







What Does Climate-Resilient Inclusive WASH Look Like?

Insights from Water for Women

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Abbreviations

COP29 Conference of the Parties of the United Nations Framework Convention on Climate Change, 2024

CSO Civil Society Organisation

GEDSI Gender Equality, Disability and Social Inclusion

icddr, b International Centre for Diarrhoeal Disease Research, Bangladesh

IWC International WaterCentre at Griffith UniversityIWMI International Water Management InstituteLSHTM London School of Hygiene & Tropical Medicine

RHO Rights Holder Organisation
RO Research Organisation

SDG Sustainable Development Goal

UTS-ISF University of Technology Sydney - Institute for Sustainable Futures

WASH Water, Sanitation and Hygiene

WfW Water for Women

Setting the scene for collaborative learning on climate-resilient inclusive WASH

Water for Women (WfW) is an implementation and research fund that is uniquely placed to contribute to local, regional and global understanding of best practice in climate-resilient, inclusive water, sanitation and hygiene (WASH) development. Under Water for Women's collaborative Learning Agenda 2023-24,¹ drawing on learnings from the implementation of climate-resilient and inclusive WASH projects and research programs in the Asia–Pacific region, WfW partners sought to explore a fundamental learning question: What does climate-resilient inclusive WASH development look like?

The understanding and definition of climate-resilient WASH has been evolving over recent years as policymakers and practitioners endeavour to prioritise inclusion and climate resilience. The Sanitation and Water for All (SWA) Climate Task Team launched the following <u>definition of climate-resilient WASH</u> at COP29 in November 2024:

Climate-Resilient Water, Sanitation and Hygiene (WASH) services anticipate, respond to, cope with, recover from, adapt to or transform based on climate-related events, trends and disturbances, all while striving to achieve and maintain universal and equitable access to safely managed services, even in the face of an unstable and uncertain climate, where possible and appropriate, minimising emissions, and paying special attention to the most exposed vulnerable groups.²

To operationalise climate-resilient WASH, it is crucial that we not only come to an agreed definition, as SWA has done, but find practical examples that demonstrate this definition and share them with practitioners and policymakers. Our understanding of global commitments at the policy level needs to be complemented with real-world practice that can be scaled up. Accordingly, WfW partners share the following learnings from Asia and the Pacific to contribute to wider sectoral learning and evolving practical actions in the face of increased climate challenges.

In exploring the <u>learning question</u>, WfW partners undertook dedicated <u>learning initiatives</u> to improve their understanding of how WASH programs consider <u>climate risk and resilience</u>, how WASH <u>governance systems</u> integrate these considerations, and the importance of <u>gender equality</u>, <u>disability and social inclusion</u> (GEDSI) to climate-resilient WASH. For further information on WfW's learning approach and methodology, see <u>Annex A</u>. WfW acknowledges the inherent complexity and scale of global WASH needs and multi-faceted inclusion and climate resilience aspects. No one-size-fits-all approach exists, but the collective experience of our partners offers guidance to achieving climate-resilient inclusive WASH for all.

Water for Women partners recognise that WASH is an important issue that underpins all the Sustainable Development Goals (SDGs). Figure 1 illustrates the structure of the 17 SDGs, representing SDG 6 (water and sanitation), SDG 13 (climate action), and SDGs 14 and 15 (life below water and on land) as foundational goals. Without water and sanitation in climate action, other social and economic goals cannot be reached. This message is also emphasised in the Global Commission on the Economics of Water's report, launched in October 2024 (Figure 2.13), demonstrating how both blue and green water are embedded within the SDGs.

¹ Water for Women, Learning Agenda, WfW, Melbourne, 2023. https://www.waterforwomenfund.org/en/learning-and-resources/learning-agenda.aspx

² Sanitation and Water for All, *Definition of climate-resilient water*, *sanitation and hygiene services*, SWA, Water for Climate Pavilion, Azerbaijan, November 2024. https://www.sanitationandwaterforall.org/sites/default/files/2024-11/ClimateResilientWASH_DefinitionPaper_final_0.pdf

³ Global Commission on the Economics of Water, *The Economics of Water: Valuing the Hydrological Cycle as a Global Common Good*, GCEW, Paris, October 2024, p73. https://economicsofwater.watercommission.org/

Water is the one issue that connects all 17 of the UN SDGs ... that's how we're looking at it. No country, no company, can deal with the water shortage issue by itself, because it is such an interconnected resource. And so collective action ... is absolutely necessary.

