



Building the Climate Rationale for Water Sanitation and Hygiene interventions

SUMMARY

This guideline outlines what the working definition of climate rationale is and provides guidance for the water, sanitation and hygiene (WASH) sector in its development at country level, identifying some key elements that enhance the climate rationale and linking it to the achievement of a range of country-level outputs.

These elements include but are not limited to i) Climate impacts to be addressed, including vulnerabilities and risks of the climate impacts to children and women; ii) Emission trajectories for mitigation actions; iii) Assessment of adaptation options based on priorities; and iv) How the proposed intervention fits into broader domestic and international policies and decision-making processes.

The climate rationale is meant to assist policymakers, donors, practitioners and service providers in the WASH and related sectors to develop strong and robust explanation of the climate impacts, risks, and vulnerabilities to be addressed, or the emissions pathways to be shifted, and to explain how the proposed interventions will address such risks and vulnerabilities to achieve climate resilient services.

What is a climate rationale

The definition of climate rationale, and the content of a climate rationale is likely to evolve as the sector evolves in incorporating climate change in its ways of working.

Climate rationale is defined by the World Meteorological Organization (WMO) as a document that “*ensures that the linkages between climate and climate impacts, climate action and societal benefits fully ground in the best available climate data and science*”. A climate rationale outlines the logical connection between the current and/or anticipated climate change effects, their impacts on services, and the proposed solutions.

The Green Climate Fund (GCF) uses four principles in adaptation and four in mitigation:

Adaptation actions should provide a well-evidenced analysis to show that proposed activities are likely to be an effective adaptive response to the threat of specific climate change hazard(s): 1) Identification; 2) Response; 3) Alignment; 4) M&E.

Mitigation actions should demonstrate that an ambitious level of emissions reductions will occur, and that these reductions would not have happened without the GCF-funded intervention: 1) Alignment; 2) Methodology (to quantify the impact); 3) Additionality; 4) Consistent Assumptions & Reporting to Paris Agreement Goals.

Climate rationales are used to:

- **Strengthen cooperation and coordination mechanisms between WASH and climate actors**, which are often disconnected.
- Influence the **formulation and revision of climate policies and strategies** (e.g., Nationally Determined Contribution or National Adaptation Plan) to include or strengthen the references to climate resilient WASH services. Likewise, to inform the **formulation and revision of WASH policies and plans** by prioritising an evidence-based approach to climate resilient WASH activities in the WASH sector.
- Facilitate the **development of a roadmap** with specifics and granularity on “how” and “where” **to implement** identified broad **WASH related national climate priorities**, as a preliminary step to inform the development of WASH sector policies, plans, strategies, or guidelines, or the development of a UNICEF country program document.
- **Mobilize climate funds and to attract climate financing**, considering that any WASH project aiming for climate financing must have a demonstrated climate-rationale.

In addition, and regardless of the ultimate purpose of the climate rationale, two important cross-cut considerations need to be taken into account:

- **Geographical level at which the climate rationale is developed** | To ensure flexibility and maximum usefulness later, it is recommended the climate rationale is developed at national level but with sub-national granularity in the analysis. This approach ensures that the resulting rationale can provide an overarching analysis which can be useful at sector level and for informing national climate and WASH policies, whilst still being useful for deriving more localized or specific rationale that might be developed for

different purposes (e.g., a climate financing proposal, or to inform UNICEF climate resilient WASH programming in a specific target area). The decision on how to provide sub-national granularity (what scales, etc.) will need to be discussed on a case-by-case basis with countries.

- **Level of consultation with partners and stakeholders** | It is recommended that participatory and consultative options are pursued by UNICEF country offices, especially if the purpose of developing the climate rationale for WASH is to influence climate and WASH policies and plans, and if the climate rationale is intended to benefit the WASH sector wider than UNICEF. Desk reviews and lighter analysis can be employed to undertake steps 1 (stakeholder mapping) and step 2 (policy analysis) of [UNICEF’s shift to climate resilient WASH programming](#) (see figure 2). Those can be good starting points for convening sector partners to jointly undertake steps 3 (WASH Risk Analysis) and steps 4 and 5 (identifying and appraising climate resilient WASH options).

