

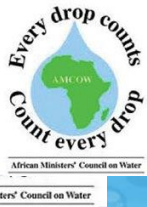
Lack of Water Security, a serious constraint to achieving eradication of poverty and inequalities

Dr Canisius Kanangire
AMCOW Executive Security

International IAP Conference on
“How can Science and Technology contribute to the reduction of poverty and inequality”

Session: “Assuring access to clean water, sanitation and adequate food for all”

Science Academy of Brazil, Rio de Janeiro
27th-29th March 2019



Background

- From time immemorial, people have settled near water, which has always been a source of life and well-being;
- Access to water, food and sanitation is a precondition to life; and is declared human right
- Water plays a crucial role in the socio-economic development of mankind
- Water is vital, a cornerstone to achieving sustainable development, and the SDGs



Background

“...water lies at the heart of everything that is important for human life: food, sanitation, energy, production of goods, transport and the biosphere; as such water ensures not only mere survival of humans, but also social well-being and economic growth.

... Water cannot be substituted.”

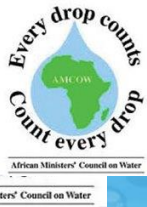
Source: 2008 World Economic Forum



Access to water and sanitation services

- Only 2% of global water is renewable freshwater
- Natural distribution of water is highly variable geographically and seasonally
- Water scarcity affects 40% of people globally
- The patterns are worsening in many areas because of impacts of climate change
- Poorest and less resilient communities are the most hit, hence exacerbating the inequalities

- 663 million people lack access to safe water
- 2.3 billion lack access to adequate sanitation
- 795 million do not have enough food, 688.5M affected by severe food insecurity



Access to water and sanitation services

- Africa is the second driest continent
- Only 9% of freshwater for 15% of the world's pop.
- About 66% of Africa is arid or semi arid
- 300/800M in SSA live with $<1,000\text{m}^3/\text{capita}/\text{year}$)
- Only 5% of water resources are exploited
- $<5\%$ of cultivated land is irrigated
- Key water withdrawal uses: Agriculture 86%, domestic 10%, industry 4%
- Water equity, transboundary water sharing, degradation of water quality pose major challenges
- Uncertainty and planning difficulty due to CC affect water availability



Access to water and sanitation services

339M have no access to basic drinking water
473M have no access to basic sanitation
333.2M affected by severe food insecurity

Principal causes of hunger in Africa:

- Poverty
- Conflict
- Environment challenges
- Governance
- Population growth





Access to water and sanitation services

- Low public sector investment for water security, sanitation and food production
- Huge infrastructure gap (for water storage, irrigation, energy, domestic use, ecosystems, etc).
- Inappropriate governance and weak legal and institutional arrangements in managing national and transboundary water basins
- 130-170bn required per year to bridge the gap!
- New forms of financing
- Stronger enabling environment
- Technical capacity and innovations
- Stronger political will
- Strategic partnerships



Challenges

Water



- **Rising Scarcity of fresh water**
- **Disruption of groundwater discharge**
- **Issues of pollution, wastewater and water quality**

Food/ Energy



- **Only 5% of agricultural land irrigated**
- **Low productivity (crops including GM, irrigation, fertilisation, marketing and value chain, governance, ICT)**
- **Africa with lowest power generation**
- **High hydropower potentials but hugely under developed (3% of Africa's renewable water exploited for power)**

Climate



- **Rainfall variability due to climate change (impediment to hydropower, Irrigation, water and sanitation services)**
- **Water related disasters (floods, droughts, contaminations)**
- **Increased conflicts**
- **INFRASTRUCTURE**



Water and socio-economic development

- Unreliable access to water is one of major causes of poverty in Africa
 - Ensure water security for all and for all usages
 - Invest in multipurpose infrastructure
 - Implement nexus approaches
 - Improve planning with comprehensive scenario dvlpt
 - Adopt technology and innovations
 - Act now!!!



