

Curriculum Vitae

Ghazi Al Nakshabandi, Prof. Dr.



Consultant, Bio-Resource Engineering
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CITIZINSHIP: Canadian

EDUCATION:

Ph.D. Purdue University, U.S.A

Major: Soil Physics

Minor: Bio-Resource Engineering (Irrigation and Drainage)

M.Sc. Purdue University, U.S.A

Major: Soil Physics

Minor: Ecology

B.Sc. Baghdad University

Major: Soil Sciences

AREA OF SPECIALIZATION:

Water management and efficient use of irrigation water. Irrigation technologies. Drainage and reclamation of water logged, and salt affected soils.

AREA OF INTEREST:

Efficient use of irrigation water for crops production. The use of brackish water for crops production. Drainage of waterlogged and salt affected soils and utilization of treated municipality water, and industrial wastewater for irrigation.

AWARDS:

Award, College of Agriculture, Baghdad Univ., highest-ranking student in Soil Science.
Award, College of Agriculture, Baghdad Univ., highest-ranking student in Agricultural Engineering.
A scholarship, Government of Iraq for the Ph.D program in Soil Physics, USA.

POST GRADUATE COURSE:

Certificate of the Third International Post-Graduate Training Centre On Land Drainage.
The International Institute For Land Reclamation and Improvement, And The Agricultural Centre, Wageningen, The Netherlands

PROFESSIONAL AFFILIATION:

Member, Jordan Environmental Society.
Affiliation, University of British Columbia (UBC), Canada.
Member, Executive Committee, Global Alliance for a Sustainable Iraq (GAASI)

WORK HISTORY:

Consultant, Bio-Resource Engineering, 1994 to date.

Research Scientist, Water and Environment Research and Study Center. The University of Jordan, Amman, Jordan, 1992- 1994

Professor, Civil Engineering Technology Department, College of Technological Studies, Kuwait, 1986-1990

Expert, Irrigation and land reclamation. Member of the American University of Beirut (AUB) team conjuncted to the Ministry of Agriculture and Water. Riyadh, Saudi Arabia. 1985-1986

Research Scientist, Kuwait Institute for Scientific Research, 1974-1985

Associate Professor, College of Agriculture, University of Baghdad, 1972-1974

Associate Professor, College of Agriculture, King Saud University, 1970-1972

Associate Professor and Assistant to the Dean for Scientific Research and Graduate Studies, and Acting Dean for the College of Agriculture and Veterinary Sciences, University of Baghdad, 1968-1970

Assistant Professor, College of Agriculture, University of Baghdad, 1963-1968.

TEACHING EXPERIENCE:

Undergraduate Level Courses:

- General Soils I
- General Soil II

- Soil Physics
- Microclimatology
- Irrigation and Drainage
- Fresh water and sewage networks
- Soil Conservation (Eng. Approach)
- Land Surveying
- Soil Survey and Land Classification
- Geology
- Physics

Graduate Level Courses:

- Advanced Irrigation Drainage and Soil Conservation
- Topics in Irrigation Technology.
- Environmental Impact Assessment

SUPERVISION OF GRADUATE STUDIES:

Co-supervisor, a graduate work leading to the degree of Master of Philosophy in irrigation. A thesis entitled "Evaluation of Irrigation Systems in Kuwait", submitted jointly to the Departments of Civil Engineering, the university of Southampton, U.K. and College of Technological Studies, Kuwait. 1989, p174.

Supervisor, a graduate study leading to the degree of Master of Science, A thesis entitled "The evapotranspiration of cotton and clover", submitted to the College of Agriculture, Baghdad university, 1974, p153

BOOKS PUBLISHED:

Principles and Technologies of Irrigation and Drainage of Agricultural Lands in the Arab World, (in Arabic). 2008. Al-Nakshabandi, G., under consideration for publication, Iraq Ministry of Higher Education.

Principles and irrigation technologies of agricultural lands. Al-Nakshabandi, G.A. 2002, 1st ed. Publisher :The Private Department of the President of the UAE.

Crops water requirements in Jordan (in Arabic). Al-Nakshabandi, G.A. and Shatanawi, M.R. 1996. Publisher: Water and Environment Research and Study Center, University of Jordan.

