

The UNICEF-GWP Strategic Framework for WASH Climate Resilient Development

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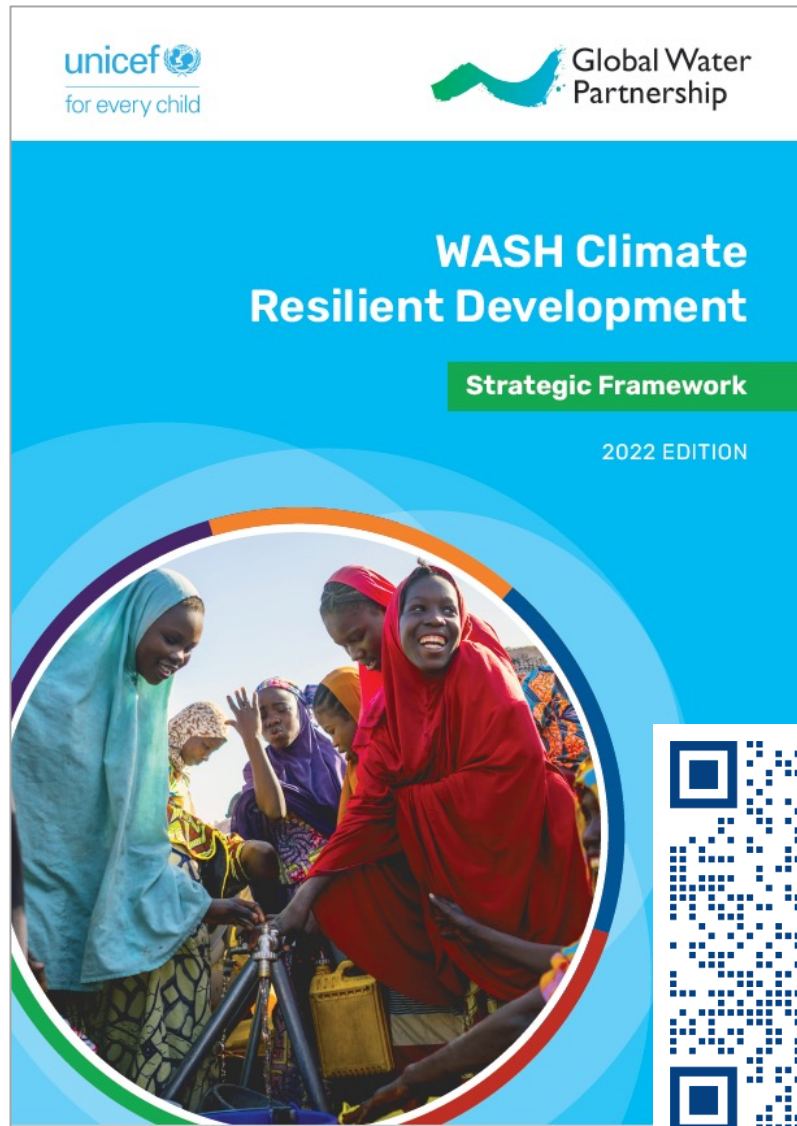
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East Asia and Pacific Regional Office