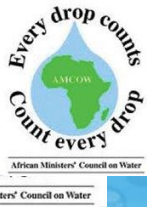
AMCOW and AMCOW's role

The African Ministers' Council on Water (AMCOW)

- Specialised Technical sub-committee on water and sanitation issues for the African Union
- Brings together all African Ministers responsible for water
- AMCOW Secretariat established in Abuja, Nigeria since 2008

Mission

To provide political leadership, policy direction and advocacy in the provision, use and management of water resources for sustainable social and economic development and maintenance of African ecosystems.



AMCOW FLAGSHIP PROGRAMS AND INITIATIVES

- Pan-African Water and Sanitation Sector Monitoring and Reporting
 - Kigali Action Plan
 - 2M4M initiative
 - Water Resource Priority Action Plan
- Africa Water Week (AWW8 16-20 Nov 2020, Windhoek, Namibia)
- Africa Sanitation Conference (AfricaSan6 22-26 Nov 2021)
- African Water Facility (AWF) (a trust fund hosted by AfDB)
- Rural Water Supply and Sanitation (RWSSI) (also hosted by AfDB)
- African Network of Basin Organisation (ANBO) (hosted by OMVS)
- African Groundwater Program (starting at the AMCOW Secretariat)
- Pan-African Water and Sanitation Knowledge and Information Hub (starting at the AMCOW Secretariat)
- African Sanitation Policy Guidelines (under development)
- AMCOW Strategy 2018-2030 available!



Key Focus Areas

- Strong enabling environment (policy, strategies and plans aligned to SDGs and other high level commitments)
- Capacity Building including (peer-to-peer learning)
- African Think Tank to influence high level decision making
- Evidence-based policy and decision making
- Strong political will (Summit of HoSG)
- Strong coordination and synergies
- Strategic Partnerships
- Resource Mobilisation (Adequate and Sustained Investment)



Water and socio-economic development

- Globally water is one leading drivers of economic development
- Increasing demands from growing population, rapidly developing economy, effects of climate change, ... put pressure on water resources
- unpredictable supply of water could (will) constrain socio-economic progress in the future
- *Therefore:*
 - *Business as usual will not work*
 - **Mindset change required**
 - **Knowledge, Technology and innovations to accelerate changes**
 - *Invest today*
 - **Cooperate effectively**
 - **Act now**
- *If we are to overcome poverty, inequalities and build resilient societies and economies*



Water and socio-economic development

What is Water Security?

"The capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability."

Working definition, UN-Water, 2013

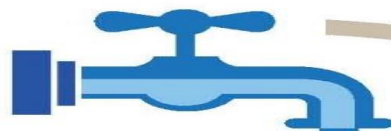
GOOD GOVERNANCE

Adequate legal regimes, institutions, infrastructure and capacity are in place.



TRANSBOUNDARY COOPERATION

Sovereign states discuss and coordinate their actions to meet the varied and sometimes competing interests for mutual benefit.



DRINKING WATER AND HUMAN WELL-BEING

Populations have access to safe, sufficient and affordable water to meet basic needs for drinking, sanitation and hygiene, to safeguard health and well-being, and to fulfill basic human rights.

ECONOMIC ACTIVITIES AND DEVELOPMENT

Adequate water supplies are available for food and energy production, industry, transport and tourism.

ECOSYSTEMS

Ecosystems are preserved and can deliver their services, on which both nature and people rely, including the provision of freshwater.

PEACE AND POLITICAL STABILITY

The negative effects of conflicts are avoided, including reduced water quality and/or quantity, compromised water infrastructure, human resources, related governance, and social or political systems.

WATER-RELATED HAZARDS AND CLIMATE CHANGE

Populations are resilient to water-related hazards including floods, droughts and pollution.

FINANCING

Innovative sources of financing complement funding by the public sector, including investments from the private sector and micro-financing schemes.

Water is central to achieving a larger sense of security, sustainability, development and human well-being. UN-water supports the inclusion of water security in the post-2015 development agenda as part of the Sustainable Development Goals.



Thank You
For your kind attention!