Bridging the digital divide: inclusive processes facilitated remotely

Case studies and best practice for eroding digital participation barriers to improve inclusion and diversity during remotely facilitated processes.
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**Context**

Many services around the world suddenly went digital with the outbreak of the SARS-CoV-2 pandemic in March 2020. Schooling, commerce, government procedures and even medical consultations changed from face-to-face to a digital form at an unexpected speed. Despite its limitations, some of the benefits of remote service delivery are clear: flexible working hours, the possibility of improving work-life balance - especially when a lot of time was spent on commuting - less environmental pollution and greater range of potential reach - overcoming geographical limitation - just to name a few. With the pandemic receding and evolving, some forecasts indicate that the shift towards remote working and digital services will continue over time, and that they have become "the new normal" (CIPD, 2020).

However, when digitally delivered services are services for development, which attempt to contribute to the inclusion of traditionally marginalized populations, new questions arise: who are the end users of these digital services? Does the message reach the target group in the same way it would in a face-to-face workshop? Are there any groups to whom the message is not reaching? What are the barriers they face in receiving it? Who among them are being left out because of the difficulty of accessing the Internet? How big is the digital divide in 2021 and where is it?

According to the International Telecommunication Union, 93% of the world’s population lives in places with Internet coverage, including mobile broadband (ITU, 2020). However, only 53.6% of them actually use it. Internet usage levels by geographic region range from 82% in Europe, 72% in Latin America and the Caribbean, 45% in Asia Pacific and 28% in Africa. There is a 10% gender gap amongst users, as 58% are male while 48% are female. And even more worrying is the trend of this gap, which increased by 6% (in global data) between 2013 and 2019.

Issues such as affordability of internet services, cell phone ownership and operating costs, differences in urban/rural services are hindering the internet usage of some population groups (ITU, 2021). According to the World Mobile Data Pricing Report 2021 (Cable.co.uk, 2021), sub-Saharan Africa still has the most expensive internet prices per data in the world.
Learning, adapting and innovating from experience

SIWI, the Stockholm International Water Institute, is a policy advisory institute that generates knowledge and informs decision-making towards a water-wise world. SIWI conducts research, builds institutional capacity, and provides advisory services to decision makers and water professionals in emerging and developing economies. Its expertise is in water governance, focusing on both water resources management and the sustainable provision of water and sanitation services. SIWI organizes the World Water Week, the world’s leading annual gathering on water and development issues and hosts the Stockholm Water Prize and the Stockholm Youth Water Prize.¹

SIWI has long experience in providing face-to-face training and workshops around the world, in all variations and settings. One of SIWI’s engagement principles is to adapt and contextualize knowledge in the local setting. This is generally referred to as “the three Cs” of international cooperative engagements: in-depth knowledge and experience of the culture, context, and connections of the local groups being engaged in a process (Sreenath, 2019). When the pandemic erupted, SIWI teams had cooperative processes planned on a face-to-face basis for the entire year 2020. However, in quick adaptations, and in order not to disrupt processes of relevance to local partners, SIWI teams had to innovate and start designing digital programs for the services once provided face-to-face. This document attempts to summarize some of those innovations and experiences, narrated in case studies to capture and share lessons learned and reflect on process design decisions that were made and consider how to maximize some of the digital benefits learned during this difficult period, while continuing to minimize barriers to digital inclusion in “the new normal”.

¹ See SIWI: www.siwi.org
Case Study 1: Technical Assistance in Ecuador - Improving Coordination in the Response to the Pandemic

In March 2020, SIWI together with the United Nations Children’s Fund (UNICEF) developed an analytical framework for mapping aspects of water, sanitation, and hygiene (WASH) included in national government response plans to the SARS-CoV-2 pandemic.²

The mapping exercise provided relevant and real-time information regarding the WASH responses being taken in different countries in Latin America and the Caribbean (LAC). Ecuador was one of the countries most affected by the pandemic as its crisis in Guayaquil achieved widespread attention (Reuters, 2021). Under the leadership of the National Water Secretariat (SENAGUA) and under the coordination of the National Emergency Operations Committee, the Technical Working Table 1 (MTT-1, for its Spanish acronym) was activated, and was in charge of coordinating the sectoral response to the emergency. Coordination included not only sectoral actors, but also inter-sectoral actors (public health, education, social protection, among others)³ (OCHA. 2021). The objective of SIWI’s support was to systematize and document the response of the WASH sector in Ecuador at an early stage of the emergency and co-create a workplan to implement adequate emergency responses.

