

Work, Experiences and Future Plans of the Regional Centre for Integrated River Basin Management (RC-IRBM) as Main Actor for Domesticating IRBM in West Africa

Presented by:

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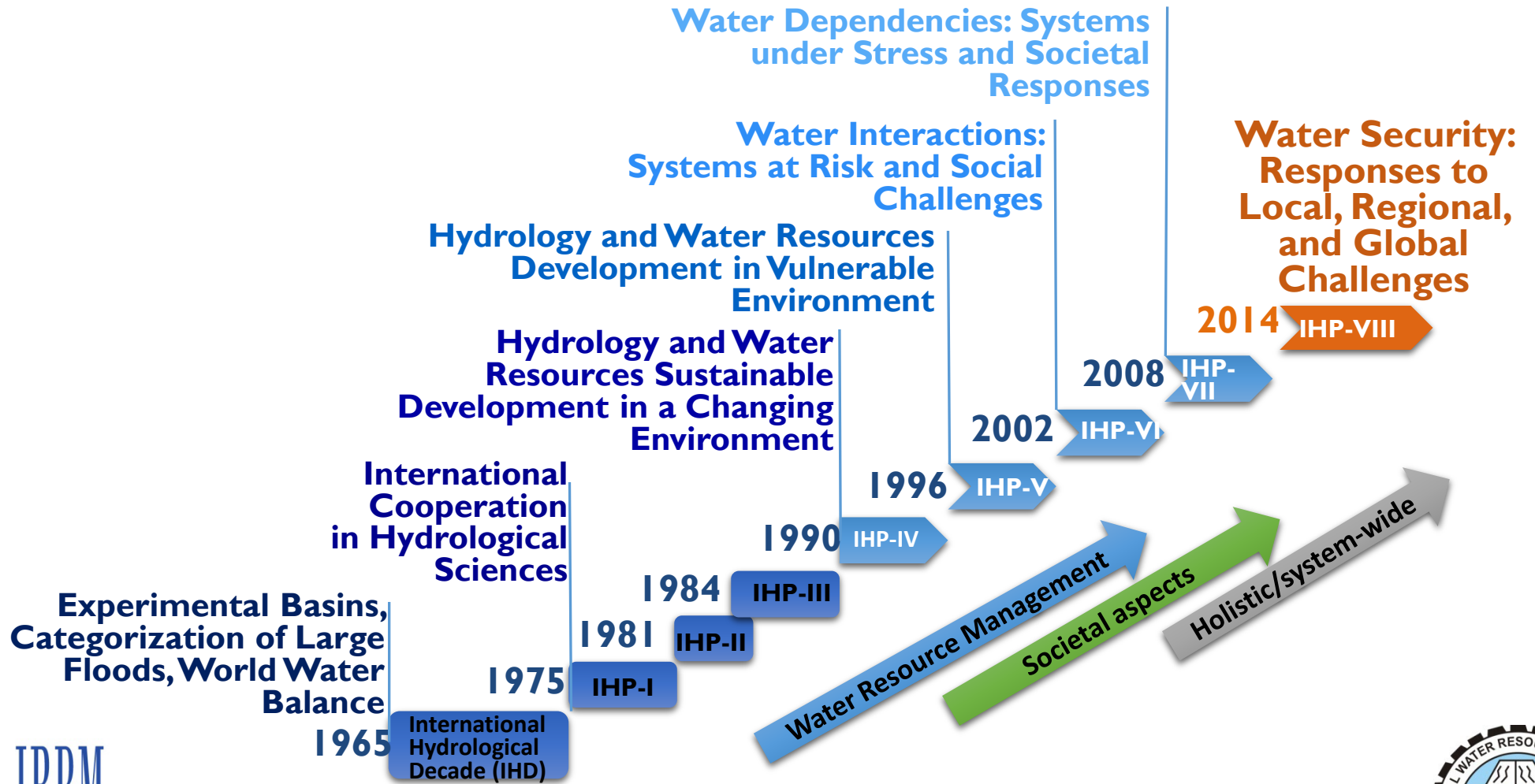
RC-IRBM

Regional Centre for
Integrated River Basin Management
under the auspices of UNESCO





Evolution of IHP: From Hydrological Science to Integrated Science, Policy, and Society



