



Document from the 7th Africa Water Week,
held in Libreville, Gabon, 29 October – 2
November 2018

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practice in the provision, use and
management of water resources for
sustainable social and economic
development and maintenance of African
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Council on Water



PLENARY SESSION DAILY REPORT
(RAPPORT JOURNALIER DE SESSION PLÉNIÈRE)
'7TH AFRICA WATER WEEK'
« 7^{IE}ME SEMAINE AFRICAINE DE L'EAU »
29 OCT. – 02 NOV. 2018

No.	AWW7-2018SS/33	Version No.	01r0			Report Date: (Date du rapport)	01/11/2018
Date:	01/11/2018	Time: (Heures)	2:05 PM	to	3:35 PM	Language: (Langue)	French
Theme:	Toward Achieving Water Security and Safely Managed Sanitation for Africa						
French theme	'Vers la Sécurité de l'Eau et des Services d'Assainissement gérés en toute sécurité pour l'Afrique'						
Sub-theme: (Sous-thème)	Water Security: Infrastructure, Investments and Innovation.						
Session No.	33	Title: (Titre)	Water Quality Surveillance Innovations				
Country: (Pays)	GABON	City: (Ville)	Libreville	Location: (Lieu)	Stade de l'Amitié Sino-Gabonaise à ANGONDJE		
Rapporteur (Rapporteur):	Brel-Maurel MICKONGO MOUKAKOU				Technical Partner: (Partenaire technique)	SASI GABON	
Further details: (Informations complémentaires)	<p>PowerPoint Presentation (YES) : 1) 20181101 - AWW7 - Innovations in Water Quality Monitoring_wide 2) CDC_Innovations in water quality monitoring_Capacity Development_20181101 3) GIZ Kenya AWW presentation_final 4) Lisniak_20181101_AWW7_Role_of_Data</p> <ul style="list-style-type: none"> • Technical Documentation Technique (NO) 						
Abbreviations and Acronyms: (Sigles et abréviations)	<ul style="list-style-type: none"> • GEMS : Global Environment Monitoring System • IWaSP : International Water Stewardship Programme • GIZ : Deutsche Gesellschaft für Internationale Zusammenarbeit 						

IDENTIFICATION OF THE LEAD CONVENER AND CONTACT (IDENTIFICATION DES RESPONSABLES ET CONTACTS)

Lead Convener (Responsable):	United Nations Environment World System of Continued Surveillance Fresh Water Environment (GEMS/Water) PNUF
Co-convener (Coresponsable):	<ul style="list-style-type: none"> • School of Biological Sciences, Earth and Environment, and Environmental Research Institute, University College Cork, Ireland; • International Water Resource and World Change Center (UNESCO-PHI) – Hydrology Federal Institute, Germany
Contact:	Kaisa.uusimaa@un.org kilian.christ@un.org

SPEAKER IDENTIFICATION (IDENTIFICATION DES INTERVENANTS)

Moderator (Modérateur):	CHRIST, Kilian (Associate Program Officer, GEMS Water Unit, Division of Early Warning and Assessment)
Speakers (Intervenants)	<ul style="list-style-type: none"> • LISNIAK, Dmytro (Scientist, GEMS/Water Data Centre) • KAPP-SCHWOERER, Maren (Counselor, GIZ) • WARNER, Stuart (Training and Support Officer, GEMS Water)

SESSION OBJECTIVES (OBJECTIFS DE LA SESSION)

SESSION PLAN (PLAN DE SESSION)

- Importance of data
- Role of data
- Role of capacity Development

SESSION SUMMARY (RÉSUMÉ DE LA SESSION)

