Curriculum Vitae

Almutaz Abdelkarim Abdelfattah Mohammed Khartoum-Sudan Mobile: +249912549309 : +249114201645 E-mail: <u>almutaz.a@gmail.com</u> <u>a.abdelfattah@hrc-sudan.sd</u>



Prersonal Information:

Name.	Almutaz Abdelkarim Abdelfattah Mohammed	
Current Position.	t Position . Researcher Engineer at Hydraulics Research Center (HRC),	
	Ministry of Water Resources, Irrigation and Electricity.	
Address	House No 152- Block 6 - Jabra - Khartoum - Sudan.	

Education:

Master of Technology (M.Tech) in Water Resources	Jul 2012 - Jul 2014
Development.	
Indian Institute of Technology-Roorkee, college of Water	
Resources Development and Management.	
BSc (Honors) Second Class-division One in Water	Jan 2001 - Jul 2008
Resources Engineering.	

Sudan University of Science and Technology, college of water and environmental engineering.

Experience:

No	Institute	Job	Duration
1	Hydraulics research Center-	Researcher	2014-Present
	Ministry of Water Resources,	Engineer	
	Irrigation and Electricity.		
2	General Directorate of Projects-	Water Resources	2010-2014
	Ministry of Water Resources,	Engineer	
	Irrigation and Electricity.		
3	KHARTOUM Company for Water	Trainee	2010
	and Services (KWS)		

A Researcher Engineer at Hydraulics Research CenterSep 2014 - Present(HRC), Ministry of Water resources, Irrigation andElectricity- Sudan.

Responsibilities:

During this period at HRC, my experience has covered broad areas such as hydrology, hydraulics, River Engineering, Irrigation water management and integrated water resources management and major projects and Their responsibilities were:

- Flood Forecasting and Early Warning Program with Eastern Nile Technical Regional Office (ENTRO) in Addis ababa.
 - Participated as a flood forecasting specialist to represent Sudan in ENTRO's flood forecasting program during 3 seasons 2015, 2016 and 2017.
 - Running FEWS_Sudan Model to forecast flood in Blue and Main Niles in Sudan and disseminate flood forecasting reports.
 - Numerical Weather Predictions (NWP) compilation and generation of Rainfall maps using WRF model.
- Navigation Study of reach, Kosti-Khartoum-Berber:
 - A team leader for data collection stage include bathymetric and land surveying.
 - Processing and analysis of collected data and participating in preparation of data collection report.
 - A GIS specialist to process and prepare geospatial data to prepare the Navigation Charts.
- Drainage problems of El Shawal major Protective drain:
 - A Team leader to lead the implementation of the study including budget management and completion according to allocated budget and time.
 - Conducting several sites investigations to diagnose and identify the problems in El Shawal Protective drain.
 - Planning and leading the team for topographical surveying and preparation of the report.
 - Conducting the Hydrological analysis of the study area and estimating discharges for purpose of drain Design.
- Jebel Aulia reservoir evaporation estimation study.

- Preparation of the proposal for the study.
- Data collection and Analysis.
- Evaporation estimation using different methods and hence estimation of evaporation volumes for Jebel Aulia reservoir.
- Prepare new evaporation factors that can be used for reservoir operation.
- Water Balance Study and Validation of Reservoir Releases for Merowe Dam.
 - Participate in the preparation of study proposal.
- A tutor for flood forecasting systems and Rainfall runoff modeling (HEC-HMS) during IGAD course on "Regional training of trainers in Hydrological Forecasting and Time Series Analysis".
- A tutor for Hydrodynamic modeling during IGAD Regional and National training course on "Sustainable shared river basin management and groundwater development".
- Research Proposals for several studies:
 - Determination of river flow for improved operation of the upper Atbara reservoirs system.
 - Estimation of Evaporation losses From Reservoirs in Sudan.
 - Drainage Problems of Sabir Branch protective drains.
- Participated in 3 proposals of Navigation study, namely:
 - The river transportation along the Main Nile reach: Karima Wadi Halfa.
 - The river transportation along Setit Atbara reach: Hemdaeid -Khashm El Girba.
 - The river transportation along the Blue Nile reach: Roseires-El Deim.
- I also organized many workshops such as:
 - Gezira Scheme consultative workshop.
 - $_{\odot}$ Land and water investments in Eastern Nile Basin funded by (SIWI and IWMI).
- Trainer on Courses organized by DIU at HRC to train new engineering graduates on the basics of water resources engineering (6 batches).

