UNESCO CHAIR IN WATER RESOURCES

Profile

2011

UNESCO **CHAIR IN WATER RESOURCES**

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We are committed to promote the role of water in life

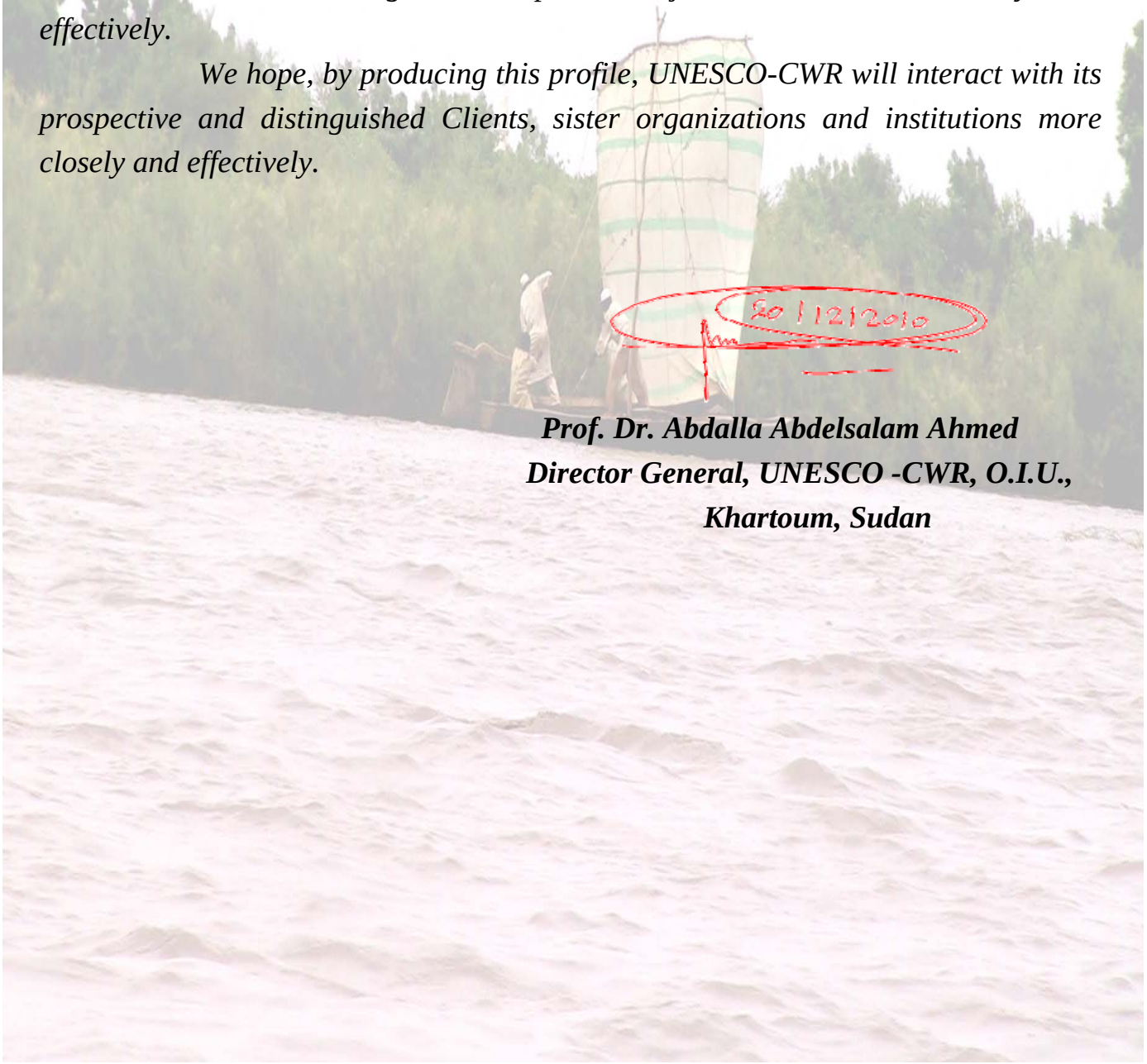
Forward

Dear Reader:

As part of its efforts to serve its community in a better way, UNESCO-CWR has produced this profile. The purpose is to let you know who we are, what do we do and how best can we serve you or be of help to you.

The profile reflects UNESCO-CWR mandate, objectives, part of its activities and facilities. UNESCO-CWR acquired wide recognition and good relationship with many relevant regional and international organizations. This gives the Chair a distinct advantage to accomplish its objectives, and serve its society more effectively.

We hope, by producing this profile, UNESCO-CWR will interact with its prospective and distinguished Clients, sister organizations and institutions more closely and effectively.



Prof. Dr. Abdalla Abdelsalam Ahmed
Director General, UNESCO -CWR, O.I.U.,
Khartoum, Sudan

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1.0 Establishment

UNESCO Chair in Water Resources-Sudan (UNESCO-CWR) was established in 1994 following the agreement signed by the UNESCO Director General and the Vice Chancellor of the Omdurman Islamic University on behalf of the Sudan Government. UNESCO-CWR serves the local, regional "the Nile Basin, Eastern and Central Africa, and Shared Aquifers" as well as international water community.