Background

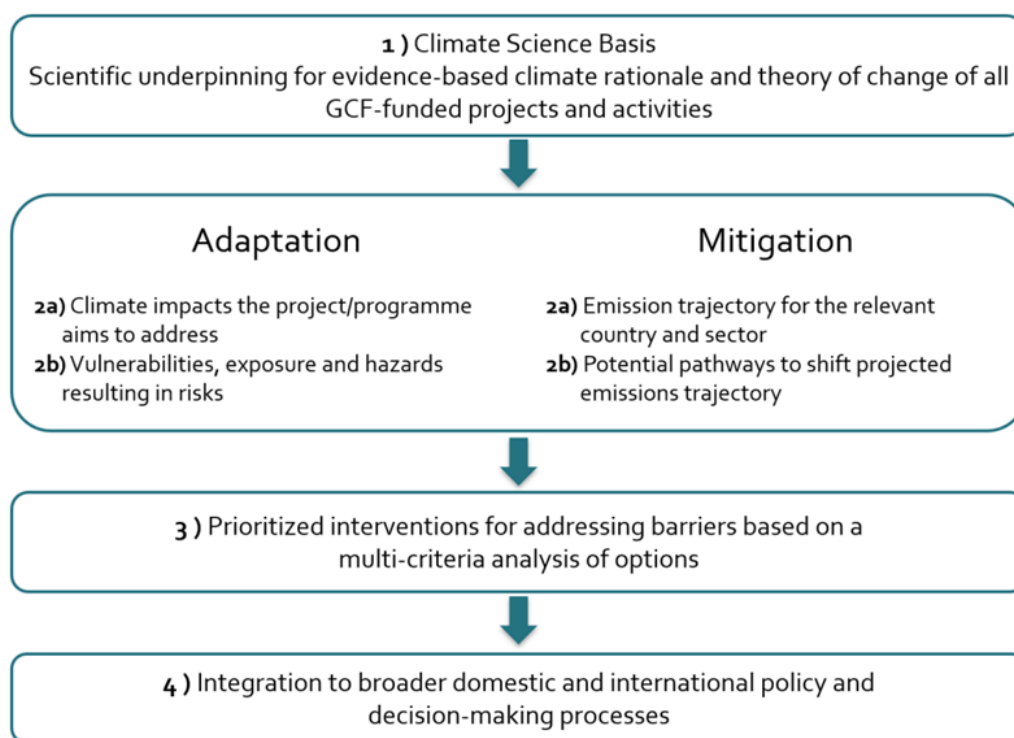
In 2020, UNICEF committed to ensuring that all its WASH work is climate-resilient, contributes towards building community resilience (adaptation), and also contributes to a reduction of greenhouse gas emissions (mitigation) (UNICEF, 2020). In consequence, one of the process indicators used by the UNICEF Strategic Plan (2022-2025) Integrated Results and Resources Framework measures the number of countries that have developed a climate rationale to address the impact of climate change on WASH services (Output indicator 4.2.4).

This brief document is meant to establish principles and guidance for countries to develop the climate rationale and to link it to a range of activities that help achieve country-level results.

The proposed approach is aligned with the [GWP-UNICEF Strategic Framework on WASH Climate Resilience](#), and also with the new [GCF Water Project Design Guidelines](#) on how to develop WASH proposals, based on the [GCF Water Security Sectoral Guide](#). As shown in Figure 1, there are four key elements that constitute a sufficient climate rationale:

- The scientific underpinning for evidence-based climate decision making (climate science basis)¹,
- The observed and projected impacts of climate change on the delivery of WASH services, based on best available climate data and science and solid analysis²,
- The appraisal and prioritization of a set of technical and non-technical climate adaptation and mitigation solutions³; and
- The identification of the linkages between WASH and climate priorities in policies and other decision-making processes.

Figure 1: Elements that constitute a climate rationale



Source: GCF (2018) *Steps to enhance the climate rationale of GCF-supported activities*

¹ The climate science will be substantiated by the conclusion of the Working Group I (The Physical Science Basis) in the IPCC Sixth Assessment Report.

² The climate impacts will be substantiated by the conclusion of the Working Group II (Adaptation and III (Mitigation) on the IPCC Sixth Assessment Report. The Report details and summarizes the climate impacts (observed and projected with a certain degree of confidence) by geographic region and by sector/theme, including water.

