

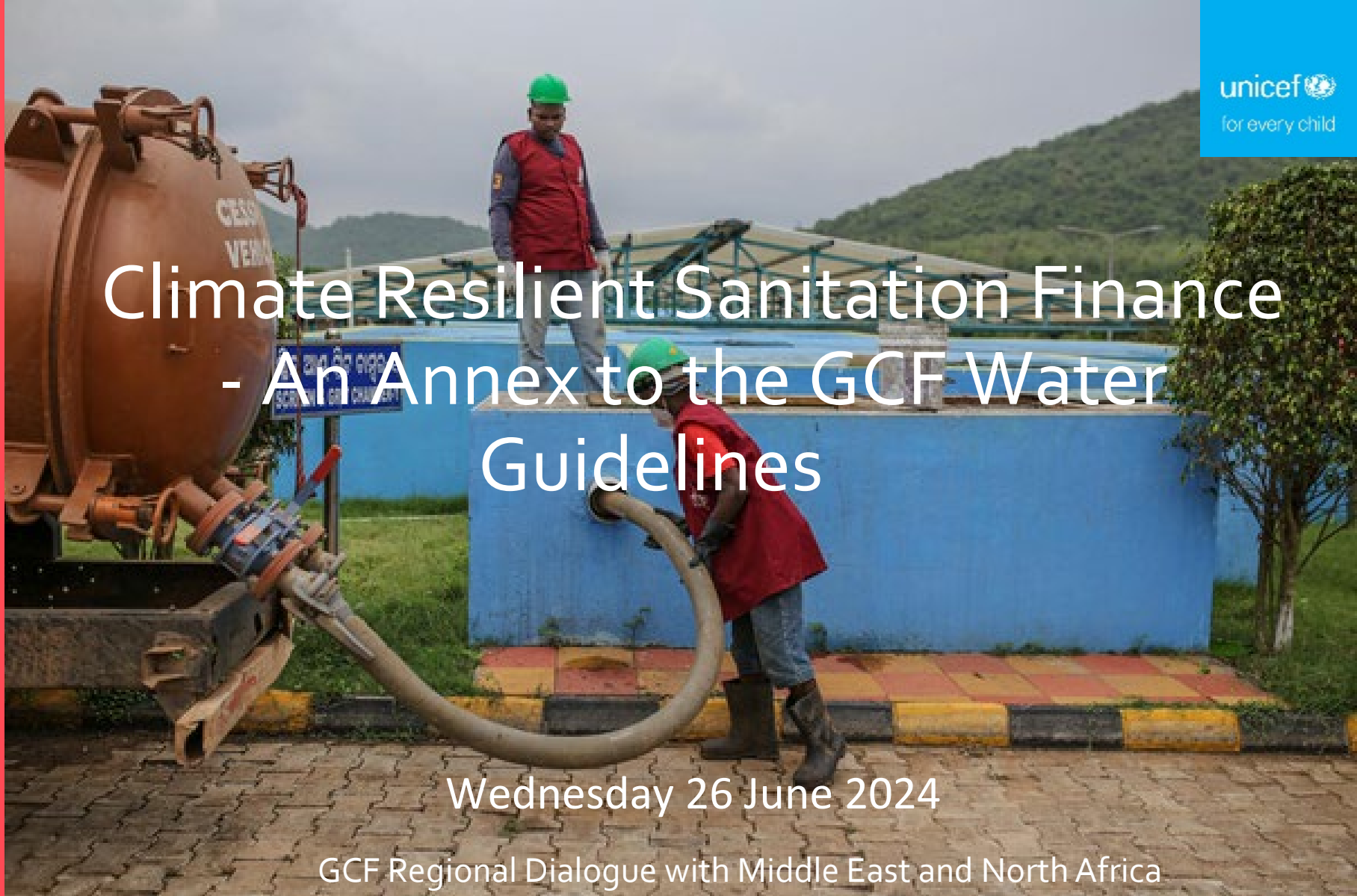
CLIMATE RESILIENT SANITATION: COALITION FOR ACTION



Climate Resilient Sanitation Finance - An Annex to the GCF Water Guidelines

Wednesday 26 June 2024

GCF Regional Dialogue with Middle East and North Africa



Session Outline

- Brief Introduction and Objective of the session – Bisi Agberemi; WASH Specialist, UNICEF New York
- Welcome and Opening Remarks – Nonhlanhla Zindela, Deputy Director and Head of Programming, GCF
- Framing presentation: Climate Resilient Sanitation and the CRS Annex - Bisi Agberemi; WASH Specialist, UNICEF New York
- Panel Discussion - Moderator: Fiona Ward (WASH Specialist, UNICEF New York)
 - Panelist:
 - Nonhlanhla Zindela, Deputy Director and Head of Programming, GCF
 - Belal Shqarin; Director of Climate Change, Ministry of Environment - Jordan
- Q& A
- Closing

Brief Introduction & Session Objectives

Bisi Agberemi, WASH Specialist, UNICEF New York

Session Objectives

- Orient participants on the interrelationship between sanitation and the climate crisis.
- Raise awareness on the adaptation needs, contributions to community resilience, as well as opportunities to reduce greenhouse gases emissions from climate-resilient sanitation programming
