NO CLIMATE RESILIENCE WITHOUT WASH:

A CALL TO ACTION

WaterAid

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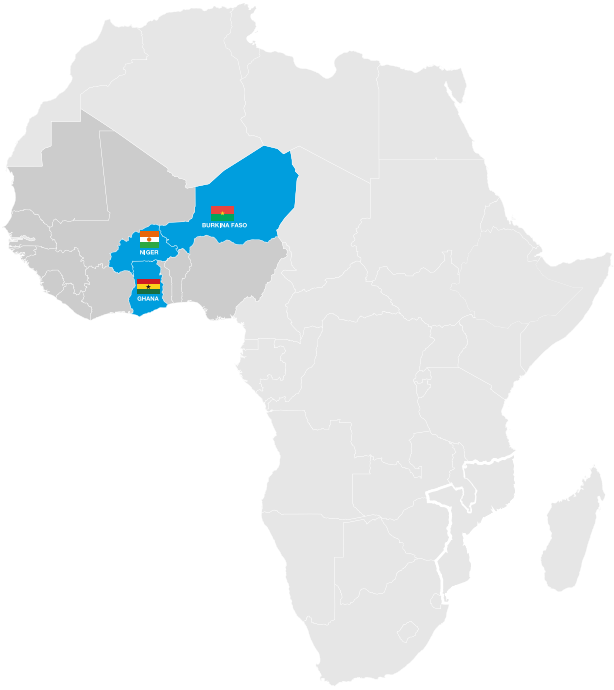
This briefing note is aimed at policy makers, and experts in both the climate sector and the water, sanitation and hygiene (WASH) sector. It analyses how WASH is integrated in climate policies (NDCs, NAPs), and highlights why West African governments need to focus more on climate-resilient WASH.

It focuses on three countries in West Africa: Burkina Faso, Ghana and Niger.

INTRODUCTION

Despite the undeniable link between combatting climate change and ensuring universal access to water and sanitation, the connection is rarely reflected in national climate commitments and policies.



In West Africa, including Burkina Faso, Ghana and Niger, the updated Nationally Determined Contributions (NDCs) and National Adaption Plans (NAPs) are unfortunately no exception to this.

According to WaterAid, this represents one of the first barriers for practical government-led implementation of climate resilient water and sanitation action on the ground.

Yet, climate change is changing water cycle through floods, droughts, and rising sea levels. These changes affect water availability, quantity and quality.

All these in a region where 106 million people do not have clean water close to home and 256 Million people do not have a decent toilet of their own[1].

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Lack of access to water, sanitation and hygiene and insufficient measures to address climate change are intertwined – they cannot be solved separately and need to be addressed through multistakeholder engagement.

For those living in Burkina Faso, Ghana and Niger, climate change is not a threat of the future – it is happening right now.

Furthermore, estimates show that climate related development finance for resilient **basic WASH systems in all of Sub-Saharan Africa** (with Bangladesh and India receiving similar amounts) **is just $48.5m per year[2]**.

The West African governments need to act now to protect communities from the impacts of climate change; current progress is too slow.

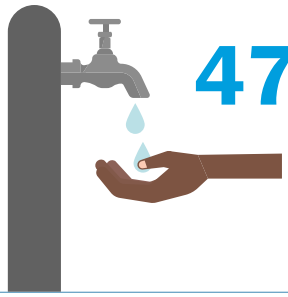
[1] WHO/UNICEF (2021) Progress on household drinking water, sanitation and hygiene 2000-2020. Joint Monitoring Programme. Geneva: World Health Organisation.
[2] Subsector shares for all Africa, Bangladesh and India, climate-related development finance for adaptation in water, 2016-2020 total – OECD data"
[3] The Water score captures a country's vulnerability of fresh water supplies to climate change. Indicators include: projected change of annual runoff, projected change of annual groundwater recharge, fresh water withdrawal rate, water dependency ratio, dam capacity, and access to reliable drinking water. https://gain-new.crc.nd.edu/ranking/vulnerability/water

