CURRICULUM VITAE

NAME: <u>AHMED ADAM IBRAHIM</u>

NATIONALITY: Sudanese

Civil Status: Married

Religion: Islam

Date & Place of Birth: 1/1/1954 – Sudan

Profession: Civil Engineer

Languages: Mother Tongue Arabic – English

1. Academic

Qualifications:

- B.Sc. Civil Engineering; University of Khartoum, Sudan, 1978.
- M.Sc. Irrigation Engineering; University of Southampton, UK, 1983
- Ph.D. in the field of Soil and Water Management, University of Gezira, Sudan, 1992.

2. Training

- Use of Microcomputer for water resources planning and development (Lake Basin Development Authority; Kisumu, Kenya (1985).
- Water resources management in developing countries;
 Department of Water Resources Engineering; Lund University,
 Sweden (1998).
- Integrated Water Resources Management; Nile Basin Applied Training Project; Regional Center for Training and Water Studies, Cairo, 2006.
- Negotiation Skills; Petroleum Training Centre; Khartoum (2006)
- On-farm Water Management, Irrigation and Drainage. June –
 July 2007.

3. Awards:

 Dr. Hassan Ismail Memorial International Award, 2001. For the best paper contributed by a young professional on development of irrigation, drainage and flood control in Africa. (ICID, 21 September 2001, Seoul).

4. **Professional Related Memberships:**

- 1) Member of Sudan Engineering Society
- 2) Member of the National Committee for Hydrology
- 3) Member of the National Committee for the Environment

Professional Experience:

Dec. 2014-Up to Date

Director General of Instrumentation and Experiments at the Hydraulics Research Centre.

In addition to the research activities, I am responsible for the instrumentation and experiments (Field, Laboratories and the Experimental Hall).

Sep. 2012-Nov. 2014

Director General of Policies, Planning and Projects (Ministry of Water Resources and Electricity). The General Directorate is a grouping of former three General Directorates:

- Former General Directorate of Projects (Ministry of Irrigation and Water Resources)
- Former General Directorate of Planning (Ministry of Irrigation and Water Resources)
- Former General Directorate of Strategic Planning (Ministry of Electricity and Dam).

The General Directorate of Policies Planning and Projects is responsible for all planning and consultancy services in the ministry. The main outcomes and activities were the following:

- Long term planning for the electricity (generation, Transmission and distribution)
- Five year Planning
- Annual Planning
- Follow-up and evaluation of the related activities.

Jan 2009-Sep. 2012

Director General of the Projects General Directorate.

The directorate acts as the Governmental consultancy arm, for the developments related to water resources; mainly:

- Responsible for survey works, design and supervision of the implementation of national irrigation projects.
- Studies related to modification and rehabilitation of irrigation projects.
- Studies and design of protection works for river morphology related problems.
- Studies and design of water harvesting projects.
- Consultancy works for the statal level water resources development activities.

2003 - Dec.2008:

Appointed Executive Director for the implementation of Assalam irrigated agricultural project ($\approx 60,000$ Feddans), responsible for:

- The Implementation of the contracts.
- Supervision of the related studies.
- Financial and administrative follow up.

1/ Promoted in August 1997 to Associate Professor at the Hydraulic Research Station (HRS) of the Ministry of Irrigation and Water Resources (MOI). Head of the Irrigation Water Management Unit of the HRS

June 1992 - Oct. 1995:

In June 1992 promoted to Assistant Professor Research Engineer and Appointed Head of the Irrigation Water Management Unit of the HRS. The Unit has conducted the following research activities:

- 1/ Water uses efficiency at the on-farm level (On-farm research) in the Gezira Scheme, aiming at evaluate water use efficiencies under different application methods in the scheme.
- 2/ Calibrations of the different hydraulic structures in the Gezira, Rahad and Kenana schemes.
- 3/ Computations of evaporation losses from the reservoirs.

During the period of May 1993 to June 1994, I was also appointed Assistant Division Engineer (ADE) for the Mussalemia Irrigation Division (=50.000 ha.) Main duties of the ADE are: irrigation water management (maintenance and operation of the system) and establishment firm adequate and dependable flows to the down stream divisions.

Jan. 1987 - June 1992:

Study period (ph. D. programme) at the University of Gezira (Sudan) in collaboration with Wageningen Agricultural University (The Netherlands). The title of the thesis was "Irrigation water use efficiency of Dura (sorghum bicola) and groundnuts (Arish hypogae) under the traditional and non-traditional irrigation practices in the Gezira scheme <SUDAN>" The research was oriented towards the following:

1/ to determine the actual on-farm water use efficiency under two different irrigation methods

- 2/ The significance of application losses in comparison to the related system losses (dam breakage and evaporation losses from Sennar reservoir and from the canal system).
- 3/ to draw the reasonable watering policy advice (weather advisory) that could improve water management in the scheme.
- 4/ to determine and/or confirm the implied scientific interpretation on Gezira soil-water relations, on-farm crop water requirements and evaporation losses from open water bodies related to the system.