Soil Conservation (In Arabic). Al-Nakshabandi, G.A., S.K. El-Khattari, and A. Taimeh, 1996. Publisher: Al-Quds Open University

Physics for Highschools (in Arabic). 4th year Science Section. Ch.7 Permeability of Soils. 1989. Publisher: Kuwait Ministry of Education.

Physics for Agricultural Schools (in Arabic). Al- Nakshabandi, G.A., M.Mahdi Al-Saeed, Kamil AIDabbagh, an J. Husain Hilmi. 1st ed. 1968. Publisher: Iraq Ministry of Education.

BOOKS REVIEWED:

Elements of Irrigation and Drainage. Al-Quds Open University, 1992.

The microorganisms in Kuwait Environment. (In Arabic), Kuwait Foundation for the Advancement of Sciences (KF AS), 1982.

CITATION OF MY WORK IN SCIENTIFIC BOOKS:

Soil physics. William A.J., Gardner W.R., and Gardner W. 5th ed. 1991, John Wiley and Sons, Inc. New York.

Microclimate. The Biological Environment. Norman J. Rosenberg. 1st ed. 1974. John Wiley and Sons Inc. New York..

Soil physics. Baver, L.D., W.Gardner and W.Gardner. 4th ed. 1972, John Wiley and Sons, Inc. New York.

Soil Physics. Helmut Kohnke. 1st ed. 1968. McGraw Hill Book Company New York.

KEY LECTURER:

Salinization of Irrigated lands and Reclamation. A training course organized by the International Center for Biosaline Agriculture (ICBA), April 5-9, 2003 Dubai, UAE.

Minimizing environmental pollution associated with utilizing treated effluent for irrigation in Jordan. Soil Science Seminar, The University of British Columbia (UBC), Vancouver, B.C., March 26, 1997

Soil resources management under Kuwait environmental conditions. Kuwait Institute for Scientific Research, Division of Training. February 17-21, 1990.

Preliminary study of the evapotranspiration of desert plants by the heat balance equation in Kuwait. Second Conference on Agrometeorology of the Arab World. Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD), Damascus, May 20-23, 1982.

Supervisor, a graduate studies leading to the degree of Master of Science. A thesis entitled "The evapotranspiration of cotton and clover", submitted to the College of Agriculture. Baghdad University, 1974. p153.

Microclimate and crops water consumptive use for some gulf countries. First conference of Agrometeorology of the Arab World. Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD), Damascus, Nov. 25-28, 1979

PROJECTS AND TECHNICAL ACTIVITIES:

Use of Tall Oil Pitch as sealant for ponds and landfill sites. A Research project proposal submitted to the British Columbia Research Council, 1997

Utilization of stabilization ponds effluent for Eggplant production in Jordan, 1993

Designed a sprinkler and trickle irrigation systems for prince Abdul Muhsin Al-Sudairi, Saudi Arabia, 1986

Project leader and principal investigator of the following projects carried out at Kuwait Institute for Scientific Research (KISR), 1974-1985:

- The use of sea water for leaching saline soils in lysimeters.

- Reclamation of Wafra Desert Soils
- Purification and utilization of industrial waste water for fodder production in Kuwait.
- Efficient use of irrigation water for cash crop production in Kuwait.
- Utilization of brackish underground water for crops production in the Kuwait desert.
- The reuse of treated municipality effluent through drip irrigation technique for crop production in Kuwait.
- Range management in Kuwait (soil and microclimatological studies).
- Kuwait waterfront project (irrigation and soil studies).
- Performance of electrical cables in Kuwait as related to thermal conductivity and diffusivity of desert soils.
- Reuse of purified industrial wastewater for landscape irrigation in Kuwait.

Designed and supervised the installation of drip and sprinkler irrigation systems for Mr. Husain Al-Qattan farm, Kuwait, 1984.

Designed and supervised the implementation of a sprinkler and trickle irrigation systems for the experimental site, Kuwait Institute for Scientific Research, 1978.