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IHP-VIII 2014-2021



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UNESCO Water Family

37 Centres

56 Chairs

WWAP

169 IHP
NatComs

Europe & North America

- 23 Chairs
- 11 Centres

Arab States

- 5 Chairs
- 5 Centres

Latin America & the Caribbean

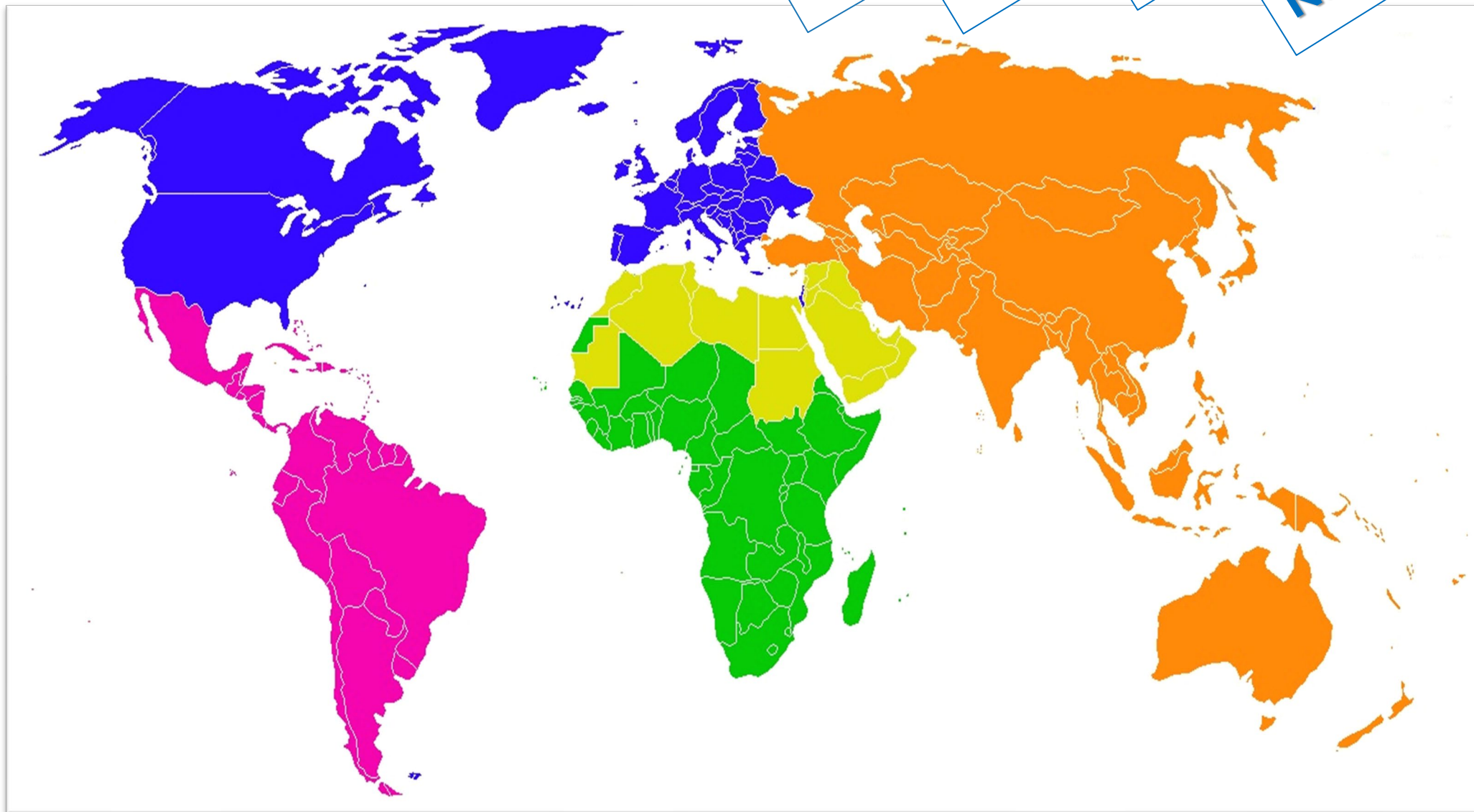
- 9 Chairs
- 6 Centres

Asia and the Pacific

- 13 Chairs
- 11 Centres

Africa

- 6 Chairs
- 4 Centres



ESTABLISHMENT

Name:

