



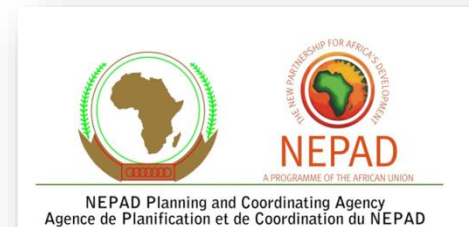
Western African NEPAD Water Centres of Excellence

Pr Alioune KANE
WANWATCE/EDEQUE/UCAD/Sénégal
alioune.kane@ucad.edu.sn

Mandate

From African Ministry Council on Science and Technology (AMCOST) and - Water AMCOW has taken forward this initiative through the NEPAD Office of Science and Technology – Cairo Resolution, 2006)

New Partnership for Africa's Development (NEPAD) initiated the identification of CE in science and technology on water for Africa's sustainable development towards new forms of regional and sub-regional networks

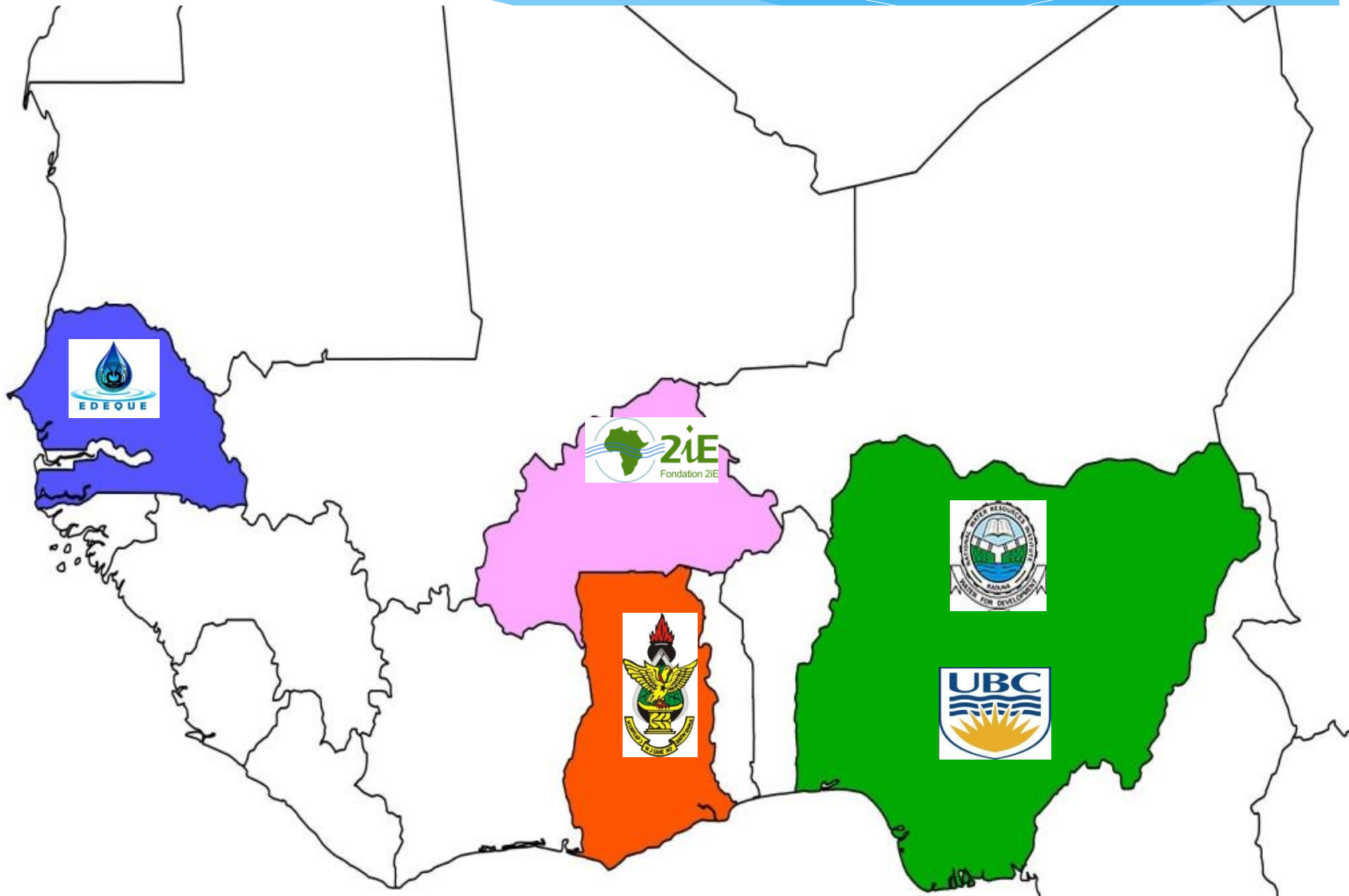


NEPAD – KNOWLEDGE INSTITUTIONS DIALOGUE

- * Universities are one of the most valuable resources which African countries possess, but unfortunately, capacity inherent in universities is hardly utilised for policy development and implementation
- * NEPAD strongly believe that universities in Africa can play a very strategic role and implementation in this regard
- * Universities can support their national governments
- ✓ knowledge production and innovation-driven processes that enhance fact and evidence based decision making and encourage increased investments in knowledge and scientific institutions and science and technology undertaking research in Water and Sanitation related fields to generate new knowledge
- ✓ Capacity building (development and strengthening) : Adaptive capacity development institutions driving a progressive agenda for capacity development , producing scholars conversant who subsequently become effective policy-makers;
- ✓ utilizing African potentials, skills and resources for development ;
- ✓ universities could also become members of the Country Implementation Teams to provide technical support to the implementation process as Resource Groups and/or Technical Experts.

The Western African Network of Water CoE's

- * The Western African Network of Water CoE's:
 - * Cheikh Anta Diop University (Senegal)
 - * Kwame Nkrumah University of Technology (Ghana)
 - * Benin City University (Nigeria)
 - * National Water Resources Institute (Nigeria)
- * 4 Centres but no Funding for the Secretariat



Objectives of the initiative are the following

- * Improve conservation and utilization of the continent's water resources;