Usha Rao-Monari, United Nations Development Programme

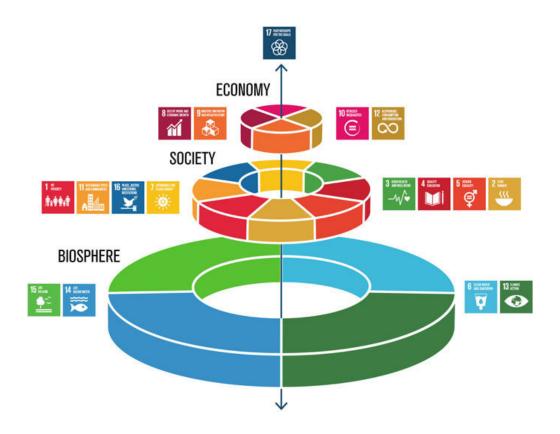


Figure 1. Clustering of the SDGs that relate to the biosphere (earth life supporting system), society and economy (Illustration Azote for Stockholm Resilience Centre, Stockholm University)

It is WfW's intention that the evidence and exchange generated on innovative and sustainable climate-resilient, inclusive approaches to WASH support development partners to learn, design and implement future programs for long-term impact. The Learning Agenda insights also aim to inform and strengthen WASH policy and practice and to contribute to local, national and global development goals. These goals include SDG 5 (gender equality and women's empowerment), SDG 6 (water and sanitation for all), and resilience-building targets such as those of the Sendai Framework for Disaster Risk Reduction and the United Nations Framework Convention on Climate Change.

Wellsprings for climate-resilient inclusive WASH delivery

Exploring key aspects of climate-resilient, inclusive WASH development under WfW's Learning Agenda revealed several critical approaches. These will be refined through ongoing learning and practice within and beyond WfW.

Inclusive WASH is essential for climate-resilient WASH development

Climate-resilient WASH systems are only possible when GEDSI principles are applied so all community members can adapt to and withstand climate events. This requires a transformative approach to gender and social inequalities.

Adaptable systems and inclusive governance are vital

Climate risk management must be embedded into existing governance structures, including customary knowledge and climate science. Simultaneously, diverse voices must be part of decision-making to promote sustainable, resilient WASH practices that reduce climate risks for marginalised communities.

Climate resilience must be embedded in all phases of WASH programs

WASH programs should incorporate climate risk and resilience into planning, budgeting, design and monitoring processes from the outset to foster long-term sustainability, adaptability and transformation.

Women and marginalised groups offer vital knowledge, capacities and resilience from lived experience

They must be recognised and empowered through transformative approaches that enable greater access and decision-making power.

Cross-sector collaboration supports climate-resilient WASH

Collaboration between sectors on evidence generation and implementation, and combining public and private financial resources (including climate finance) are essential to meet the needs of vulnerable communities, scale up climate-resilient WASH innovations, and support local adaptive capacities.



Practical actions for climate-resilient inclusive WASH implementation

Through WfW's Learning Agenda, partners developed their understanding of the concept and practices around operationalising climate-resilient inclusive WASH. The following sections provide highlights of this learning, which are further detailed in individual learning briefs (to be released in early 2025). Drawing from these investigations, and the experience and insights of partners from 40 WfW WASH and research projects in 16 Asia-Pacific countries during the past seven years, this summary shares an overview of the collective understanding that is emerging.

Policy to practice

In seeking to explore **what climate-resilient inclusive WASH development looks like**, the Learning Agenda process to date has found that climate-resilient inclusive WASH development is underpinned by enabling **policy and practice** with the following characteristics.

· Takes an inclusive program approach

Ensuring GEDSI is a foundational starting point, rather than an add-on, in climate-resilient WASH program design. This includes integrating a social norms change component at the outset.

· Adopts inclusive governance and decision-making

Actively supporting the voices of women, First Nations, people with disabilities and other marginalised people in WASH systems and integrates local knowledge of climate into WASH evidence and planning.