BURKINA FASO

Area
274 200 km²

Population in 2019
21 477 181

Basic access to water



47%

Basic Access to sanitation

22%

Population Growth rate
2,94 %
per year

Handwashing
9%

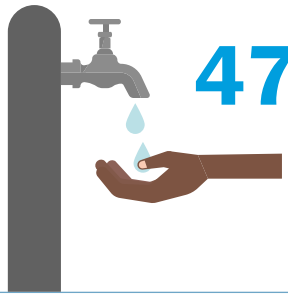
Rank countries by ND-GAIN Country Index, Vulnerability and Readiness - Water[3]
Low - 158th / 169 countries

NIGER

Area
1 267 000 km²

Population in 2019
20 505 155

Basic access to water



47%

Basic Access to sanitation

22%

Population Growth rate
3,8 %
per year

Handwashing
9%

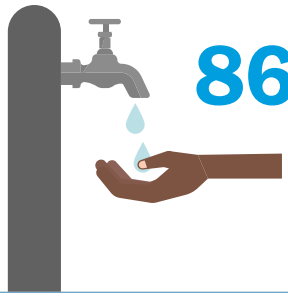
Rank countries by ND-GAIN Country Index, Vulnerability and Readiness - Water
Low - 169th/ 169 countries

GHANA

Area
238 535 km²

Population in 2019
33 475 870

Basic access to water



86%

Basic Access to sanitation

24%

Population Growth rate
2,15 %
per year

Handwashing
42%
per year

Rank countries by ND-GAIN Country Index, Vulnerability and Readiness - Water
Low - 146th / 169 countries

CLIMATE CHANGE IS HAPPENING NOW:

THE CURRENT IMPACT ON WASH

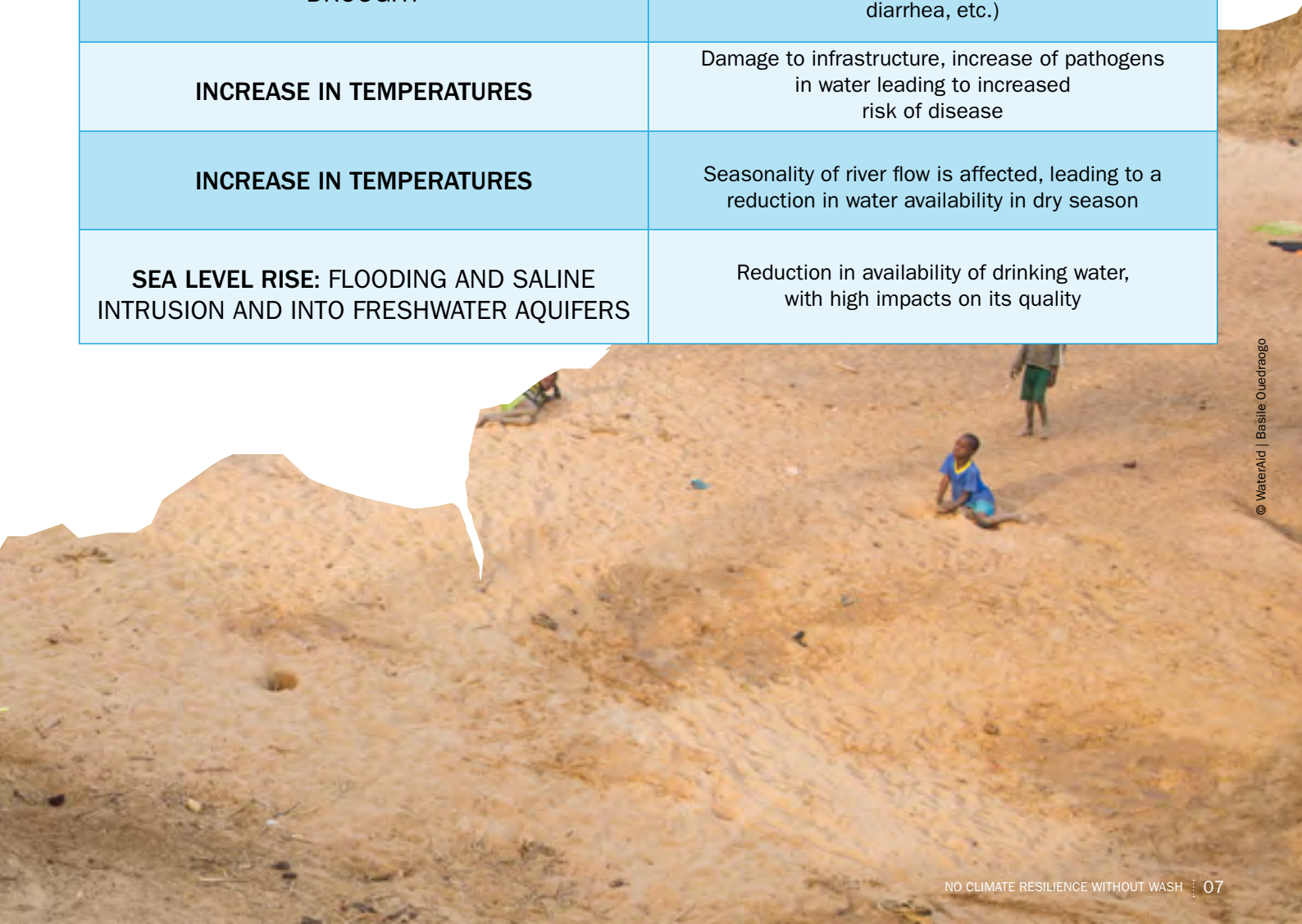
Burkina, Ghana, and Niger have a total combined GHG emission that is 0.28% of global emissions and a combined Global Climate Risk Index of 275.83[4]. A disproportionate disadvantage that they are low emitters but have higher risks of impact and they are water stressed