- Present and receive initial feedback on the GCF Sanitation Guidelines, currently under development by CRS Coalition being co-led by UNICEF.
- Raise awareness of the need to integrate climate-resilient sanitation priorities in climate policy and plans (NDCs, NAPs, etc.) as well as climate change in sanitation policy.

Welcome & Opening Remarks

Nonhlanhla Zindela, Deputy Director and Head of Programming, GCF

Framing Presentation

Bisi Agberemi; WASH Specialist, UNICEF New York



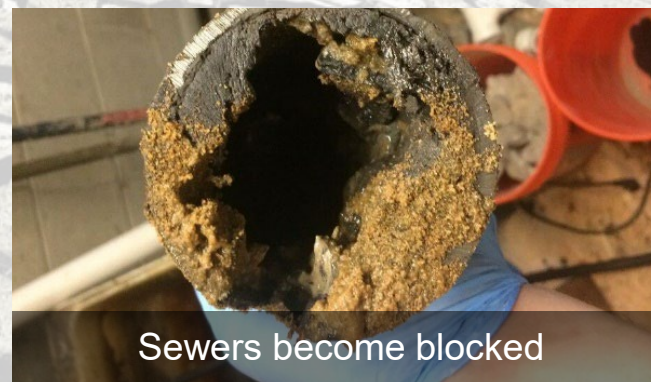
Climate Resilient Sanitation & GCF CRS Annex

Bisi Agberemi

Water, Sanitation and Hygiene Specialist, UNICEF New York

What Does Sanitation Have To Do With Climate?

**Not enough
water** means
that...



What Does Sanitation Have To Do With Climate?

**Too much
water** means
that...

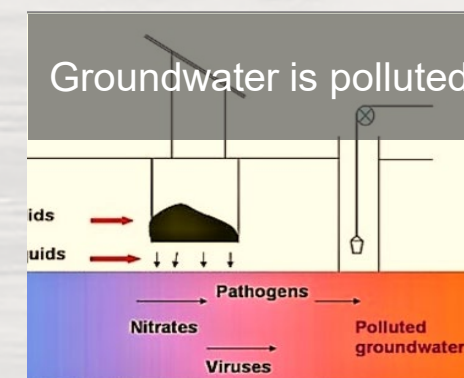
Combined sewers
overflow to waterways



Emptying is difficult
or impossible



Groundwater is polluted



Pit latrines collapse



Tidal flooding limits
toilet access



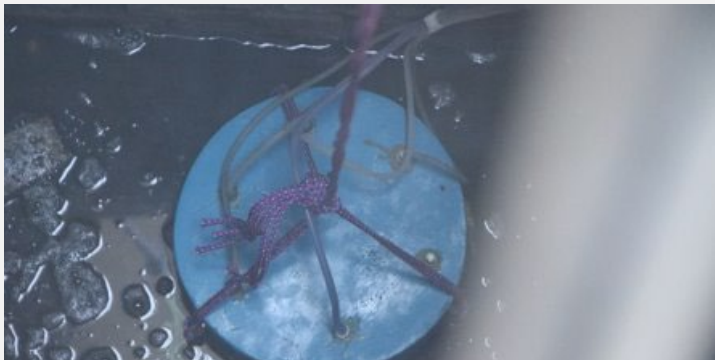
Rising seas inundate
wastewater plants



Faecal matter overflows
from facilities



What Does Sanitation Have To Do With Climate?