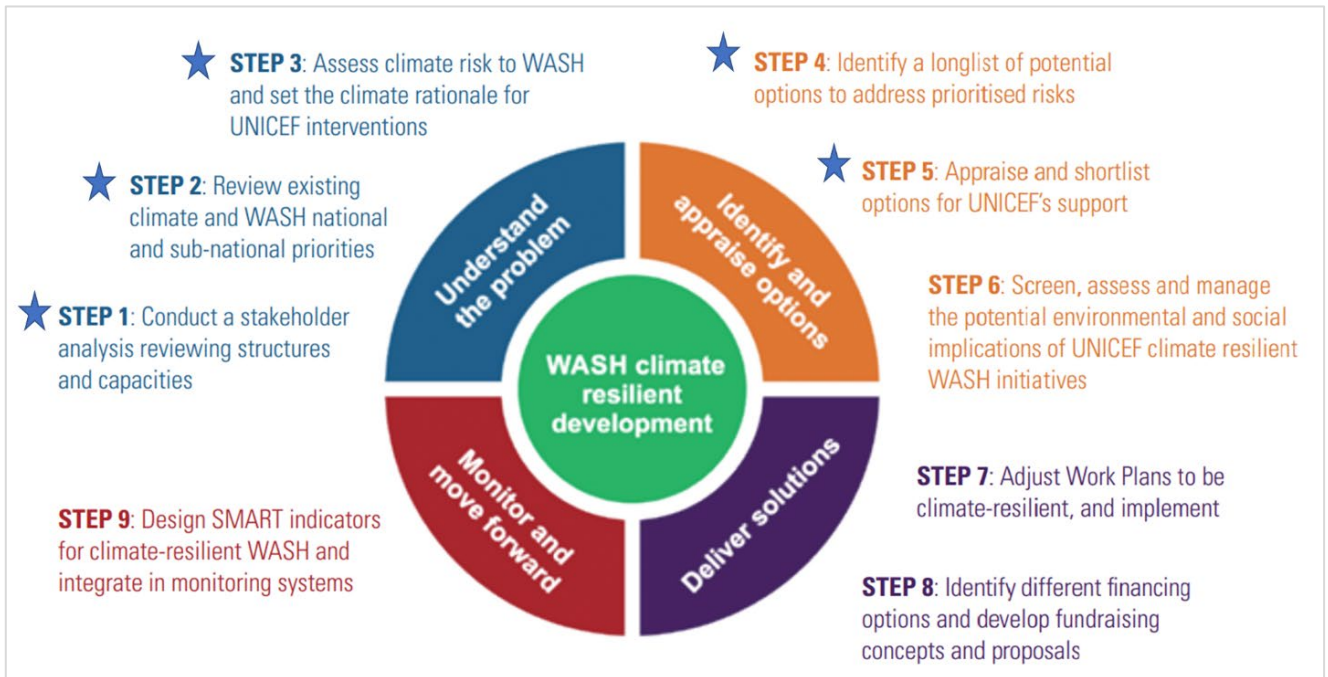
³ GCF uses six Investment Criteria in the GCF Investment Framework to assess a project: (i) Impact (Mitigation & Adaptation); (ii) Paradigm Shift (Innovation and

Replicability/Scaling); (iii) Sustainable Development (All the co-benefits including SDGs, environment, gender, etc.); (iv) Need of the Recipient (Project Objective); (v) Country Ownership (Alignment with national/ regional climate policies and strategies); (vi) Efficiency and Effectiveness (Financial and Economic Analysis and climate finance ratios)

The assessment is done over the four GCF Drivers of Change: (i) Transformational Planning and Programming; (ii) Catalyzing Climate Innovation; (iii) Mobilizing Finance at Scale; (iv) Coalition and Partnership to Scale-Up Success

The figure below presents the nine steps included in UNICEF’S shift to climate resilient WASH programming, which are described in detail in the guidance note (UNICEF, 2020). Steps 1 to 5, marked with a star in figure 2, highlight the most relevant to develop a climate rationale for WASH interventions.

