# All systems go

## Systems Strengthening in Fragile Contexts: Lessons learned through Practice

#### Chair:

Bethlehem Mengistu, Agenda for Change, Global Coordinator

All Systems Go Africa 19-21 octobre 2022

#### Presenters:

- Kyla Gregoire, CARE USA /Malawi
- Richard Bassono, GRET, Burkina Faso
- Lavuun Verstraete, Unicef Ethiopia
- Fatim Hélène Traoré, President of the Association for young water and sanitation professionals, Mali

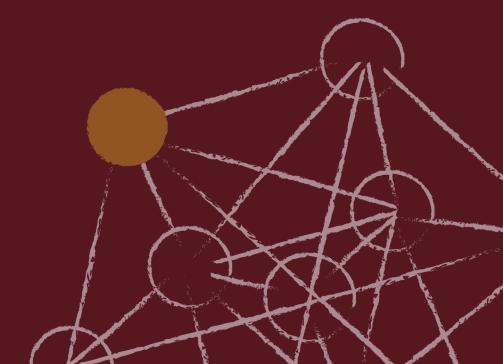






## Traduction / Translation

Kyla Gregoire - <a href="https://bit.ly/3Tzq3xm">https://bit.ly/3Tzq3xm</a> (FR)



# All systems go

Rural Water Systems
Strengthening in Marginalized an Short Case

Presented at: IRC 'All Systems Go Africa', 19-21 Oct 2022

Study

Presented by: Boyce Nyirenda, WASH Programme Manager, WaterAid, Titukulane Project

Kyla Gregoire, CARE USA Water+ Advisor



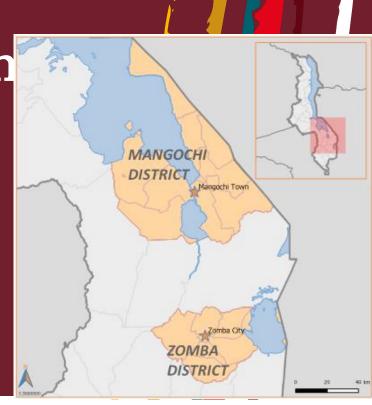












Titukulane: a
Resilience Food
Security Activity in
Southern Malawi





Agricultural Livelihoods







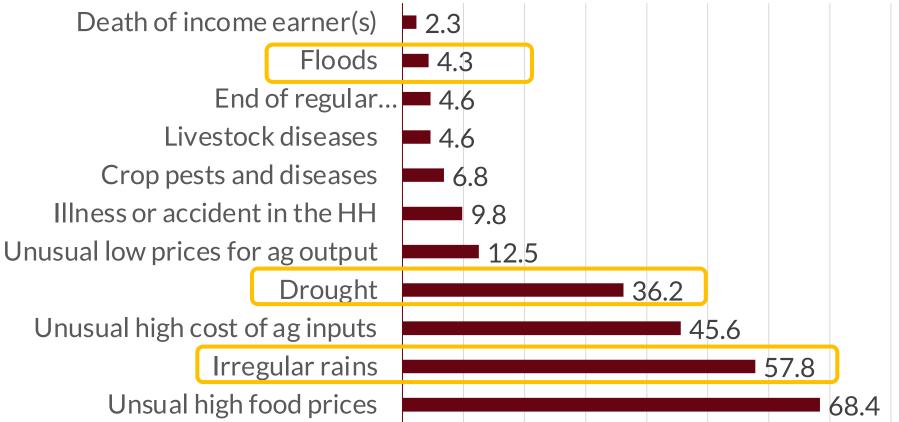




# Water Security often Reigns in RFS Contexts

## Droughts and Floods are often

HHs a fected in last 12 months, 2016/17)