Raises awareness of climate change and advocacy

Raising awareness with stakeholders and communities about climate change and its implications for WASH and adaptation and emergency responses, and advocates for climate-resilient WASH policies and practice.

• Strengthens capacities for behaviour change at all levels

Improving capacities for widespread response to climate hazards and develops adaptive capacity to strengthen and protect WASH services.

• Builds WASH service resilience and durability

Increasing the reliability of infrastructure and services by building more resilience, contingency, and durability into service provision, and including features that are adaptable to changing environmental conditions.

• Uses appropriate technologies and nature-based solutions

Using practices and technologies that minimise environmental contamination using natural systems.

Promotes collaboration with partners

Promoting the active involvement of civil society (CSOs), research (ROs) and righs holder organisations (RHOs), the private sector, governments, and local communities. Active involvement of RHOs is critical to inclusion of marginalised voices.

Integrates WASH with other sectors and breaks down silos

Considering the interconnectedness of WASH with other sectors, such as agriculture, health, education, climate, disaster risk reduction and environmental conservation.

Develops financing strategies

Developing sector financing strategies that cover all WASH life-cycle costs, including advocating for public financing, improving access to climate finance, blended finance opportunities and GEDSI-responsive financing.

· Sets clear data-driven targets

Establishing clear targets, standards and pathways for mitigating climate risks and uncertainties and achieving and sustaining WASH delivery. It involves undertaking climate risk assessments and GEDSI-responsive analysis to inform practice.

Monitors performance

Tracking sector performance to track progress against sector targets, including for inclusion and climate resilience.4

Climate-resilient, inclusive WASH means that WASH services are planned, delivered, and regulated in a way that builds on the existing strengths and processes within the local governance system while also incorporating climate risk and response into these steps, ensuring that services are designed to respond to risks and optimise resilience. Additionally, all plans, investments, and management of those services must consider climate risk at every step of the process.

Fraser Goff, WaterAid Australia



In October 2024, Water for Women partners came together in Brisbane, Australia to connect, reflect and champion climate-resilient, inclusive WASH as a culmination of our learning journey. In 2025, three learning briefs will be released that explore this learning in detail.

Our research shows that women and people living with disabilities are the most affected people by climate change, and climate disasters increase the water and sanitation workload of households, for middle-aged women in particular. It is important to ensure these groups can participate in mapping potential climate hazards. We need to ensure that the participatory rural assessment workshops are at appropriate times and accessible so that everyone can join, and a safe space is created for diverse groups to share information freely.

Novika Noerdiyanti, Yayasan Plan International Indonesia

⁴ During 2024–25, the World Health Organization, United Nations Children's Fund and partners are leading a review as part of Joint Monitoring Programme/GLAAS to identify indicators for enhanced national and global monitoring of climate-resilient WASH. See: https://washdata.org/monitoring/climate-resilient-wash

Recognising the global efforts to define and operationalise climate-resilient inclusive WASH, a WfW learning group set out to explore understanding of climate risk and resilience at the implementation level. Documenting current perspectives and understanding, including acknowledging customary knowledge and practices, provides a foundation for increasing climate-related knowledge and strengthening responses.

This learning group explored the following questions:

How do WASH programs commonly understand climate risk and resilience?

How can this be further developed to better inform the design of WASH interventions?

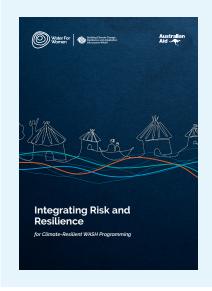
Key insights

Conceptual understanding

WASH programs recognise *climate risk* as the potential adverse impact of climate events, influenced by environmental and social changes, and *climate resilience* as the capacity to adapt and maintain WASH services under climate challenges. The **evolving definitions** of these terms reflect the sector's **ongoing adaptation** to climate complexities. However, translating these understandings into action, particularly at the implementation level, remains difficult, necessitating flexible and community-tailored solutions.

This overview summarises the key insights explored in a detailed learning brief to be launched in early 2025.

Integrating Risk and Resilience for Climate-Resilient WASH Programming



Insights from non-WASH sectors

Critical challenges identified included aligning WASH practices with broader environmental sustainability, and long-term planning under uncertainty. Additionally, interviews with experts from non-WASH sectors, such as disaster risk reduction practitioners, environmental engineers and climate governance specialists, underscored the importance of a multidisciplinary approach to identifying and reducing intersecting risks, while enhancing resilience.