Figure 2: The nine steps of UNICEF’S shift to climate resilient WASH programming with marks on the most relevant to develop a climate rationale for WASH interventions

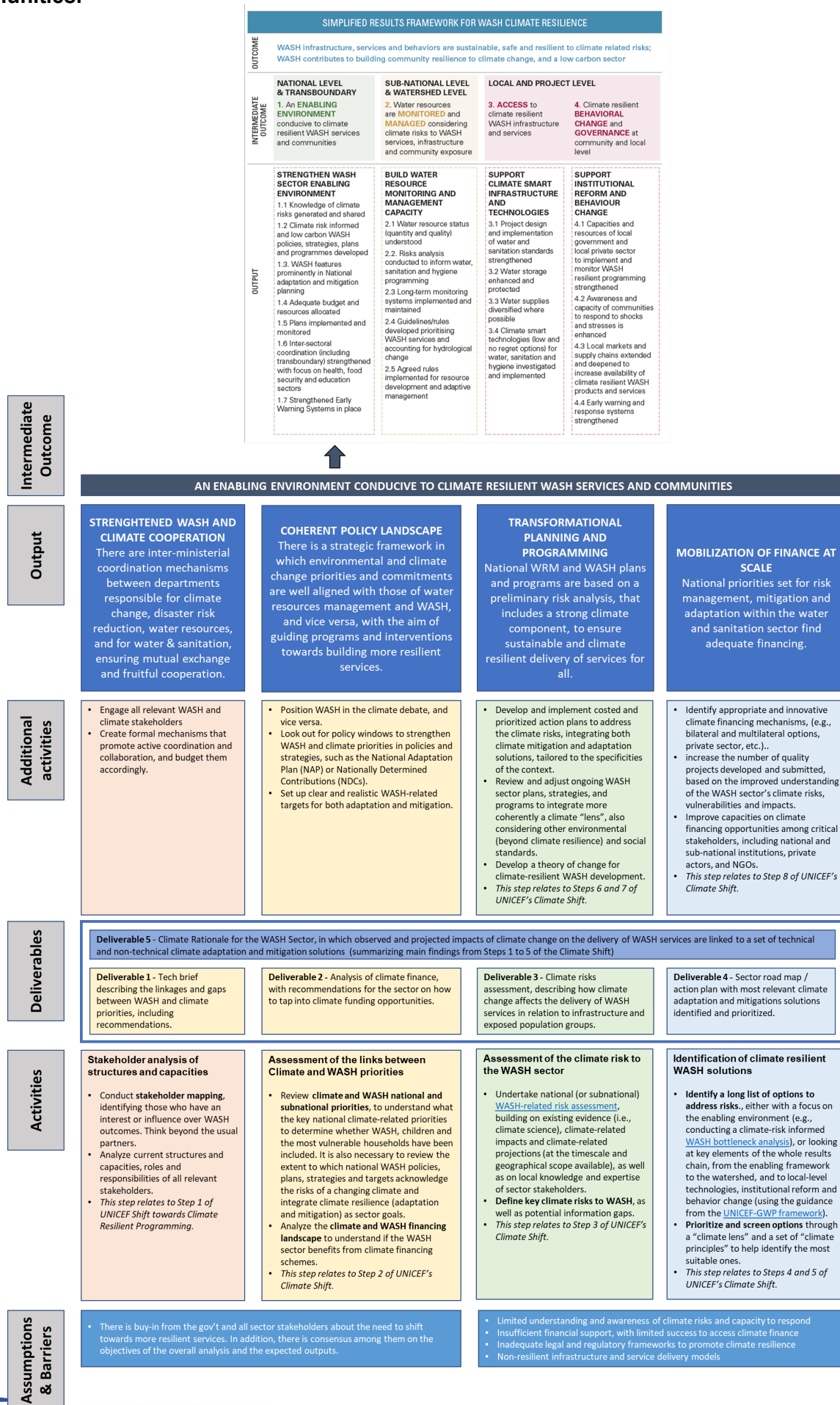


Source: UNICEF (2020) UNICEF Guidance Note. How UNICEF regional and country offices can shift to climate resilient WASH programming

Figure 3 and 4: Risk-Informed WASHBAT workshop conducted in Cambodia as part of the development of a climate rationale



Figure 1: Logframe for the development of the climate rationale, as a trigger among a suite of factors for an enabling environment conducive to climate resilient WASH services and communities.



More specifically, the logframe shown in Figure 3 helps to understand that the climate rationale is a key deliverable, which results from the combination of different activities and pieces of information that are packaged differently to achieve different outputs, depending on the situation in the country and the country office.

