

# From Risk to Resilience: Climate Change & Disaster Adaptation Strategies for WASH



8<sup>th</sup> May 2024 | 14:30 IST

## SESSION 1: Resilience to Climate Change in WASH

# Overview of existing climate action frameworks for WASH



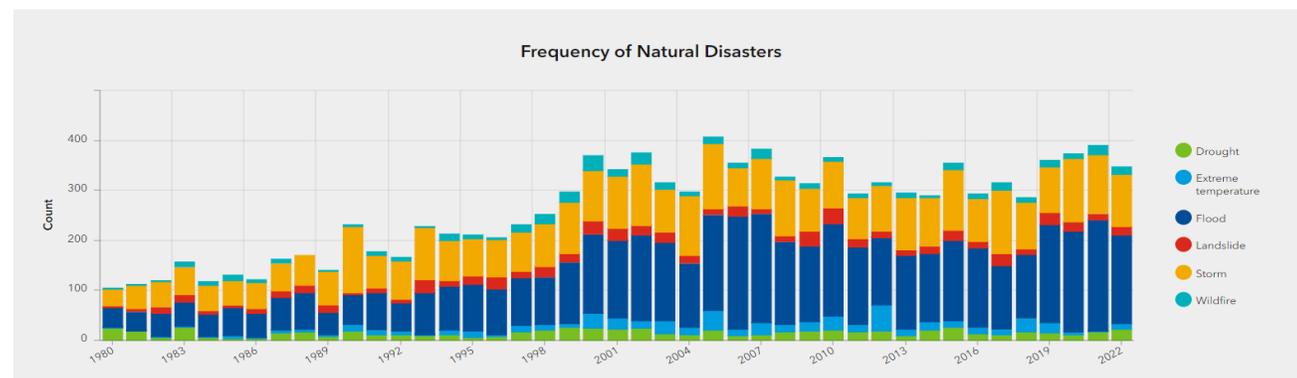
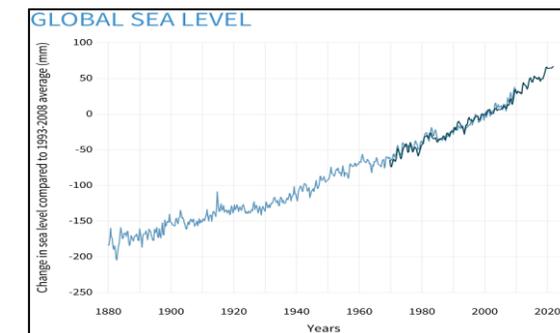
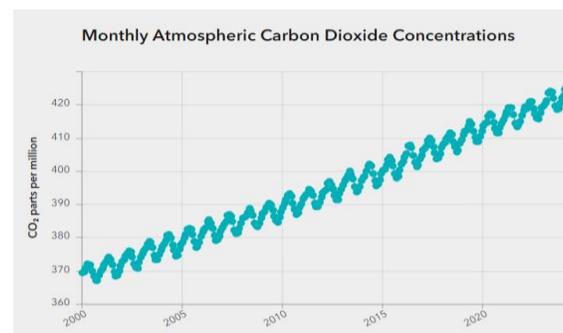
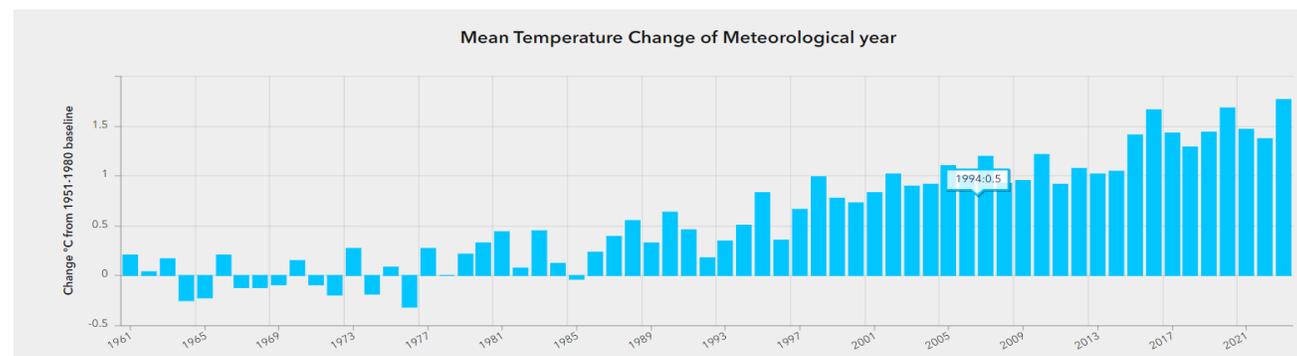
# The world is on the verge of a climate crisis

According to National Oceanic and Atmospheric Administration (NOAA)'s 2023 Annual Climate Report the combined land and ocean temperature has increased at an average rate of 0.11° Fahrenheit (0.06° Celsius) per decade since 1850, or about 2° F in total.