## RURAL WATER GOVERNANCE IN

# RI Where are we and where are we trying to

### **Most RFSAs**

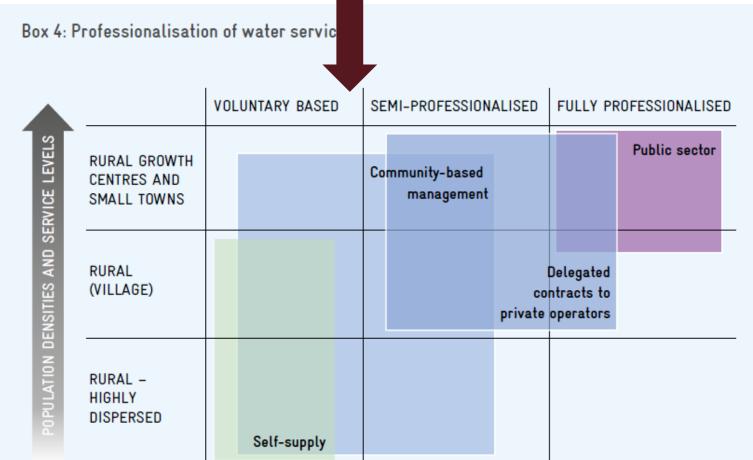


Figure 3: Types of 'rural' settlement and typical modes of service delivery

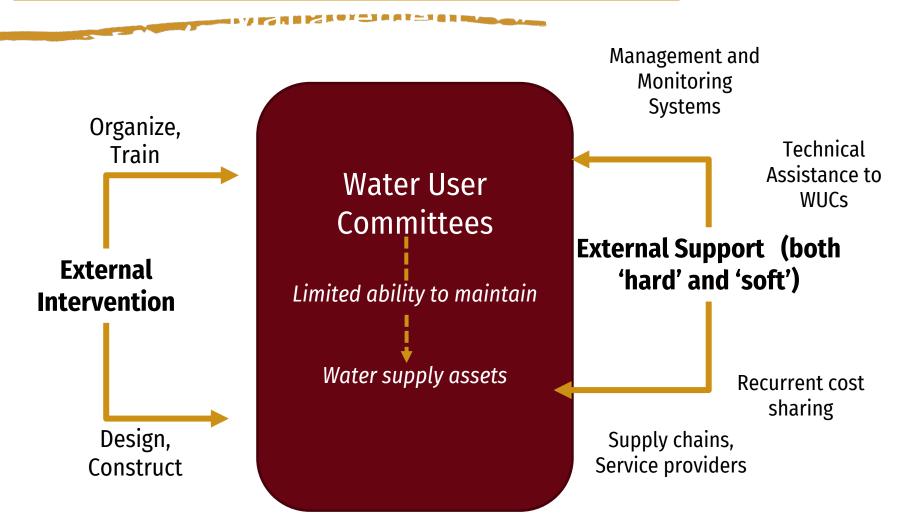
(Source: Lockwood and Smits, 2011)





## A RURAL WATER GOAL FOR RFSAS:

## Supported Community-Based







Titukulane seeks to improve women's, men's, girls' and boys' use safe water and sanitation at home through:

# Concerted Systems and Governance Learning:

'Refine & Implement' Year' focused on concurrent systems and infrastructure needs assessments

## Community-to-District level Systems Strengthening

- Strengthening District and Community capacity to plan, budget, maintain, operate and sustain water infrastructure and service delivery.
- Operationalize DWDO/DHO National Governance Standards (O&M capacity strengthening; service reliability;

### Infrastructure Investments

- Design and construction works of reticulated systems
- Construction QA/QC and contract management;
   Water Safety planning



# An initial learning year that focused on developing a systems approach to

## rural water:

Services

Non-functionality of boreholes immediate linked to: poor siting (including groundwater yields); poor construction quality; poor water quality (fluoride, E.coli)

- Additional feasibility parameters integrated into standard contracting procedures and docs (e.g. yields, WQ, GW depth)
- Development and dissemination of construction standards and Accountability Framework to contractors and GoM to enforce standards.
- Expand scope for reticulated DW investments in high yield zones
- Ministry-level engagement on water point construction and water quality standards
- Water Point Committees (i.e. CBM model) is primary management model, with limited efficacy: (i) community mistrust, low transparency; (ii) high stress/attrition; (iii) non-compliance and overlap with service agreements and private mechanics; (iv) fragmented relationship with local government; (v) poverty, seasonal incomes -
- Prioritized **official review of CBM model and policies**—tariffs, term limits, training structures and curriculum, incentive structures, mobile money, role definitions.
  - Influenced National call for CBM review
  - MoWatSan leading review process
  - Borehole banking (through VSLA) to incentive tariff payments.
  - ProWASH Life Cycle Costing approach

