



General Data

Position: Deputy Director, Water Resources Research Institute and Head of Water Resources Management and Planning Department

Name: Gamal Ibrahim M. Kotb

Date and place of birth: 28.07.1961 , Cairo **Nationality:** Egyptian

Marital status: Married

Education:

1995-1998	Ph.D., Faculty of Engineering, Ain Shams University, Egypt.
1992-1993	M.Sc. in Surface Water Hydrology, Free University Brussels (YUB) , Belgium.
1991-1992	Diploma in Hydrology, Free University Brussels (VUB) in Brussels, Belgium.
1979-1984	B.Sc. Study of Structural Engineering Department, Cairo University, Degree: Very good

Languages: Mark 1 to 5 for competence, where 5 is the highest

	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>
Arabic		Mother tongue	
English	4	4	4

Memberships: - Egyptian Syndicate of Engineers (1984)

Years of professional experience: 29 years **Years with firm:** since January 1984



Key qualifications:

More than 25 years of experience in covering the different aspects of structural, hydraulic engineering and water resources management. design and executes flood protection works, physical models, hydraulic structures, environmental impact assessment related to water resources projects and hydraulic structure for the Ministry of Water Resources and Irrigation. This experience was gained through his directing and participating in many projects in the different fields. Supervision and monitoring the meteorological stations, Analysis of meteorological data. Study of the design rainfall storms, soil geotechnical characteristics, and hydrological & geological data. Study the flood damage occurrence, protect of infrastructure against flash floods. Formulate the best alternatives of flood control structures according to the feasibility study. Hydraulic and structural design of flood control structures (Storage and detention dams, Cofferdams, Tunnels, natural and artificial Spillways, Outlet Works). Preparation of tender of documents, bill of quantity, and execution drawings.

Country experience: Egypt, Albania, Saudi Arabia, Yemen, Burundi, Malawi, Belgium.

Employment Record & Experience

- 1988 – Present
- Head of Water Resources Management and Planning Dep., Water Resources Research Institute-National Water Research Center.
 - Supervision and monitoring the meteorological stations
 - Analysis of topographical, geological maps
 - Analysis of meteorological data
 - Selection and manage of representative catchments
 - Design rainfall storms, soil geotechnical characteristics
 - Analysis of hydrological & geological data;
 - Hydrological studies for some area in Sinai & Upper Egypt
 - Study the flood damage occurrence
 - Protect of infrastructure against flash floods
 - Formulate the best alternatives of flood control structures according to the feasibility study
 - ydraulic and structural design of flood control structures
 - Preparation of tender documents, bill of quantity, and execution drawings
 - Supervision and design of hydraulic and irrigation structures (Dams, Channels, Dikes, lakes, Culverts,)
- 1987 – 1988
- Designer Engineer, Computer Center for Structural Designing.
 - Design of R.C. Structures (Domestic Buildings, Mosques) in Saudi Arabia and Egypt.
- 1986 - 1987
- Designer Engineer, Steelco Company.
 - Design of steel structures such as Trusses, Frames, and Steel Bridges in Egypt.



Projects

Foreign Projects

- Design of R.C. Structures in Sudia Arabia and El-Toha.
- Design of Has dam, to develop Has region, in Republic of Albania.
- Design of Bani Malek dam, to protect Jeddah city against flash flood and sewage water, in Sudia Arabia.
- Consulting services for survey, design and preparation of bidding documents for small and medium spate diversion works. Groundwater and Soil Conservation project, Republic of Yemen.
- Consulting services in water resources management, irrigation methods and soil conservation. According to Protocol of Technical Cooperation between Egypt and Burundi, Burundi.
- Rehabilitation of small earth dams in Malawi, Horticulture and food development project (HFCDP), Republic of Malawi

Internationally Funded Projects

- Flash Floods in Egypt: Prediction and Management (FlaFloM), funded by European Community: LIFE third countries fund project.
- Water Supply for Bedouin Settlement in El Shiekh Zuwyied-Rafah Area in North Sinai, Egypt, funded by Islamic Bank for Development.
- Evaluation and development of protection works from flash flood in Wadi Watier, South Sinai, Egypt, funded by Italian government.