Floods contaminate water sources spreading diseases like cholera and droughts causing water bodies to dry out forcing communities to travel long distances in order to access water.

[4] https://www.germanwatch.org/en/19777
[5] Ghana's Adaptation Communication to the United Nations Framework Convention on Climate Change November 2021
[6] Caused by flooding alone between 1900 and 2014 is believed to be approximately US$ 780,500,000.

HOW CLIMATE CHANGE IS UNDERMINING WASH SECTOR?

CLIMATE IMPACT	IMPACT ON WASH SECTOR
DECREASE IN PRECIPITATION	Reduction in raw availability for drinking water supplies, reduced flow in rivers, less dilution/increased concentration of full pollutants in water, challenge to hygiene practices
INCREASE IN PRECIPITATION AND SEVERE WEATHER: FLOODING	Pollution and inundation of wells, inaccessibility of water sources, flooding of latrines, damage to infrastructure, landslides around water sources, sedimentation and turbidity, challenges to sustainability of sanitation and hygiene behaviors and waterborne diseases.
DECREASE IN PRECIPITATION AND EXTREME PHENOMENA: DROUGHT	Decrease in river runoff, decrease in infiltration, lowering of the water table, pressure on water points, conflicts of use, increase of diseases related to the lack of water (disease of the dirty hands, typhoid fever, diarrhea, etc.)
INCREASE IN TEMPERATURES	Damage to infrastructure, increase of pathogens in water leading to increased risk of disease
INCREASE IN TEMPERATURES	Seasonality of river flow is affected, leading to a reduction in water availability in dry season
SEA LEVEL RISE: FLOODING AND SALINE INTRUSION AND INTO FRESHWATER AQUIFERS	Reduction in availability of drinking water, with high impacts on its quality



Over the past five decades, **Ghana has witnessed a significant number of climate hazards, including at least three major droughts and nineteen (19) flooding events[5].**

By estimation, these extreme events are believed to have affected over 16 million people and resulted in at least 444 deaths-excluding those undocumented. Flooding, for example, is ranked the second highest natural disaster after epidemics in Ghana. Economic losses caused by flooding alone between 1900 and 2014 is believed to be approximately US$ 780,500,000.

Niger is prone to natural disasters such as droughts, floods, and locust infestations, all of which contribute to chronic food insecurity.

Since 2000, there have been 35 climate, hydrological and meteorological disasters with an average of 28,091,003 people affected and 624 deaths in the country attributed to these[7]. Niger is ranked 176 out of 182 countries in regard to its vulnerability and readiness to successfully adapt to climate change.

