

**IWA Webinar “Evidence and Action from the Climate Resilient Sanitation Coalition”.  
 Q&A Report – 29 May 2024**

Webinar recordings available at: <https://iwa-network.org/learn/evidence-and-action-from-the-climate-resilient-sanitation-coalition/>

**Questions received from participants:**

#	Question	Speaker	Answer
1	Sanitation has so many important climate impacts. What are some the best examples we’ve seen of sanitation initiatives monetizing their respective climate impacts? Or opportunities?		Hi Andrew - the best example I have seen are from the CBSA on carbon credits - <a href="https://cbsa.global/resources">https://cbsa.global/resources</a> . I think there is huge and unquantified potential in estimating the benefits of CR-sanitation beyond the immediate monetary return to sanitation enterprises
2	Which is more resilient to climate hazards and why? Onsite systems or connected/ offsite		The answer to this question is context specific, as the hazards, vulnerabilities and capacities differ.  Table 3.6 of the Guidelines on sanitation and health here - <a href="https://www.who.int/publications/i/item/9789241514705">https://www.who.int/publications/i/item/9789241514705</a> - provides information on overall resilience of different technologies. However, it’s not really possible to say one is more resilient than another in general as the context (environmental conditions, management at household and services levels etc) matters a lot. Others could come in here as well.
3	What are the adaptation measures taken to combat		Those are context specific and linked to specific climate hazards

	resilience to climate sanitation?		(e.g. not the same to respond to droughts or floods). In general, the adaptation solutions will need to consider how to reduce exposure and vulnerability. At the same time and when possible, they should contribute to reduce greenhouse gases emissions
4	Three groups of people have been identified. Where do people who are displaced due to climate change fit? The sanitation facilities might be resilient but are people's livelihoods?	Kate Medicott	Hi Brian, I breezed over this important issue too quickly in my scene setting. Indeed, climate change and sanitation are also closely connected among humanitarian situations and more frequently climate related. When people are displaced by climate events, they frequently lose access to their safely managed sanitation, and where they relocate too often lacks the necessary sanitation, and livelihoods are lost.
5	What climate resilient WASH implementation examples are leading in the sector? I see a lot of work is done but often it is more or less "add-ons" to usual WASH projects, not yet thought through the whole sanitation value chain. A good example however is maybe CWIS implementation in Wai (India). Thanks!	Juliet Willets	The landscape study shared earlier on the chat provides some examples of implementation: Landscape study - Urban sanitation and climate change: A public service at risk: <a href="https://www.uts.edu.au/sites/default/files/2022-09/UTS-ISF_2022_Urban%20sanitation%20and%20climate%20change_Landscape%20study%20%281%29.pdf">https://www.uts.edu.au/sites/default/files/2022-09/UTS-ISF_2022_Urban%20sanitation%20and%20climate%20change_Landscape%20study%20%281%29.pdf</a> , as does the technical brief: <a href="https://www.unicef.org/media/131196/file/Technical%20Brief%20Climate%20Resilient%20Sanitation%20in%20Practice.pdf">https://www.unicef.org/media/131196/file/Technical%20Brief%20Climate%20Resilient%20Sanitation%20in%20Practice.pdf</a>

			The example that Meera shared is one. Please also look out for when results from World Bank's analytical work which Sanyu referred to are published.
6	How can decentralized climate systems contribute to resilience		These form part of the overall mix of onsite, decentralised (or distributed) and offsite services all playing important roles, and decentralised systems, if professionally managed, are an important part of the picture
7	Hi is there any framework developed that can be used to estimates GHGs from sanitation systems ? If so is it open source and can it be shared?	Juliet Willets	Yes, there are frameworks that were developed by by Leeds to support GHG assessments - UNICEF is using these in Nigeria and Mozambique to support country driven usage of these tools.  You can use this methodology, which was used for Kampala <a href="https://doi.org/10.5518/1110">https://doi.org/10.5518/1110</a>
8	Please give link to the Kampala study on CO2 / sanitation	Juliet Willets	You're welcome. This paper also has ideas about climate resilient sanitation at city level: <a href="https://journals.sagepub.com/doi/10.1177/23998083221098740">https://journals.sagepub.com/doi/10.1177/23998083221098740</a>
9	Jose -Sanitation can also play a role for sequestering carbon by creating carbon sinks where treated waste is reused. Would be good to discuss that as well	Jose Gesti	I'd add here that when nutrients are being reused in agriculture, it's also really important to consider the management practices that are in place for agriculture to reduce nutrient runoff into waterbodies.