The rate of warming since 1982 is more than three times as fast: 0.36° F (0.20° C) per decade. (NOAA's [2023](#))

Global mean sea level (GMSL) has risen about 21cm since 1900, at an accelerating rate. GMSL reached its highest value ever in 2022. (EEA, 2024)

Global monthly average concentrations of carbon dioxide have risen from around 337 parts per million in 1979 (averaged over the year) to 417 parts per million in 2022, an increase of more than 20% in 44 years. (USGCRP, 2023)



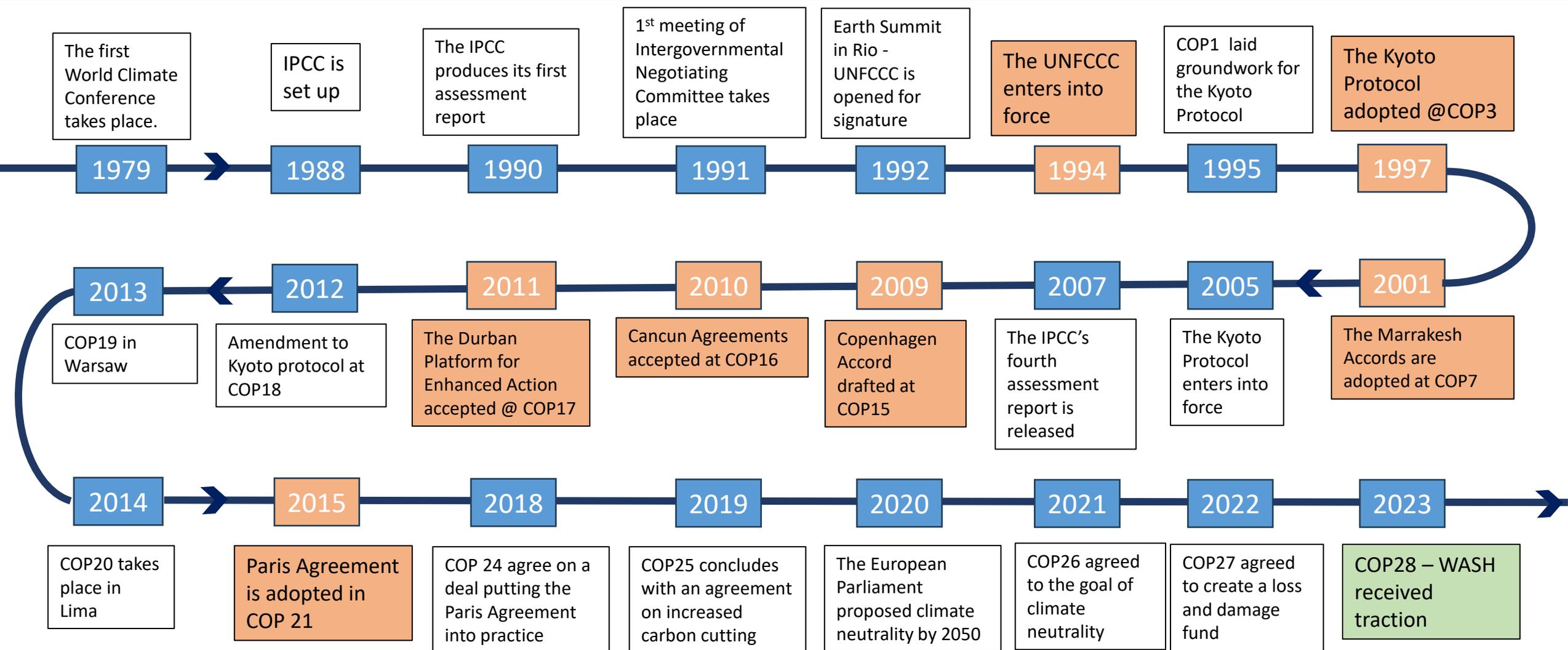
Source: IMF, Climate Change Dashboard

# The link between climate change and WASH is vital

- Improved WASH services are central to any climate change adaptation strategy to ensure quality of life.
- WASH infrastructure and behaviours are at risk from floods that harm infrastructure, droughts reducing water supply, rising temperatures influencing water usage and disease vectors.
- Increased demand for water due to low rainfall can cause water sources (including boreholes and springs) to run dry.
- Heavy rainfall and flooding can damage water sources and sanitation facilities, carry runoff and waste into streams and lakes, and contaminate the water supply.
- Water scarcity through climate change and the resulting increase in the costs of water can lead to inequitable access. This may deprive households of opportunities to collect the amount of safe water needed for proper handwashing and hygiene.
- Promoting WASH related mitigation enhances health resilience against climate challenges by adapting to long-term changes and aiding communities in recovery from extreme events.
- Sanitation and wastewater systems contribute to GHG both directly through breakdown of excreta discharged into the environment or during treatment processes, and indirectly through the energy required for treatment steps.

# How WASH features in global climate change framework?

# Major events in evolution of climate change action globally



# WASH was not explicitly mentioned in any of the global frameworks till 2023

## United Nations Framework Convention on Climate Change (UNFCCC):

**Kyoto Protocol:** Adopted in 1997, the Kyoto Protocol is an international treaty under the UNFCCC primarily focuses on reducing greenhouse gas emissions to mitigate climate change. While it **doesn't directly address water and sanitation, it indirectly acknowledges their importance** in the context of sustainable development and climate resilience.