Regional Centre for Integrated River Basin Management (RC-IRBM)

□ *On 12 March 2012, the Regional Centre for Integrated River Basin Management (RC-IRBM) came into existence as a Category 2 Centre under the auspices of UNESCO.*

□ *On 12th March, 2018, the Agreement for its establishment expired.*

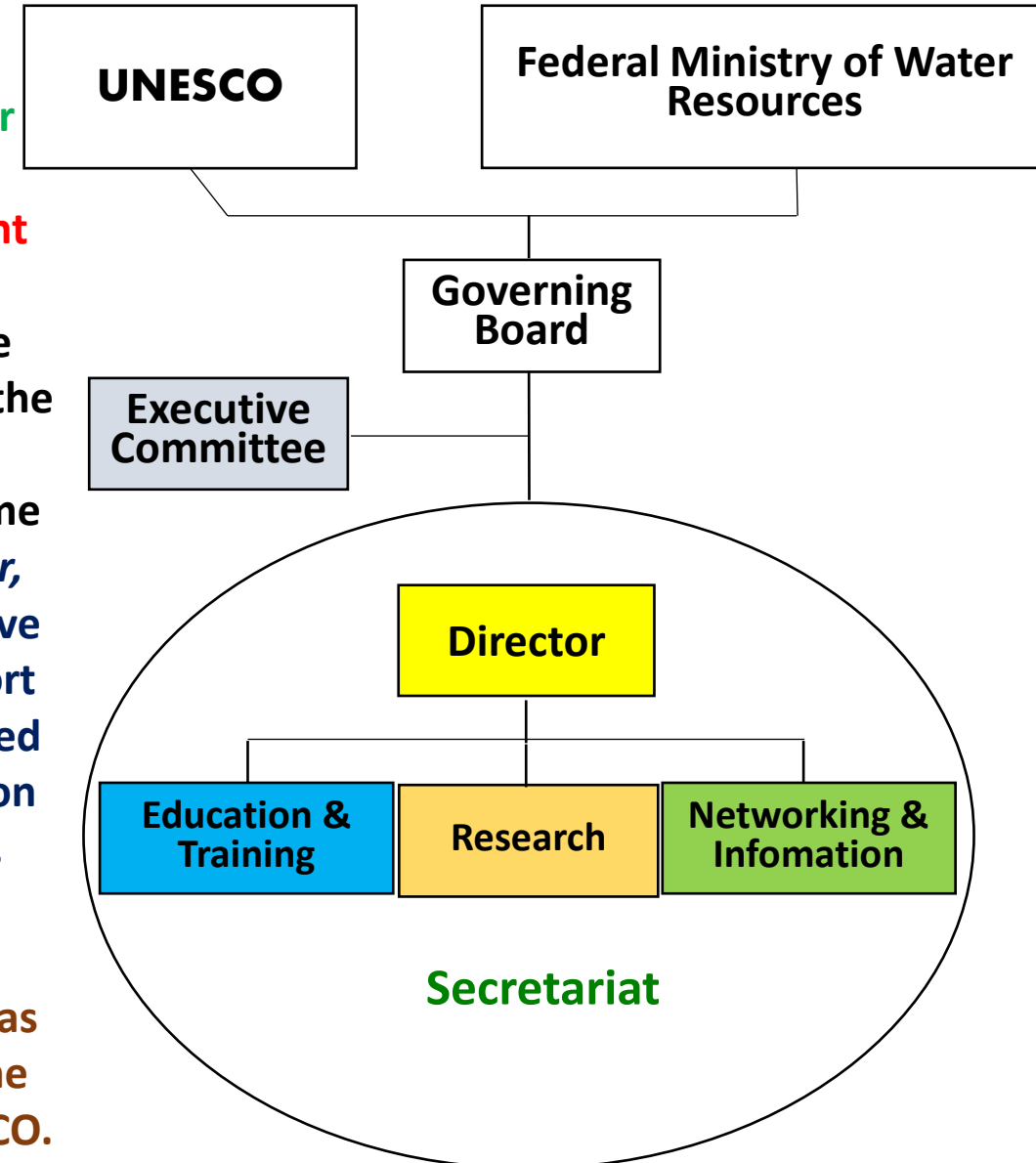
□ *In June 2018, an evaluation exercise was carried out by UNESCO to assess the activities of the Centre and its contribution to the relevant programme objectives of UNESCO. On 11th October, 2018, the 205th Session of the Executive Board of UNESCO considered the report of the evaluation exercise and approved the renewal of agreement for operation of the Centre for another six (6) years.*