10	<p>With climate change in an alarming stage, and the need for safe sanitation one of the biggest basic needs; why are we not able to link climate impacts with sanitation till date?</p>		<p>Hi Suman, Initial efforts failed to show the additionality of sanitation efforts in the climate space (i.e. what was the additionality that made this a climate effort vs an infrastructure or public health measure?) The mitigation angles have helped to strengthen the link that sanitation also causes climate change and made it a more entrenched climate issue on par with other significant sectors (i.e. transportation etc)</p>
11	<p>The difficulty of obtaining funding in developing countries like Mexico is an obstacle to measuring emissions in sanitation systems. Nonetheless, we have made progress in methods and quantifications that reveal an underestimation of emissions, but our reach is limited in terms of equipment and capabilities. How can we integrate efforts to expand our research?</p>		<p>This is something that could be discussed within the Climate Resilient Coalition. I am afraid there is no short answer to it</p>
12	<p>How can human rights approach to freshwater management help improve global health concerning climate change resilient sanitation? Is the human right to water and sanitation under the ICESCR enough for individuals to bring accountability to States?</p>		<p>As I'm sure you know there have been cases brought and won on human rights and climate (like the recent one in Switzerland here - <a href="https://www.reuters.com/sustainability/climate-activists-seek-breakthrough-human-rights-court-ruling-against-european-2024-04-09/">https://www.reuters.com/sustainability/climate-activists-seek-breakthrough-human-rights-court-ruling-against-european-2024-04-09/</a>) - but I'm not aware</p>

			of any sanitation specific ones yet.
13	Which WASH interventions are suitable for saline and flood prone area?		I am afraid that not possible to answer generically the question. It will depend on many different factors, in terms of the characteristics of the floods and levels of salinity as well as the sanitation technologies that can be employed to response (those might be very different in a developed or developing country)
14	Would be glad if participants could send links to examples of climate resilient rural sanitation systems [ on-site sanitation] - both adaptive and mitigative.		Hi Sujoy, UNICEF's technical brief lays out some practical case studies of relevant systems... <a href="https://www.unicef.org/media/131196/file/Technical%20Brief%20Climate%20Resilient%20Sanitation%20in%20Practice.pdf">https://www.unicef.org/media/131196/file/Technical%20Brief%20Climate%20Resilient%20Sanitation%20in%20Practice.pdf</a>
15	This might come up on the panel discussion anyway, but my question is, what work has been done to develop indicators or metrics in the climate resilient sanitation space?		With the adoption of the Global Resilience Framework at COP28, December 2023 and a target to work towards climate-resilient sanitation the work right now is on distilling what indicators could help to monitor progress. The very first initial step is to agree on what actually constitutes a climate resilient sanitation systems. For stakeholders to converge the Sanitation and Water for All partnership is conducting a stakeholder consultation that will feed into the two year work programme by UNICEF and WHO to agree on indicators next year

16	WHO published guidance on surface water drainage in 1991. Is this going to be updated...?	Kate Medicott	Hi Brian - which guidance are you referring to - I'd be interested to see as it's in my area of responsibility! You are right, drainage has taken a back seat to excreta management...and CC really calls for a greater focus on drainage.
17	I've seen previous references to the need to avoid wet boxes of faeces for mitigation efforts. In particular, the need to move shit within 5 days. This seems extremely challenging for many climate systems. Is the timescale really this short?		Hi Tom, the research by Leeds (Barbera Evans), UTS (Juliet Willets) and Eawag (Linda Strande with a new paper out this week) shows the importance of active management - i.e. minimizing time wet pits are anaerobic leading to GHG emissions. The number of days specifically and what is realistic management wise is less clear - but if needing to choose adaptation considerations should take precedence over mitigation!
18	Sanitation has always been severely short of funding and political will to ensure universal provision has been lacking. Now we are waiting for COP that doesn't deliver, NDCs that are inadequate, and a loss and damage fund with insultingly low-level contributions. It seems to me that we are left with existing finance and tools, with a quickly worsening situation... and that we need to address our energies, skills and resources to working with what we have, instead of expending it on appealing		Well said Mary. I agree - its not realistic to hope that climate finance can patch up chronic lack of sector funding for sanitation - but we can seek a bigger share of the climate finance pie while also continuing to press for sector financing for sanitation highlighting the huge returns to society and economies at large (if not to sanitation entities) of CR-sanitation systems which are a human right and a public good.

	<p>to the processes referred to here. The work profiled here is key to mainstreaming climate into ongoing sanitation work, whether systems based or locally focused, rather than appealing to the climate circus or playing games with credits or commodification of nature.</p>		
19	<p>GHG emissions and climate resilient sanitation services should be discussed independent of each other. GHG emissions by far is minute in the whole context of GHG. But the need for sanitation services to be climate resilient is non-negotiable to protect public health and environment. Does it really require convincing?</p>		<p>I would say that there are different advocacy contexts as well as purposes with no silver bullet. Progressing the sanitation agenda speaks to developed and developing countries. Developed countries with current high levels of access to sanitation, their focus should go to climate proof services and to mitigate and reduce emissions. In lower income context with no current access, or low access, to sanitation certainly the focus is on providing access that is at the same time climate resilient</p>