Installed 2 Agrometeorological stations and hydraulic lysimeters, Baghdad (1966) and 1 Agrometeorological station and volumetric lysimeters at the college of Agriculture, King Saud University, Saudi Arabia, 1971. Installed Sulabiyah, and Coastal Agrometeorological stations, and volumetric lysimeters in Kuwait, 1976

Chief scientific investigator, International Atomic Energy Agency (IAEA), contract NO.399/RB The Application of Radiation Technique to Water Use efficiency Studies, 1966-1970

Project leader, hydrological and soil investigations for the college of agriculture farms, Baghdad, Iraq. Designed and supervised the implementation of drainage system and land reclamation, 1968-1970.

CONSULTANCY:

Consultant, Reclamation of Waterlogged Soils, International Center for Biosaline Agriculture (ICBA), Dubai, January –April, 2003

Agricultural Specialist Consultant for the evaluation and development of Land and Water resources. Agricultural Sector, KUWAIT MASTER PLAN THIRD REVIEW (KMP3), Al-Marzouk and Abi-Hanna Planners, Kuwait, 1990.

Formulated a complete hydrology and irrigation engineering program to the Department of Civil Engineering Technology, College of Technological studies, Kuwait.1990.

Consultant; Development of Agricultural farms in Kuwait and Saudi Arabia, 1984-1986

Consultant; Shehaymia Irrigation and Land Reclamation project, Iraq, 1972-1974.

PARTICIPATION IN CONFERENCES AND PROFESSIONAL MEETINGS:

First conference for Arab Expatriate Scientists (QFIRST 2007), December 10-12,2007, Doha Qatar.

Regional seminar on the potential of groundwater artificial recharge. The University of Jordan, Water and Environment Research and Study Center, Jordan Amman, Dec. 13-15, 1993

Water Reuse Symposium II, Washington D.C., U.S.A. Aug. 23-28, 1981. International Symposium on Management of Industrial Waste water in the Developing Nations, Alexandria, Egypt, March 28-31, 1981. Paper presented: Assessment of pollutant levels in the industrial waste water in Kuwait.

International Association on water pollution research workshop on treatment of domestic and industrial waste waters in large plants. Vienna, Sept 3-7, 1979. Paper presented: Preliminary investigation into the effects of refinery wastewater and the single effect of its major pollutants on commercially interesting crops.

Nairobi Seminar on Desertification: Member of the international preparation committee for the United Nations Desertification Conference. Aug. 21-25, 1977.

First Agricultural conference of Muslim Scientist, Riyadh, Saudi Arabia, April 19-23, 1977. Paper presented: Preliminary estimate of potential evaporation Kuwait.

IFIAS Workshop on Soil Resources of the Earth, their Utilization and Preservation. Samarkand, USSR June 14-21, 1977. Paper presented: The use of seawater for leaching saline soils.

First Agricultural Conference, Baghdad, 1975. Paper Presented: The evapotranspiration of cotton measured by the neutron scattering probe and volumetric lysimeters as related to pan and potential evaporation.

Symposium on the use of isotopes in hydrology, Beirut, 1970. Paper presented: The use of the neutron moisture meter and other methods for the determination of the evapotranspiration of Maize.

Sixth Arab Science Congress, Damascus, Syria, and 1969. Paper Presented: The Evapotranspiration of Maize in Iraq.

Four meetings at the International Atomic Energy Agency (IAEA), Vienna, 1966, 67, 68. and 69, implementation of Research Contract No. 399/RB. The use of Radiation Technique to Water Use Efficiency Studies

Eighth International Congress of Soil Science, Bucharest, Romania, 1964. Paper Presented: Heat Transfer in Soils.

TECHNICAL REPORTS:

AI-Nakshabandi, G.A. and H. El-Mansy. 1984. A review of soil survey works in Kuwait. A report submitted to the Department of Agroproduction. Kuwait Institute for Scientific Research. P 36.

AI-Nakshabandi, G.A. 1983. Irrigation in Kuwait. A Technical report submitted to the Department of Agroproduction. Kuwait Institute for Scientific Research. P 59.

AI-Nakshabandi, G.A. and F.Khalil. 1983. A preliminary study on the effect of different rates of fertilizer Application and water quality through trickle irrigation for cauliflower

production in Kuwait. Annual Research Report. Kuwait Institute for Scientific Research. PP 8-10.

