



Water in Nationally Determined Contributions

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Water, Climate Change & Drought

Water plays a crucial role in climate change and drought in Sub-Saharan Africa.

1. Climate change affects the water cycle by altering precipitation patterns and increasing evaporation, leading to more frequent and intense droughts.
2. Drought, in turn, exacerbates the effects of climate change by reducing water availability for agriculture and increasing water scarcity, leading to food insecurity.



3. Over-extraction of water from underground aquifers and rivers for drinking and irrigation contributes to water scarcity, exacerbating impacts of drought.
4. Climate change and drought also increase the frequency and severity of water-borne diseases, affecting the health and well-being of populations.
5. Managing water wisely and reducing the impacts of climate change is critical to mitigate the impacts of drought in Sub-Saharan Africa.

Water and the NDCs- examples from IGAD

1. The Nationally Determined Contributions (NDCs) are a key component of the Paris Agreement, which aims to limit global warming to well below 2°C.
2. In the context of water and climate change in Sub-Saharan Africa, NDCs provide an opportunity for countries to address the impacts of climate change on water resources and incorporate sustainable water management strategies in their climate action plans.
3. Many NDCs from countries in the Greater Horn of Africa region include specific measures to improve water management and reduce the impacts of climate change on water resources. For example, Ethiopia's NDC includes a focus on increasing water storage capacity through the construction of dams and increasing efficiency of irrigation systems to reduce water loss.
4. Some NDCs also include measures to increase the resilience of communities to the impacts of climate change and drought, such as improving access to clean drinking water and water-saving technologies. For instance, Kenya's NDC includes a target to provide access to safe and clean water to at least half of its population by 2030.

5. Other NDCs aim to reduce greenhouse gas emissions from the water sector by promoting the use of renewable energy in water treatment and distribution.

6. Sudan's NDC includes a target to increase the use of renewable energy in the water sector and to reduce greenhouse gas emissions from the sector by 20%.

7. NDCs provide a framework for countries in Sub-Saharan Africa to incorporate water management and sustainable water use into their climate action plans.

8. The implementation of these NDCs can help to reduce the impacts of climate change and drought on water resources and improve the resilience of communities to these impacts.

1. Challenges in implementation

1. Lack of funding: Implementing water-related provisions in NDCs requires significant investment, but many countries in Sub-Saharan Africa lack the financial resources to fund these initiatives. This limits the ability of these countries to implement their NDCs effectively.
2. Limited technical capacity: Many countries in the region also lack the technical capacity to implement water-related provisions in their NDCs, particularly in areas such as water management and water-saving technologies. This can limit the effectiveness of NDC implementation and result in a failure to achieve the intended outcomes.
3. Political instability: Instability and conflict can also limit the ability of countries in the region to implement their NDCs. In some cases, water-related initiatives may be delayed or disrupted due to political instability or conflict, making it difficult to achieve the NDC targets.

4. Lack of coordination: In many cases, there is a lack of coordination between different sectors and stakeholders involved in NDC implementation. This can result in a lack of integrated approach to water management, which limits the effectiveness of NDC implementation.
5. Monitoring and evaluation: Effective monitoring and evaluation of NDC implementation is essential for measuring progress and identifying areas for improvement. However, many countries in the region lack the capacity to monitor and evaluate their NDCs, which can result in limited progress and ineffective implementation.
6. Implementing water-related provisions in NDCs is challenging and requires significant investment, technical capacity, and political stability. Addressing these limitations is critical for ensuring effective NDC implementation and reducing the impacts of climate change.

Enhancing water security through NDC implementation

1. Senegal and Kenya NDC include focus on improving water management and reducing the impacts of climate change on water resources through construction of new dams, the development of small-scale irrigation systems, and promotion of water-saving technologies. These initiatives have helped to increase water availability for agriculture and improve the resilience of communities to the impacts of climate change.
2. Rwanda's NDC includes improved access to safe drinking water and water management. Over 90% of the population now has access to improved water sources. Rwanda has also implemented a number of initiatives to promote water-saving technologies, such as rainwater harvesting and the use of low-flow toilets, reducing water use and increasing water efficiency.
3. South Africa's NDC includes reducing greenhouse gas emissions from the water sector through for instance the use of solar-powered water pumps and the development of small-scale hydropower projects increasing the use of clean, renewable energy.