Therefore, developing a WASH climate rationale is useful to strengthen the enabling environment for climate resilient WASH in different ways, and it is aligned with the [UNICEF's simplified results framework for climate resilient WASH](#). The simplified results framework (upper part of Figure 3) shows that the enabling environment needs to be complemented by: i) water resources monitored and managed considering climate risks to WASH, ii) climate resilient infrastructure and services, and iii) climate resilient behavioural change and governance at community and local level, in order to secure that WASH infrastructure, services, and behaviours are sustainable, safe, and resilient to climate related risks.

Documenting the climate rationale for WASH

In terms of the content, the climate rationale documents available provide evidence on climate trends and projections, and highlights policy directions taken to date. It summarises the key findings from a climate risks assessment to WASH, in particular, it details the effects of climate change on WASH infrastructure and sets the broad trends of WASH exposure and vulnerabilities to climate change. It also identifies and prioritises climate solutions to support adaptation and mitigation responses of the WASH sector.

As regards the format, it will very much depend on the ultimate purpose. A full climate rationale can be considered as a policy and guidance document and it is suggested to be a 10 to 15 pages report, with up to 30 additional pages in separate annexes to include full populated risk assessment matrix and options appraisal assessment. If you

are including the climate rationale into a concept note or proposal, you would need a 2-pages summary of the climate rationale. The climate rationale can also be used as a basis for other documents (e.g., advocacy briefs on the cost of adaptation options, or a policy document to update NAPs and NDCs).

The following is a suggested indicative structure of a climate rationale:

- **Summary** (500 words) | Brief summary of the problem statement and climate rationale i.e., linking the change in climate to the hazards, to the risks to WASH services, and to the solutions.
- **Brief country context** (1 page) | Short introduction to the geographic area and scale – i.e., national, sub-national, including justification, including information on the demographics, economy, topography, etc. Overview of water resources profile and access to WASH services. Objectives and ultimate purpose of the climate narrative (if known).
- **Methodology** (1 page) | Describe how engagement among the relevant stakeholders in the country has taken place and what further engagement will be undertaken as the proposed solutions are implemented and monitored.
- **Climate and WASH priorities** (2 pages) | Describe the climate change problem, GHG emissions profile, and mitigation and adaptation needs. Summary of the policy response to climate change, including findings from climate and WASH policy assessment. Is climate risk to WASH well-articulated in climate/WASH policies, such as the NDC, NAP or equivalent? Is WASH a national climate priority? Are climate priorities integrated in WASH policies and strategies? Gaps and upcoming

opportunities to address these gaps (e.g., update of the NDC and NAP).

- **Climate science** (1-2 pages) | Introduce the threat of climate change in relation to WASH, based on best available data and informed by local knowledge and context: historical climate observations, trends, and future projections in annual precipitation and temperature under different timeframes and climate scenarios (GCF recommends to use SSP 4.5 – middle of the road scenario-) and anticipated impacts.
- **Climate risk assessment for WASH** (2 pages) | Characterization of hazards, exposure, and vulnerability. Overview of the current and anticipated impacts of climate change hazards on the provision of WASH services – highlighting the risks posed to WASH infrastructure and services (and by association ideally water resources) and the communities which depend on these services. This can also be summarised in a table showing the Climate change - Hazard - Exposure - Vulnerabilities - Impact on WASH services - Data gaps. Connections between risk assessment and “priority vulnerable sectors” in national climate policies/plans.
- **Options identification and appraisal** (2 pages) | Identification of climate adaptation and mitigation options to address prioritised risks. Appraisal and prioritization, providing information and justification on how proposed solutions serve to shift the development pathway toward a more low-emissions and/or climate resilient direction. How will the identified solutions reduce the exposure and/or vulnerability (of people, systems, or ecosystems) and thus lessen the climate change risk or impact given barriers (e.g., technical, social, institutional, regulatory) to implementation. Options framework: enabling environment, sub-national and local/project level (infrastructural and adaptive capacity).

Alternatively, a focus on the enabling environment might be prioritised through a national WASH bottleneck analysis, with an expanded scope to cover specific aspects of climate change risks (RI-WASHBAT). Inclusion of governance-based solutions (e.g., the policy and regulatory framework, availability of resources and capacities, etc.), which are complemented with the selection of more infrastructural focused options. Connections between prioritized options and national priorities, i.e., are climate solutions directly contributing to the country’s NDC or national climate strategies or other plans such as NAPs or equivalent?