# What actors & factors contributed to creating systems-focused learning in

year 1? What often doesn't work?	What TTK did to be more effective?
WASH leads without systems strengthening capacity or focus and/or lack STTA to support this.	A RFSA WASH team with strong governance and systems <u>capacity</u> (bolstered by HQ STTA with this focus)
Under-resourced assessments. Assessments repeating what's already known or available in literature.	An appropriately <u>resourced</u> ToR that was grounded in <b>systems- and governance-focused</b> questions and methods.
Consultants without sufficient and relevant capacity to conduct meaningful FR.	A consultant with background and <u>capacity</u> to execute the ToR
'Outsourcing' the learning to a consultant.	RFSA team ensures consultant oversight, support, and co-learning (i.e. motivation).



**₩ WaterAid** 

## Titukulane Intermediate Results so far:

Facilitated participatory development of the Influenced review of Malawi's CBM model Accountability Framework (AF) & informed with the Year 1 WASH Learnings

✓ AF redefines accountabilities of MoW&S, District Councils, and National Construction Industry Council of Malawi (NCIC), NGOs, and others.

Developed a TTK Water Governance strategy, aligned with the GoM National Water policy (2005), and A4C WASH Systems Building Blocks.

✓ Clearly defined approaches & building blocks within the goals, scope, and manageable interests of Titukulane.

and sparked a national conversation on professionalization of management

✓ MoW&S commissioning assessment of professionalization of management arrangements with support from A4C.

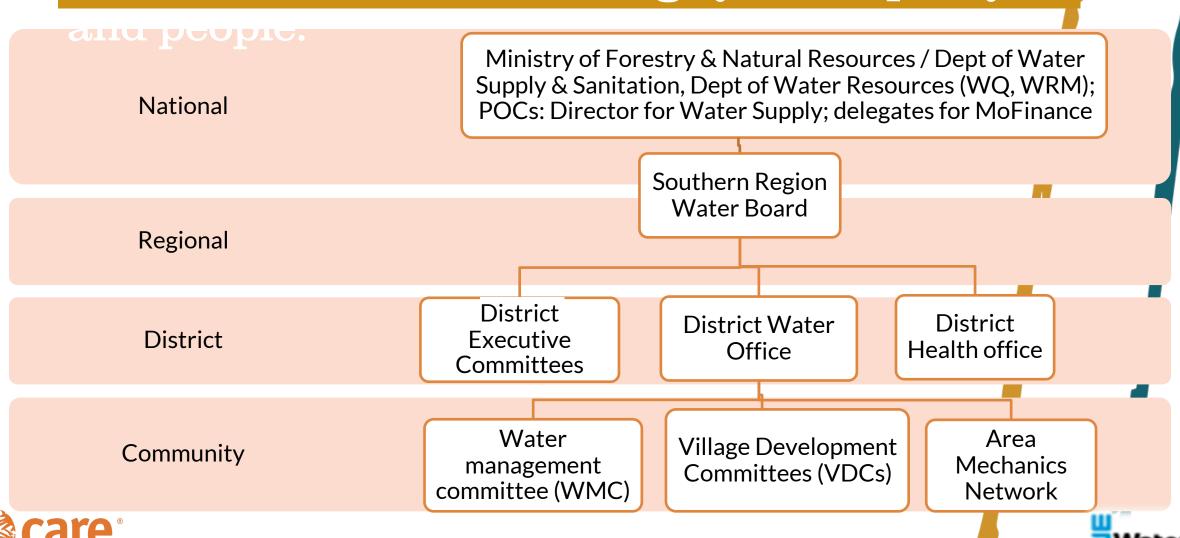
Influenced WatSan Directorate institutionalize district-level WASH Master plan

✓ Will help to scale to all 28 Districts by the end of 2023.