Since June 2022, heavy rainfall has been affecting parts of Niger, causing floods and resulting in casualties. According to media reports, 168 fatalities have been recorded, 185 people sustained injuries and about 226,717 individuals have been affected. The most impacted areas include the Maradi region and the Zinder Region. Heavy rainfall caused the destruction or damage of more than 25,000 dwellings (houses, huts, and shelters), 71 classrooms, 6 medical care centers, and 217 cereal granaries[8]. Vital infrastructures including health care, water and sanitation facilities were damaged and destroyed.

Burkina Faso is prone to chronic drought, flash floods, windstorms, and disease outbreaks from impacts of climate change.

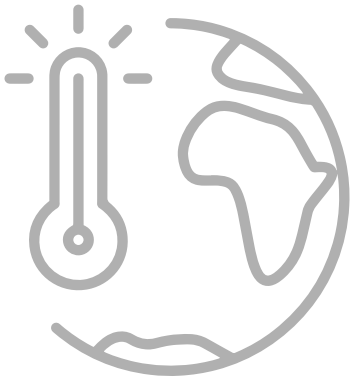
The country's soils are largely degraded and when rainfall declines, dust storms occur, or temperature spikes, food supplies/yields are immediately affected, thus further impacting its population and economy.

90%[9] of the problems caused by climate change are weather related, which have significant connections to the water cycle and overall availability of water.

Since 2000, there have been **21 climate, hydrological and meteorological disasters with an average of 10,426,053 people affected and 141 deaths**[10] in the country attributed to these.

Burkina Faso is ranked 158 out of 182 countries in regard to its vulnerability and readiness to successfully adapt to climate change.

WOMEN AND GIRLS PAY A HIGH PRICE



Climate change exacerbates water shortage. As women and girls are largely responsible for collecting water for the household in West African countries - taking up to 200,000 million hours to fetch water each year[11],they are more susceptible to seasonal and climate changes which affect quantity.

Variable rainfall causes women difficulty in terms of access to water, especially in zones with insufficient boreholes or equipped wells, let alone running water. This makes the job of collecting water for family consumption and their various activities an exhausting chore.

Women are often forced to travel long distances and still may be unable to find drinking water, as numerous other constraints make this a difficult chore, such as salinization, dry wells or contamination.

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Climate impacts on water and sanitation services further exacerbate the challenges of upholding the human rights to safe drinking water and sanitation to all, which is far from a reality today.

Lack of access to safe water and sanitation deteriorates the health of the people by increasing the incidence of water-borne and water related diseases. In developing countries like Burkina Faso, Ghana and Niger the provision of basic Water Sanitation and Hygiene (WASH) facilities still remains a huge challenge.

From this background, it should have been obvious that climate policies (especially NDCs, NAPs) in these countries would include adaptation measures that are focused on WASH actions as entry points for climate mitigation actions and community resilience.
However, the analysis carried out by WaterAid shows a different picture.

[6] Asumadu-Sarkodie, S., Owusu, P. A., & Jayaweera, M. (2015). Flood risk management in Ghana: A case study in Accra.
[7] Niger Country Profile SWA (2022)
[8] https://reliefweb.int/report/niger/niger-heavy-rain-and-floods-update-noaa-cpc-media-echo-daily-flash-22-september-2022
[9] Burkina Faso SWA Country Profile (2020)
[10] SWA Burkina Faso Country Profile (2022)
[11] UNICEF (2016). UNICEF: Collecting water is often a colossal waste of time for women and girls. Available at: https://www.unicef.org/press-releases/unicef-collecting-water-often-colossal-waste-time-women-and-girls

AEPHA:
WASH IS MISSING IN NDC AND NAP

Although Burkina Faso, Niger and Ghana developed policies and programmes referencing WASH and climate change - most of these policies have been developed before the NDCs and the NAPs, there is no obvious prioritisation of WASH Services in the NDCs or NAPs.

There are obviously some historical, plan and ongoing actions that mainly focused on management of water resources and watersheds.

However, consideration for building explicit resilience in WASH services and infrastructures are few as seen for example in Ghana's proposed action of building a desalination water system to provide water access to about 300,000 people.