□ *On 12th March, 2019 the new agreement for the operation of the Regional Centre for another 6 years was signed between the Government of the Federal Republic of Nigeria and UNESCO.*



Host Institution:

National Water Resources Institute, Kaduna, Nigeria (NWRI)



Vision, Mission and Objectives

Vision:

To be one of the foremost institutions for capacity building having responsibility for training and research activities, acquisition, archiving and analysis of data and dissemination of information for sustainable IRBM

Mission:

Promotion of effective and efficient IRBM of the Member States in the sub-region for sustainable water resources development, in collaboration with other UNESCO Water Centres

Functions:

- ❑ Coordinate the implementation of co-operative research projects and studies with regional, federal and local authorities, as well as private sectors;
- ❑ Build and run networking for information and knowledge exchange capacity-building in Member States of the West African region;
- ❑ Organize training courses, seminars, workshops and meetings; and
- ❑ Produce publications and disseminate information.

Key Activities:

- a) IWRM Research and Training;
- b) Hydro-Informatics and Related Services;
- c) Institutional Framework Development; and
- d) Regional Cooperation and Partnership

Objectives:

- a) **Constitute a facilitator and synergetic structure providing the articulation of the different scientific and institutional stakeholders at local, national, regional and international levels, for the implementation of the IRBM particularly by facilitating interactions among and provide support to River Basin Development Authorities or Organizations in the West African region;**
- b) **Conduct and promote hydro-informatics, integrated water resources management and socio-economic research; and**
- c) **Provide IRBM training and tertiary education facility for water professionals and practitioners in the West African region.**

Legal Status, Regional and International Coverage

The Regional Centre for Integrated River Basin Management was established within the framework of the relevant laws of the Federal Republic of Nigeria as host country, in line with UNESCO's guidelines for operationalization of Category 2 Centres.

The Centre has the five (5) Transboundary River Basins in West and Central Africa as its immediate constituencies to work with as well as all Ministries, Departments and Agencies responsible for water affairs in the sub-region.

Belongs to the UNESCO Water Family in Africa and has developed over time robust relationship with all water entities, particularly under the auspices of UNESCO

The Regional Centre works closely with UNESCO Abuja and Dakar Offices to implement activities that promote and project the IHP Phase VIII and IX programmes



RC-IRBM has signed Memorandum of Understanding with:

- ❖ Foundation for Conservation of Nigerian Rivers, Port Harcourt Nigeria
- ❖ Asia Pacific Centre for Ecohydrology, Jakarta Indonesia
- ❖ International Centre for Water Resources and Climate Change, Koblenz Germany
- ❖ Centre for Sustainable Development and Adaptation to Climate Change, Belgrade Serbia
- ❖ UNESCO Chair on Water Management in Central Asia, Almaty Kazakhstan







RC-IRBM is the Regional Coordinator for Sub-Saharan Africa



RC-IRBM is the African Regional Coordinating Unit of UNESCO-IHP International Initiative for Water Quality (IIWQ)



The Regional Centre is the African Regional Coordinating Unit of Hydrology for Environment, Life and Policy (HELP)

Networking

One of the mandates of the Regional Centre is to: “Constitute a facilitator and synergetic structure providing the articulation of the different scientific and institutional stakeholders at local, national, regional and international levels, for the implementation of IRBM particularly by facilitating interactions and providing support to Regional River Basin Organizations in the West African Region.”