AI-Nakshabandi, G.A., M.Sartawi, and S.AI-Kudsi. 1983. Efficient use of irrigation water for cash crop production under a protected soil surface in Kuwait. Kuwait Institute for Scientific Research. Report NO. KISR 904, P 77.

Kellow, M., M.Abdul-Hadi, and G.A. AI-Nakshabandi. 1981. Performance of underground cables in Kuwait. Annual Research Report. Kuwait Institute for Scientific Research. PP297-299.

AI-Nakshabandi, G.A. and M.Abdal. 1981. Efficient use of irrigation water for cash crop production in Kuwait. Annual Research Report. Kuwait Institute for Scientific Research. Pp32-35.

AI-Nakshabandi, G.A. and B.Saleem. 1980. Preliminary study of evapotranspiration of desert plants by the heat balance method in Kuwait. Kuwait Institute for Scientific Research. PP 38-40.

Moustafa, S.A., H.EI-Mansy, G.A. AI-Nakshabandi, and H.AI-Shami. 1979. Seasonal fluctuations in temperature and relative humidity inside three greenhouses specially designed for Kuwait. Annual Research Report. Kuwait Institute for Scientific Research. PP 133-136.

AI-Nakshabandi, G.A. and B.M.Saleem. 1979. Prediction of potential evaporation and potential evapotranspiration from meteorological data in the Coastal Region of Kuwait. Annual Research Report. Kuwait Institute for Scientific Research. PP 26-28.

AI-Nakshabandi, G.A. and B.M.Saleem. 1977. The transpiration of corn and alfalfa as affected by petroleum mulch in Kuwait. Kuwait Institute for Scientific Research Report. PP 20-23.

AI-Nakshabandi, G.A., N.Hussain and S. AI-Naseri, 1976. The use of seawater for leaching saline soils. Kuwait Institute for Scientific Research. Report No. KISR/PPI 041/FRA-R-RT -7802, P12.

AI-Nakshabandi, G.A., A.M.AI-Sheikh, and S.M. AI-Naseri. 1976. Preliminary estimate of potential evaporation in Kuwait. Annual Research Report. Kuwait Institute for Scientific Research Report. PP 12-17.

AI-Nakshabandi, G. A., 1975. Radiation techniques for water use efficiency studies. International Atomic Energy Agency, Technical Report No. 168. PP 38-46

TECHNICAL BULLETINS:

AI-Nakshabandi, G.A., Shatanawi, M.R., and T.Abu-Sharar. 1994. Irrigation water quality guideline (In Arabic). Water and Environment Research and Study Center. The University of Jordan. Bulletin No. 17, p125.

Shatanawi, M.R. G.A. AI-Nakshabandi, M.Fayyad, H. AI-Horani, and M Saqqar. 1994. Minimizing environmental problems associated with the use of treated wastewater for irrigation in Jordan. Final Report, Phase-I. Water and Environment Research and Study Center. The University of Jordan. Bulletin No. 18. P38.

TECHNICAL ARTICLES:

AJ~Nakshabandi, G.A.1978. Introduction of modern irrigation techniques to Kuwait AI~Naft AI- Wataniyah, February, pp22-24.

AI~Nakshabandi, G.A.1978. Utilization of refinery wastewater for irrigation in Kuwait. AI~Naft AIWataniyah, Vol. 4, No.41, May, pp18-20.

PUBLICATIONS

AI~Nakshabandi, G. A., M.M.Saqqar, M.R. Sbatanawi, M.Fayyad, and H. AJ~Horani. 1997. Some environmental problems associated with the use of treated wastewater for irrigation in Jordan. *Agricultural Water Management*, 34, PP 81-94 (International Referee Journal)

EI~Sbibini, F.Z. and G.A. AI-Naksbabandi. 1989. A modified system for subsidizing distilled water in Kuwait Desalination, 72, PP 235~246.

AJ~Nakshabandi, G.A. and F. T. EI-Robee. 1988. Aeolian deposits in relation to climatic conditions soil characteristics and vegetative cover in the Kuwait desert. *Journal of Arid Environments*, 15, PP 229-234, (International Referee Journal).