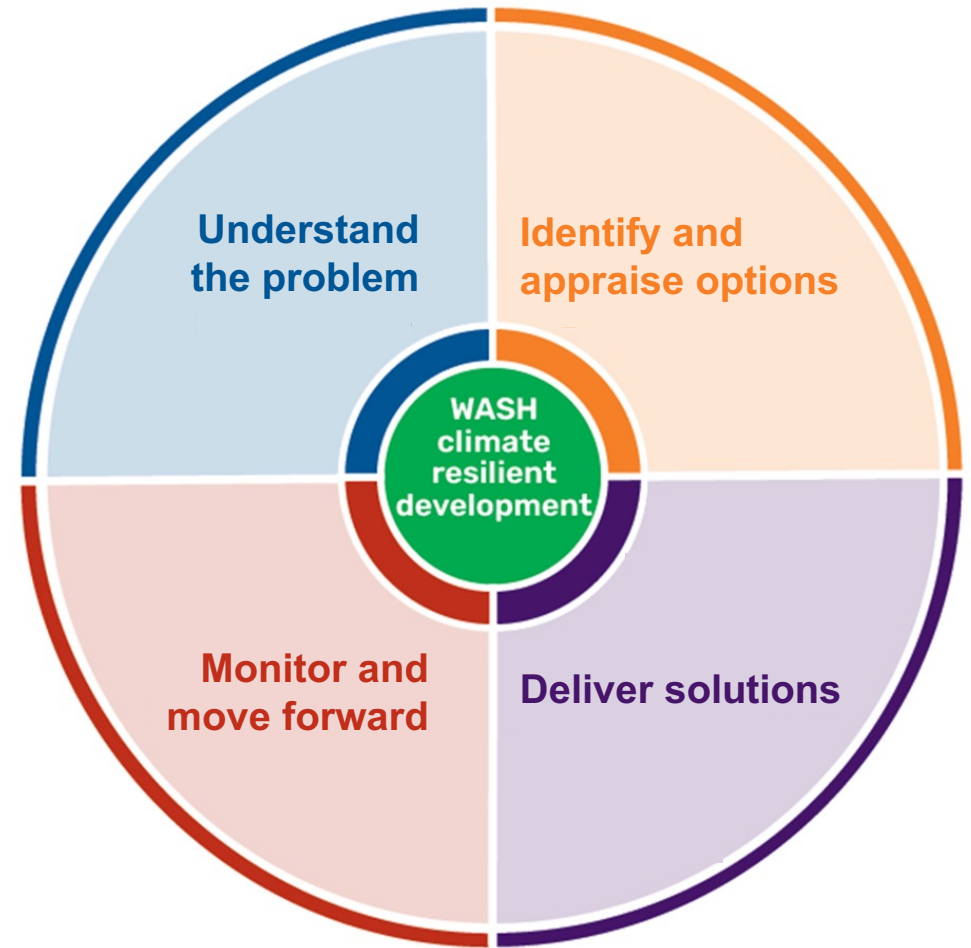


#WaWF23

A Sector-wide Framework

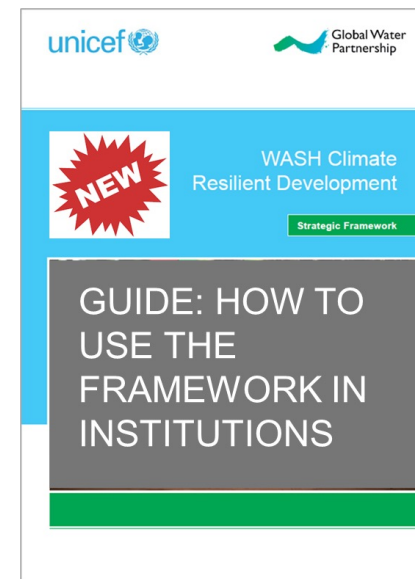


Four working quadrants



Technical guides to implement the Framework

UNDERSTAND THE PROBLEM	<ul style="list-style-type: none">• Risk assessments for WASH (to be updated in 2023)• The application of climate science to develop the Climate Rationale for WASH (in 2023)
IDENTIFY AND APPRAISE OPTIONS	<ul style="list-style-type: none">• Linking risk with response: options for climate resilient WASH (to be updated in 2023)• Appraising and prioritizing options for climate resilient WASH• Climate resilient sanitation in practice
DELIVER SOLUTIONS	<ul style="list-style-type: none">• Integrating climate resilience into national WASH strategies and plans• Local participatory water supply and climate change risk assessment: modified water safety plans• Climate financing for WASH (in 2023)• Community resilience and WASH (in 2023)• Gender, climate change and WASH services (in 2023)
MONITOR AND MOVE FORWARD	<ul style="list-style-type: none">• Monitoring and evaluation for climate resilient WASH



Objectives of the Framework

1



Ensuring that WASH facilities and services are sustainable, safe and resilient to climate-related risks

2



Ensuring that resilient WASH systems contribute to build community resilience and adapt to the impacts of climate change