- * Improve the quality and the quantity of water available to rural and urban households;
- * Strengthen national and regional capacities for water resources management and reduce impacts of water related disasters;
- * Enlarge the range of technologies for water supply and improve access to affordable quality water.

EU Project

1. Design and implement a Joint Learning Program on the water sector in West Africa.
2. Carry out a Knowledge Management program in the West African water sector through the regional network
3. Ambitious business plan (Dakar meeting, 2010)
4. Training meetings in Abuja, Accra and Dakar

ENHANCING WANWATCE COOPERATION

AMCOW

- ✓ Cape Town (2010): official recognition

Cairo, Egypt (2013)

- ✓ 11th General Assembly of AMCOW in, where the AU/NEPAD Centres of Excellence was mandated “to develop a Human Capacity Development Programme aimed at addressing junior professional and technician level capacity challenges in the water sector”. Decision: EXCO/11/2013/CAIRO/17.

Dakar (Africa Water Week 2014 ; AfricaSan4 2015)

- ✓ AMCOW General Assembly in Dakar 2014 : the “GA endorses actions taken by the AMCOW Secretariat and NEPAD Centre of Excellence on the Human Capacity Building Programme and calls on both institutions to follow up the request for the support of the 2nd phase of the project. Decision GA/09/2014/DAKAR/19.

ENHANCING WANWATCE COOPERATION

* ECOWAS :

- ✓ [MoU](#)
- ✓ 10 th Ordinary Session of the Technical Experts Committee (IWRM), Dakar, 24/25 Nov. 2015 :

Decision

ECOWAS water ministers agree strengthening IWRM coordination in West Africa , approve water management infrastructure policy and improve protection of water resources

The IWRM Ministerial Monitoring Committee adopted the following resolutions :

Resolution 11 on strengthening WRCC partnership with research structures and degree training centres



NEPAD Western African Water Centres of Excellence

A joint stakeholders analysis of the water sector in Western Africa

February 11-15, 2013 - ABUJA, NIGERIA

FINAL REPORT



In the pictures from the left: the coordinator of the Network, Prof. Kane, with the ECOWAS Water Commissioner; the participants at the Nigerian Ministry of Water Resources; the participants at the Guarara Dam.