Jan. 1983 - Jan. 1987.

I returned back to HRS after I had obtained and M.Sc. degree in Irrigation Engineering from the University of Southampton, U.K.

Promoted in June 1984 to Senior Research Engineer. In this period I was fully involved in hydrometric activities, such as:

- 1/ Bathymetric survey of the reservoirs (Sennar, Roseires and Khashm El Girba).
- 2/ River training and related studies in the Northern State of the Sudan.
- 3/ Bank erosion and water escape problems in the Nile State.
- 4/ Calibration of hydraulic structures.
- 5/ Water supply problems in different areas of the Sudan.

Aug, 1981 – Dec. 1982

Study period in the Institute of Irrigation Studies, University of Southampton, U.K. (M.Sc. program).

June 1978 – August 1981:

Employed in June 1978 as an assistant research engineer in the HRS.

. HRS was established by MOI with the assistance of the United Nations

Development Program (UNDP) in mid 1970's. The main scope of HRS is to
give support in the various problems and activities related to water resources
and their management, such as: Irrigated Agriculture Developments Hydro-

power, River Transport, River Training and Bank Erosion, Flood Protection and Control, Water supply, and Basic Research.

In this period I was fully involved in river training programme and bank erosion studies 9in the Northern State of the Sudan) which was carried by HRS under the supervision of the United Nations Development Programme (UNDP).

Teaching at University Level

- Since 1983 I have been a part-timer in the University of Gezira,
 teaching the field of Hydrology, Irrigation, Hydraulic and Surveying.
- Supervision of many research programs at the Institute of Management and Irrigation (UG).
- External examiner (UG, UK).

List of Publications

- 1 (Ibrahim, A.A. (1982). Unconventional design of drop structure in canals. M.Sc. thesis, University of Southampton, U.K.
- 2 <u>Ibrahim, A.A.,</u> C. J. Stigter, A. M. Adeeb, H.S. Adam and A. E. Jansen (1989). Development and validation of the shaded Piche evaporimeter for the tropics to replace humidity and wind speed data in the aerodynamic term of the Penman equation. In: Proceedings of the fourth technical Conference on Instruments and Methods of Observation (TECIMO IV), Instruments and Observing Methods Report No. 35, WMO/TD No. 303, Geneva, 147 152.
- Ibrahim, A.A. H.S. Adam, A. M. Adeep and C. J. Stigter (1989).
 Evaporation from Sennar reservoir. In: Irrigation water management in the Gezira scheme. Conference papers, Hydraulic Research Station, Wad Medani, pp 192-233.
- Stigter, C. J., C.L. Coulson, D.N. Mungai, R.M.R. Kainkwa, A.E. Mohamed, A.A. Ibrahim, F.S. Mpelasoka and B.I. Abdulai (1989). Some examples of quantification in tropical agrometeorlog for low-resource agriculture in Africa: Instruments

- and on-farm research conditions. Proceedings for the second ICTP/SAPAM workshop on the applicability of the environmental physics and meteorology in Africa, Addis Ababa University, ICTP/SAPAM, 16 pp.
- Stigter, C.J., C. Baldy, C.L. Coulson, C.O. Othieno, A.E. Mohamed, D. N. Mungai, R.M.R., Kainkwa and A.A. Ibrahim (1991). Meteorological hazards and the low external input farmer: Some case studies. In J.S. Oquutoyinbo, J. Bayo Ovotogho and E.E. Ekuwen, Meteorological hazards and development, Lagos/Kano (Nigeria), 59 64.
- Abdulai, B. I., C. J. Stigter, <u>A.A. Ibrahim</u> and A. M. Adeeb (1990). Evaporation calculations for lake Sennar (Sudan): a search for a meteorological minimum input approach for shallow lakes. A synopsis. Neth. J. agric. Sc., 38.
- 7. <u>Ibrahim A.A.</u> (1992). Water use efficiency of Dura (Sorghum bicola) and groundnuts (Arish hypogae) under traditional and non-traditional irrigation practice in the Gezira scheme, Sudan. Ph.D. Thesis, University of Gezira, Wad Medani, Sudan.
- 8. Yousif D.M. and <u>A.A.Ibrahim</u> (1993). Water delivery and distribution in Taiba Major system. HRS technical note.
- Stigter, C.J., A.E. Mohamed, L.O.Z.Onyeyewatu, D.N. Mungai, <u>A.A. Ibrahim</u> and R.M.R. Kainkwa (1994). Agrometearological research for protection and improvement of the tropical agricultural environment. Invited paper presented at the Second National Workshop on Meteorological Research Applications and Services, Nairobi, Kenya, 15pp.
- 10. <u>Ibrahim, A.A.</u> (1995). Water use and water east under traditional and non-traditional irrigation practices in the Gezira scheme, Sudan. In: C.J. Stigter, F.E. Wangati, J.K. Nganga and D.N. Mungai (Ede.), The TTMI-Project and the "PICNIC" Model. An internal evaluation of approaches and the results and the prospects for TTMI-Units. Wageningen Agriculture University, The Netherlands, pp. 165-172.