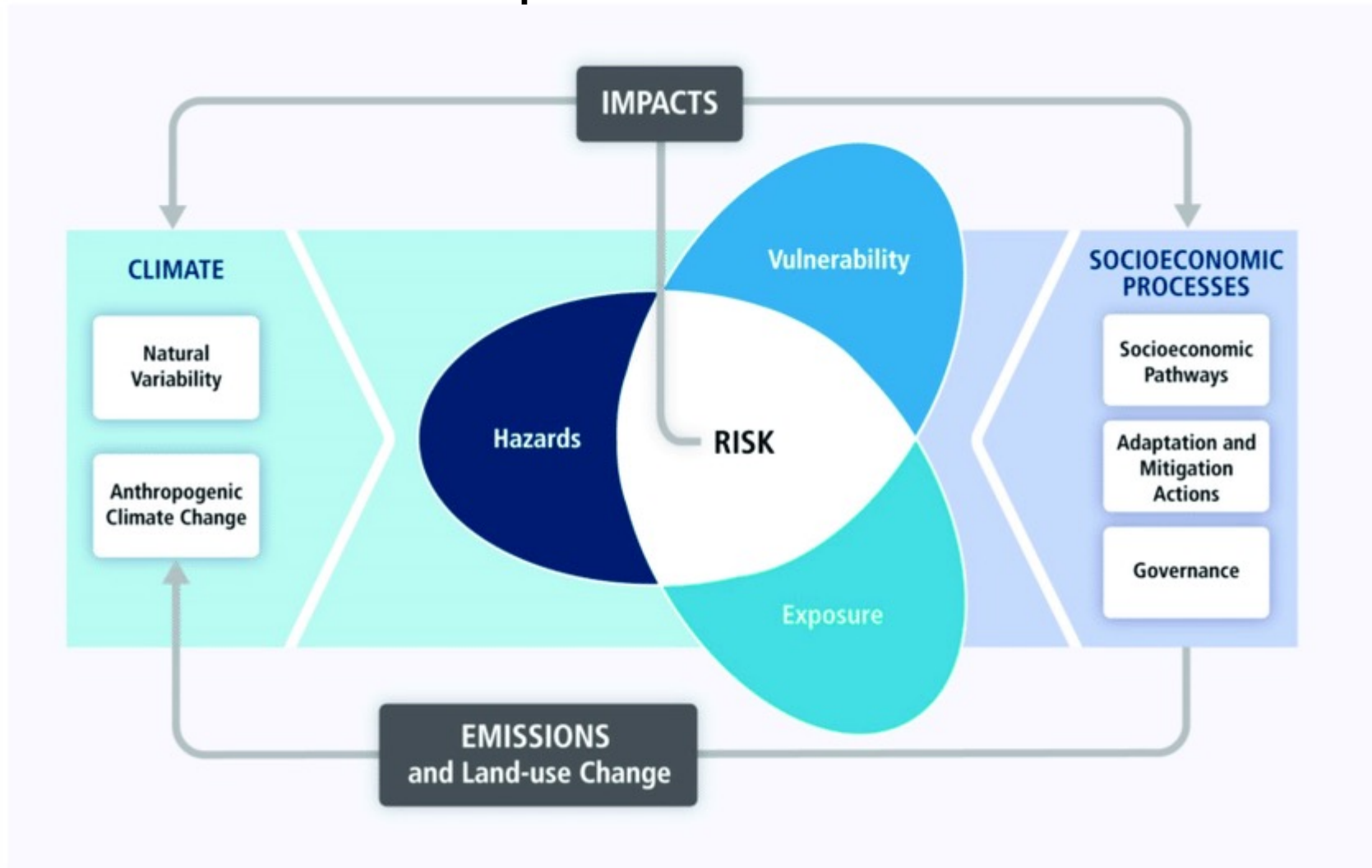
3



Working towards a carbon-neutral WASH sector

Risk identification is key to implement the framework

The IPCC AR5 conceptual framework with risk at the center

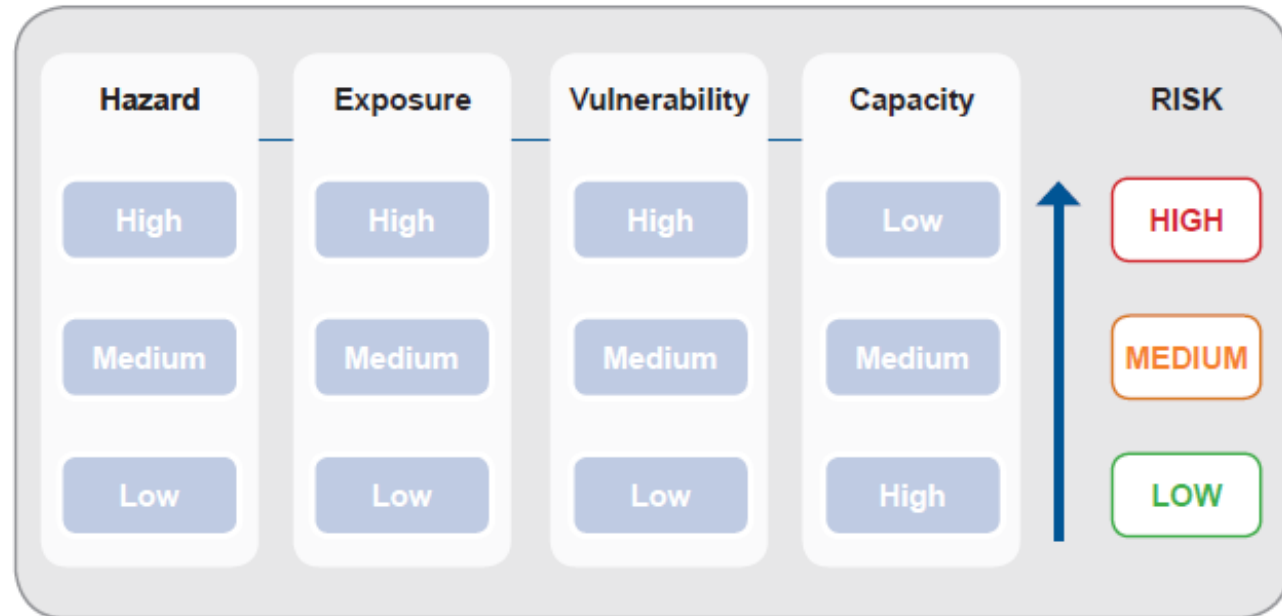


Risk identification is key to implement the framework



Risk results from the interaction of hazard, vulnerability and exposure. Capacity also influences risk: a high capacity reduces risk while a low capacity does not.

$$\text{Risk} = \text{Hazard} \times \text{Exposure} \times \text{Vulnerability}$$






Scope of the Risk Assessment



Environmental events (climate-related, meteorological, and geophysical events and trends) and environmental degradation (pollution, industrial hazards)			
<ul style="list-style-type: none"> ■ Drought ■ Flooding ■ Heavy rainfall ■ Heatwave ■ Cold spell ■ Blizzard ■ Heavy snowfall ■ Melting of snow and ice 	<ul style="list-style-type: none"> ■ Storms – thunder, hail, dust, ice, wind ■ Tornado ■ Tropical cyclone ■ Salinisation (dryland) ■ Desertification ■ Wildfire ■ Landslide, mudslide 	<ul style="list-style-type: none"> ■ Avalanche ■ Rockfall ■ Subsidence ■ Soil erosion ■ River bank erosion ■ River