

CURRICULUM VITAE

Name : Dr. Babiker Ibrahim Barsi

Date of Birth : Jan, 1st, 1955

Address : Faculty of Engineering & Architecture,
University of Khartoum,
P.O. Box 321, Khartoum, Sudan.
Mobile. +249912132885
Email: babiker.barsi@gmail.com



Marital Status : Married , with four children

Languages : Arabic & English

Specialization : Engineering Hydrology.

Other Areas of Interest : Irrigation Engineering & Hydraulics .

Knowledge of Computer Programming :

Fluent in computer programming and in using computer packages programs for various Water Resources Engineering problems

Qualifications :

- 1979 B. Sc. Honours (Eng) , Faculty of Engineering and Architecture, University of Khartoum (Sudan)
- 1980 Part I of the M. Sc.(Hydrology) course in the University College, Galway, (Ireland)
- 1983 Ph.D.(Engineering Hydrology), National University of Ireland , (Ireland)

Affiliations :

- Member of "Sudan Engineering Society" (SES).
- Member of "Sudan Engineering Council" (SEC).

Positions Held :

- 2010 – 2011: Head, Department of Civil Engineering, Faculty of Engineering & Architecture, University of Khartoum .
- 2002 – 2010: Head, Water Resources & Environment Section, Department of Civil Engineering, Faculty of Engineering & Architecture, University of Khartoum .
- 2001 – 2002: Director, University of Khartoum Consultancy Corporation
- 1990 – 2003 : Deputy Chairman of The Hydrology Committee of the National Commission for Education, Science & Culture, (a UNESCO organization)

Academic Experience :

- 2001 – 2011: Member of Senate, University of Khartoum
- 1997 – 2009 : Co-ordinator of M.Sc. Program in Water Resources, at the Department of Civil Engineering, Faculty of Engineering & Architecture, University of Khartoum .
- 1995 – 1997: Co-ordinator of Post-graduate Studies at UNESCO Chair in Water Resources, Omdurman Islamic University
- 1993 External Examiner; Department of Civil Engineering, Sudan University For Science & Technology
- 1988 - 2011 Member of Faculty Board, Faculty Engineering & Architecture, University of Khartoum
- 1986 Visiting Professor , of the M. Sc. (Hydrology) course, University College, Galway, Ireland .
- 1985 - 1987 : Secretary, Departmental Board, Civil Engineering, University of Khartoum
- 1981 - 1982 : Part-time Lecturer, in the M.Sc. (Hydrology) course University College, Galway, Ireland .

Publications :

- " A Hybrid Model For River Flow Forecasting", Journal of Hydrology, Vol. 65, (1983) .
- " A Flood Routing Method For Seasonal Rivers", International Conference on Water Resources Needs & Planning In Drought Prone Areas, Khartoum, (1986)
- " A Frequency Analysis of the Rainfall in the Sudan", International Conference on Efficient Utilization & Management of Water Resources In Africa, Khartoum, (1994)
- " Wadi Hydrology - The Sudanese Experience", Wadi Hydrology Workshop, Cairo,(1996).
- " Hydrology of Wadi Systems in Sudan", International Conference on Wadi Hydrology, Sharm ElSheikh, (2000)
- " Wadi Water Resources Management ", Wadi Hydrology Workshop, Beriut,(2001).
- " Regional Frequency Analysis For Ungauged Wadis ”, Mascot, Oman(2002).
- “Flash Floods Risk Management – Sudan Experience”. Workshop on Flash Floods Risk Management , Cario, 2010
- "Validation of Rainfall Satellite Estimates Based on Rainfall Observation for Sudan", Journal of Water Science & Engineering", Vol 1, Issue 1 (2014).
- " Rain Water Harvesting Projects in Sudan: Challenges and Directions",University of Khartoum Graduate College Conference in Science & Engineering , Khartoum, (2016) .

Supervision of Ph.D. Theses :

- " A Flood Simulation Model for The River Nile at Dongola Using ANNs & GIS ", (2009)
- " Development of a Semi-Distributed Physically-Based Model for Runoff Simulation in Data Scarce Semi- Arid Regions ", (2016)

Supervision of M.Sc. Theses :

- " A Stochastic Model for Upper Atbra Tributary", (1994)
- " Evaporation from Jabel Auliya Reservoir", (1994)
- " Artificial Neural Network Model for River Atbra ", (2004)
- " Design of a Drainage Network for Khartoum East", (2003)
- " Frequency Analysis of Annual and Maximum Daily Rainfall in Sudan ", (2014)
- " Rainfall Runoff Modelling for Khor Abu Fargha in Gadarif State Using HEC-HMS ", (2014)

Professional Experience :

1. Design of the" Rainfall Drainage Network for the National Capital(Khartoum, Omdurman & Khartoum North)",
Consulting Firm : Agib-Howard Humpherys Joint Venture, 1991
Client: Ministry of Engineering Affairs, Khartoum State