Methane emissions from onsite sanitation



Photo credit: Aquatic Ecology Center, Kathmandu University

communications earth & environment

ARTICLE

<https://doi.org/10.1038/s43247-022-00413-w>

OPEN

Check for updates

Whole-system analysis reveals high greenhouse-gas emissions from citywide sanitation in Kampala, Uganda

Jake Johnson^{1,3}, Fiona Zakaria^{1,3}, Allan G. Nkurunziza^{2,3}, Celia Way¹, Miller A. Camargo-Valero^{1,3} & Barbara Evans^{1,3}

Global estimates of emissions of greenhouse gases do not take into account the complex service chain in rapidly growing cities in low- and middle-income countries. This paper presents an end-to-end analysis to estimate emissions from all stages of the sanitation-service chain, using Kampala in Uganda as an example. We show that emissions associated with long periods of storage of faecal waste in sealed anaerobic tanks (49%), discharge from tanks and pits direct to open drains (4%), illegal dumping of faecal waste (2%), leakage from sewers (6%), wastewater bypassing treatment (7%) and uncollected methane emissions at treatment plants (31%), are contributing to high levels of greenhouse-gas emissions. Sanitation in Kampala produces 189 kt CO₂e per year, which may represent more than half of the total city-level emissions. Significant further empirical and modelling work is required to update estimates of greenhouse-gas emissions from sanitation systems globally.

GHG emissions

Biogas capture



Measuring nitrous oxide emissions

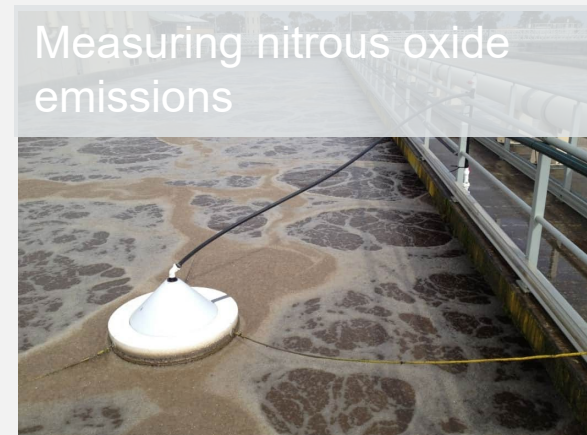
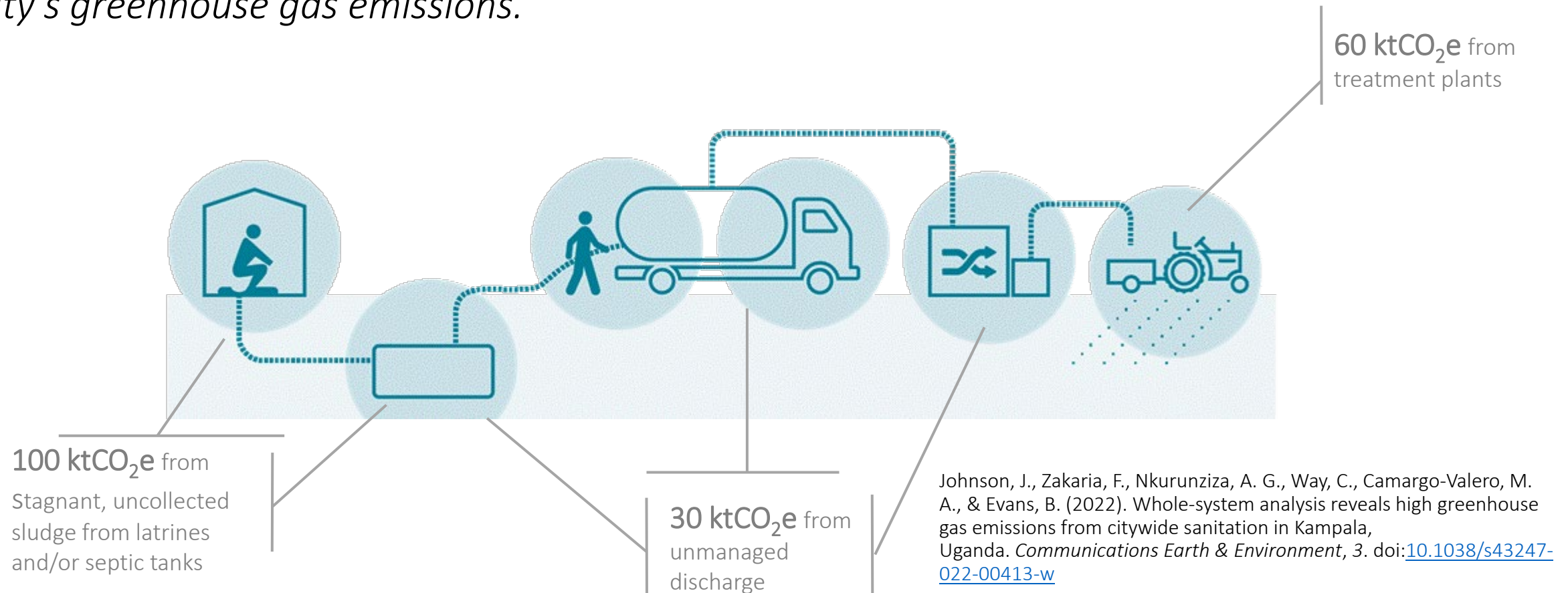