Against this backdrop, the challenge was: How to effectively coordinate between these multiple actors, located in different parts of the country, facilitated remotely and online from Stockholm?

A structured program was designed through strategically planned virtual work sessions. A total of eleven weekly sessions were conducted between May and November 2020, using the Zoom platform. On average, each session was attended

² The mapping exercise tracked all response measures taken to 1) ensure universal access to a minimum daily volume of safe drinking water and basic sanitation, 2) improve safe hygiene behavior and strengthen protection and infection control, and 3) ensure continuity and affordability of ASH services and products.

³ Technical roundtable 1 on “Safe Water, Sanitation and Waste Management” was formed by the Public Water Company (EPA-EP), the Ministry of Public Health (MSP), the Water Regulation and Control Agency (ARCA), the National Agency for Regulation, Control and Sanitary Surveillance (ARCSA), and the Association of Municipalities of Ecuador (AME). In parallel, the WASH cluster, led by UNICEF, provides a platform for the coordination of ASH emergency responses to the crisis by cooperation across the country.
by approximately 15 people, representing a variety of sector institutions from the WASH technical group. Participants were divided into three working groups of four to six people, using sub-working rooms. The three groups worked in parallel and with a series of guiding questions and tables to discuss in each session. The group discussions were a key and valuable element of the methodology in terms of reviewing and discussing the measures implemented and prioritizing activities. On several occasions, the online tool’s polling and voting functions were useful for prioritization and decision making. Finally, the key messages and conclusions of each group work were highlighted in the closing plenary by the rapporteur of each team in each session. As an additional task, all members were invited to do additional individual work.

The process was useful first to systematize and document the response of the WASH sector in Ecuador at an early stage of the emergency. At the same time, sector institutions were able to identify additional measures adopted by other countries in the region that could also be relevant to the Ecuadorian context. Through this exercise, Technical Working Table 1 structured its response plan, building on the initial sectoral measures taken and planning possible future measures based on learning from other countries in the region.

As a result of the collaborative work, the WASH aspects of the emergency response were given relevance through three main products: 1) The comprehensive emergency response plan for SARS-Cov-19; 2) The Post-Disaster Needs Assessment, which included a specific chapter on water and sanitation; and 3) The work of the Technical Working Table 1 in the Strategic Operational Framework for COVID-19.

However, beyond these three documents, it is also important to mention that the process itself contributed significantly to improving the dialogue among stakeholders, addressing issues such as coordination, financial sustainability of service providers and concrete resilience of the system, and services in the face of crises. It was also useful to address the needs of specific sectors (such as education) or to highlight the specific demands of vulnerable populations (such as indigenous groups and women). Thus, the structured process of inter-sectoral dialogue and coordination that was put in place generated benefits beyond the pandemic response itself.
Case study 2: Capacity building in Ethiopia using Telegram - Promoting inclusive trainings in challenging environments

Post-pandemic confinement was not the only challenge Ethiopia faced in the early 2020s. The country was in crisis after demonstrations by rival regions and political groups felt on the fringes of the political agenda. The Ethiopian government had declared a state of emergency (Aljazeera, April 8, 2020), which led to the complete shutdown of 4G Internet and put broadband connections for businesses and government offices out of operation. This was at a time when a large SIWI program was about to launch three major face-to-face training courses for a group of textile industry professionals. The SIWI project management team was forced to consider alternatives that could facilitate remote, inclusive, and fair participation.

Ethiopia is the 28th largest country in the world and the second most populous country in Africa, with 116.4 million inhabitants. Almost 22% of Ethiopia’s population lives in urban centers. It has 23.96 million Internet users and 44.86 million mobile connections (Kemp, 11.02.2021). At the beginning of 2020, 20% of Ethiopians were active online, 24% had an Internet and data subscription, 44.8% had a GSM mobile connection and smartphones. Only 5.8% were active on social networks, but 96.2% of all social network usage is via cell phone.

In this context, the challenge was: How to develop and carry out an inclusive training for the group of textile professionals, adapted to the limitations of the Internet?