## What else has been critical to success?

Titukulane builds on existing systems, policy,















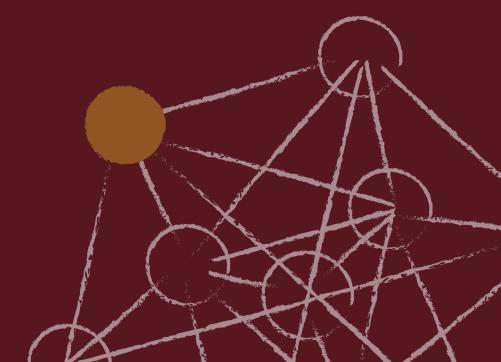






Traduction / Translation

Richard Bassono - <a href="https://bit.ly/3TAMeD1">https://bit.ly/3TAMeD1</a> (EN)















# All systems go

Approche Nexus Humanitairedevelopment -cohesion sociale dans le domaine de l'eau potable au Burkina Faso

All Systems Go Africa 19-21 octobre 2022

Richard Bassono Gret Burkina Faso







## Contenu



## **Approches**

### **Approches partenariales**

- Conception du projet entre un consortium d'ONG humanitaire (SI), de développement (le Gret) et d'appui à la capitalisation (Groupe URD) en partenariat avec l'ONEA
- Développement de partenariat avec les communes
- Une phase préalable de construction participative du programme
- Travail avec le Cluster WASH et les autres ONGs humanitaire et développement

### **Les Diagnostics**

- Diagnostic techniques conjoints avec l'ONEA déterminer les besoins
- Diagnostic de la gouvernance des services d'eau potable
- Plusieurs études approfondies : socio-anthropologique, hydrogéologique

### **Planification**

Schéma Directeur d'Urgence concerté





# Quelques solutions identifiées de manière concertée

## Solutions techniques

- Amélioration de la production: raccordements de forages inexploités ou sous-utilisés (PMH/PEA), traitement de l'eau de forage contaminé à l'Arsenic
- **Sécurisation de forages fonctionnels**: solarisation/électrification, télégestion
- Renforcement de la distribution à travers des extensions, bornes fontaines (Séguénéga, Ouahigouya et Kongoussi)



Mission de réparation du groupe électrogène ONEA Titao, 2022

# Quelques solutions identifiées de manière concertée

## Solutions organisationnelles

- **Articulation avec les acteurs humanitaires** pour prendre en charge les actions purement urgences dans nos zones d'interventions (Titao)
- Appui à l'ONEA et aux communes pour la **coordination de l'action** humanitaire dans leurs zones
- Appui à l'ONEA pour le **maintien du service d'eau potable** dans la commune de Titao à travers les vols UNAS (fourniture gazoil)
- Appui aux communes pour la mise en place de **systèmes de gestion transitoire** des tous les ouvrages nouvellement réalisés et ceux dont le mode de gestion n'est pas formel



Mission d'approvisionnement de carburant du centre ONEA Titao, 2022

## Quelques solutions identifiées

### Solutions Institutionnelles

- Plan de résilience de l'ONEA face de la crise (plan de renforcement des capacités)
- 5 plans de renforcement des capacités des communes

## **Capitalisation**

- **Recherche-action** pour améliorer nos pratiques : prise en compte des PDI, viabilité financière des services
- Evaluation Interactive avec mini-séminaire (EIMS)
- Capitalisation des approches pour diffusion



Plan de renforcement des capacités, 2022

## Perspectives/défis

- Maintenir le service et une capacité d'action dans les zones à défis sécuritaires très élevé
- Flexibilité des bailleurs face aux situations volatiles de certaines zones (lignes de financement non dédiées)
- Moyens aux institutions pour mieux coordonner
   l'action humanitaire et développement