**Paris Agreement:** Adopted in 2015 under the UNFCCC, the Paris Agreement **does not specifically mention drinking water and sanitation**, though it recognizes the importance of sustainable development and the interconnectedness of climate change with various aspects of human well-being, including access to clean water and sanitation.

**Intergovernmental Panel on Climate Change (IPCC) 2023**  
All previous IPCC reports have focused on future water-related risks to urban areas due to climate change rather than documented observed impacts. **AR6 2023 includes detailed impact on WASH in its Chapter on Water. It also lists various adaptation methods undertaken in different regions for WASH.**

# WASH featured in COP 28 but focus on drinking water and sanitation is still limited

- The Water for Climate Pavilion, organized by the Stockholm International Water Institute (SIWI) and featuring WHO as a principal collaborator, was the focal point for water-related discussions at COP28.
- In addition, over 150 water-centric sessions were conducted at various locations throughout COP28.
- In collaboration with the UNICEF and other partners, WHO also underscored the essential role of sanitation in climate resilience through the newly-formed Climate-Resilient Sanitation Coalition and issued the COP Declaration on Climate and Health, endorsed so far by 123 countries and recognizing the importance of water and sanitation for healthier populations.
- A highlight of the conference came with the adoption of the Global Goal on Adaptation (GGA) framework, eight years after the decision to establish a global adaptation target. The GGA is intended to help guide climate adaptation around the world to strengthen resilience and reduce vulnerability to climate change. Water is listed as the first thematic target of the framework.
- The Food, Agriculture and Water Day featured the first-ever ministerial dialogue on building water-resilient food systems.

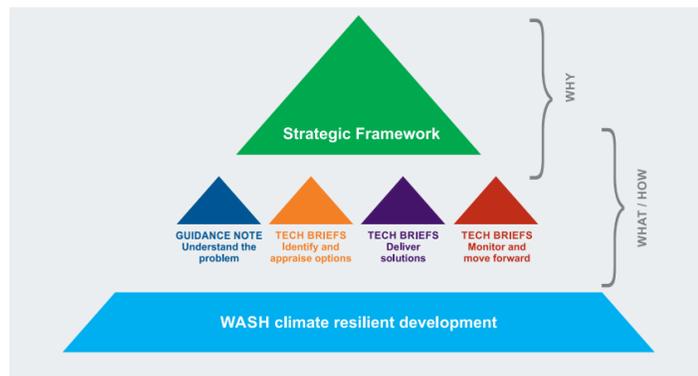
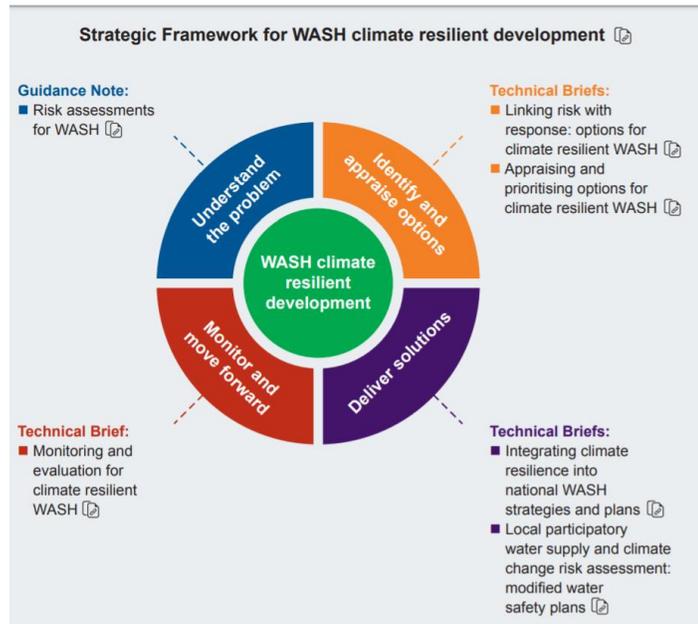


