Building Climate Resiliency into WASH in Healthcare Facilities Programming

Thursday, May 25 | 9:00AM – 10:30 AM EDT / 16:00 – 17:30 EAT

Climate change threatens the ability of HCF to provide routine services without disruption, particularly as it relates to the availability and quality of WASH services. Building resiliency into WASH in HCF programming is an important consideration from the onset. This session will share tools and resources to support climate resiliency, learn from programs that have made strides in integrating climate resiliency, and discuss options for securing resources.

Simultaneous interpretation available in French and Spanish
Interpretation

- **INTERPRETATION:** Select English, French, or Spanish. Then, click “Mute Original Audio.”

- **INTERPRÉTATION:** Sélectionnez Anglais, Français ou Espagnol. Puis, cliquez sur "Couper le son d’origine."

- **INTERPRETACIÓN:** Seleccione Inglés, Francés o Español. Luego, haga clic en “Silenciar audio original.”
This Community of Practice is an action-oriented learning platform that brings together the WASH and health communities to focus on policy, evidence, and practice in WASH in HCF.

- **CONNECT** partners
- **SHARE** experiences
- Encourage groups to **ACT**
1. **WASH is a fundamental prerequisite for quality care** within a healthcare facility and **there cannot be effective infection prevention and control** without adequate WASH.

2. **WASH in healthcare facilities** is a **solvable issue** and will require multiple systems, sectors, and stakeholders to work together to see sustainable improvements.

3. The Community of Practice is **open to all who seek to learn and share** about WASH in healthcare facilities. **We welcome all and respect the diversity of perspectives** who participate.
New Resource Alert

WASH FIT portal
This page includes a range of WASH FIT related resources and information. Further country examples are available by searching "WASH FIT" in the Resources page.
Success Story: Govt. of Niger Adoption of an Essential Supply list for Infection Prevention and Control in Health care Facilities

Overview:

• In 2023, MoH in Niger adopted the Essential Supply List for Infection Prevention and Control in Health Care Facilities (supported by USAID Kulawa project)
• The IPC list (2021) was developed by the USAID Momentum Country and Global Leadership (MCGL) project and provides global operational guidance on the essential supplies needed for HCFs to maintain basic standard IPC precautions at all health care service levels and contexts.
• The document supports HCF staff, administrators, and government officials at local and national levels to prioritize IPC supplies and informs budgeting, procurement, and planning decisions that impact WASH/IPC readiness across all levels.

Next Steps:

• Supporting roll-out of the policy
• Continued advocacy in other countries and health networks
• Supply chain bottleneck and costing assessments
• Integrating the list into stock management systems
Today’s Agenda: Climate-Resilient WASH in HCF

- **Overview Presentation on Climate-Resilient WASH in HCF**
  Lindsay Denny

- **District-Level Perspective, Coban, Guatemala**
  Arquitecto Allan Yisrael Laj Hun

- **Case Study 1: Amref Health Africa, Uganda**
  Comfort Hajra Mukasa

- **Case Study 2: Terre des hommes, Nepal**
  Prakash Bohara

- **Resource Mobilization: Lessons from Save the Children**
  Steve Sara
Climate-Resilient WASH in Healthcare Facilities
Definition

“Climate-resilient and environmentally sustainable health care facilities anticipate, respond to, cope with, recover from and adapt to climate-related shocks and stresses, while minimizing negative impacts on the environment and leveraging opportunities to restore and improve it, so as to bring ongoing and sustained health care to their target population and protect the health and well-being of future generations.”

What does this mean, practically?

• **Climate-resiliency**: Facility designs are risk-informed, so HCFs can deliver healthcare services with minimal disruption, despite acute or protracted climate events (i.e., floods, drought, etc.).

• **Environmental Sustainability (“Greening”)**: HCF operations do not exacerbate climate change (i.e., burning of waste).
Climate-Related Risks

Figure 3. Impacts of climate-related risks on health care facilities

Source: Checklists to Assess Vulnerabilities in Health Care Facilities in the Context of Climate Change, WHO (2021)
Figure 2. Climate resilience in health care facilities

Health care facility capacity level

Above average
Normal
Acceptable
Below average
Low

Risk
Vulnerability
Hazard
Exposure
Performance drop
Shock

Health care facility resilience level

Transform
Recover better than before
Recover to pre-event state
Recover but worse than before
Collapse