Photo credit: Juliet Willetts (top), SA Water (bottom)

Emissions: GHG in the Sanitation Value Chain

The Kampala Example

Recent research shows that in Kampala, sanitation may contribute to almost 50% of the city's greenhouse gas emissions.



Why Does CRS Matter?



Health & wellbeing

- Diarrhoea and vector borne disease - cholera and dengue fever are raging

Ecosystems

- Damaged sanitation discharges waste into communities and freshwater & saltwater ecosystems damaging seagrass beds, mangrove swamps, etc.

Investment Impact

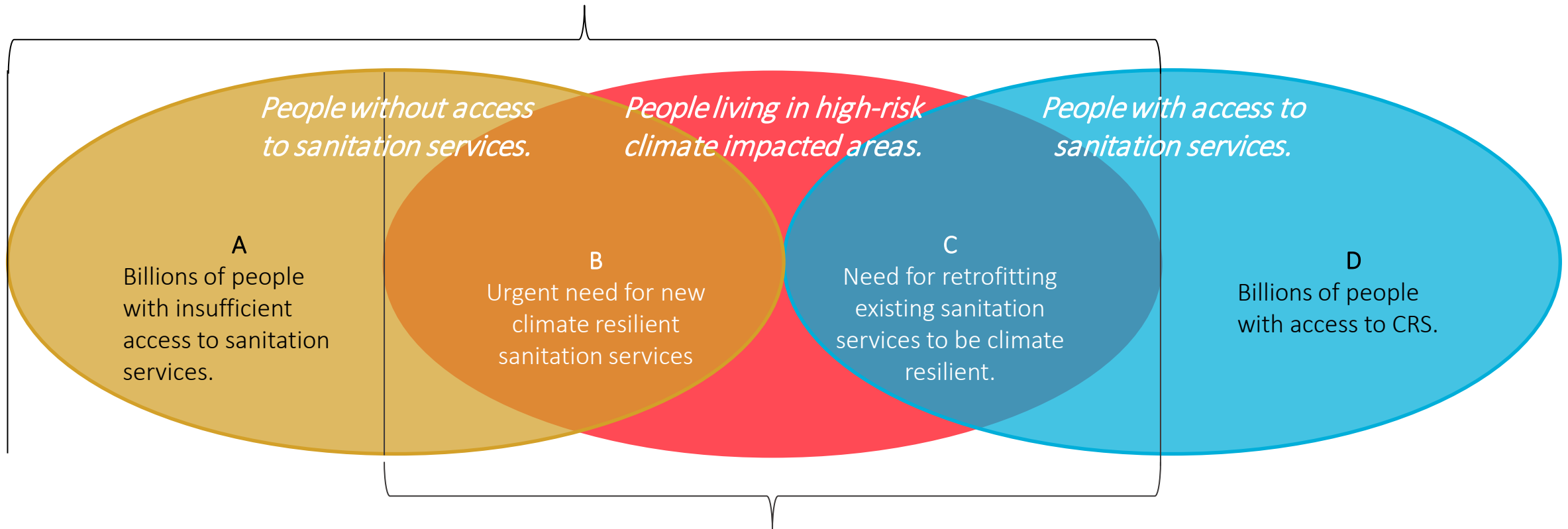
- Climate events threaten precious capital invested in sanitation infrastructure and services