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The impact, risk, and vulnerability information used in the updated NDCs in the countries reflect the increasing urgency of climate impacts and identify specific population groups as more vulnerable to climate change impacts.

However as much as WASH infrastructures and sources are mentioned as being impacted, WASH adaptations are not as ambitious as they should be.

Integrated Water Resources Management (IWRM) benefits from more focus than specific WASH resilience challenges.

Consultations across government agencies and diverse stakeholder groups took place, including WASH sector in the three countries. How and why their voices are lost is not clearly understood.

Burkina Faso

The NDC and NAP are both low on the understanding, planning and finance of the WASH sector based on their contents and provisions for WASH. The total WASH sector adaptation action is about 7% and 11% of the total NDC and Adaption costs respectively. The financing gap for WASH adaption actions in the NDC is of USD 222,916,751.

Ironically, the 2015 NAP seems to have taken more of the WASH issues than the WASH adaptation commitments in the 2021 NDC.
While the 2015 NAP is specific about the overall WASH actions to preserve water resources and improve access to sanitation, especially for women with some baseline information, the Revised Burkina 2021 NDC lists water and sanitation as a cross-sectoral theme. It went further to propose a specific project of "Hygiene and sanitation project in the North, Center North and Center- South Regions in Burkina Faso 2018-2019". The itemized monitoring indicators have more to do with the number of fecal sludge collection and treatment centers. The monitoring indicators do not actually align with the proposed actions in the NDC.

The use of latest impact, risk, and vulnerability information is not so evident. There are analysis on how climate risks and impacts water resources, and access to WASH, especially by women. However, the adaption commitment refers only to the protection of the water streams. WASH sector is not referenced as a priority sector

Ghana

Although the government of Ghana also recognizes access to safe drinking-water as a basic human right and essential to protect public health, it is not reflected in the NDC/NAP and adaptation communication.

There is a need for more proactive and coordinated adaptation actions. As much as Ghana's NAP process is well-positioned to ensure efficient planning at scale, funding requirements to support such efforts on an on-going and long-term basis remain a challenge. This is a challenge that needs to be addressed to assure the sustenance of current momentum to reduce vulnerability levels and to build adaptive capacity and resilience within and among sectors.

The only reference in the updated NDC (September 2021) is to Integrated water resources Management. The revised NDC is based on 4 laws and 11 Policies and has 55 climate targets. WASH sector is not prioritized in any depth and measure anywhere, with the main emphasis on IWRM.

Only the AdCom gives an insight of some progress made/planned in the Water Sector.

The analysis of Ghana's first Adaptation Communication (AdCom) shows that great strides continue to be made towards adaptation planning in Ghana, however, gains so far have been modest and only provide a basis for further commitments and more ambitious actions. There is a need for more proactive and coordinated adaptation actions.
Ghana's NAP process is well-positioned to ensure efficient planning at scale, however, funding requirements to support such efforts on an on-going and long-term basis remain a challenge. This challenge needs to be addressed to assure the sustenance of current momentum to reduce vulnerability levels and to build adaptive capacity and resilience within and among sectors.

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Niger

Niger has set itself the overarching goal of ensuring that all stakeholders address both the causes and impacts of climate change through appropriate measures while also promoting sustainable development and green growth.

Niger's key sectors and priority areas are mapped out based on the following documents: National Adaptation Program of Action (NAPA), Nationally Determined Contributions (NDCs), Third National Communication (TNC), Sustainable Development and Inclusive Growth Strategy - Niger 2035 (SDDCI), and the National Climate Change Policy (PNCC).

In Niger NDC, Water is regarded as a subsector of the Agriculture, Forestry and Other Land Use (AFOLU) sector.

The Nationally Determined Contributions of Niger estimate a total investment need of USD 8.667 billion to reach its objectives, with around 13% of the costs (USD 1.167 billion) being provided as unconditional financing from the government's resources and public development aid.
There is a need for large-scale investment in climate change adaptation in Niger that is not currently met.

At the time we concluded this briefing, Niger's National Climate Change Adaptation Plan (NAP) document was adopted on 20th September 2022 but also without much emphasis on WASH.