<https://washmatters.wateraid.org/blog/cop28-summary-water-sanitation-hygiene-climate-adaptation>

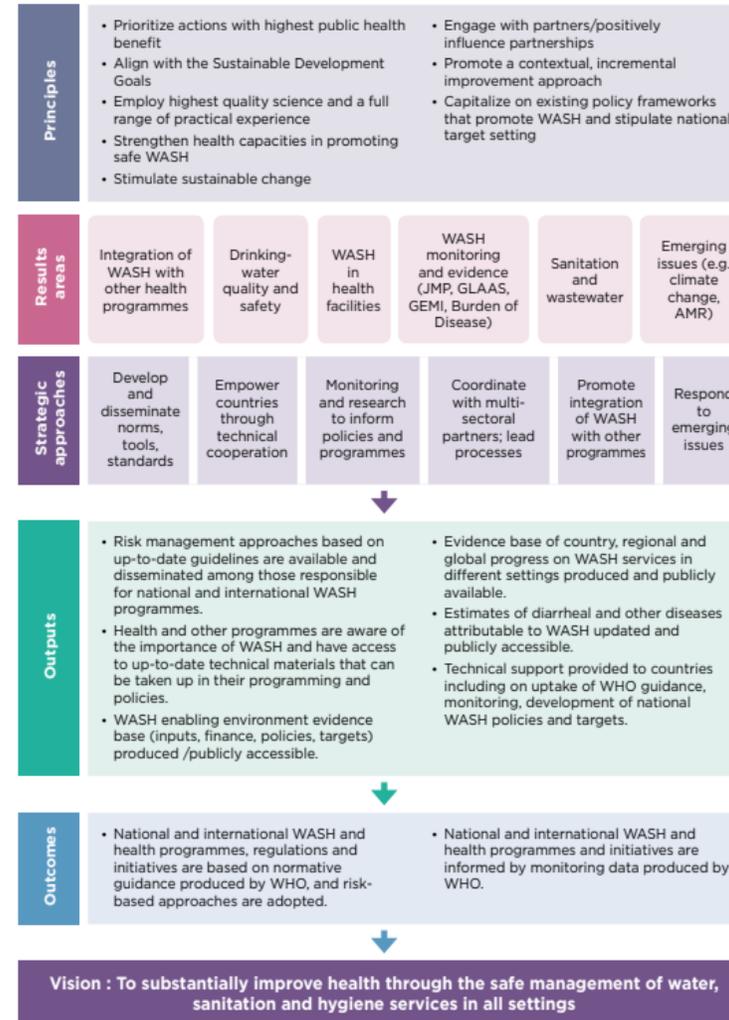


# Organisations that are working on WASH has put together frameworks for climate resilient development

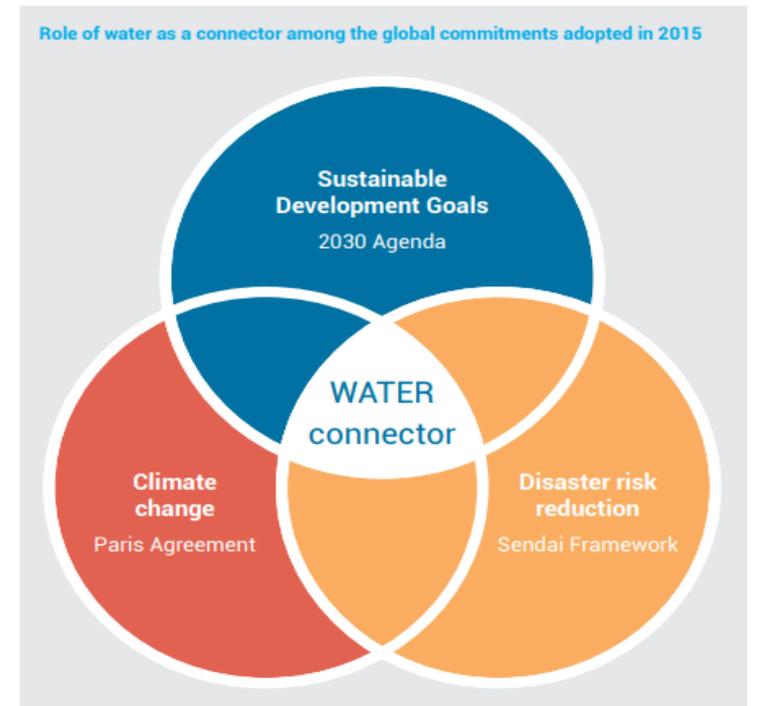
## WASH Climate Resilient Development Strategic Framework – UNICEF & GWP (2017)



## WHO Water, Sanitation And Hygiene Strategy 2018-2025