Societal resilience

- Cities
- food and energy systems

CRS Focus

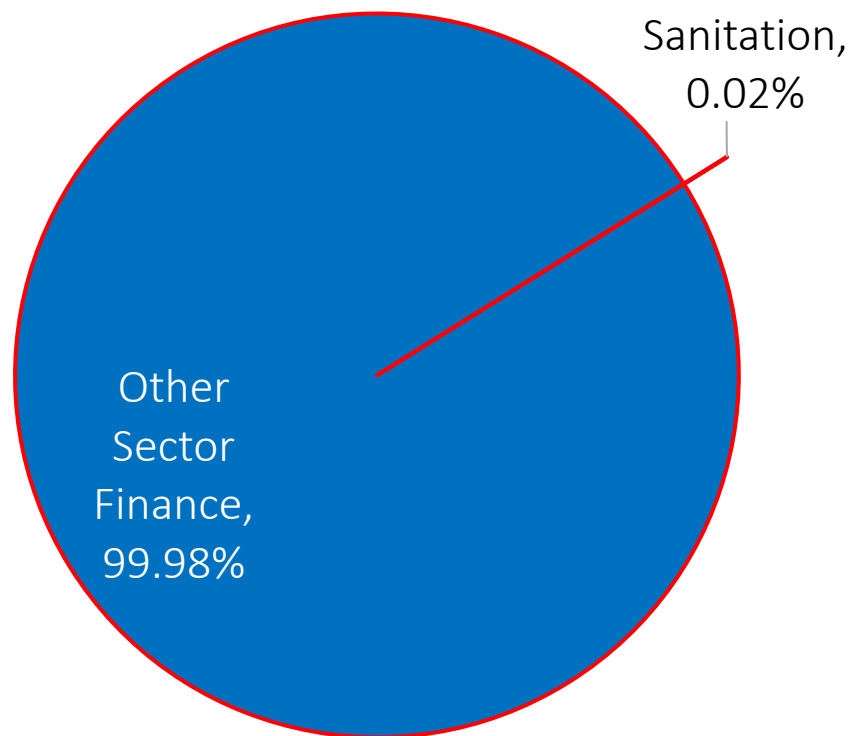
CRS Mitigation Focus



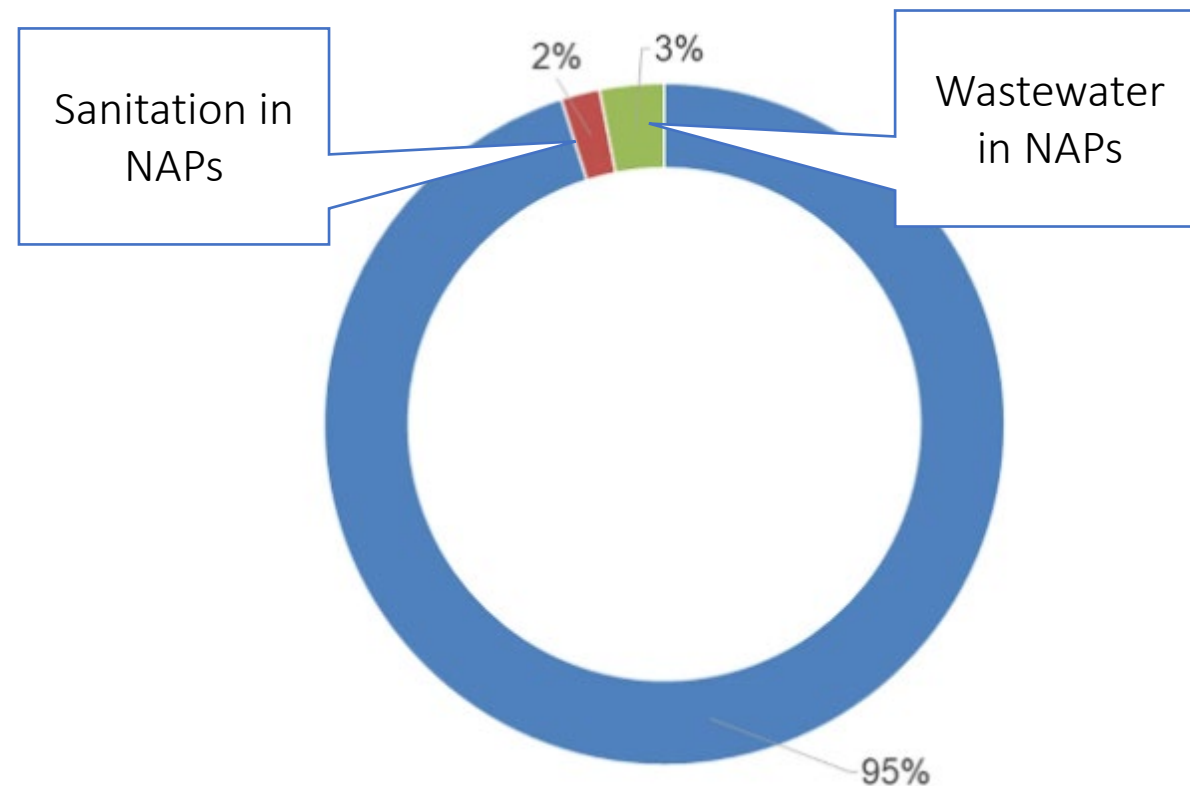
CRS Adaptation Focus

Financing and Policy

GREEN CLIMATE FUND FINANCING



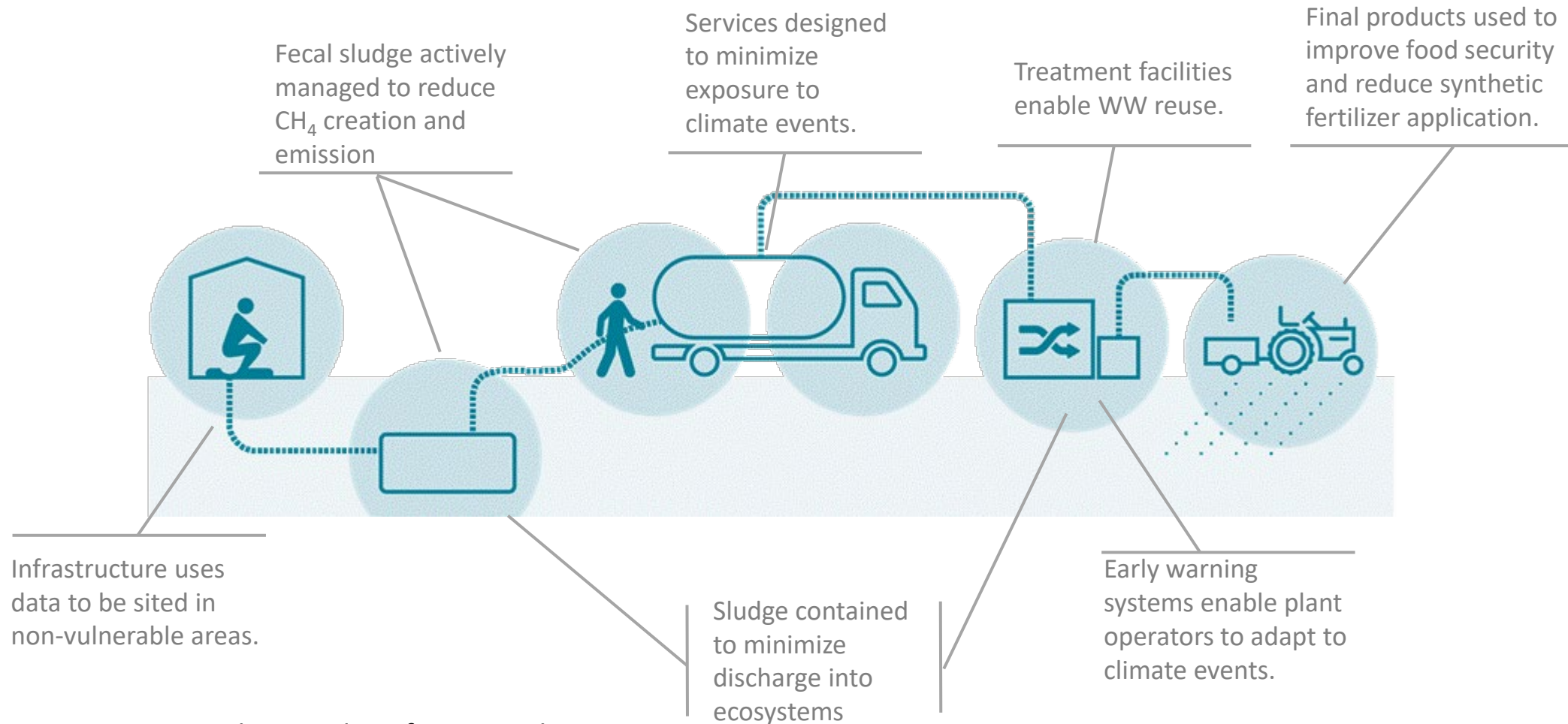
SANITATION IN SDG-RELATED NATIONAL ADAPTATION PLANS



Only few countries in MENAR have sanitation well represented in their NDCs & NAPs

CRS From a Practitioner's Perspective