5. Uganda, Ethiopia and Malawi's NDC seek to improve water management and reduce water stress and have undertaken construction of new dams and the expansion of irrigation systems, increasing water availability for agriculture and improving water security for communities.

6. Kenya's NDC includes a target to increase access to safe drinking water and improve water management by construction of new water wells and the promotion of water-saving technologies which has increased access to safe drinking water and reduced water stress.

7. These success stories demonstrate the potential for NDCs in improving water management and reducing the impacts of climate change. They highlight need for sustained efforts and investment to ensure implementation is successful and results in meaningful outcomes.

National Climate Change Planning Documents	Year
Egypt's First Updated Nationally Determined Contributions	2022
National Climate Change Strategy (NCCS)	2021
Nationally-Determined Contribution	2016
Third National Communication	2016
Climate Change Adaptation Strategy	2013
National Strategy for Mainstreaming Gender	2011
National Strategy for Adaption to Climate Change and Disaster Risk Reduction	2011
Egypt National Environmental, Economic and Development Study for Climate Change	2010
Egyptian National Action Plan to Combat Desertification	2005

- Water in national climate plans
- Water in national planning and governance
- Water and climate connections in specific sectors
- Links to climate financing and project implementation

Water in national climate plans

Question		NWRP	NCCS	CCS
1. Water as a risk				
1a.	Are changes to the hydrological cycle mentioned in terms of climate impacts? (<u>f</u> looding, drought, changes to extreme weather events, etc.). Note that this includes both negative (i.e., increased drought) and positive (i.e., changes in agricultural potential due to increased precipitation) climate impacts.	Yes	Yes	N/A
1b.	Are water-related climate impacts well understood?	Yes	Yes	N/A
1c.	Are water-related risks or opportunities prioritized according to set criteria such as levels of exposure, vulnerability, and hazard?	Yes	No	N/A
1d.	Is there identification and prioritization of root causes to be addressed for the range of water risks, connecting hydrological and ecological systems with societal and economic systems?	Yes	No	N/A
2. Water as a sector				
2a.	Is a section on the Water Sector explicitly included in the document? (i.e. as an essential common good, water, and sanitation, water as an input to economic development, or goal towards water security)	Yes	Yes	N/A
2b.	Are specific adaptation activities mentioned in the Water Sector?	Yes	Yes	N/A
2c.	Are specific mitigation activities mentioned in the Water and Sanitation Sector? (i.e. reduction of GHG associated with water treatment and delivery)	Yes	Yes	N/A
2d.	Is the water sector explicitly linked to the rest of the document's areas/components/sectors?	Yes	Yes	N/A
2e.	Are there specific connections to SDG 6? If so, are there mitigation opportunities and or adaptation needs related to the specific targets from SDG6 that are included?	Yes	Yes	N/A
2f.	Are the adaptation needs of water and sanitation infrastructure and services identified to ensure resilient climate provision of those basic social services?	Yes	Yes	N/A
3. Water as an opportunity				
3a.	Is water mentioned as an opportunity? (i.e., as a connecting point between and across sectors, or acknowledging the need for awareness of climate-related water consumption and management)	Yes	Yes	N/A
3b.	Do climate mitigation commitments explicitly state water requirements? If so, which ones?	Yes	Yes	N/A
3c.	Do climate mitigation commitments build on the opportunities derived from water and sanitation services? (e.g. use of renewable energy, water efficiency, energy recovery from waste)	No	Yes	N/A
3d.	Is there consideration of water required to meet adaptation goals?	Yes	Yes	N/A