

As global temperatures rise, water-related risks are expected to escalate with each degree. Currently, 1.47 billion people reside in high flood-risk areas, underscoring the urgent need for effective climate adaptation strategies.

To be successful, water adaptation solutions must be created using indigenous knowledge, local knowledge, and technical knowledge. In both Africa and Small Island Developing States (SIDS), it is essential to mobilize diverse stakeholders - especially those most vulnerable to climate disasters, such as women and young people.



About **8 BILLION PEOPLE** experience water scarcity every year

In Africa, between 2008 and 2018, floods accounted for **65% OF CLIMATE-RELATED DISASTERS**

SINCE 1980



Global average sea level has risen by **21-24 CM**

1 IN 3 PEOPLE are affected by water scarcity **IN AFRICA**

118 000 SIDS inhabitants are exposed to coastal floods

BY 2050 economic damage from flooding in Africa could reach

\$266 BILLION PER YEAR

MAIN CHALLENGES FACED BY YOUNG PEOPLE TO BECOME LEADERS IN WATER ADAPTATION?



Limited access to financial resources and funding for water-related adaptation solutions



Exclusion from decision-making and policy-making processes, often dominated by older generations



Lack of experience, mentorship, and capacity-building opportunities

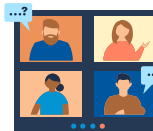


Bureaucratic obstacles and restricted entry into strategic roles within the water sector



Raising awareness and engaging communities effectively

WHAT CAN YOUNG PEOPLE DO TO ENGAGE WITH WATER-RELATED ADAPTATION SOLUTIONS?



Actively participating in global webinars, networks, and social media platforms to raise awareness and share solutions



Partnering with local or global NGOs to counter lack of funding



Engaging with their communities to understand local water challenges



Supporting adaptation efforts developed by small-scale initiatives



Learning from others and teaching others about sustainable and adaptive water practices

GOOD PRACTICES



INCLUSIVE PARTICIPATION FOR THE REGIONAL WATER PROGRAM OF THE YUCATAN PENINSULA

Ariel Goldin, Mexico

In 2020, Ariel worked as a technical vice-coordinator for the 2020-2024 Regional Water Program of the Yucatán Peninsula. To develop this program, he conducted a large-scale region-wide participatory process with over 1200 participants to map the region's large diversity of problems and potential solutions.

The initial stage of the participatory process was online. However, to incorporate the perspectives of those with scarce internet access, a group of young activists and professionals called "Ha'kanules", water guardians in Mayan language, volunteered to start making telephone and in-person interviews. These efforts materialized in one of the largest participatory processes of this type in the country.

The data generated in the process was made available in a series of interactive visualizations on a purpose-made website to make it accessible, transparent, and useful beyond the development of the document.

The participatory process engaged over 1,100 participants, including 435 Indigenous individuals, facilitated by youth networks to ensure diverse perspectives.



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YOUTH WITH SANITATION CONCERN (YSC), ADDRESSING FECAL CONTAMINATION IN COASTAL AREA OF BANDAR LAMPUNG CITY

Cindy Dui Islamli, Indonesia

Bandar Lampung City is located near the coastline and is challenged by a lack of sanitation infrastructure. Today, 98,48% of the urban village has Open Defecation Free (ODF) status. In coastal areas, as settlements above the sea lack of septic tanks infrastructure to manage toilet wastewater, some urban villages are not ODF yet. This situation is expected to get worse as climate change increases the intensity of tidal waves and floods. The risk is then for the wastewater to overflow and pollute the surrounding environment, threatening public health.

Coastal settlements are still difficult for ODF because the typology of settlements above the sea makes it difficult to install conventional septic tanks. Previous sanitation initiatives have been carried out in the coastal area of Bandar Lampung, including one case in Panjang urban village which has a floating septic tank. However, the use of floating septic tanks has proven to be ineffective as they are vulnerable to natural disasters and lack of monitoring. As a solution, YSC decided to implement a simple and affordable technology discovered by Professor Hardjoso Prodjopangarso called "Tripikon-S Spectic Tank". Through a participatory and collaborative approach, YSC has installed 9 household septic tanks.



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KEY RECOMMENDATIONS



For any adaptation project, a participatory process is essential to understand the context and its complexities



Using technologies to monitor the progress of a project and to adapt its strategies



Training people on how to manage their resources in a more efficient and sustainable way

GOOD PRACTICES



SUSTAINABLE WATER IRRIGATION AND FARMING TECHNOLOGIES (SWIFT) LIMITED Ulaya Mwale, Malawi

Malawi is particularly vulnerable to droughts, floods, and water quality problems leading to public health issues like cholera pandemic and a loss in agricultural productivity. The country is also prone to extreme weather events such as cyclones. SWIFT Limited, a fully Malawian-owned engineering and technology company founded in 2017, aims to adapt to these climate change impacts. SWIFT Limited creates innovative projects that enhance water supply systems by utilizing both surface and groundwater, ensuring reliability amid changing climate conditions. The company emphasizes community empowerment by building solar-powered water supply systems and training local populations in efficient water usage and irrigation practices, such as drip irrigation.

In addition to water management, the company is diversifying energy sources by integrating solar and wind systems, particularly following disruptions caused by climate events. Its goal is to promote resilience and sustainability in water management not only in Malawi but also in neighboring countries like Zambia and Mozambique.



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ATIDOGBÈ PROJECT, PILOT EXPERIMENT TO REINVENT THE CELEBRATION OF NATIONAL TREE DAY Daniel Koto Dagnon, Benin

Benin possesses significant valleys, making it greatly affected by floods. In 2023, 36 provinces were impacted, and 300 schools and hospitals were damaged. To overcome this climate change impact, the Atidogbè project's goal is to plant trees to stabilize the water cycle.

The project focuses mainly on specific degraded areas, especially near Benin's rivers. The reforestation process is conducted with the help of local communities and youth-led organizations. They use digital sensors to monitor tree growth and use recycled tires to protect the plants. The most important step of this project is the maintaining of the tree. To overcome the lack of follow-up care, youth are motivated to maintain the trees through a weekly challenge, with grants awarded to the most active participants to fund additional projects related to water and climate.

The project began with planting 100 trees and has shown positive impacts. Now, the plan is to scale up by involving more youth organizations, with the goal of planting 5,000 trees, focusing in the north of Benin.



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MORE INFORMATION

The Global Center on Adaptation (GCA) is an international organization that promotes adaptation to the impacts of climate change. The Youth Leadership and Education Program aims to put young people at the forefront of advancing the adaptation agenda.

About the fact sheets

This fact sheet is part of a series that presents information collated from the Thematic Youth Adaptation Forums held between March 2024 and August 2024. The information seeks to build the knowledge of young people on thematic areas of adaptation, foster a global knowledge transfer on good practices of adaptation solutions, encourage innovation, and accelerate adaptation action amongst young people.

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