2.0 Mission

UNESCO-CWR mission is "to build, enhance and strengthen capacity for sustainable water resources development and management through education, research, consultancy, and knowledge dissemination."

3.0 Vision

We are committed to promote the role of water in life

4.0 Objectives

The main objectives of UNESCO-CWR are summarized as follows:

a) Capacity building in Integrated Water Resources Planning and Management and related fields;
b) Promote integrated research systems based on multi- disciplinary approach;
c) Documentation, dissemination and awareness raising;
d) Facilitate coordination, collaboration and cooperation among universities, research institutions and centers at national, regional and international levels;
e) Provide consultancy services in its areas of expertise.

5.0. Areas of Specialization

UNESCO-CWR offers training, research and consultancy services on the following areas:

5.1. Water Resources

- Water resources assessment
- Design of hydrologic networks
- Integrated WR planning and management
- Design of water projects.
    - urban and rural water supply
    - water harvesting
    - hydropower

  - irrigation and drainage
- Management of water projects
  - operation and maintenance
  - measures of performance

5.2. Environmental Engineering

- Water quality planning and management
- Environmental monitoring and assessment
- Water treatment and waste water disposal
- Restoration of degraded natural resources
- Climate change

5.3. Remote Sensing and GIS

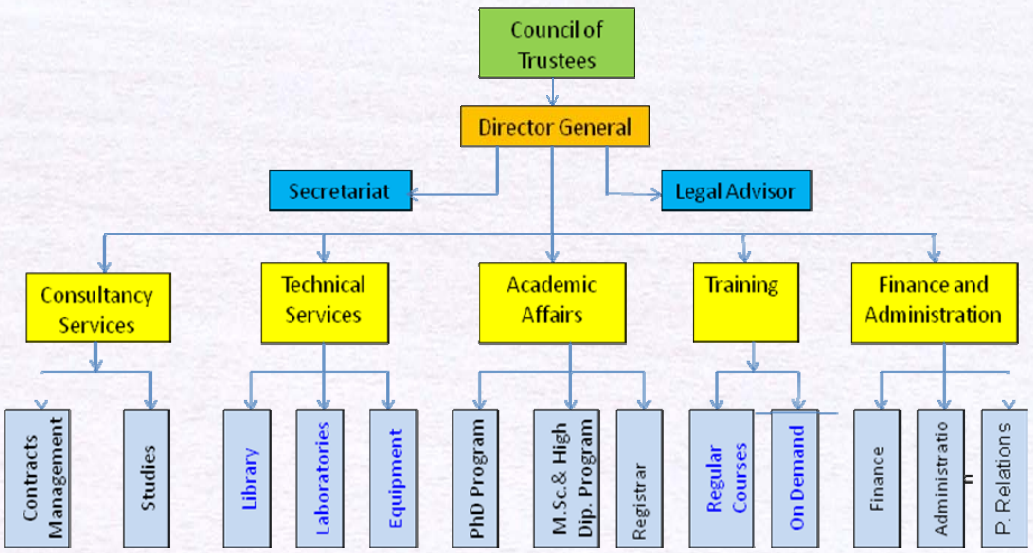
- Soil survey and land use mapping
- Land, wetland and floodplain delineation and mapping
- Environment monitoring

6.0 Organizational Structure

The organization of UNESCO-CWR is structured around the following departments managed by the Director General. A Council of Trustees sets and steers the strategic plans and activities of the Chair:

- Academic Affairs
- Training
- Technical.
- Consultancy.
- Finance and Administration.

UNESCO-CWR Organizational Structure



7.0 Regular Capacity Building Programs

One of UNESCO-CWR main objectives is to develop human resources and associated infrastructures to ensure that water professionals and other stakeholders have the skills, knowledge and means to realize their full potential and achieve sustainable development.

These are made through:-

1. Master Degree Programs
2. Ph.D. Degree Programs
3. Postgraduate Diploma Program
4. Short Training Courses
5. Monthly Forums
6. Public Lectures

8.0 Available Facilities

In performing its educational, research and consultancy activities, UNESCO-CWR has availed and equipped itself with a wide range of supporting facilities. These comprise:-

- Library;
- Computer & Video Conferencing Hall;
- Lecture Rooms,
- Meeting Halls;
- Remote Sensing & GIS Laboratory
- Water Quality Laboratory;
- Survey Equipment;
- Groundwater Exploration Equipment;

In the following some details are given about these facilities:

8.1. The Library

To help UNESCO-CWR in fulfilling its objectives, a library was established hoping later to be center for information and documentation in the field of Water Resources and related sciences. Currently the library holdings reached more than 3000 copies of books and references, proceedings of conferences, periodicals, and thesis for Higher Diploma, M.Sc. and PhD. The documents are mostly in English. It includes also in the division of e-library a number of compact discs (CD's) and electronic books. Annually the library receives new collections. The main reading room of the library accommodates about 35 researchers at any one time.