The main elements applied to support the resolution of this challenge included the use of Bloom’s taxonomy or higher order thinking skills (H.O.T.S) and the fundamental construct of critical thinking in course design (Armstrong, 2018 and Bloom, 1956). The six important elements of Bloom’s taxonomy include remembering, understanding, applying, analyzing, evaluating, and creating. When planning distance learning, it is even more important to encourage participation and stimulate discussion among participants to follow the training activities. Equally important is to design with purpose: who is the target group and what is the purpose of the remote service. In this case, for example, since the aim was to train mid-career professionals who had requested empowerment, special attention was given to
analysis, evaluation, and creation. In order to stimulate learning, a platform for peer learning and exchange based on reading assignments and case studies, peer discussions and group problem solving was created. The organization of group assignments promoted a community of peer learning and performance accountability among participants.

SIWI partnered with key content providers and online pedagogy experts to deliver the best possible online experience. SIWI staff and online pedagogy training experts at Accelerated (Accelerated.co, 2020) applied their three core guiding principles to make the learning experience on the platform engaging:

**Box 1. The guiding principles for effective learning on a digital platform**

1. **Remove barriers for people to make participation easier**
   
   a) Choose a platform that is easy and intuitive for the user to use.
   
   b) Choose a familiar platform among your target group, to minimize delays in the learning curve.
   
   c) Use a platform that requires low bandwidth (people travel and are on the move, the connection will always vary).

2. **Develop intrinsic motivation**
   
   a) “Gamify” (using the principles of a video game) the learning experience by recognizing and rewarding weekly achievements, best-phrased questions of the week, and completion of activities.
   
   b) Develop a social community by creating group thinking and problem solving in teams.
   
   c) Establish clear communication guidelines and schedules.
   
   e) Use instructional design and pedagogical principles.

3. **Build trust with your audience and target group**
   
   a) Trainers and training materials must be relatable to the audience who are familiar with the context.
   
   b) Building relationships between participants and facilitators (horizontally and vertically).
c) Address real, practical, everyday problems with which the audience can identify.

d) Be sure to answer all questions, engage in community discussions, and promote peer learning. Let this feedback affect the design of next steps.

In the application for the Ethiopian context, this meant that all trainings were implemented on the Telegram application, the most widely used in the country. Short-format, modular videos were prepared and uploaded on a fixed schedule that provided key learnings on the topic, which could also be viewed offline thanks to the platform. Weekly assignments were uploaded that were realistic to complete in a week when working full time on other tasks, and optional live discussions with technical experts from Ethiopia and internationally were facilitated. This preparation supported the growth of a learning community that began to recruit other peers who wanted to participate and share experiences from other textile mills. With this well-managed and organized solution, a training originally targeted at 50-100 participants was able to convene just over 500 participants from all 10 regions of Ethiopia and two administrative cities, all with limited connectivity.
Case Study 3: Building trust in fragile contexts: one Zoom at a time

Since its inception, SIWI’s Shared Waters Partnership (SWP) and the SIWI hosted UNESCO Category II International Centre for Water Cooperation (ICWC) have collaborated to provide tailored, flexible and contextualized support to transboundary water cooperation processes in some of the world’s most fragile basin environments through demand-driven capacity building, experience sharing and dialogue facilitation. While SWP often provides targeted support to trigger dialogue and joint learning to overcome a specific political or technical barrier to regional water cooperation, many of the barriers to effective regional water cooperation require sustained engagement over time. Supporting sustained communities of practice over time can enable alternative spaces for informal dialogue to build trust, share knowledge, improve communications and cooperation, identify challenges before they become risks, and contribute to a positive enabling environment for improved transboundary cooperation overall.

The Women in Water Diplomacy Network, a core programme of SWP, supports sustained engagement among women water decision makers in the Nile Basin, with the aim of removing barriers to cooperation, elevating women’s leadership in high-level decision making, sharing knowledge and experiences, and contributing to building trust across the basin (Troell and Koch, 2019). The Network was established in 2017 following the first forum for women water leaders in the Nile. Building on the momentum of this initial engagement, SWP transformed this stakeholder kick-off meeting into a sustained network through annual, regular, and recurring network forums.

Shortly after the third Women’s Water Diplomacy Network Forum in early 2020, the Network was forced to adapt and evolve dramatically in the context of the global pandemic and the resulting constraints to continuing face-to-face meeting commitments.