Promising practices

Actionable approaches identified include integrating climate risk assessments throughout projects, engaging diverse voices in community committees, and strengthening governance models. Local adaptation, gender considerations, and long-term planning can enhance resilience.

Nine non-negotiables

Essential ingredients (Figure 2) for fostering resilient WASH systems that are inclusive, adaptable and capable of addressing the compound risks posed by climate change include:

- 1) Risk-Informed
- 2 Inclusion
- Governance

- 4 Sustainability
- 5 Gender equity
- 6 Leadership

- 7 Evidence
- 8 Partnerships
- 9 Adaptability

Figure 2. Non-negotiables for climate-resilient, inclusive WASH systems

We need to stop thinking of climate change problems in our work purely as WASH problems. We should draw on lessons from other sectors and develop solutions in partnership with actors we wouldn't typically consider in a conventional WASH program.

Jeremy Kohlitz, University of Technology Sydney - Institute for Sustainable Futures (UTS-ISF)

Safeguarding safe sanitation in seasonally flooded Cambodian communes

In Cambodia, WfW supported iDE in the implementation of its Sky Latrine product for rural households in seasonally flooded environments. This elevated sanitation solution, installed by local entrepreneurs as part of iDE's <u>Climate-Resilient Water</u>, <u>Sanitation and Hygiene Scale-Up Program</u>, allows households to safely use toilets year-round while preventing faecal sludge from contaminating water sources. iDE's engineering team solved problems that had occurred during floods by iteratively testing and retrofitting the Sky Latrine to ensure reliable flushing, preventing return to <u>unsafe coping mechanisms</u>, such as open defection The Sky Latrine is an innovative, context-specific solution that supports safe, sustainable, and climate-resilient sanitation practices in vulnerable areas.



An elevated latrine in flood-prone Trapeang Chan commune, Kampong Chhnang province, Cambodia

Credit: iDE / Tyler Kozole

The effects of climate change are increasingly being felt, so WASH stakeholders are working to strengthen climate-resilient development. Accordingly, a second WfW learning group set out to improve understanding of how to integrate climate risk and resilience into WASH governance systems.

This group explored the questions:

How do WASH governance systems commonly integrate climate risk and resilience?

What lessons from promising practices can we share to support strengthened climate risk integration?

Key insights

· Inclusivity and community participation

Incorporating inclusive processes in governance systems ensures that climate resilience efforts do not inadvertently exacerbate existing inequalities, but instead promote broader social equity. Including voices from marginalised groups and use of both scientific and customary data helps to make risk assessments relevant and accessible to local communities.

Governance strengthening for climate resilience

Integrating climate risk into WASH governance is increasingly important as climate effects grow more intense. Embedding climate risk management within existing governance frameworks, rather than creating standalone climate-WASH processes, encourages alignment with WASH goals and fosters a systematic approach to climate-resilient WASH.

This overview summarises the key insights explored in a detailed learning brief to be launched in early 2025.

Strengthening Governance for Climate-Resilient WASH Systems



Frameworks and promising practices

Emerging promising practices that are supporting governance systems that are responsive to climate risks and inclusive of all community members include building climate risk management capacity within broader governance reforms, combining resources from various funding sources, and prioritising inclusive decision-making.

It is important that we appreciate our own cultures and kastoms and recognise that many solutions are within [us] especially for behavioural actions. We empower the water committee with skills and governance in water planning and monitoring. We encourage communities to reflect on past climate hazards so they better prepare for the future. Including women in water stewardship at zone level is important because they can go back to their communities and share information with other women.

Sheilla Funubo, Solomon Islands National University

The Do No Harm approach is a conscious way to ensure there are no negative unintended consequences of our work. It is especially important for leaders to understand the Do No Harm approach, and linkages between GEDSI and WASH, so that they can support enabling environments for marginalised people – women and people living with disabilities – to be part of discussions and solutions.