Niger's NAP document identified five (5) priority sectors for which adaptation options were proposed: Health, Livestock, Forestry, Transport and Wetlands. A process of developing water-specific NAPs is underway.

WHY WE NEED TO INVEST ON CLIMATE RESILIENT WASH?

The Intergovernmental Panel on Climate Change (IPCC) identifies providing water, sanitation and hygiene services as one of the most effective measures to reduce climate vulnerability in the near term and as a 'low-regrets' adaptation measure.

Sustainable and responsive WASH will help decrease inequalities and deliver universal access but achieving this is more difficult because of climate change.

WASH will help build resilience to climate change, particularly for communities who do not currently have access to WASH or those who have fragile water sources which often fail in the face of droughts, Although updated NDCs include more prioritized actions overall, most of these actions are neither investment nor implementation ready.

Some costed activities in WASH do not show any indication that they are investment ready.
For example, what funding source will be applied.

WASH situation requires a double edge action. One is the fact that WASH infrastructures are at risk and vulnerable to climate impact.

Secondly access to WASH services can be lost if impacted by climate changes.

Once services are lost it affects the resilience of people. Therefore, WASH infrastructures and services must be considered for adaptation to climate resilience.

Women and girls are particularly vulnerable in cases of water scarcity or food insecurity. They must walk longer distances to collect water and fuelwood due to environmental degradation, putting them at risk of violence and affecting their health.

Securing universal access to water and sanitation by 2030 will only be achieved in tandem with effective government-led climate actions, which includes attention to water, sanitation and hygiene, and stronger support for climate-resilient WASH services.

WASH services and infrastructures need prioritizing for resilience building, and it is intrinsically linked with the health and livelihoods of the population especially the poor and the vulnerable.

We know that people cannot survive for long without clean water, decent toilets and good hygiene. That is why we must adapt to reduce the impacts of climate change now. We already see the impacts in headlines everyday – like the recent floods in Niger, Ghana, and Côte d'Ivoire[12].

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[12] https://reliefweb.int/report/congo/west-and-central-africa-flooding-situation-16-august-2022

CALL TO ACTION

The potential contributions that the WASH sector can make to adapt to climate impacts is enormous. In order to realize them, and to accelerate the climate adaptation and mitigation of global WASH services, planners and policy makers in the WASH and Climate sectors can focus their efforts on several key areas for action. This is significant for COP27 but also beyond the global climate conference as plans and policies become implemented.

We are calling on national governments and sectors working on NDCs and NAPs to:

- **Improve the level of understanding on the Concept of Risk and Vulnerability:** the sector actors need to undertake these processes primarily to classify the infrastructures and services. This will help according to the sector priority as required.
- **Organize adequate Institutional Capacity Building** on WASH and climate change (technical and financial) to develop appropriate instruments that truly align with country contexts and policy documents. Despite numerous WASH sector policy documents and the fact that WASH should be in the frontline of resilience building and adaptation actions, none of the countries has prioritized WASH.
- Integrate WASH in NDC: WASH is lost or not prioritized because the focus of the NDCs are more on reduction of GHG emission. It is time to make sure that sector actors and stakeholders take a different route to getting WASH on the table. It is therefore desirable that Water/WASH specific NAP be developed as it is done in Niger.
- Ensure a gender-sensitive climate response: Generate data to further understand the impact of the climate crisis on women, girls and ensure their voices are heard.
- Significantly **increase public climate finance allocated to WASH as a low-regrets** adaptation measure to reduce communities' vulnerabilities to climate impacts.
- **Support approaches that address whole WASH systems** to ensure sustainability and reliability. By prioritizing long-term management and funding to keep WASH services reliable, communities will have essential services during and after climate impacts.

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ACKNOWLEDGEMENTS

With thanks to Sam-Adejoh Okedi and his team who were commissioned to conduct analysis on WASH in NDCs and NAPs for WaterAid and the country teams and partners in Burkina Faso, Niger and Ghana for their contributions.

Date: October 2022

WaterAid is an international non-profit organization working to democratize access to safe water, decent toilets and sanitation for everyone, everywhere, within a generation. Only sustainable responses to these three essential challenges can enable populations to see their lives transformed for good.

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