In-person (2017) and online (2021) activities of the Women in Water Diplomacy Network.
SWP adopted a response strategy that focused on improved monitoring and evaluation, enhanced communications, and online adaptation in all its engagements, including programming in the Horn of Africa and Nile Basin, Middle East and Central Asia-Afghanistan. Moving from having face-to-face meetings to participating in online platforms had immediate impacts on process design, barriers and opportunities for building trust, and indeed the content of dialogues (Koch and Klimes, 2021). Over time, the first impulses to adapt to online platforms, shifted to the intentional design of processes for online and hybrid dialogues. Several key trends emerged despite the diversity of national contexts of SWP dialogues.

During face-to-face engagements, dialogue facilitation and process support teams have more opportunities to adjust the agenda on the spot, making pivots, taking breaks and adjusting agendas more fluidly. Online dialogues, which are less flexible in format, are aided by the intentional design of consistent milestones among all parties involved in the dialogue, and by making their expectations explicit.

For the Women’s Water Diplomacy Network, a consistent process design was incorporated with five iconic elements that all members expected at each engagement, including: agenda time where network members could share updates informally (coffee time); network governance announcements; introduction of an innovative concept/theme/perspective; sharing of experiences on the new concept/theme/perspective; and follow-up monitoring and evaluation. Similarly, dialogue participants could expect consistent preparatory documentation and follow-up after action reports.

The participation guidelines now incorporated technical guidance and more information on shared purpose, expectations, and additional learning resources.

The Women in Water Diplomacy Network Leadership Council was established, and codes of conduct were developed. Dialogue tools, such as the Chatham House Rule, were used frequently. Monitoring and evaluation of all engagements was greatly enhanced with increased use of pre-, post-, and in-session Monitoring and Evaluation (M&E) methods to allow for feedback loops. In addition, all M&E data was intentionally and consistently shared by the Women in Water Diplomacy process support team with all Network members after each engagement, breaking down barriers between the process support team and the members themselves, improving co-creation of processes across the Network, and allowing for reflection and group thinking to come together. In fact, discussions catalyzed through group reflection on M&E data provided Network members with opportunities to erode assumptions and even reevaluate information and identify new opportunities.
In addition, with most Network members now interacting from home or in hybrid work environments, communications largely shifted from email to the faster and more responsive group chat to support collaboration and information sharing. Emojis, long avoided in the spaces of formal diplomacy, became a kind of internal Network language with internal group chat messages and public social media posts carrying the group hashtag in the Nile Network, and in the Central Asia and Afghanistan Network. A sort of emoji-diplomacy campaign that, in its own way, fostered shared group identity.

In 2022, the Network has grown to include nearly fifty women diplomats from Nile Basin, now joined by members of the sister Network in Central Asia and Afghanistan, established in cooperation with the Organization for Security and Cooperation (OSCE) and the Regional Environmental Centre for Central Asia (CAREC) in 2021. Network Members meet online regularly and, hopefully, soon once again in person. "To get ahead and innovate in our work, practitioners and experts must be surrounded by a supportive network for inspiration and sharing," shared Dr. Muna Musnad, representative of the Women in Water Diplomacy Leadership Council, at a recent experience-sharing event.

Missing the “in real life” hugs, but undeterred by the restrictions in place, the Network launched its global Women in Diplomacy Network Nile and Beyond strategy in December 2021 and Network members continue to comment on the added value of the Network to enhance trust and support an enabling environment for water cooperation and women’s leadership in the Nile and beyond. The Women in Water Diplomacy Network has not only supported the elevation of women water diplomats in the Nile and beyond, but has been strengthened by embracing innovative and agile methods of developing critical networks in the present and in the future, in an uncertain context. For further background on the inception, development and process design adaptions in the Women in Water Diplomacy Network, see Laying the Bedrock of Transformation (2022).
Process design suggestions for a hybrid future

From these three case studies and other relevant experiences gained over the past two years, some lessons learned emerge that may be useful for practitioners who wish to design similar processes.