Jigme Choden, Gender Officer, SNV Bhutan

Strengthening climate risk capacity within existing WASH governance in Nepal

In Nepal, SNV supported training for local WASH focal persons and Information Technology officers to use the National WASH Management Information System and Climate-Resilient Water Safety Plans, under the <u>Towards Climate-Resilient Inclusive WASH Services in Rural Nepal</u> project. This enabled local governments in Dailekh and Sarlahi to prioritise investments for water supply upgrades based on climate change and disaster impact data. This approach utilised federally endorsed tools and processes, ensuring that climate resilience was embedded into standard operating procedures. By leveraging existing systems and building local capacity, the initiative institutionalised climate risk management and enhanced the sustainability of WASH services, even in resource-constrained settings.



Local government staff facilitate a focus group discussion with women at Geruka Tole, in Chandranagar Rural Municipality, Sarlahi Credit: SNV / Meeting Point

In seeking to establish evidence of the importance of GEDSI and how greater equity contributes to climate-resilient WASH and community resilience, a third learning group aimed to identify those with the least access to WASH services and decision-making, and the particular barriers they face. WfW partners also sought to understand more about how gatekeepers, change agents, those with power, and rightsholders themselves can make the changes required, and the change that can occur as a result.

This learning group explored the question:

Why and how is gender equality, disability and social inclusion critical to climate-resilient WASH?

Key insights

Intersection of GEDSI and climate resilience

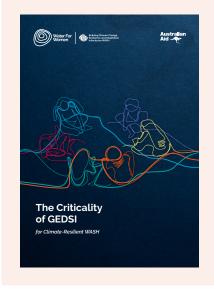
Inclusive WASH is essential for climate resilience. Marginalised groups – such as women, people with disabilities, sexual and gender minority groups and low-income households – face compounded vulnerabilities due to social and economic disadvantages, making them disproportionately affected by climate hazards. To create resilient WASH systems, the needs and voices of these groups must be integrated into planning and decision-making.

Barriers and enablers

Key barriers to marginalised groups' access to climate-resilient WASH services include social stigma, habitat vulnerabilities, institutional discrimination, financial limitations and inaccessible technology. Findings suggest these barriers can be shifted to become enablers through inclusive decision-making, prioritising local knowledge, and fostering diverse leadership.

This overview summarises the key insights explored in a detailed learning brief to be launched in early 2025.

The Criticality of GEDSI for Climate-Resilient Inclusive WASH



Transformative approach

Communities, including women and marginalised groups, are already resilient; the role of development and institutional actors is to build on, leverage and bolster this resilience and knowledge. For meaningful change, WASH programs, services and systems should employ a transformative approach to GEDSI by embedding social norms change, empowerment and Do No Harm as a core part of planning and implementation. This includes upskilling, training and supporting marginalised groups to engage in WASH governance, strengthening inclusive policies, and promoting equitable distribution of resources.

· Pathways to inclusion

Three stepping stones for achieving GEDSI integration are recognising all community members, enabling their participation in decision-making, and ensuring equitable access to climate-resilient WASH services. These steps form a foundation for inclusive governance that strengthens both community and climate resilience (Figure 3).



Figure 3. Stepping stones to shift barriers to enablers

Training has been effective in giving women the confidence to speak up and see themselves as leaders and advocates. Women have taken up leadership positions in government and at ward level. Seeing women in power empowers others to take up active roles. Women are more confident to talk about and raise their voice on issues affecting them and others in the community. Women have formed collectives to amplify their voice.

International Centre for Diarrhoeal Disease Research, Bangladesh (icddr, b) and World Vision, Bangladesh

I think ensuring that the system delivering services to users is gender-responsive is the entry point to ensure that services meet the unique needs of all community members, contributing to sustainable and inclusive growth. By not including diverse perspectives of users, WASH service may fail to meet user needs, leading to ineffective use and, in some cases, increasing vulnerability for certain groups in the community.

It's more than just about fairness and justice; it's crucial for building resilient communities that are inclusive of all and capable of adapting and responding to the challenges of climate change. Every individual, regardless of their sex, disability, or ethnicity, deserves the right to equally benefit from development and foster harmony within the community.

Pisey Chea, WaterAid Australia

Empowering action in Papua New Guinea

In Papua New Guinea, WaterAid's <u>Strongim WASH Kominiti Projek</u> utilised participatory dialogue tools to enhance the role of women and people with disabilities in WASH decision-making. By involving households in rights-awareness activities and supporting diverse representation in local governance, this approach empowered marginalised voices and fostered a community-wide commitment to inclusive WASH practices.