The Library provides its services primarily to employees of UNESCO-CWR and graduate students at all levels (PhD- M.Sc. - Higher Diploma). It provides services to researchers and students from other universities and similar research institutes. The services range from using computers, World

Wide Web searching to book lending and information retrieving through the library bibliographic database system established under UNESCO Win / isis for thesis loaded in the auto run CD-ROM, according to UNESCO program Genesis / CD. In addition access to electronic books stored on CD-ROM is also available.

Library of UNESCO-CWR

8.2. The Computer Laboratory:

The laboratory is equipped with 40 PCs and Tele-conferencing facility. It encompasses a wide range of networking facilities that include sharing programs and internet accessibility. The laboratory witnessed many educational and training programs arranged by UNESCO-CWR. The facility is also available to serve other institutions and organizations. Several NBI, ENTRO, UNICEF, USAID, RTF of France, RTI of USA …. etc. training activities were conducted in this lab.

Computer Laboratory

8.3. Meeting Halls

UNESCO-CWR has furnished and equipped three medium meeting halls. They are suitable and flexible for various types of functions. In addition UNESCO-CWR has strong linkages with many institutions and hotels to avail larger halls if need arises.

8.4 Remote Sensing & GIS Laboratory

This unit was established in 2005. It provides hard and digital copies of satellite imageries and thematic maps. Topographic and land use maps are also produced at different scales.
The laboratory enables UNESCO-CWR to acquire data bank, digital satellite imageries and high thematic maps. Moreover the laboratory built a GIS geo-database that includes a very wide range of thematic geospatial layers.
The laboratory has the following facilities:-

Hardware:

- Three high capacity computers
- Large format digitizer
- Large format scanner (A0)
- Large format color plotter (A0)
- High sensitive and modern Total Station
- Several handsets GPS
- Color printer (A3 size)

Software:

- ERDAS IMAGINE 9.2
- ARCGIS 9.3
- ENVI 4.7
- Global Mapper11
- PCI 10

Remote Sensing and GIS Laboratory

8.5. Water Quality Laboratory

This laboratory is equipped with very advanced instruments that especially suit the Sudan environment and needs. Moreover, the lab covers a wide range of tests and offers services for testing physical, chemical and biological properties of water. The lab was built in a flexible way to accommodate future development in basic and applied research, beside the general services for the society. Total quality central management program is initiated to combine both efficiency and precision. The state of the art of the laboratory system allows creating multi-analytical approaches to solving problems and generates strategic data and information.

The *Water Microbiology* division provides testing services for numerous water types including, potable water, waste water, bottled water, food processing water and dialysis water. UNESCO-CWR lab provides advice and assistance on water quality monitoring and water sample collection. The laboratory provides bacteriological analysis of water for the private sector, researchers, students, government departments and the general public. Various water quality tests are available to detect the number and types of microorganisms in water and assist communities in keeping the microbial content of their water supplies at safe level. These tests and standard procedures include:-

- Most Probable Number (MPN) using liquid media
- Presence/ absence test using liquid media
- Total Bacterial Count
- Membrane Filtration Technique

Further the following analysis can be performed in the lab.

- Physicochemical analysis;
- Major cations;
- Major anions.

Water Quality Laboratory

8.6 Survey Equipment:

Field data measurements are crucial for the proper planning, design and management of water resources projects. UNESCO-CWR acquired modern Hydrographic and Land Survey equipment such as Total Station, Levels, GPS Sounder, ADPC, Engine-boat and other survey accessories.

The field survey team is well trained and very experienced in conducting survey works efficiently and on time.

Land and Hydrographic Survey Equipment at Work

8.7 Groundwater Exploration Equipment

Here the main concerned is groundwater exploration for drinking water and irrigation. We possess a sophisticated and advanced piece of equipment (ABEM Terrameter 4000) which provides valuable information on water availability in the underground strata (depth, quantity, quality and extension) using advanced software. The investigations are conducted by qualified and experienced experts and technicians.

Groundwater Exploration Equipment

9.0. Completed Projects

UNESCO-CWR conducted and completed a wide range of projects ranging from desk studies to intensive field works. Some samples of these projects are given below:-

9.1 "*Nile Banks Protection in Khartoum State*" It was conducted for Khartoum Development Corporation, (2002).

9.2 "*Assessment of Water Supply Sources and Systems of Potable Water in Khartoum Metropolitan in Relation to Liquid Disposal*", carried out under the NBCBN-RE programme, (2009).

9.3 "*Flood Risk Assessment for Pilot Areas in Sudan"*, carried out for ENTRO, NBI, (2009-2010)

9.4 "*Improved Water and Land Management in the Ethiopian Highlands and its impact on D/S Stakeholders"*, performed jointly with IWMI for the benefits of the Eastern Nile Basin Countries (2007 – 2010).

9.5 "*Assessment of the Current State of the Nile Basin Reservoir Sedimentation* ***Problems",*** conducted under the NBCBN-RE Program, phase I, (2001 – 2005)**.**

9.6 "*Towards the improvement of the protection methods against bank erosion*", conducted under the NBCBN-RE Program, phase I, (2001 – 2005)

9.7 "*Nile Basin Reservoir Sedimentation Prediction and Mitigation*", conducted under the NBCBN-RE Program, Phase II, (2006 – 2010).

