

# Climate Resilient Sanitation

## GCF Annex: Global Webinar

**Date:** 22 January '25

**Time:** 1400 - 1530 UK Time

**Platform:** Virtual

## Webinar Background

The Green Climate Fund (GCF) is the world's largest dedicated fund helping developing countries respond to climate change. GCF have developed a series of Sectoral Guides to provide evidence-based information for impactful projects in priority investment areas and to support the efficient and effective delivery of GCF projects and operations.

Supported by members of the Climate Resilient Sanitation Coalition, GCF have published new, practical guidelines for designing climate-resilient sanitation (CRS) projects. This new CRS Annex complements the GCF Water Security Sectoral Guide that describes the position and ambitions of GCF's investment in the water sector.

The Annex introduces GCF's approach to CRS; outlines the climate science basis and rationale for the adaptation and mitigation components of CRS projects and programs; provides guidance on the specific interventions that can be included within CRS projects and programs to support adaptation and mitigation; and presents content-related and procedural guidance for developing a GCF proposal on CRS and the specific requirements that need to be met.

The Annex is designed to be useful to any organization interested in accessing GCF funding for CRS projects. This includes Direct Access Entities at the national levels, who co-originate projects with the National Designated Authorities; International Access Entities; Accredited Entities, who work alongside countries to develop project ideas and submit funding proposals to GCF; and other entities interested to access climate finance for sanitation.

The webinar had two connected objectives: 1) to raise awareness of the CRS Annex as a practical resource, encouraging future use of the document; and 2) to introduce key concepts and technical guidance relating to CRS, as outlined in the Annex.

## Agenda and Speakers

Agenda Item	Speaker
Welcome	Nat Paynter, UNICEF
<b>Context Setting</b>	
Why discrete guidance is needed for CRS	Ann Thomas, UNICEF
GCF's approach to CRS	Bapon Fakhruddin, GCF
CRS Annex overview	Sam Drabble, WSUP
Moderated Q&A with audience	Nat Paynter, UNICEF
<b>Panel Discussion: CRS experiences</b>	
CRS implementation experiences	
- Mitigation (Nigeria)	- Jolly Ann Maulit, UNICEF
- Adaptation (Bangladesh)	- Yeasin Arafat, WaterAid
- Systems strengthening	- Martin Gambrell, World Bank consultant
- Climate Science	- James Wallace, University of Leeds
Moderated Q&A with audience	Nat Paynter, UNICEF
<b>Proposal Development</b>	
Proposal development	Bapon Fakhruddin, GCF
Moderated Q&A with audience	Nat Paynter, UNICEF
<b>Conclusion</b>	
Next Steps and Close	Kate Medlicott, WHO

# Summary and Key Messages

## Context Setting

- There are compelling arguments for climate-resilient sanitation (CRS), relating to both adaptation and mitigation.
- Sanitation is unique for the number of sectors it has the potential to impact, including water supply, water resource management, food security, environment and ecosystems, health and energy.
- The target population for CRS interventions is broad. It includes the most vulnerable, living in high-risk climate-impacted areas and without access to safely managed sanitation; but also wider segments of the population, who will need retrofitting of existing services to be fully resilient.
- The proportion of countries including sanitation in their nationally determined contributions (NDCs) is increasing, but there is much more to do. We now have a collective responsibility to design effective CRS programs to support channeling of large-scale climate investments into the sanitation sector.

## Applying the Annex

- When designing sanitation projects to be climate resilient, it is critical not to lose sight of the first-level objectives of sanitation: improving public health, protecting the environment, and ensuring equitable access to essential services. Climate resilience objectives should complement, not replace, these objectives.
- Climate risk assessment is a critical step in developing the climate rationale for any GCF project. These assessments should reflect the formula presented in the GCF Water Sector Guidelines Annex 1: Risk = Hazard X Exposure X Vulnerability.
- The evidence for emissions from in situ real-life sanitation systems is rapidly evolving. It is important not to overpromise on emissions reductions, and to seek expert input on emissions measurement.
- Sanitation can act as an entry point for wider systems change across sectors and contribute to transformative adaptation to climate change. To realize its transformative potential, sanitation projects should promote circular economy approaches and interlinkages with other sectors.
- There are wide-ranging known interventions with potential to support climate change adaptation and mitigation across the sanitation service chain. However, the evidence base in this area is also evolving, and the interventions cited in the Annex are illustrative. Selecting interventions will always be context-specific.
- Infrastructure solutions alone will not deliver climate-resilient sanitation at scale. Projects should also include consideration of the policy, institutional, regulatory and financing mechanisms needed to enable and mainstream CRS.