## Climate Change and Water UN-Water Policy Brief

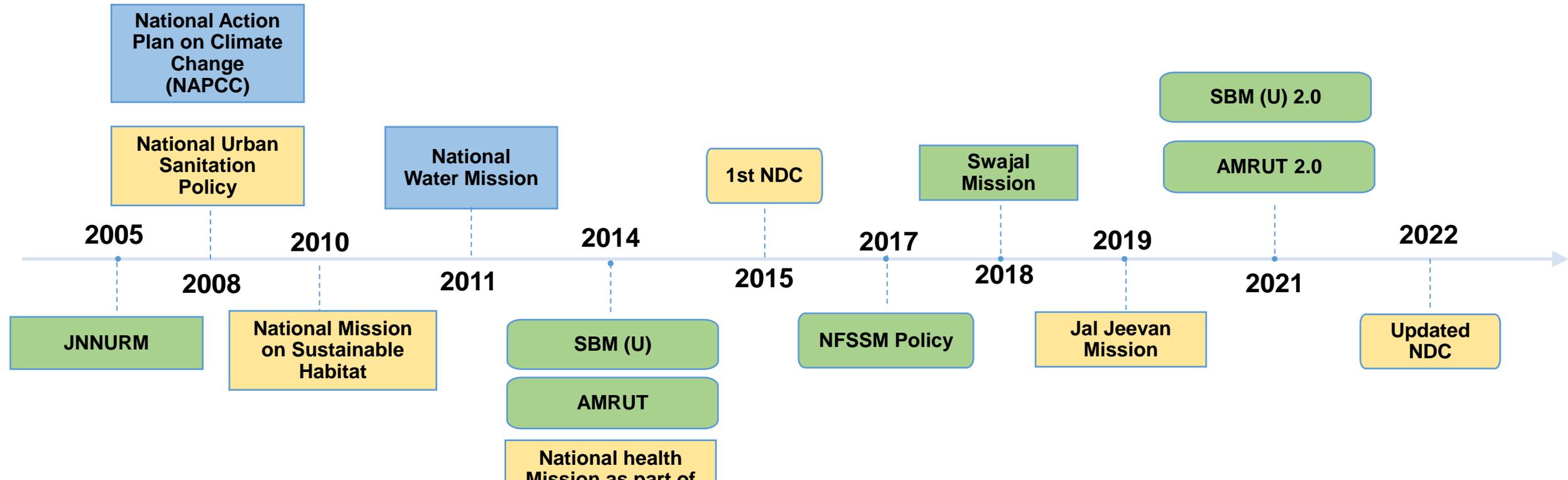


- Engage platforms like UNFCCC and the NDC Partnership, facilitate participation
- Prioritize climate-resilient water and sanitation interventions in vulnerable areas
- When seeking climate financing, ensure proposals integrate cross-sectoral water aspects, including sanitation, hygiene, health, agriculture, energy, industry, and ecosystems.