9.8 "*Nile River Bank Erosion and Protection*", conducted under the NBCBN-RE Program, Phase II, (2006 – 2010).

9.9 ***Flow Regimes from International Experimental and Network Data (FRIEND/NILE PROJECT***

Phase I (2000 – 2005):-

- ***Sediment Transport and Watershed Management Component (STWM).***
- ***Flood Frequency Analysis Component (FFA).***
- ***Rainfall-Runoff Modeling Component (RRM).***
- ***The Drought and Low-Flow Component (DLFA).***

Phase II (2005 -2010)

- ***Hydrologic Modelling Component (HMC)***
- ***Erosion and Sediment Transport Modeling Component (ESTMC).***
- ***Stochastic Modelling Component (SMC).***
- ***Eco-hydrology Component (EHC).***
- ***Integrated Water resources Management Component (IWRMC).***

910 *"Groundwater Assessment for West Omdurman Area, Khartoum State"*, conducted for Housing Development Fund – Ministry of Physical Planning and Public Utilities, (2005).

9.11 *"Groundwater Exploration – White Nile State"*, conducted for Ministry of Physical Planning and Public Utilities, White Nile State, (2007).

9.12 *"Assessment of Groundwater – Northern State"*, conducted for Ministry of Physical Planning and Public Utilities, Northern State, (2007).

9.13 *"Aweil City Water Supply – Pollution Mitigation, Bahr AlGhazal State "*, conducted for Bahr AlGhazal State, (2005).

9.14 *"Study of Sand Encroachment on the River Nile Northern Sudan"*, (2000).

9.15 *" Water Exploration in Darfur – Sudan"*, conducted jointly with Radar Technologies France for USAID, (2006).

10.0 Current Projects

10.1 ***"Eastern Nile Forecast, Data Collection and Communication Systems",*** conducted for ENTRO, NBI, (2010 – 2011)

10.2 ***"Eastern Nile Community Watershed Management Project",*** conducted for Eastern Nile Basin Countries, (2010 – 2014).

11.0 Proposed Research Topics

UNESCO-CWR has identified a range of research topics (listed below) that will address certain problems of practical and economic values that contribute towards efficient and sustainable management of our water resources. The Chair is currently seeking funds to carry out some (if not all) of these projects.

11.1 Water Resources Engineering

1. Irrigation water practices and management for optimum efficiency
2. Water resources development in Jabel Marra Area – Darfur - Sudan
3. Inventory and Assessment of the Hydrometric Network in Sudan
4. Optimal Utilization of Surface and Groundwater: a Case Study of Dinder and Rahad
5. Optimal Utilization of Surface and Groundwater: a Case Study of Elsileim Aquifer
6. Optimal Utilization of Groundwater: a Case Study of Albaggara Aquifer
7. Suitability of small dams as water harvesting techniques in wadi Kutum, N- Darfur
8. Identification of potential projects for utilization of non Nilotic surface water
9. Modeling of Flood Magnitude and Inundations
10. Groundwater Assessment in Sudan using GIS
11. Hydrological Criteria for Design
12. Water Resources Development Issues in River Nile State – Northern Sudan
13. Identification of Potential Projects for Groundwater utilization
14. Water Resources Assessment of Bahr Elghazal Rivers – Southern Sudan
15. Use of Remote Sensing in GW exploration in basement area in western Sudan
16. Irrigated Agricultural sector challenges and mitigations

11.2 River Engineering

1. Mitigation of Sand Encroachment on the Nile river channel
2. Delta formation upstream the High Aswan Dam in Sudan
3. Sabaloga Dam project on the Main Nile
4. The effects of Siltation on Reservoirs and Agricultural Projects
5. Gash River: challenges and mitigation measures
6. Akrip Dam multipurpose Project on upper Atbara
7. Design Procedures for Silting Irrigation Channels
8. Tuti island bank protection – Blue Nile and White Nile confluence
9. Impact of sedimentation on hydropower generation, Roseires Dam.

11.3 Environmental Engineering

1. Mitigation measures for contamination from petroleum production in Sudan
2. The environmental impacts of groundwater development
3. Status of Groundwater Contamination in Tri-cities Capital, Khartoum State
4. Economical and Social Impacts of Water Harvesting Projects
5. Land use changes in Gash river basin
6. The negative impacts of Floods and Droughts
7. Natural Resources assessment in Darfur

11.4 Water Supply and Sanitation

1. Drinking water standards and Health
2. Options to mitigate quality of water supply during flood season in Khartoum State
3. Development of Groundwater Database for Khartoum State
4. Assessment of available models used in design of wastewater networks
5. Development of drainage system in Khartoum State

11.5 Socio-economic Impacts of water projects

1. Economical and Social Impacts of Water Harvesting Projects
2. Economical and Social Impacts of Water borne diseases
3. The Effect of Privatization on Agricultural Sector

11.6 Hydro-Informatics

1. Groundwater encyclopedia in Sudan
2. Relationships among Nile Basin Countries in issues related to water

12.0 Conferences and Workshops

Since its inauguration, UNECO-CWR has managed to launch a number of workshops and conferences at local, regional and international levels addressing a wide spectrum of topics. The following tables list locations and dates of some conferences and workshops events that were solely organized by UNESCO-CWR.