Dorothy is a respected community WASH leader, water kiosk operator, and the only female Peace Officer within the peri-urban community of Pari, in PNG Credit: WaterAid / Tariq Hawari

Annex A. Water for Women Learning Agenda 2023-24 methodology

Water for Women's Learning Agenda provided the dynamic and interactive framework that enabled Fund partners, including <u>civil society</u> and <u>research</u> organisations, to share and learn from one another. It promoted a shared interest in collaborative knowledge development and learning on climate-resilient inclusive WASH between all partners and with external stakeholders.

During 2023–24 the Learning Agenda drew on learnings from WfW's implementation of climate-resilient inclusive WASH projects and research initiatives in 16 countries in Asia and the Pacific. The process involved sharing experience and evidence from projects through publications, learning groups, webinars and knowledge and learning events in Suva, Siem Reap and Brisbane. It also promoted the collaborative development of answers to the Learning Agenda question:

What does climate-resilient inclusive WASH development look like?

To answer this question, three dedicated learning initiatives considered the following questions:

- 1. How do WASH programs commonly understand climate risk and resilience? How can this be further developed to better inform the design of WASH interventions?
- 2. How do WASH governance systems commonly integrate climate risk and resilience?
- 3. Why and how is gender equality, disability and social inclusion critical to climate-resilient WASH?

The exploration was led by learning groups comprising both CSO and RO partners, with inputs from stakeholders including government, RHOs and multilateral organisations such as the United Nations Office for Disaster Risk Reduction. At the final WfW Fund event in Brisbane in October 2024, 95 WfW partner representatives discussed and validated the findings of the three learning groups.

The **climate risk and resilience learning group** was led by UTS-ISF and comprised representatives from Plan International, iDE, World Vision, WaterAid and the WfW Fund Coordinator. The group assessed WASH programs' understanding of climate risk and resilience by reviewing WfW project designs, interviewing WfW partner, government and RHO staff, facilitating discussions at a learning exchange event, analysing key frameworks, and consulting non-WASH climate experts.

The **governance learning group** was led by WaterAid and the WfW Fund Coordinator and comprised representatives from the International WaterCentre (IWC) at Griffith University, Plan International, the International Water Management Institute (IWMI), Thrive Networks/East Meets West, World Vision, SNV, and UTS-ISF. The group reviewed global frameworks to identify WfW's unique contributions, selected nine frameworks for in-depth analysis, and conducted a qualitative thematic analysis of project reports to uncover promising practices, and validated insights.

The **GEDSI learning group** was led by the WfW Fund Coordinator and WaterAid and comprised representatives from iDE, SNV, icddr,b, the London School of Hygiene & Tropical Medicine (LSHTM), UTS-ISF, and World Vision. The group drew on literature and data from 14 WfW CSO project teams across nine Asia-Pacific countries, which was analysed through CSO staff reflections, stakeholder focus groups, and key informant interviews. Further refinement took place via an analytical framework, an online workshop, and partner engagement at the final WfW Fund event.

Acknowledgements

Water for Women would like to thank all partners for their engagement and hard work in delivering projects and supporting the Learning Agenda. Water for Women partners' skills, expertise and dedication to collaboration and exchange shaped Water for Women's contribution to regional and global understanding of policy and practice in climate-resilient, inclusive development. Water for Women would particularly like to thank the organisations involved in the learning groups: UTS-ISF, Plan International, iDE, World Vision, WaterAid, IWC, IWMI, Thrive Networks/East Meets West, SNV, LSHTM and icddr,b.

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About Water for Women

Water for Women supports improved health, gender equality and well-being in Asian and Pacific communities through climate-resilient and socially inclusive WASH projects and research. It is the Australian Government's flagship WASH program, investing AUD159.9 million over seven years. Water for Women is partnering with civil society organisations, research organisations and local partners to deliver 40 projects in 16 countries from 2018 to 2024. Knowledge and learning are central to Water for Women, positioning the Fund as an important contributor to global knowledge development and sharing in climate-resilient, inclusive WASH. Water for Women's Learning Agenda promotes collaborative learning, knowledge development and sharing to support long-term transformative change to WASH policy and practice globally.

Find out more at waterforwomen@ghd.com waterforwomenfund.org