siltation ■ Coastal erosion ■ Saline intrusion 	<ul style="list-style-type: none"> ■ Sea level rise (long-term) ■ Storm surge ■ Tsunami ■ Earthquake ■ Volcanic eruptions ■ Pollution ■ Other
Violent/potential violent conflict (ongoing conflict, socio-political tensions and possible triggers)		Current and potential political/social unrest and instability	
<ul style="list-style-type: none"> ■ Violent conflict ■ Riots ■ Other 		<ul style="list-style-type: none"> ■ Social unrest and protests ■ Political instability ■ Other 	
Biological hazards		Chemical hazards	
<ul style="list-style-type: none"> ■ Potential viruses/diseases ■ Insect/animal infestation ■ Plant or animal contagion ■ Moulds and fungi ■ Algal growth ■ Other 		<ul style="list-style-type: none"> ■ Arsenic ■ Fluoride ■ Nitrate ■ Phosphate ■ Chemical spill ■ Other 	
Cross-border dynamics (as a destabilising factor)		Economic downturn/shocks and market instability	
<ul style="list-style-type: none"> ■ Displacement ■ Migration ■ Cross-border violence ■ Other 		<ul style="list-style-type: none"> ■ Economic downturn ■ Economic shock ■ Market instability for specific commodities ■ Other 	

A generic Simplified Results Framework (I)