# How Climate Change features in Indian programmes and policies on WASH?

# Over the last decade, India has seen a remarkable expansion in climate policy and institutions at national level

However the impacts on actual policy outcomes are far less visible as legacy development-oriented program also continue



CC policy environment development started with a the National Action Plan on Climate Change

- Includes WASH, limited climate change reference
- Includes both WASH and climate change
- Includes climate change, limited WASH

# Framework to Govern Climate Change in India \_ National Level Guidance Committees

2007

## Prime Minister's Council on Climate Change

NAPCC: co-benefits approach

Members Drawn From



2013

## Executive Committee on Climate Change

Chaired by Principal Secretary to PM

Members Drawn From



2020

## Apex Committee for Implementation of Paris Agreement (AIPA)

Chaired by Secretary, MoEFCC

Members Drawn From



# Framework to Govern Climate Change \_National Level Institutions\_ within legacy institutions

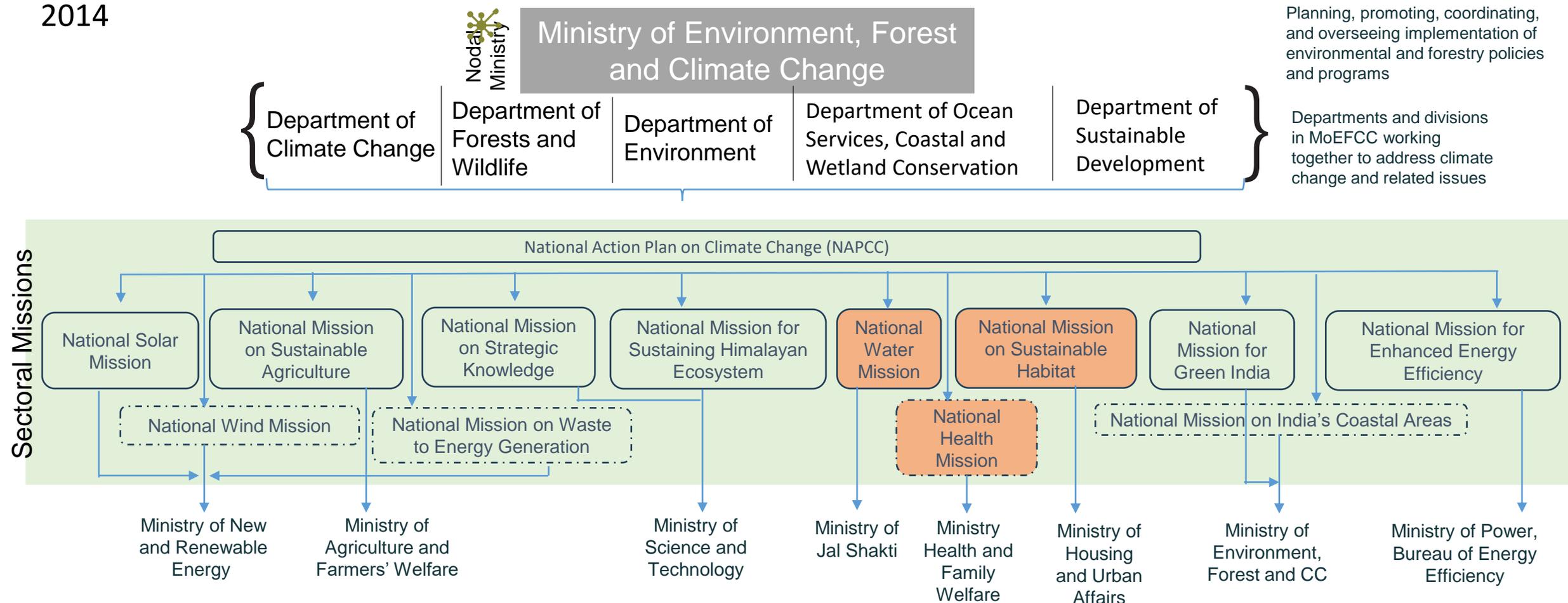
2008 New institutional spaces within legacy institutions

2014

**NDC**

Planning, promoting, coordinating, and overseeing implementation of environmental and forestry policies and programs

Departments and divisions in MoEFCC working together to address climate change and related issues



Wish list-like approach : Specification of particular co-benefits that drive missions is absent