Andrea Leone
Juan Arevalo
Giorgia Donin

Africa Centre of Excellence Project

Regional Water and Environmental Sanitation Centre, Kwame Nkrumah University of Science and Technology Kumasi (RWESCK)



Partnership Agreement Between Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, and University of Cheikh Anta Diop, Dakar, Senegal

June 20, 2015

Collaboration

WANWATCE / SANWATCE/CSIR

**Using IWRM best practices to develop
Appropriate Capacity and Training for the benefit
of Sub-Saharan Africa Water Security
[ACT4SSAWS]**

- Funded by African Union Research Grants and 10th European Development Fund**
- IWRM-Component in the SRB_Delta**
- Socio-environmental component on typha**

CE/EDEQUE/UCAD_DGPRE/MHA

- * **Data bases :**

1. **SIIE** : Integrated Information System on Water
(Senegal Water Atlas)

2. **PROGRES**: Senegal Water Resource Management PROgramme

- * **GEMI**: Need to better analyze conceptual and technical implications of the SDO 6 (access to water concepts: quality, accessibility and availability / Sanitation . Secure management of infrastructures ...) Targets 6.3 ; 6.4 ; 6.5 ; 6.6

- * **IWRM** : Niayes ecosysteme and SRB Delta

- * Capacity building: students are welcome to DGPRE , Home Ministry staff in our doctoral programs , joint seminars

A joint stakeholders analysis of the water sector in Western Africa

This study was conducted based on the objectives set on the project document and agreed with all involved institutions partners.

These are as follows:

1. ***To carry out a survey on requirements in higher education and within training for practitioners in the water sector.***
1. ***To carry out a study on how the centre of excellence would better address sector expertise consultancy and advocacy **needed** for the water sector development in the west **African** region.***

Kwame Nkrumah University of Science and Technology



KNUST



JOINT RESEARCH
CENTRE Institute for
Environment and
Sustainability



Western African Water Centres of Excellence

Kwame Nkrumah University of Science and Technology

Report on Ghana Water Sector Stakeholders' Capacity Analysis FINAL REPORT

Document prepared by:
Dr. S. Oduro-Kwarteng
KNUST Civil Engineering

Date: January 2013

University of Benin



University of



Western African Water Centres of Excellence

University of Benin

Report on the Water Sector Stakeholders Analysis Task JLP 1.1 and JLP 1.2

Document prepared by: Dr J. O. Ehiorobo

Date: January 2013

National Water Resources Institute



NEPAD West African Water Centres of Excellence

Report on Task JLP1.1 and JLP1.2

National Water Resources Institute (NWRI)

January 2013

University of CHeikh Anta Diop Dakar



EUROPEAN COMMISSION

JOINT RESEARCH CENTRE

Institute for Environment and Sustainability



NEPAD WESTERN AFRICAN WATER CENTRES OF EXCELLENCE

Program Office

West African Water Centres of Excellence



Document prepared by:

Doctorate School of Water and water Usages, University of CHeikh Anta Diop, Dakar, Senegal

Prof. Alioune Kane and his team

Date: January 2013

Main findings/Results

- ❖ Lack of enforceable legislation for water practitioners(Nigeria).
- ❖ Lack of awareness on the importance of hydrological data in the planning and management of the nation's water resources.
- ❖ Lack of adequately trained manpower in the sector
- ❖ No proper coordination in research and monitoring of water related activities in various institutions, both at the Federal, States and even non-governmental levels need to be addressed

Main findings/results

❖ **Knowledge management: Formal** Knowledge management systems does not always exist in many of the existing water and sanitation organisations;

❖ **Mechanism of dialogue among water actors for water resources management is weak**

❖ **Collaboration among research centres, academia and development partners (government and donors) for research and development in water resources management IS LIMITED**

○ The National Learning Alliance Platform for WASH (water, sanitation and hygiene) could be extended to include water resources in Ghana

Development of a joint training course by the NEPAD Western Africa water centre of excellences in the water sector in Western Africa

CoE	Sub-topic title
Senegal	Module 1 Frameworks for Integrated water resource management
Ghana	Module 2 Water Allocation and Demand Management
University of Benin	Module 3 Environmental Impact Assessment Module 4 Post Construction Monitoring and Evaluation
NWRI Nigeria	Module 5 Conflict Resolution in River Basin Management