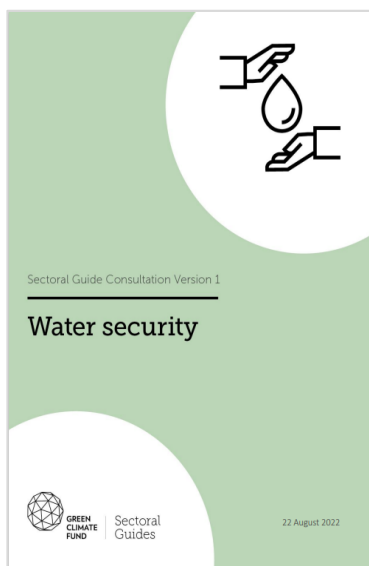
Climate-resilient sanitation systems (both non-sewered and sewered) can survive, function or quickly recover from climate-related shocks, and minimize GHG emissions and discharge into the ecosystem



*NOTE: This is **not** a comprehensive list of activities!*

The Need for a CRS Annex

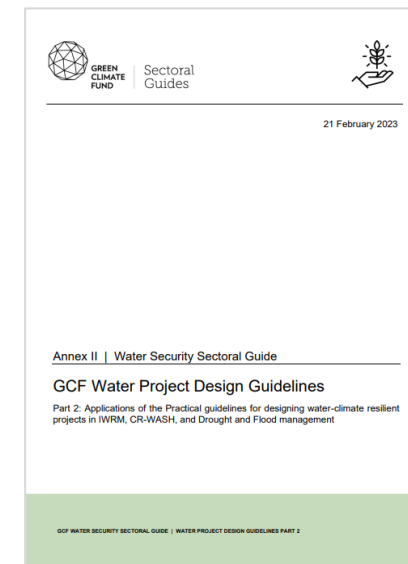
Current GCF Guideline Structure



GCF Water Security Sectoral Guide

Annex I: Practical guidelines for designing water-climate resilient projects.

Annex II: Applications of the Practical guidelines for designing water-climate resilient projects in IWRM, CR-WASH, and Drought and Flood management



Missing from Guidelines:

- Mitigation (GHG, wastewater reuse, marine environments)
- Specific requirements for resilience in sanitation systems
- Market approaches
- Behavioural approaches
- Community-based solutions