- **Conclusions and key remarks** (2 pages) | Overall conclusions, linking risks with prioritised climate solutions. If known, specific recommendations for downscaling climate rationale development for specific purposes (UNICEF Programming, climate finance proposal development, etc.). Outline how the sustainability of proposed interventions will be ensured in the long run and how this will be monitored and evaluated.
- **Annexes** | In separate annexes: i) Details of the consultation; ii) Key documents consulted.

Recommendations on information and data sources

To elaborate the climate science basis, it is advisable to use credible internationally peer-reviewed climate data. The following data sources provide a starting point for analysis:

- **Source of Data for climate projections:** Use IPCC data, reports, and other credible internationally peer-reviewed climate data, such as:
 - [Climate analytics](#) includes a diverse set of interactive climate projection tools and resources for policymakers and researchers;

- World Bank – [Climate Change Knowledge Portal](#) presents [Climate Risk Country Profiles](#) - a high-level assessment of physical climate risks for countries, providing insight for decision-makers into the potential for increasing, expanding, and emerging risks across space and time, and for different climate futures;
- World Resources Institute (WRI) presents the [Aqueduct portal](#), which includes a set of tools to map water risks such as floods, droughts and stress, using open-source, peer reviewed data. The tools include a Water Risk Atlas, Country Rankings, and a specific tool to identify coastal and riverine flood risks.
- IPCC Sixth Assessment Report – Regional Fact Sheets: WG1: [Climate Sciences](#); WG2: [Adaptation](#); WG3: [Mitigation](#);
- [Climate Information Platform](#) provides access to data, tools and guidance to assist in the development of the climate science information for climate action. It provides information on past climate change trends based on model data for the reference period 1981–2010, as well as on projected future changes in the climate system;
- [Think Hazard](#), which gives a general view of the hazards, for a given location; and [Climate Watch](#) offers open data to help gather insights on countries' climate progress, including countries' commitments submitted by countries related to the Paris Agreement.
- **Mitigation Actions:** Demonstrate that an ambitious level of emissions reductions will occur and that these reductions would not have happened without these actions or under 'business as usual' scenario (i.e., demonstrate additionality).
 - Confirm alignment of activities with regional and national climate strategies (NDC)
 - Develop a well-referenced methodology to quantify the mitigation impacts and its monitoring
- **Adaptation Actions:** Provide well-evidenced analysis to show that the project responds to the current and future threats of identified climate change hazards by reducing climate risks and vulnerability and increasing people's climate resilience.
 - Confirm alignment of activities with regional and national climate strategies (NAP)
 - Include a description of the monitoring, evaluation, reporting, and verification to assess climate impact.
- **Children Climate Risk Index (CCRI):** You can use the composite indicator developed by UNICEF to support the Climate Rationale. The CCCRI incorporates climate and environmental (compounded by climate change) shocks with child vulnerability that the WASH sector can address.

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About the Authors

This guideline was authored on behalf of UNICEF by Ricard Giné (SIWI Advisor for Sustainable Services at SIWI); Jose Gestí (Climate consultant at SIWI); Antoine Delepiere (Senior Programme Manager at SIWI) and Alejandro Jimenez (Water and Sanitation Director at SIWI). From UNICEF side, the document was led by Jorge Alvarez-Sala (WASH Specialist at UNICEF HQ).

About the Series

UNICEF's water, sanitation and hygiene (WASH) country teams work inclusively with governments, civil society partners and donors, to improve WASH services for children and adolescents, and the families and caregivers who support them. UNICEF works in over 100 countries worldwide to improve water and sanitation services, as well as basic hygiene practices. This publication is part of the UNICEF WASH Learning Series, designed to contribute to knowledge of good practice across UNICEF's WASH programming. In this series:

Discussion Papers explore the significance of new and emerging topics with limited evidence or understanding, and the options for action and further exploration.

Fact Sheets summarize the most important knowledge on a topic in few pages in the form of graphics, tables and bullet points, serving as a briefing for staff on a topical issue.

Field Notes share innovations in UNICEF's WASH programming, detailing its experiences implementing these innovations in the field.

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WASH Diaries explore the personal dimensions of users of WASH services, and remind us why a good standard of water, sanitation and hygiene is important for all to enjoy. Through personal reflections, this series also offers an opportunity for tapping into the rich reservoir of tacit knowledge of UNICEF's WASH staff in bringing results for children.

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United Nations Children's Fund
3 United Nations Plaza, New York, NY 10017, USA

For more information, please contact: WASH@unicef.org