12.1 Local Workshops and Conferences:-

Title of Event	Location	Date	Remarks
Future of Scientific Research	El-Shaheed El-Zibair Hall	9/9/02	Under the Auspices of Minister of High Education
Water Supply: Risks and Remedies	Arab Organization for Agricultural Development	21 to 23/10/02	Under the Auspices of the Vice President of the Sudan

12.2 Regional Workshops and Conferences:-

Title of Event	Location	Date	Remarks
NBCBN-RE	HQ of UCWR	Feb. 2005	Under the Auspices of the Vice Chancellor of OIU
FRIEND/Nile Programme	HQ of UCWR	July 2005	Under the Auspices of the Vice Chancellor of OIU
NBCBN-RE	HQ of UCWR	2006	Under the Auspices of the Director of UCWR
Hydro-Informatics	HQ of UCWR	March 2007	Under the Auspices of the Vice Chancellor of OIU
FRIEND/Nile Programme	HQ UCWR	Nov. 2007	Under the Auspices of the Director of UCWR

12.3 International Workshops and Conferences:-

Title of Event	Location	Date	Remarks
Training of Trainers in the field of IWRM	El-Shaheed El-Zibair Hall	Dec. 2005	Under the Auspices of the Minister of High Education
GIS & RS- USGS-USA	HQ of UCWR	6 to 16 March 2005	Under the Auspices of the Minister of IWR
International Sediment Initiative Conference	Friendship Hall	12 to 15 Nov. 2006	Under the Auspices of the President of the Sudan
Ground Water Management Using Radar Technology	HQ of UCWR	16 to 20 Oct. 2006	Under the Auspices of the Director of UCWR
Meeting of the UNESCO Water Expert with The UNESCO National Committee	HQ of UCWR	24 to 30 Aug. 2007	Under the Auspices of the Minister of IWR

13.0 Prizes and International Participations

In recognition of its excellent performance in the field of water resources and related fields, research and capacity building, UNESCO-CWR was awarded the UNESCO UNITWIN Distinction Award, UNESCO-HQ-Paris, November, 2002.

The Chair was also distinguished by an Appreciation Award for outstanding performance and efforts by the National Water Research Centre of Egypt in April 2004, Cairo during the 2nd Arab Conference.

14.0 Short Profile of UNESCO-CWR Staff

Prof. Dr. Abdalla A.salam Ahmed

- **Position:** Director General, UNESCO Professor, Prof. O.I.U of Water Resources
- **Education**: (i) Ph.D. (Hydraulic Eng.) Glasgow U., 1984; (ii) B.Sc. Honor (Civil Eng.) Khartoum U., 1978
- **Countries of Work Experience**: Sudan, U.K., Ethiopia, Egypt
- **Areas of Interest**: Water Policies, Planning in Water Resources, IWRM, Irrigation and Sedimentation Management, Water harvesting, Water Supply and Sanitation, Climate Change, Flood and Drought Risk Management.

Prof. Dr. Ahmed Salih Ahmed

- **Position:** Professor
- **Education:** (i) Ph.D. (Hydraulic Eng.) U. of Southampton England, 1984; (ii) M.Sc. (Irrigation Eng.) U. of Southampton England, 1978; (iii) B.Sc. (Civil Eng.) U. of Khartoum, 1973
- **Countries of Work Experience:** Sudan , England
- **Areas of Interest**: rrigation Engineering and Management ,Sediment Transport

Prof. Dr. Khalil Abdalla El-Medani

- **Position:** Professor of Sociology
- **Education:** (i) Ph.D. (Sociology) U. of California Riverside, 1986 (ii) M.S. (Anthropology and Sociology), U. of Khartoum, 1978; (iii) B.S. (Social Anthropology and Sociology) U. of Khartoum, 197**4**
- **Countries of Work Experience:** Sudan, United States, Kingdom of Saudi Arabia
- **Areas of Interest:** Social and Environment Impacts Assessment, Economical Analysis, Community Participatory Approach

Prof. Hassan M. Fadul

- **Position:** Professor of Soil Science and RS
- **Education:** (i) Ph.D. (Soil Sciences) U. of Gezira, 2000; M.S. (Soil Science) I.T.C, Holland, 1976; (iii) Advanced Diploma (RS) I.T.C., Holland, 1973; (iv) B.Sc., U. of Khartoum, 1971; (v) Standard Diploma I.T.C., Holland, 1971; (vii) Diploma (Agriculture) Shambat Institute, 1960
- **Countries of Work Experience:** Sudan, Tanzania, Kenya
- **Areas of Interest:** Soil Sciences and Agronomy

Prof. Dr. Abbas A.Alla Ibrahim

- **Position:** Professor
- **Education: (i)** Ph.D. (Hydraulic Eng.) U. of Khartoum, Sudan 1996; (ii) M.Sc. (Irrigation Eng.) U. of Khartoum Sudan, 1980; (iii) B.Sc. (Civil Eng.) U. of Khartoum, 1975, Civil Eng. Diploma: - April 1961. K.T.I.
- **Countries of Work Experience**: Sudan, England
- **Areas of Interest:** River Morphology