Technical Assessment Visits

- UNESCO-IHE Institute for Water Education, Delft Netherlands
- International Centre for Education, Capacity Building and Applied Research in Water (HidroEx), Frutal State of Minas Gerais – CEP (MG), Brazil
- Lake Chad Basin Commission, N’Djamena Chad
- Niger Basin Authority, Niamey Niger
- Senegal River Basin Organization, Dakar Senegal
- Volta Basin Authority, Ouagadougou Burkina Faso
- International Research and Training Centre on Erosion and Sedimentation, Beijing China

Advocacy Visits

- NEPAD Water Centre of Excellence, Dakar Senegal
- International Institute for Water and Environmental Engineering (2iE), Ouagadougou Burkina Faso
- ECOWAS Water Resources Coordination Centre, Ouagadougou Burkina Faso
- Global Water Partnership, West Africa Office, Ouagadougou Burkina Faso
- African Development Bank (AfDB), Abidjan, Cote D’Ivoire
- Ministry of Water, Irrigation and Energy (Host of African Regional Centre for Ecohydrology (UNESCO Category 2 Centre), Addis Ababa Ethiopia
- Regional Centre for Mapping of Resources for Development, Nairobi Kenya
- UNEP Regional Office for Africa, Nairobi Kenya

INSTITUTIONAL PARTNERSHIPS

Transboundary Water Basin Organizations (TWBOs)

- ❖ Lake Chad Basin Commission
- ❖ Gambia River Basin Organization
- ❖ Niger Basin Authority
- ❖ Senegal River Basin Organization
- ❖ Volta Basin Authority

UNESCO Category 2 Water Centres and Chairs

- ❖ Capital Normal University, Beijing China
- ❖ Centre for Sustainable Development and Adaptation to Climate Change, Belgrade Serbia
- ❖ International Centre for Water Resources and Global Change, Koblenz, Germany
- ❖ Asia Pacific Centre for Ecohydrology, Jakarta Indonesia
- ❖ UNESCO Chair on Water Resources, Khartoum Sudan

UNESCO Regional Offices

- ❖ UNESCO Multisectoral Regional Office, Abuja Nigeria
- ❖ UNESCO Regional Office, Nairobi Kenya
- ❖ UNESCO Regional Bureau for Sciences in Asia and the Pacific, Jakarta Indonesia

Other Water-related Institutions

- ❖ Foundation for Conservation of Nigerian Rivers, Port Harcourt Nigeria
- ❖ ECOWAS Water Resources Coordination Centre, Ouagadougou Burkina Faso
- ❖ Kwame Nkrumah University of Science and Technology, Kumasi Ghana
- ❖ All the Ministries, Departments and Agencies responsible for Water Affairs in the 15 Member States of West Africa

UNESCO Headquarter

- ❖ Division of Water Sciences/International Hydrological Programme Secretariat (SC/HYD)
- ❖ Groundwater Systems and Settlements Section (GSS)
- ❖ Hydrological Systems and Water Scarcity Section (HSS)
- ❖ Ecohydrology, Water Quality and Water Education Section (EQE)
- ❖ Man and the Biosphere (MAB) Secretariat
- ❖ International Initiative for Water Quality (IIWQ)

CAPACITY BUILDING PROGRAMMES

- ❖ **IWRM Modular Curricular Development** → 1 international seminar + 1 international workshop;
- ❖ **Rebooting of the IHP and MAB Committees** → 1 national meeting;
- ❖ **Africa Water Resources Capacity Building (AWaCaB) Programme** → 1 methodology workshop + 1 peer-review/validation workshop;
- ❖ **Sensitization on Transboundary Water Security and Cooperation** → 1 sub-regional workshop;
- ❖ **Development of Transboundary Water Educational Materials** → 1 sub-regional technical meeting + Production of Facts Sheets and Briefing Notes;
- ❖ **Water Quality and Emerging Pollutants** → 1 regional experts' meeting + 1 sub-regional training workshop + 1 regional training workshop; and
- ❖ **Upscaling IWRM and Ecohydrology in Africa** → 1 Inter-regional workshop;

CAPACITY BUILDING PROGRAMMES

- ❖ Contextualizing and adoption of PCCP (from Potential Conflicts to Cooperation Potentials) concept in the management of natural resources of the Lake Chad Basin ➡ 1 Inception meeting + 1 Train-the-Trainer workshop + 4 national capacity building workshops + 1 sub-regional workshop;
- ❖ City Blueprint Framework for Urban Water Management ➡ 1 inception meeting + Field research studies in Abuja, Lagos, Kano, Lafia, Enugu and Calabar + 2 national workshops;
- ❖ Ecohydrology ➡ 5 national consultative meetings + 1 national stakeholders' sensitization workshop + 3 regional capacity building workshops;
- ❖ Collaboration with the Federal Ministry of Water Resources to develop capacity on Integrated River Basin Management (IRBM) at the sub-catchment level ➡ 1 Inception meeting + 1 Train-the-Trainer workshop + 4 national capacity building workshops + 1 sub-regional workshop.
- ❖ *Currently carrying out applied research at Jabi Lake in the capital city of Abuja in Nigeria and Maio Biosphere Reserve in Cape Verde for the sole purpose of demonstrating ecohydrology and to present both sites for approval by UNESCO as Ecohydrology Demonstration Sites*