National Projects

- Protection of El-Noqra Drainage and El-Noqra project from flash Flood, Aswan Governorate, Egypt.
- Hydraulic Design of El-Noqra Drain to pass drainage water beside flood water, Aswan Governorate, Egypt
- Protection of the Gas line project, connecting Taba and Sharm El-Sheikh cities, from flash Flood, South Sinai Egypt.
- Protection of the Gas line project, connecting Al-Menia and Bani Sueif Governess, from flash Flood, Upper Egypt, Egypt.
- Project Manager of El-Gudeirate representative catchments, in El Arish City, North Sinai, Egypt.
- Design and construction of El-Gudeirate broad crested weir, and defenses of meteorological station, North Sinai, Egypt.
- Preparation of hydrological, morphological, hydro geological and meteorological studies of some projects in Egypt.
- Participating in designing of 4 storage dams and 7 detention dams in Dahab City. And 5 storage dams and 17 detention dams in W. Watir, Nuwabia City. South Sinai.
- Design of passing overflow rock-fill Dam in wadi El Assuity, Upper Egypt.
- Designing of some detention dams in wadi El Grafy, Sinai,
- Supervision of many hydraulic structures such as culverts, embankments, weirs and channels.



Training

Training:

- (1) The 11th INTERNATIONAL COURSE ON ENVIRONMENTAL HYDROLOGY FOR ARID AND SEMI ARID REGIONS, held at the Development Research and Technological Planning Center - Cairo University, May 6 - June 28 1990.
- (2) Advanced course in: Limnological bases for water flow management and biological quality of rivers, from 9th to 20th Sep. 1996, Spain.
- (3) Consultant Engineer in the field of "Design of Irrigation Works", Egyptian Syndicate of professional Engineers, March 2002.
- (4) Water Resources Management for Egyptian Officials from Nov. 26 to Dec. 13, 2004 organized by the Korea International Cooperation Agency of the Republic of Korea.
- (5) "Science Leadership", Canadian International Development Agency, 2003 – 2005.
- (6) Drought Mitigation Methodologies, Tools and Management Options, Feb. 2006.

Publications

- (7) Dr. Gamal Kotb (Oct. 2002) "A decision Support System for Wadi Watir Watershed Management, South Sinai", First Regional Conference on Perspectives of Arab Water Cooperation, Cairo, Egypt.
- (8) Dr. Gamal Kotb (May, 1999) "Optimal and Sustainable Utilization of Watershed Resources in Arid Region". International Symposium on Environmental Hydrology, Cairo, Egypt.
- (9) Dr. Gamal Kotb (Nov. 1999) "Practical Instruction for Protection Works". International Conference Integrated Management of Water Resources in the 21st Century, Cairo, Egypt.
- (10) Prof. Dr. Ahmed Khattab, Dr. Mohamed Soliman, Dr. Gamal Kotb, Dr. Hala Badawy (April 2002) "Seepage Analysis of Has Dam-Albania-Considering Flow in Unsaturated Zone", 3rd International Symposium on Environmental Hydrology. Cairo, Egypt.
- (11) Dr. Abdelaziz F. Zaki, Dr. Gamal Kotb, Prof. Dr. Nadia El-Bahnsawy, Prof. Dr. M. Samir Farid (Nov. 2001) "Erosion Classification of Natural Streams in East Sinai", Eighth International Symposium on River Sedimentation Third Announcement, Cairo, Egypt.
- (12) Dr. Gamal Kotb, Dr. Hatem M. Mekhemer, Prof. Dr. Mohamed S. Farid (Nov. 2000) "Feasible Approach for Indirect Use of Flash Flood in Sinai". International Conference on Wadi Hydrology, Sharm El Sheikh City, Egypt.
- (13) Dr. Gamal kotb, Dr. Ahmed F. Khattab (Nov. 2000) "Design and Construction Aspects for Has Dam in Albania". International Conference on Wadi Hydrology, Sharm El Sheikh City, Egypt.
- (14) Dr. Ahmed H. Fahmy, Dr. Mediate A. El-Bihery, Dr. Gamal Kotb, Prof. Dr. M. Samir M. Farid (Nov. 1999) "Promising Deltas for Development projects in Egypt". International Conference Integrated Management of Water Resources in the 21st Century, Cairo, Egypt.
- (15) Dr. Gamal Kotb, Dr. A. Hassan Fahmi, Prof. Dr. M. Samir Farid (Nov. 1999) "An Applicable Strategic Water Policy for Sinai". International Conference Integrated Management of Water Resources in the 21st Century, Cairo, Egypt.