Time
Learning

Climate change adaptation
Disaster risk management

Prevention
Preparedness
Response
Recovery
The Intervention Process Looks Familiar! (WASH FIT)

1. Establish the baseline
2. Define and prioritize short- and long-term interventions
3. Develop and implement an improvement plan
4. Monitor and evaluate improvements
5. Assemble and train a multisectoral operative team

Awareness, political commitment and community engagement

Climate resilient and environmentally sustainable health care facility

WASH in Healthcare Facilities Initiative
<table>
<thead>
<tr>
<th>Climate effect</th>
<th>Hazard</th>
<th>Impact on WASH sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease in precipitation</td>
<td>Drought</td>
<td>Reduction in raw water supplies, reduced flow in rivers, less dilution/increased concentration of pollutants in water, challenge to hygiene practices.</td>
</tr>
<tr>
<td>Increase in precipitation and severe weather</td>
<td>Flooding</td>
<td>Pollution of wells, inundation of wells, inaccessibility of water sources, flooding of latrines, damage to infrastructure, landslides around water sources, sedimentation and turbidity, challenges to sustainability of sanitation and hygiene behaviours, and waterborne diseases.</td>
</tr>
<tr>
<td>Increase in temperatures</td>
<td>Heatwaves</td>
<td>Damage to infrastructure, increase in pathogens in water leading to increased risk of disease.</td>
</tr>
<tr>
<td></td>
<td>Melting and thawing of glaciers, snow, sea ice and frozen ground</td>
<td>Seasonality of river flows affected leading to a reduction in water availability in summer.</td>
</tr>
<tr>
<td>Sea-level rise</td>
<td>Flooding and saline intrusion into freshwater aquifers</td>
<td>Reduction in availability of drinking water, with high impacts on quality.</td>
</tr>
</tbody>
</table>
Climate-Resilient WASH in HCF Interventions

There isn’t just one action that you take to make your WASH facilities climate-resilient. Instead, a tailored plan will be needed based on the identified risks.

| Water                      | Access: ensuring sufficient water quantities throughout the year and identifying alternative water sources as needed.  
|                           | Storage: increasing water storage capacity and disinfecting existing tanks  
|                           | Distribution: connecting new water sources to wards within the health care facility and repairing leaking pipes and broken taps with more robust materials  
|                           | Treatment: testing water quality and procuring water treatment supplies or technologies  
|                           | Disposal: offering solutions for wastewater that are safe and sustainable  
| Sanitation                | Access: if the facility is flood-prone, ensuring toilets are raised to prevent overflowing  
|                           | Technologies: using pit toilets or low flush on-site systems which do not require large quantities of water to maintain  
|                           | Fecal sludge management: similarly, ensuring fecal waste from toilets is protected and not in danger of contaminating the environment during a flood or climate event  
| Hand Hygiene              | Access: ensuring that hand hygiene facilities do not leak water  
|                           | Behavior change: Promote turning off faucets while lathering hands. |
WASH FIT 2.0

A practical guide for improving quality of care through water, sanitation and hygiene in health care facilities
SECOND EDITION

TECHNICAL FACT SHEET 1

Strengthening the resilience of WASH services in health care facilities to climate impacts

The impacts of climate change, e.g., higher temperatures, more intense storms and system-wide changes, put a strain on water and sanitation systems, making them more vulnerable to contamination and failure. This stress on water and sanitation systems is especially evident in low- and middle-income countries. The impacts of climate change affect most of these systems, including water, sanitation, and hygiene (WASH) services, and are not yet fully understood. This fact sheet presents the WASH climate risk management framework for building climate-resilient health systems from WASH services and efforts should be made to retrofit existing facilities.

A climate resilient health system is one that is "capable to anticipate, respond to, cope with, recover from, and adapt to climate related shocks and stress, as we bring sustained improvements in population health, despite an unstable climate" (WHO Operational Framework for building climate-resilient health systems, 2016).