2. Design of the" Drainage Structures for El-Renk – Malakal Road ",
(330 km) ,1997
Consulting Firm : Stippe-Techncon Joint Venture
Client: Ministry of Highways & Transportation

3. Design of the" Drainage Structures for El-Renk – Jabalein I Road ",
(158 km), 1998
Consulting Firm : Techncon
Client: Ministry of Highways & Transportation

4. Design ,in participation with other colleagues, of the" Drainage Structures for En Nuhud-Rigl elFula-ElMuglad Road ", (230 km),
as a consultant for University of Khartoum Consultancy Corporation ,1998
Client: Ministry of Highways & Transportation

5. Design of the" Rainfall Drainage Network for Singa town", as a consultant for El-Dar El-Estisharia
Client: Ministry of Engineering Affairs, El-Gadarif State

6. Design ,in participation with other colleagues, of the Canalization System, Drainage System, Irrigation structures and Pump Stations of Tama Irrigation Scheme :This is a 6000 Feddan scheme on the Blue Nile near Karkooj (Blue Nile State), 1992
Client: Ministry of Engineering Affairs, Sennar State

7. Design ,in participation with other colleagues, of the Canalization System, Drainage System, Irrigation structures and Pump Stations of Soba West Irrigation Scheme : This is a 2700 feddan Scheme on the Blue Nile, , 1990 .
Client: Khartoum University
8. Design ,in participation with other colleagues, of the Canalization System, Drainage System, Irrigation structures and Pump Stations of Sanabil Scheme : This is a 22000 feddan scheme on the eastern bank of the Blue Nile near Um Dawanban (Khartoum State), 1993.
Client: Sanabil Cooperative Committee
9. Design ,in participation with other colleagues, of the Canalization System, Drainage System, Irrigation structures and Pump Stations of ElMultaga Agricultural Scheme : This is a 15000 feddan scheme on the eastern bank of the Blue Nile near El-Daba (Northern State),
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Merowe Dam Project ImplementationUnit,1999.
10. Design ,in participation with other colleagues, of the Canalization System, Drainage System, Irrigation structures and Pump Stations of Mokabrab Agricultural Scheme : This is a 60 000 feddan scheme on the eastern bank of the River Nile near ElDamar (Nile State),
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Merowe Dam Project ImplementationUnit, 2000.
11. Design ,in participation with other colleagues, of the Canalization System, Drainage System, Irrigation structures and Pump Stations of New Amri Agricultural Scheme : This is a 35000 feddan scheme on the western bank of the Blue Nile near Korti (Northern State),
Consulting Firm :University of Khartoum Consultancy Corporation
Client: Merowe Dam Project ImplementationUnit ,2003.
12. Design ,in participation with other colleagues, of the Canalization System, Drainage System, Irrigation structures and Pump Stations of Kiheila Agricultural Scheme : This is a 45 000 feddan scheme on the eastern bank of the River Nile near Abu Hamad (Nile State),
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Merowe Dam Project ImplementationUnit, 2005.
13. Design, in participation with other colleagues, of “ El-Gadarif Water Supply Scheme”,(1994) , which include the following :
 - i) design of a 66 km long pipeline with a pump station
 - ii) design of a water reservoir at the outfall of a small stream
 - iii) design of an earth dam with deep sluices and a spillway*Client: Ministry of Engineering Affairs, El-Gadarif State*

14. " Design of Jabel Marra Hydropower & Water Supply Scheme by utilizing three waterfalls in the Marra mountain",
Client: Ministry of Engineering Affairs, South Darfur State
15. Development, in participation with other colleagues, of " Ground Water Mathematical Model for El-Gadarif Aquifers" ,(1997)
Client: Ministry of Engineering Affairs, El-Gadarif State
16. Design, in participation with other colleagues, of " Wadi Gabatit (Red Sea State) Water Supply Scheme", (1997) , which include the following :
- i) design of a 15 km long pipeline
 - ii) design of an underground dam
 - iii) design of an earth dam with a spillway
- Client: Ministry of Engineering Affairs, Red Sea State*
17. Design, in participation with other colleagues, of " Wadi Moj (Red Sea State) Water Supply Scheme", (1999) , which include the following :
- i) design of a 12 km long pipeline
 - ii) design of an earth dam with a spillway
- Client: Ministry of Engineering Affairs, Red Sea State*
18. Design, in participation with other colleagues, of " Sudd El-Daiga (Khartoum State) Water Supply Scheme", (1999) , which includes the design of an earth dam with a spillway
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Ministry of Engineering Affairs, Khartoum State
19. Design, in participation with other colleagues, of " Wadi El-Mugadam (Khartoum State) Water Harvesting Scheme", (1999) , which includes the design of an earth dam with a spillway
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Ministry of Engineering Affairs, Khartoum State
20. Design ,in participation with other colleagues, of the Canalization System, Drainage System, Irrigation structures and Pump Stations of "The Bioremediation Project", at Hegleig Oil Field, 2000.
Consulting Firm : Solar Enterprises Company
Client: Greater Nile Petroleum Operating Company
21. Supervision of Construction of the Canalization System, Drainage System, Irrigation structures and Pump Stations of ElMultaga

Scheme: This is a 15000 feddan scheme on the eastern bank of the Blue Nile near ElDaba (Northern State), 2002.