OUTCOME	Rural and urban WASH infrastructure and services are sustainable, safe and resilient to climate related risks; and WASH contributes to building community resilience to climate change		
	 NATIONAL	 SUB-NATIONAL LEVEL/ WATERSHED LEVEL	 LOCAL AND PROJECT LEVEL
	1. An ENABLING ENVIRONMENT conducive to climate resilient WASH services and communities	2. Water resources are MONITORED and MANAGED through IWRM considering climate risks to WASH services and infrastructure	3. ACCESS to climate resilient WASH infrastructure and services v
INTERMEDIATE OUTCOME	STRENGTHEN WASH SECTOR ENABLING ENVIRONMENT	BUILD WATER RESOURCE MONITORING AND MANAGEMENT CAPACITY	LOCAL AND PROJECT LEVEL SUPPORT CLIMATE SMART INFRASTRUCTURE AND TECHNOLOGIES
	1.1 Knowledge of climate risks generated and shared 1.2 Climate risk informed policies, strategies, plans and programmes and WASH informed climate plans and strategies 1.3 Adequate budget and resources allocated 1.4 Gender-sensitive plans implemented and monitored 1.5 Inter-sectoral coordination strengthened with focus on health, food security and education sectors 1.6 Strengthened Early Warning Systems in place	2.1 Water resource status and pressures understood (e.g. Water Atlas or a National Water Resources Management Plan) 2.2 Long-term monitoring systems implemented and maintained 2.3 Guidelines developed prioritising gender-sensitive climate resilient WASH services and accounting for hydrological change 2.4 Agreed mechanisms implemented for resource development and adaptive management	3.1 Project design and implementation of WASH standards strengthened 3.2 Water storage enhanced and protected 3.3 Water supplies diversified (including multiple use schemes) where possible (and where resources permit) 3.4 Climate smart technologies (low and no-regret options) for WASH investigated and implemented



A generic Simplified Results Framework (II)



ACTIVITY	STRENGTHEN WASH SECTOR ENABLING ENVIRONMENT	BUILD WATER RESOURCE MONITORING AND MANAGEMENT CAPACITY	LOCAL AND PROJECT LEVEL SUPPORT CLIMATE SMART INFRASTRUCTURE AND TECHNOLOGIES
	<p>1.1.1 Improving understanding of climate risks (including the impact on equality, the most vulnerable groups, gender, etc.)</p> <p>1.1.2 Understanding resilience of technology types</p> <p>1.1.3 Understanding WASH contribution to building community climate resilience</p> <p>1.2.1 Reviewing and updating WASH and climate policies and strategies to account for climate risks</p> <p>1.2.2 Strengthening evidence-based policy advocacy</p> <p>1.2.3 Making budget allocations available to enhance resilience of existing WASH systems</p> <p>1.2.4 Understanding and assessing policies for allocation of water to other sectors (agriculture, industry, etc.)</p> <p>1.3.1 Making budget allocations available to prioritize climate resilient WASH interventions in identified risk areas</p> <p>1.3.2 Ensuring adequate emergency budget allocations for WASH sector</p> <p>1.4.1 Developing, implementing and monitoring plans</p> <p>1.4.2 Mainstreaming bottleneck analysis and planning</p>	<p>2.2.1 Assessing water resources – quantity and quality</p> <p>2.2.2 Assessing risks to water resources from climate change and other pressures</p> <p>2.2.3 Monitoring water availability and quality</p> <p>2.2.1 Monitoring patterns of use and climate-linked (and other) threats</p> <p>2.3.1 Developing agreed guidelines/mechanisms across water sector informed by climate risks</p> <p>2.3.2 Supporting basin planning initiatives that coordinate water-using and polluting sectors and that prioritise support for the most vulnerable areas</p> <p>2.4.1 Developing new water sources in a resilient and sustainable manner</p> <p>2.4.2 Prioritising WASH in the allocation of resources between sectors</p> <p>2.4.3 Assessing water demand management options (including non-revenue water)</p> <p>2.4.4 Increasing water efficiency using low carbon options</p>	<p>3.1.1 Ensuring conformity with climate-informed standards</p> <p>3.1.2 Supporting supervision and enforcement of standards</p> <p>3.2.1 Developing decentralised storage systems</p> <p>3.2.2 Strategically developing groundwater resources</p> <p>3.3.1 Spreading risk between different water sources and systems</p> <p>3.3.2 Targeting areas/communities affected by climate hazards and vulnerable sources by providing climate resilient WASH services</p> <p>3.4.1 Adapting technologies to account for climate risks</p> <p>3.4.2 Exploring innovative, climate smart technologies</p> <p>3.4.3 Exploring wastewater reuse/ recycling, nutrient recovery and energy production from waste</p> <p>3.4.4 Improving sanitation and hygiene practices (e.g. ending open defecation) to reduce vulnerability</p> <p>3.4.5 Implementing measures to improve water efficiency</p> <p>3.4.6 Exploring nature-based solutions</p>

Thank you!

WATER
WASH **2023**
FUTURES

Achieving SDG6 in a Changing Climate