Climate considerations within the Water and Sanitation for Health Facility improvement Tool (WASH FIT) cycle

<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
<th>Additional considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Establish the Team</td>
<td>Engage with representatives of each sector: water, sanitation, and hygiene in health care facilities</td>
<td>Identify climate risk management teams in each facility and region</td>
</tr>
<tr>
<td>Step 2: Assess the Facility</td>
<td>Define the current and future climate-related risks and prioritize steps needed to improve resilience</td>
<td>Assess current infrastructure and identify areas for improvement</td>
</tr>
<tr>
<td>Step 3: Design and Implement</td>
<td>Design and implement solutions to address climate-related risks</td>
<td>Include climate resilience in facility design and operation</td>
</tr>
<tr>
<td>Step 4: Monitor, Review, Adapt, Improve</td>
<td>Monitor, review, and adapt to changes in climate conditions</td>
<td>Regularly review and update the climate risk management plan</td>
</tr>
</tbody>
</table>

Establish & Train the Team; Document Decision Making

1. Establish & Train the Team; Document Decision Making

2. Assess The Facility

3. Identify and Prioritize Areas for Improvement

4. Develop an Improvement Plan and Take Action

5. Monitor, Review, Adapt, Improve

WASH FIT in Healthcare Facilities Initiative
Climate resilient water supplies – reliability

Ensuring water availability at the health care facilities at all times and climate scenarios

1. Sufficient water storage at the health care facility to buffer drought periods

2. Alternative (back up) sources of water supply

3. Infrastructure needs to ready to withstand potential climate hazards (e.g. heavy rain, wind, floods, etc.)
When it comes to climate-resilient WASH in HCF, it’s not just the interventions themselves that need adaptation.

Consider whether climate resiliency is recognized in policies, guidelines, monitoring systems and accountability mechanisms.
Amref Health Africa

Climate Resilience WASH in HCF programming

Comfort Hajra Mukasa
<table>
<thead>
<tr>
<th>Founded in 1957 and began as Flying Doctors of East Africa</th>
<th>International Headquarters Nairobi, Kenya</th>
<th>Programmes reach more than 10 million people in Africa per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reach into 35 countries in Africa, 11 countries in Europe and North America</td>
<td>International Recognition The Bill and Melinda Gates Award for Global Health</td>
<td>The Conrad N. Hilton Humanitarian Prize</td>
</tr>
</tbody>
</table>
Amref Health Africa
MISSION & VISION

VISION

Lasting health change in Africa

MISSION

Our mission is to increase sustainable health access to communities in Africa through solutions in human resources for health, health services delivery and investments in health.
Amref Health Africa TODAY

- WIDE-SCALE ACTIVITIES
  Programme development and implementation, fundraising, partnership, advocacy, research, monitoring and evaluation

- LARGE COVERAGE IN AFRICA
  35 countries in Africa where programmes are being run

- FUNDRAISING OFFICES
  In Europe and North America

- AMREF FLYING DOCTORS
  The leading provider of air ambulance services in Africa – operating from Wilson Airport in Nairobi, Kenya.

- AMREF ENTERPRISES LIMITED (AEL)
  A social enterprise that is responsible for delivering sustainable social impact through incubation and scaling of innovative solutions.

- AMREF INTERNATIONAL UNIVERSITY (AMIU)
  An accredited institution of higher learning focused in training undergraduate and post graduate degrees in health sciences.
Sustainable Development Goals (SDGs)

The high burden of disease remains the main challenge to African health systems (Africa Union, 2016). Sub-Saharan Africa, home to 11% of the world’s population, bears 24% of the global disease burden and accounts for less than 1% of global health expenditure. As Amref Health Africa navigates through this challenging landscape, engaging in this cohesive vision of health systems strengthening, it focusses on the following SDGs:
Background

• Amref had been integrating WASH in Maternal, Reproductive, Child and Adolescent Health (MRCAH) programming to increase the uptake of MRCAH services at HCF.

  • WASH FIT is used to guide innovations

• Water is pumped from available point water sources to the health care facilities using solar.

• Success was registered in some HCF while failures due to dry wells and swamps were registered in two (2) HCF.

• The alternative water sources were too far, not fit in the approved design and very expensive.

• Community dialogues were held for a root cause analysis.

Using existing structures to reduce costs of bringing water closer to people
Background cont’d

- Climate change was identified as the root cause unanimously.

- Climate risks of concern included:
  - Drying wells,
  - Increasing water washed diseases and conditions (especially NTDs like trachoma),
  - Flush flood (death of an officer)
  - Increasing water borne diseases during rainy seasons.

- An action plan was developed by the community to solve the water problem in the face of climate change.

- The donor was asked for a budget Neutral Extension period to allow time for the solution to materialize.

Using existing structures to reduce costs of bringing water closer to people
What was done

• Community dialogues were held for root cause analysis
• The root cause was unanimously agreed upon to be climate change.