A Water Resources Engineer at Design Office, GeneralApr 2010 - Sep 2014Directorate of Projects, Ministry of Water resources,Irrigation and Electricity- Sudan.

Responsibilities:

Main duties were designing of irrigation projects including canalization and hydraulic structures such as regulators and other structures and preparation of drawings and setting out sheets for tenders. During this period I participated in different projects such as:

- Kassap group Agricultural Scheme.
- El Malaha Group Agricultural Scheme.
- New Halfa Agricultural Scheme rehabilitation.
- Gash Agricultural Scheme rehabilitation.

A Trainee at wastewater treatment plant, KHARTOUM One Month for Water and Services Company (KWS).

My main duties was carrying out lab tests to monitor and optimize plant operation and preparing operations reports.

Languages:

Fluent Arabic and English (Reading- Writing-Speaking-Understanding).

Skills:

NLP Diploma: from Experts training and HRD Centre.

Presentation: Developed ability to produce reports and presentations to a professional standard.

Analysis & Evaluation: Proficient in assessing data and formulating solutions.

Organisational: Effective at time management and prioritising tasks to achieve deadlines.

Interpersonal/Communication: Strong team working, leadership, communication, and persuasion skills (NLP Diploma).

Computer Skills:

Highly proficient at Windows, Linux, ArcGIS, QGIS, ERDAS, SWAT, WMS, HEC-HMS, HEC-GeoHMS, HEC-RAS, SOBEK, Ribasim, SPSS, WaterCAD, SewerCAD, WaterGEMS, SewerGEMS, AutoCAD, Microsoft Office Packages and internet. Programming Skills of: Python, MATLAB and R.

Proven ability to use any software after short period.

Courses and Workshops:

- GIS & Remote sensing training course at The National Ribat University, College of Computer Studies.
- The procurement Seminar at The Ministry of Water Resources-Sudan.
- Water Use Efficiency workshop at Department of Water resources development & Management, Indian Institute of Technology Roorkee.
- Soil and Water Assessment Tool (SWAT) Modeling at National Institute of Hydrology-India.
- Dam Safety workshop at ENTRO (Eastern Nile Technical Regional Office), Ethiopia.
- Water and sanitation training program organized by Chinese Academy of Science and The world Academy of Science, Centre of Excellence for Water and Environment (CAS-TWAS CEWE), Beijing, China.
- RIBASIM model training program at Hydraulic Research Center (HRC).
- SOBEK Hydrodynamic model training program at Hydraulic Research Center (HRC).

References:

- Prof. Dr. Yasir Abbas Mohamed.
 Director of Hydraulic Research Center (HRC) Sudan, a senior Lecturer in Water Resources Management at UNESCO-IHE.
 (y.mohamed@hrs-sudan.sd), (yasir.mohamed@unesco.ihe.nl).
- Prof. Dr. Nadir Ahmed Elagib.
 CNRD Professor, Natural Resources Management and Research Fellow of the Alexander von Humboldt Foundation (Nov 2011 Apr 2013), Georg Forster Fellowship for Experienced Researchers, Institute for Technology and Resources Management in the Tropics and Subtropics (ITT), Cologne University of Applied Sciences (CUAS), Betzdorferstr. 2, 50679 Köln (Deutz), Germany. Tel : +49-221 8275 2075 (Office). (elagib@hotmail.com).
- Associ. Prof Abu Obeida Babiker Ahmed.
 Associate professor (HRC),
 Mobile: +249123813813, +249912643490.
 e-mail: (hrs_abdo@hotmail.com)