AI~Nakshabandi, G.A. and B.Saleem. 1986. New sources of irrigation water for arid agriculture in Kuwait *Current Practices in Dry land Resources and Technology*, Vol. 3, PP 1-13.

AJ~Nakshabandi, G.A. 1983. The potential evapotranspiration of short grass (*Cynodon dactylon*) as related to the estimated potential evaporation and evapotranspiration from meteorological data in the coastal region of Kuwait. *Journal of Arid Environments*, 6, PP 33 -38, (International Referee Journal).

AI~Nakshabandi, G.A.S.Kotob, B.Saleem, M.Saba and H.S. Pal. 1982. Assessment of pollutant levels in the industrial wastewaters of Kuwait. *Water Quality Bulletin, Wastewater Management in Developing Nations, Part I, Vol. 7,pp*

AI~Nakshabandi, G.A. H.E.EI-Mansy, S.AI-Naseri and B.Saleem.1980. Reclamation of Wafra desert soil. *Transactions of Indian Society of Desert Technology and University Center of Desert Studies. Vol. 5, NO.2, PP 12-15, (International Referee Journal).*

AI~Naksbabandi, G.A., A.M.AI~Sheikh and S.M. AI-Naseri. 1977. Preliminary estimate of potential evaporation in Kuwait. *Proceedings of the 1st. Agricultural Conference of Muslim Scientist. Riyadh, Saudi Arabia.*

AI~Nakshabandi, G.A., and H.N.Ismail. 1975. The transpiration of Mexipak wheat (*Triticum aestivium L.*) in Central Iraq. *Journal of Agric. Science, (Cambridge)*. 84, PP 231-237, (International Referee Journal).

AJ~Nakshabandi, G.A., and Y .AI~Samman.1975. The evapotranspiration of alfalfa (*Medico sativa L.*) in the Central Province of Saudi Arabia. *Iraqi Journal of Agric. Science, Vol x, PP 95-104.*

AI~Nakshabandi, G.A. and J. W.Kijne. 1974. Potential evapotranspiration in Central Iraq using the Penman method with modified wind function. *Journal of Hydrology*, 23, PP

319~328, (International Referee Journal).

Al-Nakshabandi, G.A., and H.N.Ismail. 1972. The use of the neutron scattering probe and other methods for the determination of the evapotranspiration of Maize. The use of Isotopes in Hydrology (Proc. Symp. Beirut, 1970). Lebanese National Council for Scientific Research.

Al-Nakshabandi, G.A., and H.N.Ismail. 1972 The transpiration of com. Journal of Agric. Science, (Cambridge), 79, PP 501-507, (International Referee Journal).

Al-Nakshabandi, G.A., A.Al-Zubaidi, H. N. Ismail, F.Al-Rayhani and E. Al-Hadithy. 1971. Leaching of Euphrates saline soils in lysimeter. Journal of Soil Science, (Oxford), Vol.22, NO.4, PP 508~513, (International Referee Journal).

Al-Nakshabandi, G.A., and H.N.Ismail. 1969. The evapotranspiration of maize in Iraq. Proceedings of the 6th Arab Science Congress, Damascus, Syria, PP 661-668.

Al-Nakshabandi, G.A., S.A. Jobbori and G. Husni. 1969. Effect of mulches on thermal regime of soils. The Iraqi Journal of Agric. Sciences. Vol. 4, No., PP 3~15.

Al-Nakshabandi, G.A., and H.N.Ismail. 1967. The physical properties of four Iraqi soils. The Iraqi Journal of Agric. Sciences. Vol. II, No.1, PP 16-25.

Al-Nakshabandi, G.A. and H. Kohnke. 1965. Thermal conductivity and diffusivity of soils as related to moisture tension and other physical properties. Agricultural Meteorology. 2, PP 271~279, (International Referee Journal).

Kohnke, H. and G.A. Al-Nakshabandi. 1964. Heat transfer in soils. 8th International Congress of Soil Science Trans. Bucharest, Rumania, Vol.II.pp 185-193.