• Action plans were developed
• Solutions identified to include:
  • Community resource recovery (swamps recovery) using locally available materials.
  • Swamps friendly farming (sisal, papyrus growing and fish farming).
  • Mandatory terracing of gardens on hilly land.
  • Earth banks.
  • Joint sponge community
  • Advocacy for bridges

• Indicators developed locally including recharge of the swamps and shallow wells.

• HCF workers and local government officers were part of the processes for shared ownership and resources leverage.

• HCF are used as meeting point to discuss Primary Health challenges and solutions under the theme, ‘One stop health solutions centre’.
The results

• Swamps recharged after 1 year (2) rain seasons.

• The 2 shallow wells being monitored recharged after 3 rain seasons.

• Aquatic life was observed in the swamps after 3 rain seasons.

• The bridge supported water floor from one side of the swamp to another without flooding the community.

• Amref was able to pump water to the 2 HCF using solar.

• The communities appreciate the impotence of conserving the swamps since they know that the supply of water to their HCF is dependent on that.

• Other climate smart solutions like ecosan latrines have been introduce to protect the water during floods.
Our next steps

• Scaling approach to all Amref project areas.

• Building capacity of local government staff and systems strengthening for better integration

• Integration of climate change into all project implementation

• Safely managed sanitation facilities promotion

• Bulk water supply verses point water sources.

• Tree planting around catchments a critical requirement for receiving a water source.

• Climate change sensitive programming has been including in our global strategy.

Advocacy areas

• Need to advocate for integration of climate change programming into all local government plans.

• Focus on systems planning verses single point planning.
More funding still needed

• The rocky areas of Pader and Agago need a different approach specifically rock catchment for multi-purpose water harvesting and floods control.

• Integration of community and facility water access for meaningful climate change integration (requires huge investment into bulk water supply).

• Water without sanitation in the face of climate change makes the situation worse.
Key recommendation

• Involve the front bearers (women) of climate change in climate change programming such that familiar indigenous solutions become the foundation of new solutions for ownership and scalability.

• Youth form over 70% of the population. Make interventions attractive to them through digitalization.

• Holistic (systems thinking and planning) for leverage, ownership and meaningful integration.
Building Climate Resiliency into WASH in Healthcare Facilities Programming

Tdh Nepal Experiences
Prakash BOHARA

25.05.2023
Brief Introduction

- **Contextualized WASH FIT 1.0** endorsed by the MoHP in 2018
- Country is updating the WASH FIT inline with **WASH FIT 2.0**
- Terre des hommes is a **leading agency** implementing WASH FIT in Nepal
Tdhs project site is among the highly flood-prone areas of Nepal.
Impact on WASH facilities

• **Disruption of Water Treatment Infrastructure**: Flood damages or disrupts water and sanitation facilities, pipelines, and distribution systems and compromises the ability to treat water properly, resulting in a decrease in water quality.

• **Sedimentation**: Floodwaters often carry sediments, such as soil particles and organic matter, which can settle in water bodies. Excessive sedimentation can reduce water clarity, affect aquatic ecosystems, and impact the functioning of water treatment processes.

• **Contamination**: Floodwater carries various contaminants, including sediments, debris, agricultural runoff, and human and animal waste. As floodwaters mix with water sources, they can introduce these contaminants, leading to a deterioration in water quality.

• **Pathogens and Disease**: Floods can introduce pathogens, such as bacteria, viruses, and parasites, into water sources. Contaminated water can cause waterborne diseases like diarrhea, cholera, typhoid, and hepatitis A. Increased human and animal contact with floodwaters can further enhance the transmission of these diseases.
Efforts towards climate-resilient WASH in HCF
*(keeping in mind the flooding in the district)*
Water Treatment System Installed at the first floor. Water can also be collected from a raised tap installed on the ground floor.
Raised water treatment system with sufficient water storage. It is connected with the HCF building for easy access and safety.
• **Schedule emptying of septic tanks** and pits prior to the time of year which is prone to flooding

• **Construction of toilets** in an area (location) of the facility which is less prone to floods and/or raised toilets

• Toilets with an open pit or soak-away is located **15 m** away from sources of water and above the water table.
Promotion of non-burn technologies

Raised and protected waste pit
Hazard and Challenges

- **Flooding** is the main hazard in our project location
- **No guiding instruments (climate-resilient framework)** to promote climate-resilient infrastructure for WASH in HCFs.
  