Consulting Firm : University of Khartoum Consultancy Corporation.

Client: Merowe Dam Project Implementation Unit.

22. Design ,in participation with other colleagues, of the Evaporation Ponds ,Canalization System, Drainage System, at Bamboo, Toma South, ElToor, ElHar-ElNar, Munga and Unity Oil Fields, 2002.

Consulting Firm : Solar Enterprises Company

Client: Greater Nile Petroleum Operating Company

23. Design ,in participation with other colleagues, of the Evaporation Ponds ,Canalization System, Drainage System, at Khartoum Refinery, 2002.

Consulting Firm : Techneco Group

Client: Khartoum Refinery

24. Project Manager for the Supervision of Construction of the Canalization System, Drainage System, Irrigation structures and Pump Stations of New Amri Scheme: This is a 35000 feddans scheme on the eastern bank of the River Nile near Korti (Northern State), 2004-2007.

Consulting Firm : University of Khartoum Consultancy Corporation.

Client: Dams Implementation Unit.

25. Supervision of Construction of the Canalization System, Drainage System, Irrigation structures and Pump Stations of AlMokabrab Scheme: This is a 60000 feddans scheme on the eastern bank of the River Nile near AlDamer (Nile State), 2004-2007.

Consulting Firm : University of Khartoum Consultancy Corporation.

Client: : Dams Implementation Unit.

26. Supervision of Construction of the Canalization System, Drainage System, Irrigation structures and Pump Stations of Kehaila Scheme: This is a 45000 feddans scheme on the eastern bank of the River Nile near Abu Hamad (Nile State), 2006-2008.

Consulting Firm : University of Khartoum Consultancy Corporation.

Client: Dams Implementation Unit.

27. Hydraulic Design of the " Drainage Structures for Kadogli-Lagawa-AlFoola Road ", (170 km), 2006

Consulting Firm : Techno Group

- Client: Ministry of Highways & Transportation*
28. Hydraulic Design of the " Drainage Structures for Kadugli – Higlieg Road with a length of 130 km and Mujlad – Abyei Road with a length of 220 km, 2009
Consulting Firm : Shouraconsult Company Ltd
Client: Ministry of Highways & Transportation
29. Team Leader for the “ Technical & Financial Feasibility Study of Al-Roseiris Irrigation Scheme”: This is a 200,000 feddans scheme on the eastern bank of the Blue Nile near Al-Roseiris (Blue Nile State), 2009.
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Dams Implementation Unit.
30. “Water Resources Assessment (WRA) in Southern Sudan”, 2010.
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Government of South Sudan.
31. Team Leader for the “ Technical & Financial Feasibility Study of Al-Shereik Irrigation Scheme”: This is a 40,000 feddans scheme on the eastern bank of the River Nile near Al-Sherik (Nile State), 2010.
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Dams Implementation Unit
32. Team Leader for the" Design of the Drainage Structures for Baleela-Um Adara Road ", (98 km), 2012
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Petro-Energy Company
33. Team Leader for the" Design of the Drainage Structures for For Block 6 (Jake-Keyi-Sentaya and Muglad) ", (84 km), 2013
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Petro-Energy Company
34. Project Manager for the Supervision of Construction of the " Drainage Structures for Baleela-Um Adara Road (Shalango Sector)", EPCC Contractor: Sudan Pile -Jobdeliver, 2014-2015
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Petro-Energy Company
35. Project Manager for the Supervision of Construction of the " Drainage Structures for Jake-Keyi-Sentaya and Muglad ",

EPCC Contractor: Shandong, 2015.
Consulting Firm : University of Khartoum Consultancy Corporation.
Client: Petro-Energy Company

36. Team Leader for the “ Technical & Financial Assessment Study of The Existing Irrigation 58 Schemes in Northern State, Nile State & Sennar State”: Total Area is 657,000, 2015.

Consulting Firm : University of Khartoum Consultancy Corporation.

Client: Ministry of Finance

37. Hydrologic and Hydraulic Design of the" Drainage Structures in Delta Toker Scheme, Red Sea State", 2015

Consulting Firm : University of Khartoum Consultancy Corporation.

Client: Eastern Sudan Rehabilitation and Development Fund