Mixed bag: between strategic or diffused

# Are there limits to coordinated actions to address diffused mandates ?

## Action Plan and Timelines for Identified Strategies under "National Water Mission 2021-31"

S.No.	Recommended Strategies	Activities	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Organizations to initiate the process	
<b>I Goal I: Comprehensive water data base in public domain</b>														
I.1	Dissemination of necessary reliable data on water	NWM to act as one of the information dissemination centres/ agencies											DoWR, NWM	
		Review of network of hydrological observation stations, automatic weather stations and automated rain gauge stations to assess the adequacy from time to time.												DoWR, CWC, CGWB, NIH, NWIC
		Development of a data sharing portal including server												DoWR, CWC, CGWB, NIH, NWIC
		Listing of organizations working in particular field such as Groundwater, Surface water, Climate Change, Environmental, Forest etc. and request them about for their datasets.												DoWR & State Governments

Development of India's Climate Institutions and governance processes are key to defining, and constraining, climate policymaking and action

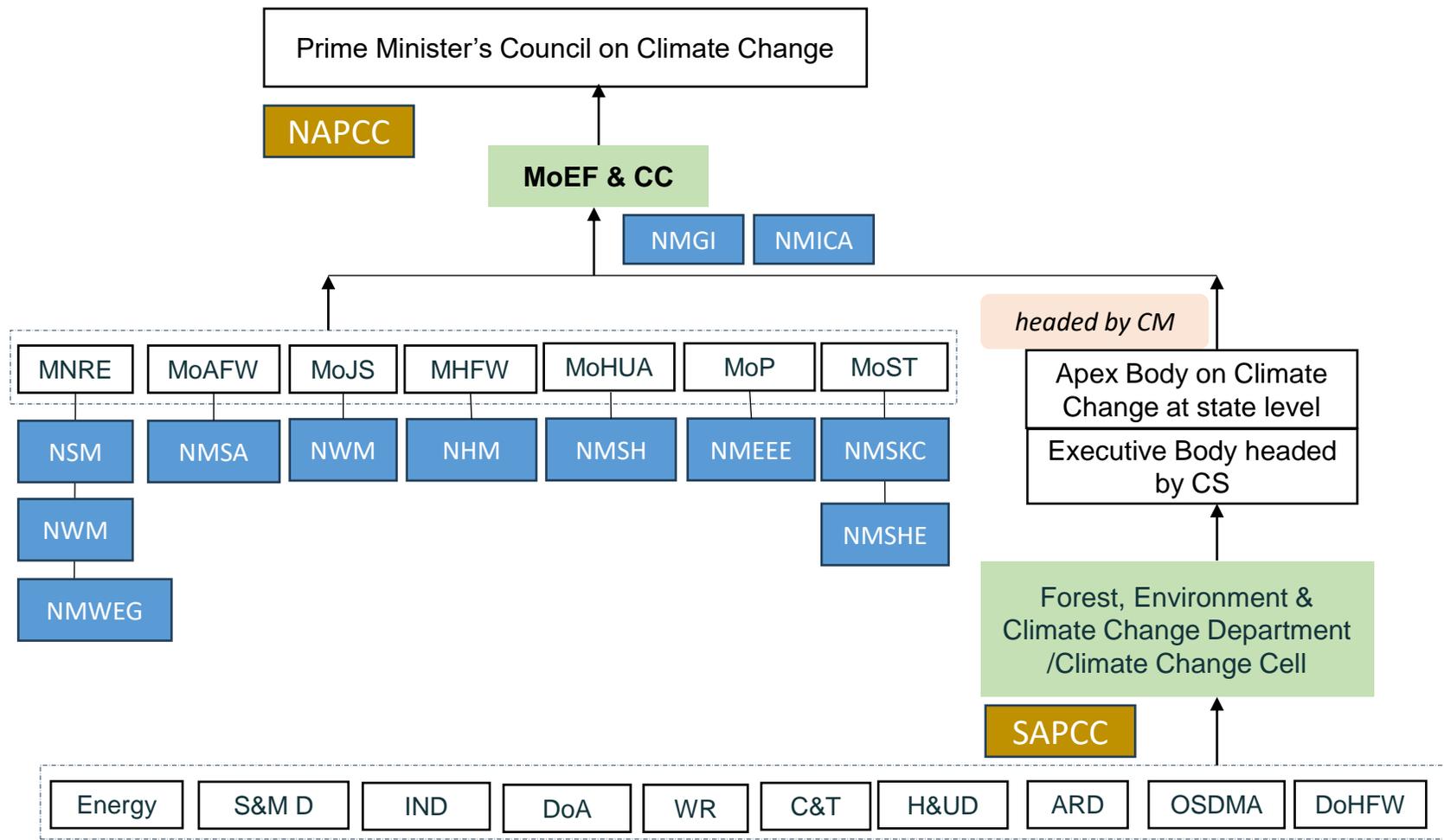
How to make legacy institutions and programs be held directly accountable? – a CC Law?