- During session #33, speakers discussed the different innovations in terms of water quality surveillance.
- Kilian Christ first indicated that 10 years ago, a conference was held in Gabon and led to the signature of the **Libreville Declaration on Health and Environment in Africa**. At the end of this conference, African countries committed to implement or reinforce health and environment surveillance systems to allow the measurement of interdependent effects on health and environment, and to identify emerging risks to better manage them (6th engagement). Then, he stated that the aim of data collection is to help the decision-making process. Consequently, all the tools made available in that sense do not resolve the different water quality issues, but bring useful information allowing the detection of different water, sanitation and hygiene issues. One of these tools is the GEMS system, which not only allows to collect and analyse data relative to water quality, but also offers capacity building training, owns a large database, publishes reports and works in networking with multiple countries in the world.
- Dmytro Lisniak spoke about the importance of data. Speaking in the name of the GEMS Water Data Center, he indicated that 75 countries work with GEMS Stat in data collection and treatment, and study reports publication. He insisted on the fact that data is important because it is the core of decision-making. Collected data allow to verify water quality, verify if it is safe for consumption or any other use. The GEMS System (World Environmental Surveillance System) uses different types of indicators, as well as satellite observations (optical properties, thin layer) which allow to collect data on the field and send it to the centre for analysis. A feed and data treatment scheme has been planned to demonstrate the reliability of the collection and treatment system via GEMS Water. However, one of the issues encountered remains the sharing of information from some countries.
- The International German Cooperation Agency (GIZ)'s committee has discussed the issues relative to the role of data within what they have labelled "Citizen Science." In Kenya, the information is collected by citizens, which are trained to do data collection and entry in the database via mobile phone.

Rivers are very polluted in the country, due to the increase of the number of people in the capital and to industrialization. Waste water, solid waste and heavy metals are not treated and discharged in the river, etc. Currently, there is no coherent surveillance system to measure the river pollution level and the collected data is not accessible, thus the importance of citizen science which brings citizens at the core of the data collection activity. Through the International Water and Sanitation Program (IWaSP), which is in charge of water security by combining the world's water management best practices with local knowledge, the population learns by itself to collect and verify water's quality, to avoid being infected by bacteria such as E.coli.

However, there exist a few challenges, namely the recruitment of a larger number of people to participate to the collection of data. With the gradual suppression of IWaSP, it is uncertain that Nairobi Data will be used, but another anchorage is searched with another institution.

- Stuart Warner has discussed about the importance of respecting certain steps in data collection. He explained that it was indeed important to collect data, but that should be done in the appropriated way. For example, it is important to know the when and where to collect data, the collection parameters, etc. It is to that effect that the GEMS Capacity Development Centre was put in place. Its activities among others:
 - Train in the collection of reliable and high-quality data on the quality of the water which can be used for national, regional and world evaluations;
 - Provide advice and assistance for the conception of surveillance programs and implementation of networks Methods.

QUESTIONS AND ANSWERS (QUESTIONS ET RÉPONSES)

Question No.	1	Author (Auteur):	Kilian Christ
Wording (Libellé):	What are the improvements in terms of water security in your country, as a representative of your respective countries and institutions?		
ANSWERS (RÉPONSES)			Speakers (Intervenants)
In Nigeria, we have created a framework for the implementation of laboratories. Certain areas in Nigeria are affected by pollution. To resolve this issue, there was a law on water, and we have built 6 additional laboratories in addition to the 6 existing ones. But, we also have to harmonize all the data collected. One of the issues we face is the understanding of the data by decision-makers.			Abu (Nigeria)
Despite our water potential, there exists areas in Senegal where water quality is poor. Populations complain about the bad taste of water. We have, however a judicial framework for water, and the National Water Quality Improvement Strategy. Our challenges remain information sharing at all levels. We work with GEMS Water to achieve the SDG 6.			Ndour (Senegal)
In Chad, the focus is on bottled water. That water is subject to quality verifications. Tap and source waters are not really monitored. But today, we are working to study water quality, on water streams. We also work to reach the SDG 6, and for that we ask the support of specialists in that matter.			Yunan (Chad)

Question No.	2	Author (Auteur):	Anyitike (Tanzania)
Wording (Libellé):	Why do you work on such findings and not share them with decision-makers, namely the Kenyan Government?		
ANSWERS (RÉPONSES)			Speakers (Intervenants)
We are working on a pilot project, and it is sure that the information will be shared with decision-makers.			Walter (GIZ, Kenya)

CONCLUSIONS OF THE SESSION (CONCLUSIONS DE LA SESSION)

- No conclusion from the moderator.