International Seminar on Modular Curriculum Development for Vocational and Postgraduate Water Education in Integrated Water Resources Management held in Kaduna, Nigeria on 28-30 June, 2011

Country	Nigeria	Senegal	Sudan	UNESCO HQ	Namibia
Number of participants	73	1	1	1	1

International Workshop on Implementing Modular Curricula in Tertiary, Technical and Vocational Education in Integrated Water Resources Management, held in Kaduna, Nigeria on 21-23 May, 2012.

Country	Nigeria	Serbia	Tanzania	Egypt	China	Zimbabwe	UNESCO HQ	South Korea
Number of participants	40	2	1	1	1	1	1	1

Workshop on Strengthening the UNESCO IHP and MAB National Committees for Effective Water Governance, Biosphere Reserve Management and Biodiversity Conservation. Held in Kaduna, Nigeria on 26-27 March, 2013.

Country	Nigeria
Number of participants	43

Sensitization Workshop on Transboundary Water Security and Cooperation in the West African Sub Region. Held in Abuja, Nigeria on 12-13 November, 2014.

Country	Nigeria	ECOWAS	Ghana	Benin	Togo	LCBC	Cote D’Ivoire	NBA	OMVS
Number of participants	35	1	2	2	2	1	2	1	1

Technical Workshop to Develop Effective Transboundary Water Management Education and Awareness Materials to Promote Cooperation and Security in West African Sub Region, held in Kaduna, Nigeria on 1-3 November, 2015.

Country	Nigeria	Benin	Togo	Ghana
Number of participants	22	1	1	1

Country	Congo DR	Guinea	Kenya	Namibia	Nigeria	Sudan	Tanzania
Participants	1	1	1	1	1	1	1

International Methodology Workshop for Implementation of the African Water Resources Capacity Building (AWaCaB) Programme on 28-29 November, 2013

Regional Expert Meeting on Ambient Water Quality in Agenda 2030 SDGs, held in Abuja on 5-6 December, 2016.

Country	Nigeria	Benin	Togo	Ghana	Sierra Leone	Guinea	Liberia	OMVG	LCBC	GEMS Water	Cote D’Ivoire	VBA	OMVS
Number of participants	46	1	1	2	1	1	1	1	1	2	1	1	2

Regional Validation and Peer Review Workshop for the African Water Resources Capacity Building (AWaCaB) Programme on 25-26 June, 2013

African Sub-region	Central Africa	East Africa	North Africa	Southern Africa	West Africa
Participants	1	1	1	1	1

Sub-Regional Training Workshop on Enhancing Skills of Water Professionals in the Assessment, Monitoring and Management of Water Quality in Agenda 2030 SDGs held on 3-4 October, 2017 in Accra Ghana;

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Country	Nigeria	Benin	Togo	Ghana	Sierra Leone	Guinea	Liberia	OMVG	Cote D' Ivoire	VBA	OMVS
Number of participants	13	2	2	9	2	2	2	1	2	1	1

Inter-Regional Workshop on South South Cooperation for Upscaling Integrated Water Resources Management (IWRM) and Echohydrology as Tools for Achieving Water Security in Africa. Held in Abuja, Nigeria on 24-26 January, 2017.