Dr. Kamaleldin ELsidig Bashar

- **Position:** Assoc. Professor
- **Education:** (i) Ph.D. (Water Resources Eng.) U. of Dar es Salaam, 2000; (ii) M.Sc. (Water Resources Eng.) U. of Dar es Salaam, 1993; (iii) B.Sc. (Civil Eng.) U. of Khartoum, 1986
- **Countries of Work Experience:** Sudan, Tanzania and Ethiopia
- **Areas of Interest:** Water Resources Engineering (Modeling)

Dr. Ahmed Musa Siyam

- **Position:** Assoc. Professor
- **Education: (**i) Ph.D. (Hydraulic Eng.) Bristol U.,UK 1999; (ii) MSc. (Building Technology) Khartoum U., 1988; (iii) MSc. (River Eng.) Delft Institute, 1995 (iv) B.Sc. Honor (Civil Eng.) Khartoum U., 1984
- **Countries of Work Experience:** Sudan, England, Egypt
- **Areas of Interest:** Sediment transport, water harvesting and Hydraulic Engineering

Dr. Ibrahim A.A. Babikir

- **Position:** Assist. Professor of Remote Sensing and GIS
- **Education: (**i) Ph.D. in Remote Sensing and GIS, Berlin-Germany (2005); (ii) M. Sc. in Sedimentlogy Khartoum U., (1994); (iii) B.Sc. Geology, Faculty of Science- U. of Khartoum (1987).
- **Countries of Work Experience:** Sudan, Germany
- **Areas of Interest:** RS and GIS

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Dr. Yosif Ahmed Ibrahim

- **Position:** Assoc. Professor
- **Education:** (i) Ph.D. (Water Resources Engineering) U. of Dar es Salaam, 1997 (ii) M.S. (Water Resources Eng.), U. of Dar es Salaam, 1992; (iii) B.Sc. Honors (Civil Eng.) Khartoum U., 1989
- **Countries of Work Experience:** Sudan, United States, Tanzania, Republic of South Africa.
- **Areas of Interest:** Water System Analysis

Dr. Sami Omer Hag El Khidir

- **Position:** Assist. Professor
- **Education:** (i) Ph.D. Geology (Remote Sensing and GIS), Berlin U., Germany 2006. (ii)M. Sc. Geology , Khartoum U. 1990 (ii)B.Sc. Geology and Chemistry, Faculty of Science - Al Mansoura U., Egypt 1988
- **Areas of Interest:** Geo-informatic Sciences, Digital image processing and interpretation of Satellite data, Geospatial analyses and GIS modeling. Geological, geo-morphological studies.

Eng. Muna Mohammed Musnad

- **Position:** Researcher
- **Education:** (i) Diploma on Hydraulic Eng. in River Basin, Hydraulic Research Institute, Egypt 2002 (ii) M.Sc. in Water Resources Eng., U. of Dar es Salaam, Tanzania. 1998 (iii) B. Tech. (Honors) in Civil Eng. (Hydraulics), Sudan U., Sudan1993.
- **Countries of Work Experience:** Sudan, Tanzania
- **Areas of Interest:** Water Quality, Water Management, Modeling, GIS and RS

Eng. Dina Abdin Ahmed Salama

- **Position:** Researcher
- **Education:** (i) M.Sc. in Hydrology UNESCO-CWR, O.I.U. 2006 (Grade Very Good) (ii) B.Sc. in Agricultural Eng., Khartoum., Faculty of Eng. & Architecture 2002.
- **Countries of Work Experience:** Sudan, Norway
- **Areas of Interest:** Watershed Management, Water Harvesting, Hydrological Modeling, Climate Change, GIS and RS Applications

Eng. Usama Hamid Ahd E. Ismail

- **Position:** Researcher
- **Education: (**i) M.Sc. in WR Development and Management, UNESCO-CWR, O.I.U. 2010
- (ii) B.Sc. in Civil Eng. (East London U.) – 1996 (iii) HND in Civil Eng. (South Bank U.) 1994
- **Countries of Work Experience:** Sudan
- **Areas of Interest:** Sediment Transport , Hydrology, Hydrological Modeling, Water Quality, Hydraulic Structure, RS and GIS applications

Eng. Elgaily M.Ahmed Bashir

- **Position: Researcher**
- **Education:** (i) M.Sc. in Water Resources Eng., Khartoum U., Sudan, 2005 (ii)B.Sc. in Civil Eng., O.I.U., 2000
- **Countries of Work Experience:** Sudan
- **Areas of Interest:** Hydrological Modeling "Rainfall – Runoff Modeling"

Eng. Ayman Khalid Abdalla

- **Position :** Researcher
- **Education:** (i) M.Sc. Hydrology Student. (ii) B.Sc. of Environmental Sciences 1996, O. A.U.
- **Countries of work Experience:** Sudan
- **Areas of Interest:** Water Quality, Environmental Impact Assessment, Risk assessment and GIS Application

Mr. Anwar Elbushra Mohamed

- **Position**: Researcher
- **Education: (i)** M.Sc. in Chemistry, College of Graduate Studies, Sudan U. for Science and Technology 2004 **(ii)** Higher Diploma in Chemistry, College of Graduate Studies, Sudan U. 1997(iii) Higher Diploma in Chemistry UK U. 2001 **(iv)** B.Sc. in Chemistry, Faculty of Education, Sudan U. 1995

Position: Researcher

- **Areas of Interest:** Water Quality, Synthesis of organic compounds.