## Panel Discussion

### Mitigation

- In Nigeria, UNICEF have worked with ECOPSIS and the University of Bristol to estimate GHG emissions from sanitation at the national and city level. The study estimated that 5% of Nigeria's total GHG emissions come from sanitation; and that septic tanks and pit latrines are the primary sources of GHG emissions. Summary findings from the study will be made available in early 2025.
- For estimating GHG emissions, IPCC guidelines are considered the current standard — see for example Vol. 5, Chapter 6 of 2019 refinement of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Combining IPCC default values with updated data on sanitation coverage from JMP and World Bank can produce estimates of sufficient quality to support integration of sanitation in NDCs.
- Researchers must ensure they are using the best available national data; and working closely with government partners to increase the accuracy of results.

### Adaptation

- In Bangladesh, WaterAid has worked with municipal partners to develop co-composting approaches, demonstrating the circular economy potential of sanitation and links with the agricultural sector.

Technological innovations and solar energy have also been applied to reduce emissions in faecal sludge treatment plants.

#### Systems Strengthening

- World Bank have developed a report on CRS policies, institutions, regulations and financing, planned for launch in spring 2025. Key messages include that citywide inclusive sanitation (CWIS) and its principles provide a solid foundation to moving towards climate resilience, requiring a combination of sewer and onsite approaches. A conceptual framework has been developed to assess absorptive adaptive and transformative capacities for CRS.
- Policy recommendations incorporate the need to improve governance; rethinking approaches to urban sanitation services and their role in urban water resilience and city resilience; and supporting capacity building skills development and the adoption of innovative technologies.
- There are wide-ranging examples of PIRF interventions to support CRS, including the use of flexible planning, financing and regulatory frameworks to support condominal sewers and decentralized approaches (Brasilia, Brazil); the development of climate risk screening guidelines which incorporate circular economy approaches (Zambia); leveraging carbon credits (Sanergy, Kenya; Fiji); results-based financing (SOIL, Haiti); and integrating sanitation with wider urban development processes (Mukuru, Nairobi; Latin America).
- Transparent and consistent policy messaging is required around the costs and benefits of CRS – including the cost of delivery and conversely the cost of inaction.
- Different implementation pathways will be required for different cities and countries depending on their starting point and levels of resourcing.

#### Combining adaptation and mitigation

- Adaptation and mitigation are two sides of the same coin. These two terms should be brought together under the umbrella of resilience. For example, frequent emptying of onsite sanitation systems can be expected to both reduce emissions and increase resilience to flooding. Circular economy approaches through resource reuse and recycling also combine adaptation and mitigation approaches. Container-based sanitation is an example of an intervention with multiple climate resilience benefits.
- Global and national indicators are currently being developed through the JMP / GLAAS initiative to support monitoring of the climate resilience of sanitation systems.

#### The additive nature of climate-resilient sanitation

- Safely managed sanitation provides an essential foundation for CRS, but does not itself guarantee climate resilience. The additive value of CRS lies in enabling the sustainability of the service in the face of climate shocks and stressors and ensuring the system's ability to respond and restore following these shocks.

### Developing a GCF proposal

- GCF supports scalable projects – the average ticket size is US\$ 50 - \$70 million.
- Proposals must align with the overall GCF investment criteria, as detailed in the Annex: Impact potential; Paradigm shift potential; Sustainable development potential; Needs of the recipient; Country ownership (including alignment with country priorities); and efficiency and effectiveness.

### Closing

- Although CRS has transformational potential, it is also closely aligned with ongoing activities and existing knowledge in the sector.
- We should be careful not to overemphasize innovative technologies without due attention to systems strengthening; or to overemphasize the profitability of circular economy approaches, which need to be framed as one part of larger systems.
- Continued collaboration will be critical, including through the Coalition, in knowledge sharing, proposal development and ensuring high-quality implementation.