- (16) Dr. Gamal Kotb, Dr. Ahmed H. Fahmi, Prof. Dr. M. Samir Farid (Mar, 1999) "Quantifying the Spatial Variability of Saturated Hydraulic Conductivity for Runoff Modeling" Third International Conference on Civil and Architecture Engineering Vol.2, Military Technical College, ACCAE, Cairo, Egypt.
- (17) 11- Dr. Gamal Kotb, Prof. Dr. Mohammed Abdel Mottlab (Oct. 2003) "Integrated Management of Water Resources in Arid and Semi-arid Regions, Case Study Wadi Feiran, South Sinai" The 43th Annual Science Week, International Conference on Water Science and Technology, Damascus University Campus, Syria.
- (18) Dr. Gamal Kotb, Dr. Ahmed H. Fahmi, Dr. Osama N., Prof. Dr. Nadia El-Bahnsawy, Prof. Dr. Mohammed Abdel Mottlab (April 2004) "Evaluation of Water Resources in Eastern Desert, Case Study Wadi Ghuweiba, Gulf of Suez" Second Regional Conference On Arab Water 2004, Action Plans for Integrated Development, Cairo, Egypt.
- (19) م. محمد مجاهد، د. جمال قطب، ا.د. نادية البيهناوى، ا.د. محمد عبد المطلب " محاكاة التخزين بمنخفضات توشكى فى
- (20) الفيضانات العالية " رابطة المغتربين العائدين بالتضامن مع وزارة الموارد المائية والرى، مؤتمر توشكى 2004/مصر..
- (21) Dr. Gamal Kotb, Dr. Entesar A.S. El-Ghorab, Prof Dr. N.A. El Bahnasawy, Prof. Dr. Mohammed Abdel Mottlab (DEC., 2004) "Drains and Flash Flood Protection in Upper Egypt". Drainage in Africa (Challenges & Opportunities for Enhancing Quality of Life) ARCOD, Cairo, Egypt.
- (22) Dr. A.A. Nassar, Prof. Dr. A.F. Khattab, Dr. Gamal Kotb, Dr. H.A. Badawy (Aug. 2004) "Hydrological Analysis of Wadi Bani Malek Dam", Engineering Research Newspaper, Faculty of El-MaTaria, Helwan University, Cairo, Egypt.
- (23) Dr. Gamal kotb, Dr. Ahmed F. Khattab (Nov.2005) "Strengthening and Rehabilitation of wadi El-Asla Dike (Bani Malik) Jeddah area, Kingdom of Sudia Arabia". International Conference of UNESCO Fit, FRIEND/Nile project, Towards A better Cooperation, Sharm El Sheikh City, Egypt.
- (24) Dr. Mohamed Saad Dr. Hatem Abdel Rahman, Dr. Gamal kotb (Nov.2005) "Impacts of Exploration in Valley of the Kings on Flooding". International Conference of UNESCO Fit, FRIEND/Nile project, Towards A better Cooperation, Sharm El Sheikh City, Egypt.
- (25) Dr. Gamal kotb, Dr. Hatem M. Mekhemaer (Nov.2005) "Artificial Groundwater Recharge as a Potential Solution for Seawater Intrusion in El-Arish Area". International Conference of UNESCO Fit, FRIEND/Nile project, Towards A better Cooperation, Sharm El Sheikh City, Egypt.
- (26) Prof Dr. N.A. El Bahnasawy, Dr.Gamal Kotb, Dr. A. H. Fahmy, Dr. Hatem M. Mekhemer (Sep. 2005) "Water Harvesting for Flood Security and Mitigation of Flash Flood Hazards in Egypt" Water, International Conference of Land and Food Security in Arid & Semi-Arid Regions. Bary, Italia.
- (27) Dr. Gamal kotb (Aug. 2007) "Classifying Natural Streams According to their Morphological Status, Case Study Wadi Watir in Sinai, Egypt". International Conference of Sustainable Development and management of water resources in Palestine, Amman, Jordan.
- (28) Dr.Gamal Kotb, Dr. El. Belasy A. M. (Sep. 2007) "Protecting the Economical Area North West Suez Gulf Against Flash Flood Hazards, South Part". (V) International Symposium on Environmental Hydrology, and (V) Regional Conference on Civil Engineering Tech. Cairo, Egypt.
- (29) Dr.Gamal Kotb (Sep. 2007) "Enhancing the hydraulic characteristics of drains to recieve Flood flows, Case study; El-Noqra drain". Ain Shams University Journal, Vol 42., No 1., Sep., 2007. Cairo, Egypt.



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Gamal Ibrahim M. Kotb

- (30) Prof. Dr. N.A. El Bahnasawy, Dr.Gamal Kotb, Dr.Gamal Abdallah (Nov. 2007)
"Rainfed Agricultural in North Africa, Case Study, Egypt" Second African Regional
Conference, Glenbum, Johannesburg, South Afrca.
- (31) 24- Prof. Dr. N.A. El Bahnasawy, Dr.Gamal Kotb, Dr.Gamal Abdallah (Nov. 2007)
"Rainfed Agricultural in North Africa, Case Study, Egypt" Second African Regional
Conference, Glenbum, Johannesburg, South Africa