Miss. Feda Abd Allah Bukhari

- **Position:** Researcher
- **Education:** (i)Higher Diploma in Microbiology, Sudan U. (ii) M.Sc. in Chemistry and Zoology Sudan U. for Science and Technology 2004, B.Sc. in Microbiology Sudan U., 1995
- **Areas of Interest:** Water Quality, Clinical Microbiology

Eng. Leena Mahgoub Ali Bashir.

- **Position:** Researcher
- **Education:** (i) M. Sc. in Hydrology. Omdurman Islamic University. (i) B.Sc. Honor in geology, University of ALneelain – Sudan.
- **Countries Work:** SUDAN
- **Area of Interest:** Water Quality, Hydrology, Water Recourses Management, Hydrogeology

Mr. Mhd F. Izeldeen Hussein.

- **Position:** Librarian
- **Education:** (i) M. Sc. in library & Information Science, U. of Juba, 2007. (ii)Higher Diploma in library & Information Science, U. of Juba, 2006. (iii)B. A. Library & Documentation, Faculty of Arts, O.I.U.,1996.
- **Countries Work:** SUDAN
- **Area of Interest:**, Database development, Writing Articles in the Newspaper, photography

Mr. Arffat Ibrahim Osman

- **Position:** Information Technology Manager
- **Education**: (i) M.Sc. of Business Administration **MBA** in Sudan U. (ii) B.Sc. in Computer Science, 2003 (iii) Computer maintenance certified from telecommunication training center in 2001.
- Oracle Certified from telecommunication training center in 2002
- ICDL Certificate & ICDL Authorised Tester at Sharjah Institute of Secretarial Sciences

Mr. Safe Zarrog Alhaj El Sheakh

- **Position:** Assist. Researcher
- **Education: (i)** Groundwater Technology (College of Water and Environmental Eng. – Sudan U. of Science & Technology). **(ii)** High Diploma in WRDM, UNESCO-CWR, O.I.U., 2008.
- **Areas of Interest:** GIS and RS Applications in Water Recourses

Mr. Fadul Hassan Mohamed

- **Position:** Financial Manager
- **Education:** (i) M.Sc. Administration O.I.U., 1997,(ii) B.Sc. Commerce Ein Shams University, Egypt 1985
- **Countries of Work Experience:** Sudan

Mr. Asaad Awad Satti

- **Position:** Registrar
- **Education:** B.Sc. Mass Communication, Cairo U.
- **Countries of Work Experience:** Sudan

Mr. Hitham Bakri Mohamad khlfalla

- **Position:** Head of Personnel Affairs
- **Education:** Diploma, Business Administration and Accounting, School of Aviation Sciences U., Khartoum, Sudan

Mr. Mohamed Ibrahim Mursal

- **Position**: Computer Technician
- **Education:** Diploma in Computer 3 year

Mr. Abuomeya Abdalla

- **Position:** Public Relation
- **Education:** Bsc Mass Communcation, O.I.U.

Mr. Alfateh Mohammed Abdullah

- **Position:** Accountant Manager
- **Education:** Diploma in Financial Accountant 1997, O.I.U.