The NDC provides India an opportunity to enhance institutional capacity to strategize on climate issues, particularly their linkages with developmental concerns.

Can the NDC trigger a more rigorous engagement with and operationalize the co-benefits framework?

<https://nwm.gov.in/sites/default/files/Revised%20Mission%20Document.pdf>

# Framework to Govern Climate Change in India \_ Multitier structure



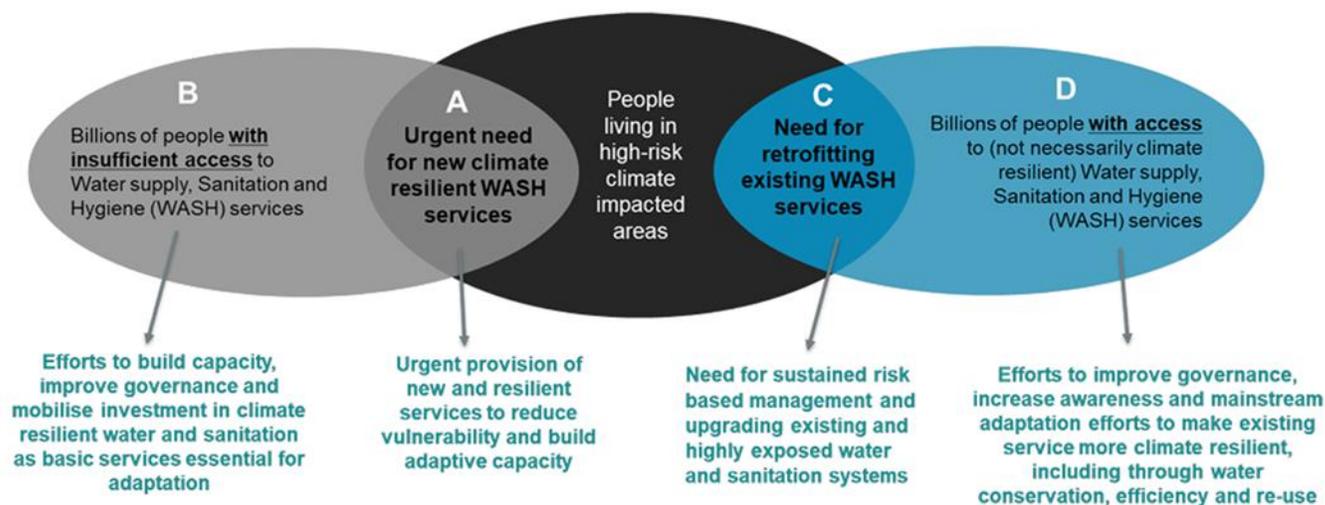
**State Action Plans on Climate Change (SAPCC)** Although the Centre mandates SAPCCs, the content of SAPCCs is shaped by the priorities of each state in terms of their developmental agenda, as well as specific climate vulnerabilities

While national and state governments and their agencies in climate change policy has been a welcome change, **local governments** in Indian cities have been **notably absent** from this process and are **seen only as conduits for implementation.**

Also there is lack of involvement of **communities and community institutions** in the climate change policy. How can our climate change action be made more bottom up from the existing top down framework?

# Building WASH resilience will need to address these concerns .....

WASH strategies according to access and hazard exposure levels



Source : Sanitation and Water for All, 2023

## Institutions: Scaling downwards or scaling upwards?

- Scaling down can be effective as knowledge of the local causes, patterns and interests will improve the resolution and detail of understanding and hence will lead to better instruments, however the **'territorial trap'** needs to be overcome. Scaling up and developing global goals, translating them into targets for developed countries as a whole (**SDG 6 – CC measures underway**), can be translated into targets for countries. But the buck ends there!
- From a **'black box'** at the national level to the division of responsibility and accountability of institutions needs to be addressed.
- **Both Scaling up and Scaling down are required for WASH resilience.**

# Thank you



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ALLIANCE