  (Note: One basic guideline was developed in 2017 to implement climate resilient water safety plan and it is intended for a very simple rural water supply scheme)
- **Inadequate and untrained health workforce**
- **No dedicated unit/person** at the local government to look after WASH and climate change
- **High-cost** power back installations
- **Climate resiliency is not strongly integrated** in existing programming by the local governments
Opportunities

• Existing WASHFIT is being updated inline with WASH FIT 2.0.

• Development of Operation and Maintenance Policy and fund establishment at the municipality and HCF level

• Implementation of the O&M policy for monitoring of WASH infra with DASHBOARD data visualization to improve functionality

• Investment from the local government (advocacy/sensitization)
What do you need to better implement climate-resilient programming?

- Supportive **policies and guidance** (Institutional frameworks for climate resiliency in health care facilities)
- **Capacity building** of human resources and sensitization with the local government
- Developing and maintaining **resilient WASH infrastructure that can withstand** flood events.
- Establish **emergency response plans** for water quality management and safe sanitation during and after floods
- Regular **monitoring of water sources** to assess and address any contamination issues promptly.
- Promotion of climate resilience measures in health programmes
- Climate resilient HCF building/ WASH facilities.
THANK YOU
A Brief Overview of the UN’s Green Climate Fund & a proposed WASH in HCF project in Lao PDR

Steve Sara
Lead WASH Advisor
Save the Children
(ssara@savechildren.org)
Stakeholders Roles:

- Accredited Entities: pre-qualified partners to lead project design and implementation
- Nationally Designated Authorities: government institutions that serve as the interface between each country and the Fund

Programmatic Areas:

- **Mitigation Activities:** designed to reduce the release of greenhouse gas emissions, or to increase the capacity of carbon sinks
- **Adaptation Activities:** designed to improve resilience of communities and ecosystems to climate change
  1. Ecosystems and ecosystem services
  2. Health, food and water security
  3. Resilient infrastructure
  4. Livelihoods and vulnerable communities
SC’s GCF Laos Proposal Overview

• Simplified Approval Process (SAP) Proposal ($25m in GCF funds, plus co-financing from other donors)
  • 5-year implementation period
  • 25 districts (7 provinces)
    100 HCFs will receive capacity strengthening and training support
    o 79 HCFs will receive infrastructure support
    o 250 communities will benefit from early warning and climate resilience action planning support
• Expect program start date in early 2024
Strengthening Climate Resilience of the Lao People’s Democratic Republic (PDR) Health System

(Co-Executing Entity)

Nationally Designated Authority

(Implementing Partner)

(Accredited Entity & Co-Executing Entity)

(Technical Assistance Provider)
Goal: Strengthen the Climate Resilience of the Lao PDR Health System

Outcome 1
The health system’s governance and leadership is climate-resilient

Outcome 2
Health information systems are improved to include climate and weather data and used to track, prepare for, and reduce climate-related risks to health

Outcome 3
Health service delivery in rural provinces is improved and able to manage climate-related disease burden and determinants of health

Outcome 4
Communities respond to early warnings, manage and mitigate risk, and seek care appropriately
Output 3.2: Rural health facility infrastructure is climate resilient and energy efficient

1. Conduct GHG emissions and infrastructure quality assessments at climate-vulnerable health facilities.

2. Improve health facility infrastructure resilience to extreme weather events.

3. Upgrade electrical services to be climate resilient.

4. Upgrade WASH services within climate-vulnerable HCFs to be climate resilient.

5. Strengthen the capacity of MoH, Nam Saat, and private sector partners to effectively operate, maintain, and monitor health facility infrastructure.
Questions?
Ways to Get Involved

1. **Subscribe to the listserv** to receive updates on events and resources (link in chat). Join live sessions and connect with others in the space.

2. **Send us topic recommendations.** We want to know what you want to learn about, what you feel needs more discussion.

3. **Nominate a success story.** Every live session + newsletters will highlight successes, big and small, around WASH in HCF.

4. **Join our next session!** July 2023 will be as “Ask an Expert” session, with various topical experts (HCWM, IPC, gender, etc.)
WASH in Healthcare Facilities Community of Practice

The WASH in HCF Community of Practice Initiative, facilitated by Emory University, is an action-oriented learning platform seeking to connect practitioners around the world.