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Country/Organization	ARCE	Cape Verde	Guinea	Sierra Leone	Ghana	ECOWAS WRCC	OMVS	UCWR	NBA
Number of participants	1	1	1	1	1	1	2	1	1
Country	Nigeria	Indonesia	Malaysia	Mali	VBA	Liberia	Benin	Cote D' Ivoire	Togo
Number of participants	36	2	3	1	2	1	1	1	1

Tailor-Made Training on Water Diplomacy and Training Material Adaptation for Peaceful Management of Lake Chad Natural Resources through PCCP (from Potential Conflicts to Cooperation Potentials) Approach, held in Abuja Nigeria on 18-21 September 2018

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Country/Organization	UNESCO Hq	CAMEROON	IHE Water Education Institute	Nigeria	UNESCO Office, Abuja
Number of participants	1	1	1	6	1

Regional Training Workshop on Effective Management of Water Quality and Emerging Pollutants in Water and Wastewater in Sub-Saharan Africa in Accra on 25-27 September, 2018

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Country	West Africa	East Africa	South Africa	Central Africa	RRBOs	Water Centres & Chairs
Number of participants	51	4	4	4	5	3

Capacity Building on Water Diplomacy and Peaceful Management of Natural Resources of the Lake Chad Basin through the PCCP (from Potential Conflict to Cooperation Potential) Approach held in Abuja Nigeria on 12-14 November, 2018

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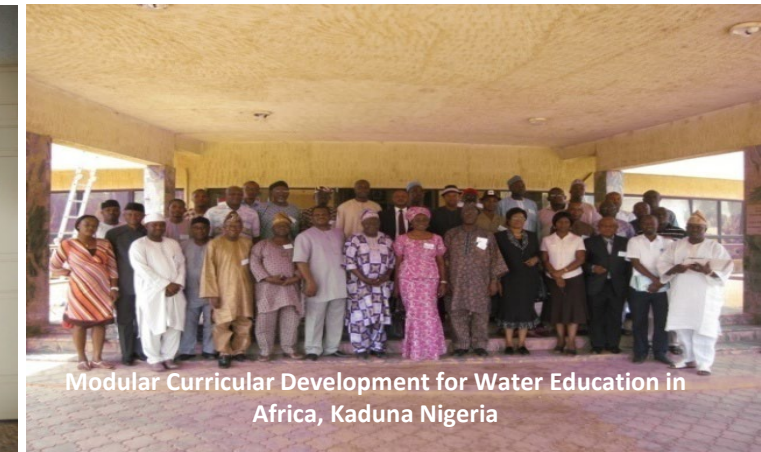
Country/Organization	CAR	CAMEROON	Chad	Niger	Nigeria	LCBC
Number of participants	2	2	2	1	14	2



**INTER-REGIONAL WORKSHOP ON SOUTH-SOUTH COOPERATION
FOR UPSCALING INTEGRATED WATER RESOURCES
MANAGEMENT (IWRM) AND ECOHYDROLOGY AS TOOLS FOR
ACHIEVING WATER SECURITY IN AFRICA**

Workplan

- **Capacity gaps** (explore scholarships for PGD, M.Sc. and Ph.D programmes);
- **Dearth of subject knowledge experts;**
- **Partnership and Networking** – Organize meetings, conferences, workshops and seminars to build capacity and for information and knowledge exchange;
- **Develop websites and publish newsletters, fact sheets, brochures, flyers** etc to disseminate high-level information for policy making
- **Resource mobilization** – exploring funding windows
- **Data acquisition and Management**
- **Sensitization and advocacy**
- **Policies and Legislation**
- **Transboundary water cooperation and security**
- **Mainstreaming IRBM and Ecohydrology at the basin level**



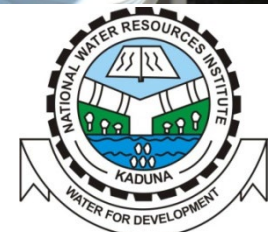


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Bathymetric Study of Sabke Dam in Katsina State, North-Western Nigeria





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International
Hydrological
Programme

Preliminary Investigation into the Prevalence and Causes of Kidney Diseases and Flooding Problems in Gashua and Nguru in North-Eastern Nigeria



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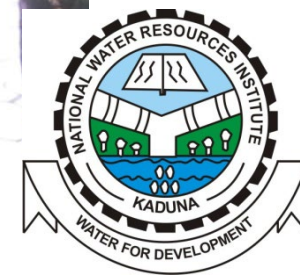
Regional Training Workshop on Effective Management of Water Quality and Emerging Pollutants in Water and Wastewater in Sub-Saharan Africa
in Accra on 25-27 September, 2018



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UNESCO C2C Building Complex (on going)



THANK YOU



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