Miss. Hagir Mohammed Mustafa

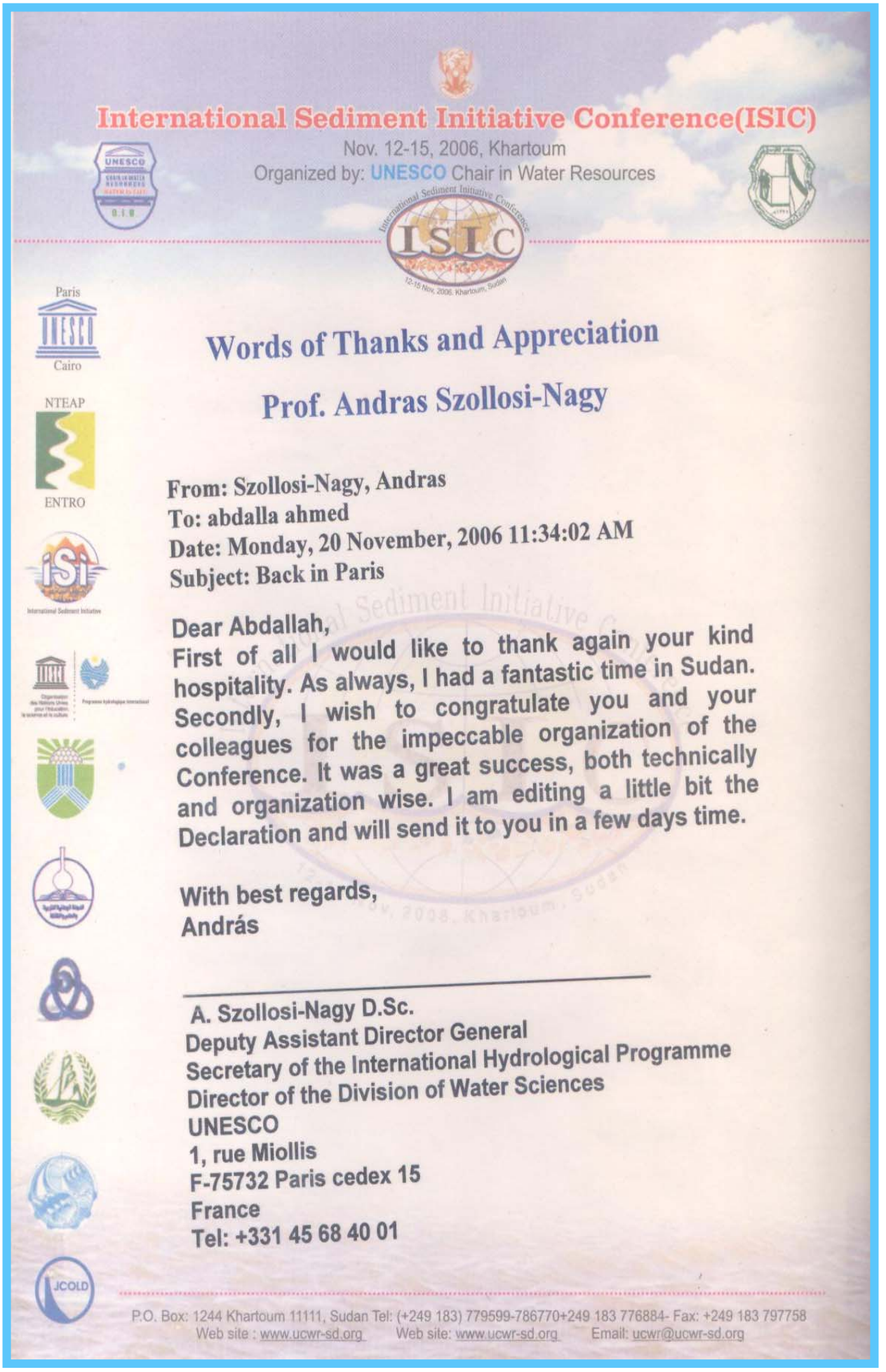
- **Position:** Accountant
- **Education:** B.Sc. Accounting U. of Sudan

Miss. Hala Abdelhalim Mahgoob

- **Position: Secretary**
- **Education:** (i)MSc. Community Development, Al Neelain University. **(ii)**Postgraduate Diploma, Economic Development, Al-Neelain University. **(ii) License in Sociology**, Al-Neelain University

15.0. Affiliated Staff:-

1. Prof. Jamal Abdo (Groundwater)
2. Prof. Elsamani Elgaili (Animal Production)
3. Prof. Edriss Salim (Socio- economic)
4. Prof. Nour Eldin Almosharaf (Poultry Production)
5. Prof. Hassan Salim (Horticulture)
6. Dr. Babiker Abdallah (Environment al Sciences)
7. Dr. Abdelhadi Abdelwahab (Agriculture)
8. Prof. M. A. Khadam (Sanitary and Public Health Engineering)
9. Dr. Suaad A. Said Ahmed (Chemical Engineering and Water Quality)
10. Eng. Badr El Din Hassan Omer (Surveying)
11. Eng. Eltab Yagoub (Water Harvesting and Rural Water Supply)
12. Prof. Mamoon Dawelbeet (Agric. Engineering)
13. Dr. Khalil A/Elgadir (Irrigation Engineering)
14. Dr. Adil Elkhadir (Irrigation Engineering)
15. Dr. Gamal A. Eltom (Geology)
16. Dr. Omer Elawad (Irrigation Engineering and Road Consterction)
17. Eng. Abbas Baloola (Mathematics)
18. Prof. Sef El Din Hamad (Water Resources)
19. Assoc. Prof. Abo Obieda Babiker (Hydrulic Engineering)
20. Dr. Mhd Ali Alooba (Water Quality)
21. Prof. Basheir M. El Hassan (Chemical Engineering and Water Quality)
22. Prof. Abdalla Almubark (Food Technology)
23. Mr. Hassein Mhd Ahmed (Range Specialist)



International Sediment Initiative Conference(ISIC)

Nov. 12-15, 2006, Khartoum

Organized by: UNESCO Chair in Water Resources

Words of Thanks and Appreciation

Prof. Andras Szollosi-Nagy

From: Szollosi-Nagy, Andras
To: abdalla ahmed
Date: Monday, 20 November, 2006 11:34:02 AM
Subject: Back in Paris

Dear Abdallah,
First of all I would like to thank again your kind hospitality. As always, I had a fantastic time in Sudan. Secondly, I wish to congratulate you and your colleagues for the impeccable organization of the Conference. It was a great success, both technically and organization wise. I am editing a little bit the Declaration and will send it to you in a few days time.

With best regards,
András

A. Szollosi-Nagy D.Sc.
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