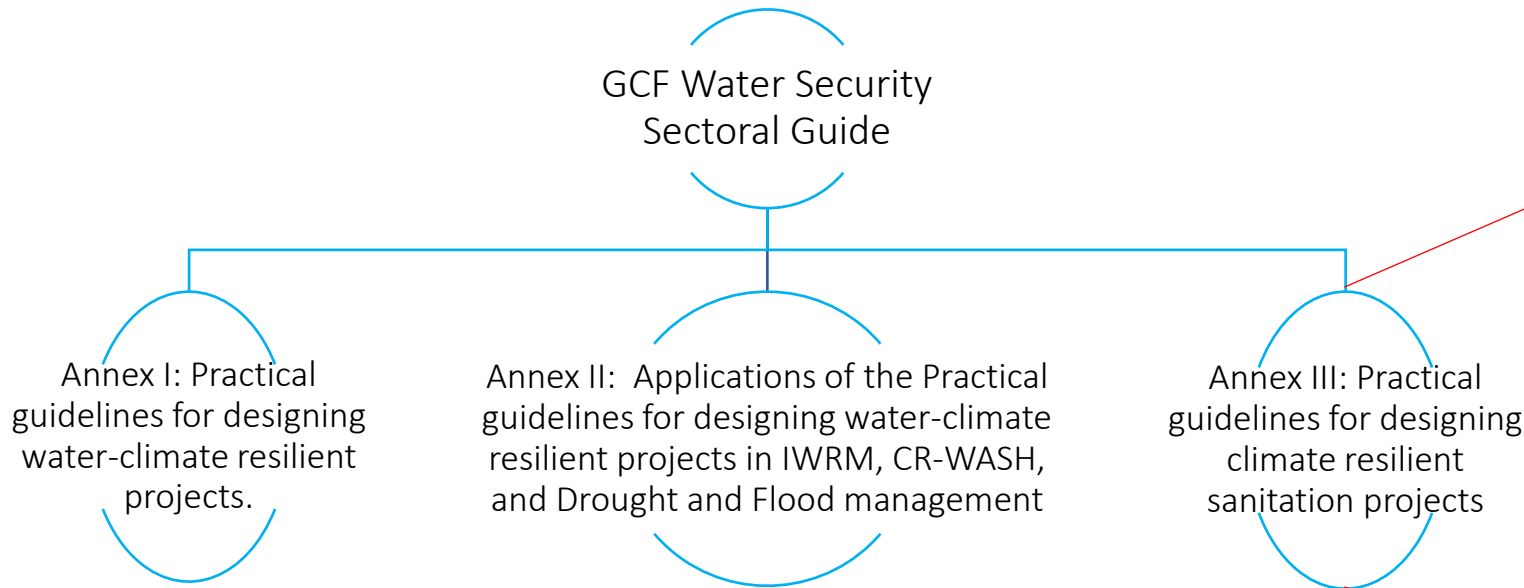
Annex III Objectives & Structure

Objectives:

- To support stakeholders in developing successful GCF proposals
- To attract financing in support of CRS programs

Structure:

1. Introduction
2. The State of Sanitation and the Climate Crisis
3. Climate Risks to Sanitation
4. Climate Risks from Sanitation
5. Responses and Interventions
6. Guidance on Developing a GCF Proposal



Panel Discussion

Moderator: Fiona Ward (WASH Specialist, UNICEF New York)

Questions

Jordan:

Climate resilient WASH is strongly represented in Jordan's NDC and the national climate change adaptation plan,

- Could you kindly share Jordan's experience of incorporating climate resilient WASH into the NDCs and key national climate change documents?
- What components of sanitation do you have in your NDC and in the national climate change adaptation plan? With the upcoming revision of the NDCs, can the potential of sanitation be further increased?

GCF:

The guideline clearly outlines the important role of climate resilient sanitation for both mitigation and adaptation measures. Once the guidelines are released at COP at the end of the year, how do you anticipate GCF disseminating the guidelines and supporting countries to be aware of and use the guidelines and incorporating the key components into concept notes and proposals for GCF financing?

Q&A

Bisi Agberemi; WASH Specialist, UNICEF New York

Closing

Nonhlanhla Zindela, Deputy Director and Head of Programming, GCF

Key Messages

- Governments should incorporate climate resilient sanitation in national policies plans and strategies (e.g. NAPs and NDCs)
- Increase domestic resources and leverage new financing options including climate finance for accelerating delivery of climate resilient sanitation services.
- Build the evidence base for strengthening climate rationale for Climate Resilient Sanitation
- Increase the prominence of sanitation in climate discussions through active dissemination of evidence and experiences.
- Build the capacity of sector professionals and strengthen institutional and regulatory systems to plan and promote appropriate climate resilient sanitation services.

Thank You