**NEPAD Western African Water Centres of Excellence
Water Resources and River Basin Management Joint
Training Course**



2014

Report EUR 26622EN

Training sessions

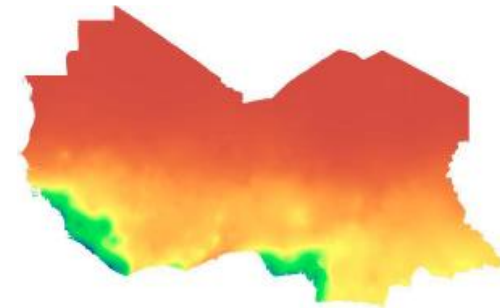
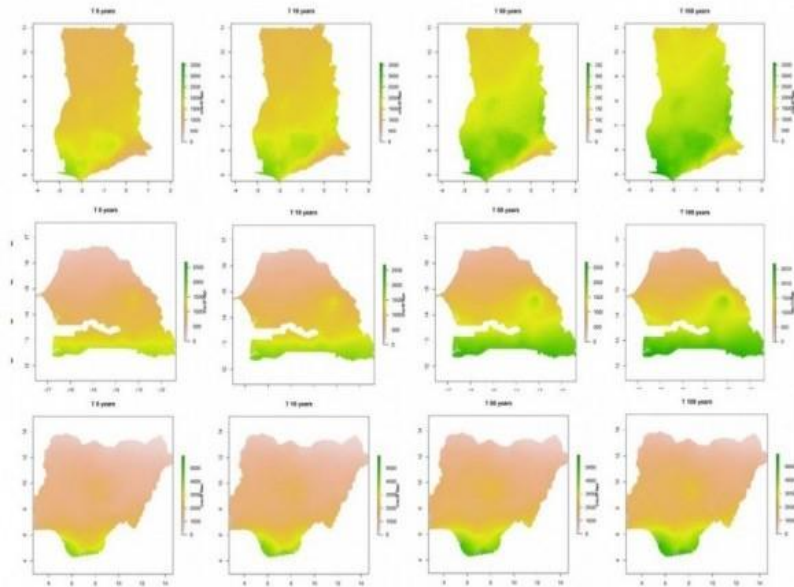
1. AquaKnow GIS module2.
2. Analysis of precipitation data through the L-moments approach.

The L- moments are statistics that can be used to facilitate the estimation of frequency extreme events.

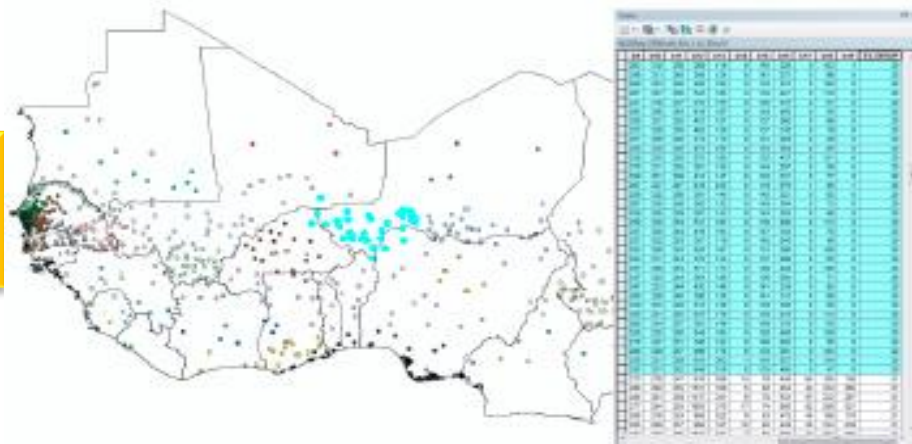
Application of REFRAN-CV on precipitation data (tools acquired from JRC)

Scientific activities supporting policy making

Knowledge and data
management for water security
and climate change -> water
security atlas