- 11. <u>Ibrahim, A.A.</u> and H. H. Omer (1995). Proposal for river training and flood protection in the Northern State of the Sudan. HRS Technical Note.
- 12. <u>Ibrahim, A.A.</u> (1995). Measures for flood protection in the Northern State of the Sudan. Paper presented in the Conference on Environmental and Economical Impact of High Floods along the Nile Valley in the Sudan (University of Khartoum).
- 13. Stiger, C.J., A.M.G.M. Rashidi, C.B.S. Uiso, and <u>A.A. Ibrahim</u> (1995) Precautions in using Piche Evaportimeters. Wageningen Agricultural University, Netherlands, Internal Report No. IR9502.
- 14. <u>Ibrahim, A.A.</u>, M. Sharf El Din and H. S. Adam (1996). The use of Piche Evaporimeter for estimating potential evapotranspiration (Eto). Paper presented in the Conference at the Agricultural Research Corporation (ARC), Wad Medani, Sudan.
- 15. <u>Ibrahim, A.A...</u>, C. J. Stigter, A. M. Adeep, H.S. Adam, and W. Van Rheenen (1999). On-farm sampling density and correction requirements for soil moisture determination in irrigated heavy clay soils in the Gezira, Central Sudan. Agricultural water management. Vol. 41 pp. 91-113.
- 16. <u>Ibrahim, A.A.</u>, C. J. Stigter, H.S. Adam and A. M. Adeep, (1999). Water use efficiency of sorghum and groundnut under traditional and current irrigation in the Gezira scheme Sudan. (Submitted for publication).
- 17. <u>Ibrahim, A.A.</u>, C. J. Stigter, H.S. Adam and A. M. Adeep and O.A.A. Fadl (1999). Farmer's attitudes in on-farm irrigation management in the Gezira Scheme Central Sudan. (Revision to be submitted irrigation science).
- 18. C. J. Stigter, R.M.R. Kainkwa, S.B.B. Oteng'l L.O.Z. Onyewotu, A. E. Mohamed and <u>A.A. Ibrahim</u> (1999). Measuring wind gradients in agroforestry systems by intercomparison, using shaded Piche evaporimeter.

- 19. C. J. Stigter, R.M.R. Kainkwa, S.B.B. Oteng'l, <u>A.A Ibrahim</u> A. E. Mohamed and L.O.Z. Onyewotu, (1998). The shaded Piche evaporimeter. As an ancillary isothermal anemometer. Instrumeters and Observing methods, report No. 77. WMO/TD-No. 877. WMO. Geneva, pp. 377-380.
- 20.C. J. Stigter, , A. E. Mohamed and . L.O.Z. Onyewotu, D.N. Mungai, , <u>Ibrahim, A.A</u> and R.M.R. Kainkwa, (1994). Agrmeteorlogical research for protection and improvement of the Tropical agricultural environment. Conference paper. The second notional workshop. On Meteorological Research Applications and Services, Nairobi, Kenya, 15pp.
- 21. Adam H. S., <u>Ibrahim, A.A</u> M. K. Abdalla, (1999) Rainfall in the Sudan.
- 22. <u>Ibrahim, A.A.</u> and M. E. Mohamed (1999) seasonal rainfall, an example of poor reliability in sub-Saharan Africa, conference paper. Nile 2002, Cairo, Egypt.
- 23. <u>Ibrahim, A.A.</u> (1998). Impacts of Desertification on the Nile River's environment.
- 24. Sugeiroun E. S, A. M. A. Salih, H.S, Adam, A.S.A. Hussein, Ibrahim, A.A and B. Bargi, (1993). Review of evaporation estimates for Merowe reservoir (committee paper, for Ministry of Irrigation and Water Resources).