Some of the most salient tips are:

a. **Identify the participants who need to "sit at the table" (virtual), and map what is needed to get them there.** Design your process according to its purpose, as if it were face-to-face. To do this, map the actors essential to your activity (e.g. multi-stakeholder dialogue, training, technical assistance). Check the digital connectivity status of these actors. Design solutions to have them all "sitting at the table" (virtual). Some solutions may include facilitating transportation, renting hotel rooms, distributing mobile internet vouchers, renting hours in a cybercafé with the right conditions. While these costs may not be anticipated by the program, it is likely that these costs are still significantly less than what the meeting would be if it were face-to-face.

b. **Select the technology appropriate to the purpose and access conditions of the participants.** Use technology or platforms that your target group is familiar with, this will facilitate connection, reconnection and transfer of knowledge and content. Keep in mind that your participants may not always have a stable or reliable internet connection, so it is recommended to use low-bandwidth technology that allows participants to work and access content and messages offline, and upload when the connection is restored.

c. **Analyze and design the use of digital tools according to your needs.** The different digital tools available on the market to support these dynamics remotely have different functionalities and provide a menu of options that give flexibility to adapt the dynamics to the context. For example: Zoom, Teams, Miro, Google forms, Menti meter, among others, complement each other, and can greatly facilitate the participation and engagement from participants. At the same time, the multiplicity of tools available on these platforms (polls, video, presentation, virtual rooms, collaborative boards, among others) enrich the dynamics and can make it more attractive to participants.

d. **Work in a co-creation model, in a horizontal community.** In a co-creation process it is important to create a platform that invites participation and opens to an
organized activity but with space for common creativity. It is important that participants have an active role to play, creating space for valid, meaningful and useful contributions to the group, which are incorporated as the process progresses. Strive to climb the ‘ladder of participation’ (Basco-Carrera et al, 2017)

Ladder of Participation


e. **Foster a safe space to build trust.** Be clear, post rules of behaviour and what you expect from everyone. Clarity in the rules of conversations is important so that everyone feels safe to share and participate. The Chatham House Rule can be an important part of the dialogue.⁴

f. **Intentionally make the implicit explicit.** In digital communication, the decoding of nonverbal communication that occurs in face-to-face meetings is lost. Therefore, as facilitators, you must actively and consciously work to make explicit expectations, processes, needs, and limitations of the participants. Given that all communication should be explicit and verbal, dynamics of giving the floor to participants to explain their moods or particular situations can be relevant to improve communication among participants less engaged.

⁴ The Chatham House Rule stipulates that anyone attending a meeting is free to use information from the discussion, but may not reveal who made any particular comment. It is designed to increase the openness of the discussion. is named after the headquarters of the Royal Institute of International Affairs in the United Kingdom, based at Chatham House, London, where the rule originated in June 1927.
g. Be intentional in breaking down power distances. Keep in mind that participants often have different levels of experience and familiarity with the technology and may be more or less comfortable with it. This naturally adds to the power distances that exist because they belong to different institutions and hold different hierarchical positions. Be attentive - as a facilitation team - to detect the voices that are not participating and be intentional to include them in the dynamics, for example, by asking specific questions to people or giving stricter speaking turns. Other activities such as using participatory murals (such as Miro), generating anonymous online voting, serve to give a more equal voice and balance the weight of interventions.

h. Have clear and easy schedules, process deadlines and milestones. Use scheduling, timelines and milestones to create a clear structure for your online activity. Reward good behaviour by those who follow the schedule by calling names at meetings. For example, thank them for completing on time or post a notice in your group for best group performance.

i. Use ongoing monitoring and evaluation to support the development of dynamics throughout the process. Incorporate continuous feedback through the organization of question and answer sessions or live chats. This will be used to continually improve your training or remote dialogue.

j. "Gamify" the experience. This can include creating incentives such as prizes for participation, prizes for completion, contests and games, and awards for group work well done. These rewards can be a star, a point or a score that will ultimately lead to a certificate listing all completions.
Conclusion: weaving bridges over the digital abyss

The pandemic forced development institutions - like so many others - to think unexpectedly about how to remain operational in their purpose. In the disadvantaged contexts where organizations like SIWI focus their services and support, the people who need support most are generally those who have the least access to the Internet and are therefore at risk of being doubly marginalized. It is essential, then, that development organizations intentionally reflect on the design of programs that, far from increasing the digital divide, contribute to its closure. These experiences of the Stockholm International Water Institute show some concrete examples and initial reflections to make these digital processes as inclusive as possible.

Image from Shutterstock.
References

• Ravi Shankar Sreenath, Interview Verbatim Quote: 01.02.2019.


The UNESCO International Centre for Water Cooperation (ICWC) generates and shares knowledge on water cooperation. The Centre contributes to context-specific solutions for cooperation over shared freshwater resources. ICWC is hosted by SIWI under the auspices of UNESCO. For more information please visit: https://siwi.org/international-centre-for-water-cooperation/