Regional databases on climate
variability impact on water
resources management



République du Sénégal
Université Cheikh Anta Diop

Meeting the Water and Sanitation MDGs

*Mapping human resource
capacity gaps in the water
supply and sanitation
sector*



EDEQUE-UCAD Report
February 2013



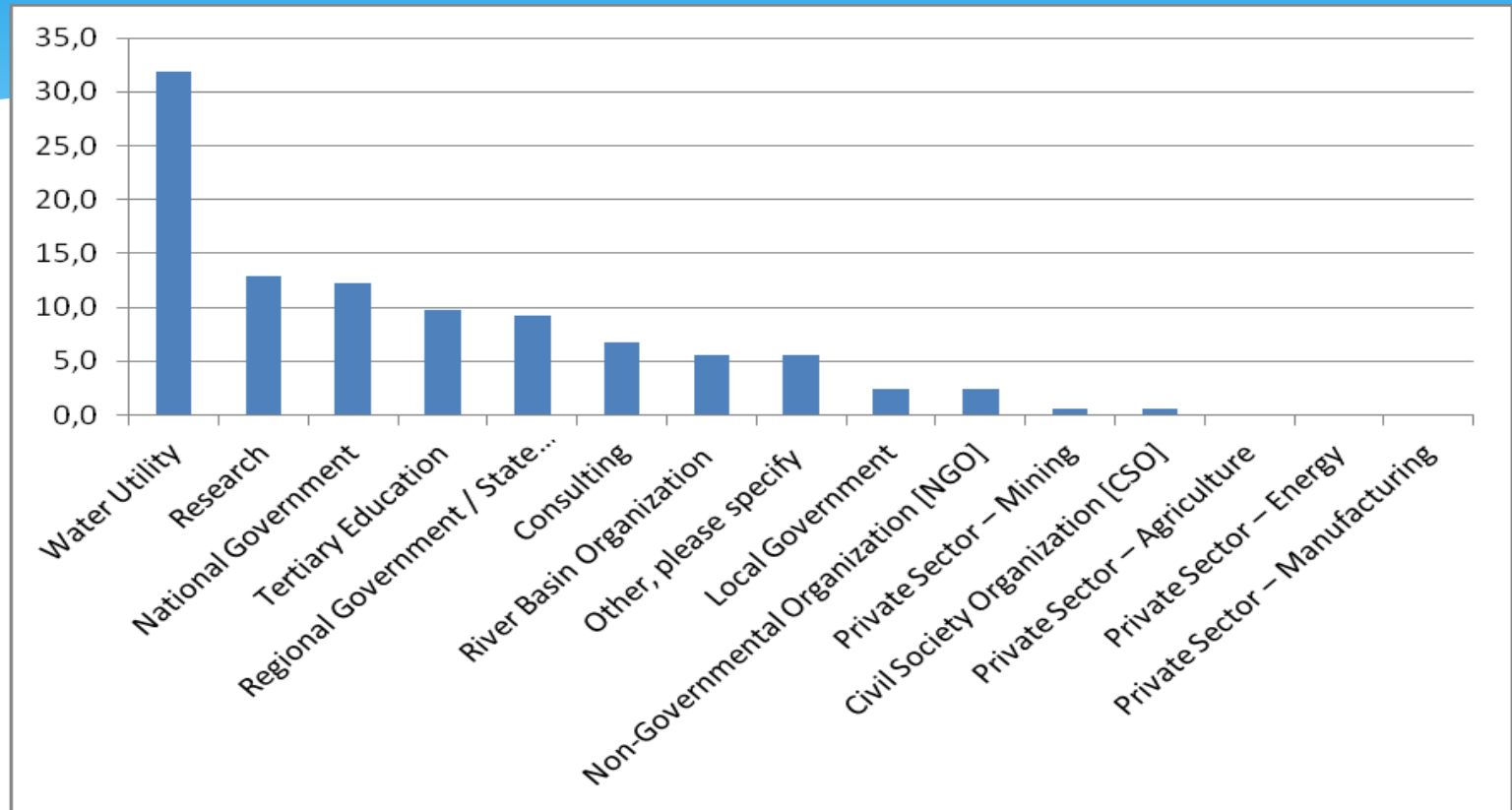
10th Ordinary Session of the Technical Experts Committee (IWRM),
Dakar, 24/25 Nov. 2015



The idea is to...

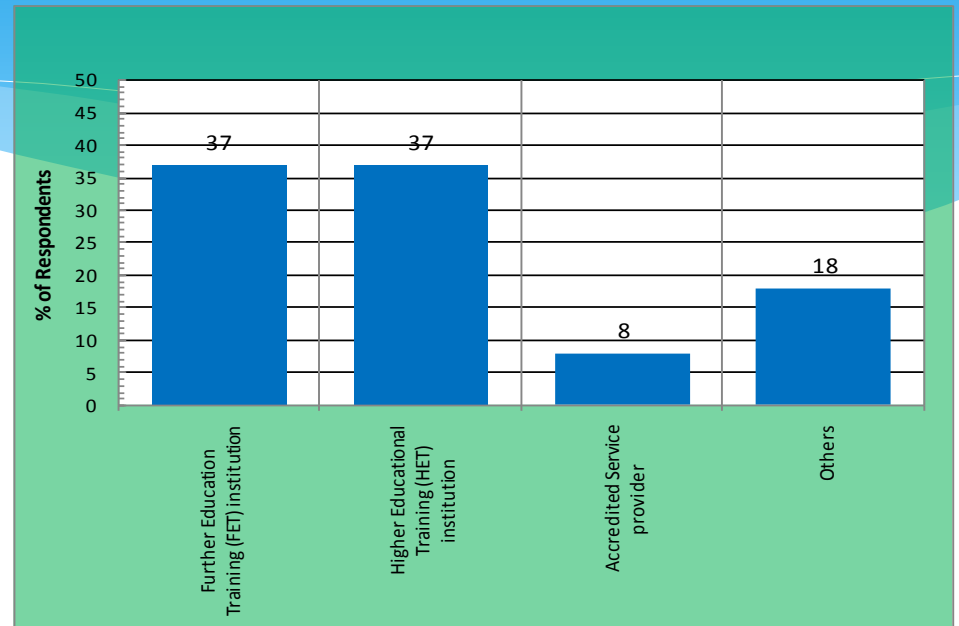
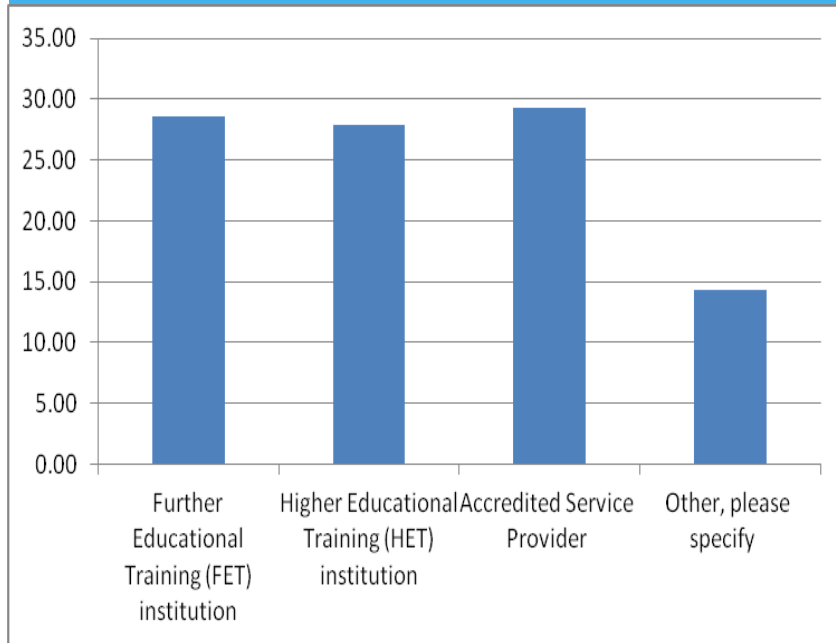
- ✓ Estimate existing capacities and qualifications in the water sector in west Africa region ie private, public, academia, NGO, utilities, international partners, etc.);
- ✓ Identify needs in the water sector in West African sub-region for advocacy and consultancy;
- ✓ Establish priorities based on the results of the survey.

Responses analysis



Majority of the assessed skills are from water utility, research, national government and tertiary education institutions.

Main type of training



three (3) major types of training service providers are recorded in main countries :

- ❖ Accredited service provider ,
- ❖ further education training and
- ❖ higher education training .

Main Findings

- * 1 Supporting and encouraging training institutions to develop professional curricula dedicated to the WASH sector, with a particular focus on developing sanitation curricula both at undergraduate (short-term solution) and graduate (long-term solution)
- * 2 In Senegal, most training and WASH institutions are centralised in Dakar. There is a real need to decentralise training institutions to make it more accessible to other regions
- * 3 There is a need to create vocational courses and technical school for technicians and artisans; this should be done in close collaboration with implementation of agencies and companies involved in WATSAN sectors at all levels

Senegal candidate to WWF 2021
Thanks

Alioune KANE

Université Cheikh Anta Diop de Dakar (Sénégal)
Directeur de l'Ecole Doctorale « Eau, Qualité et Usages de l'Eau »
Boulevard Martin Luther King (Corniche Ouest), Dakar-Fann, B.P. 5005, Tél. : 221 77 648 67 18,
courriel: alioune.kane@ucad.edu.sn; akane@ucad.sn / akane1252@yahoo.fr