## All systems go Africa

19 - 21 octobre 2022 | Accra, Ghana

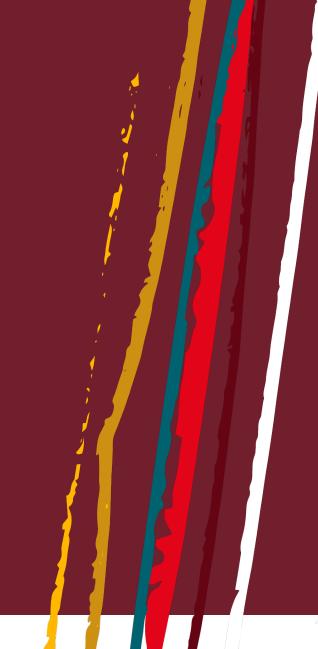
#### En savoir plus

https://www.ircwash.org/all-systems-go-africa-fr



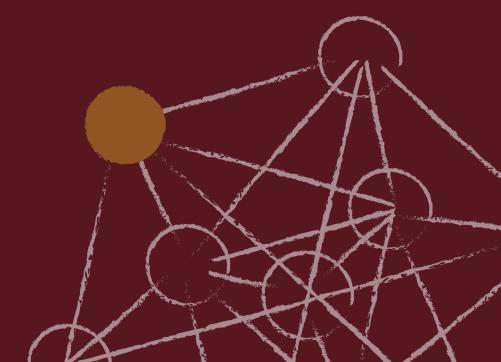






Traduction / Translation

Lavuun Verstraete - https://bit.ly/3eIr47m (FR)



### All systems go Africa

System building in fragile contexts across the WASH, Humanitarian Development, and Peace triple nexus

**ETHIOPIA** 

Lavuun Verstraete, UNICEF Ethiopia lverstraete@unicef.org 19 October 2022

All systems go Africa 19-21 October 2022

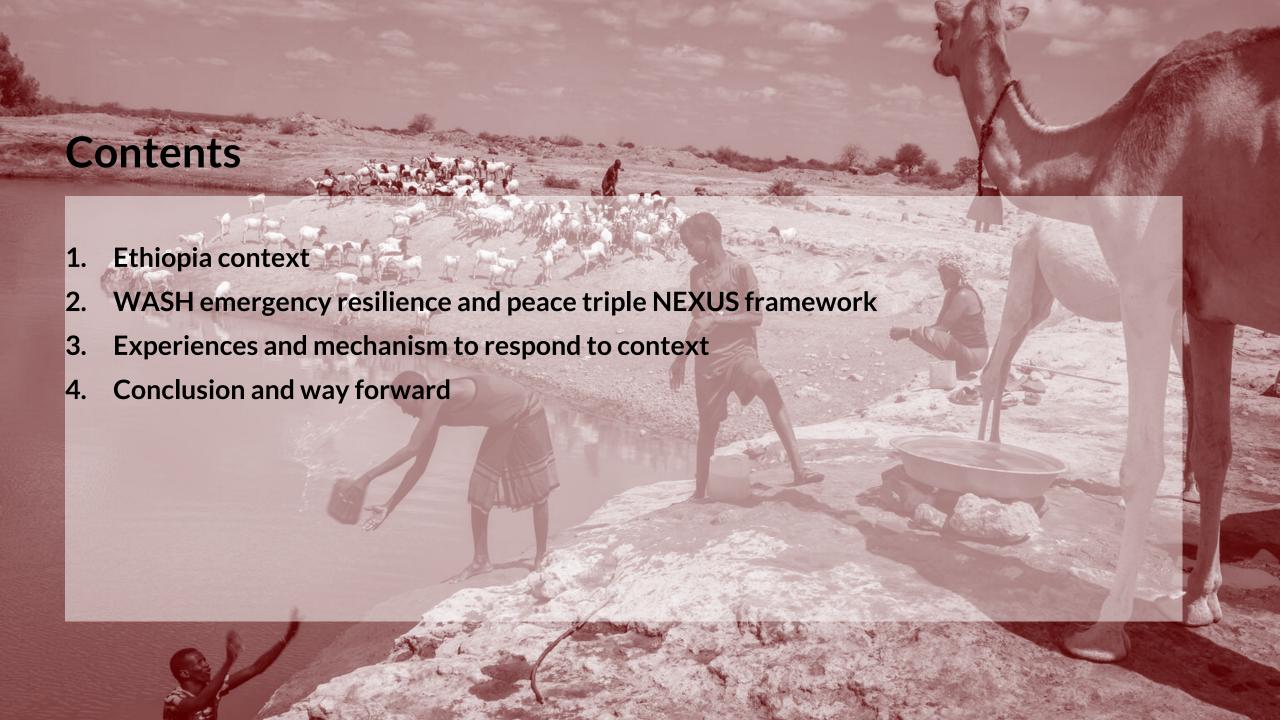












## Ethiopia context - Extremely fragile with multiple displacements

IDP: 2.8M | PIN: 18.7

Requirement \$133M

**Shocks and stressors** 

**Security related** 

Climate induced (drought/floods)

15

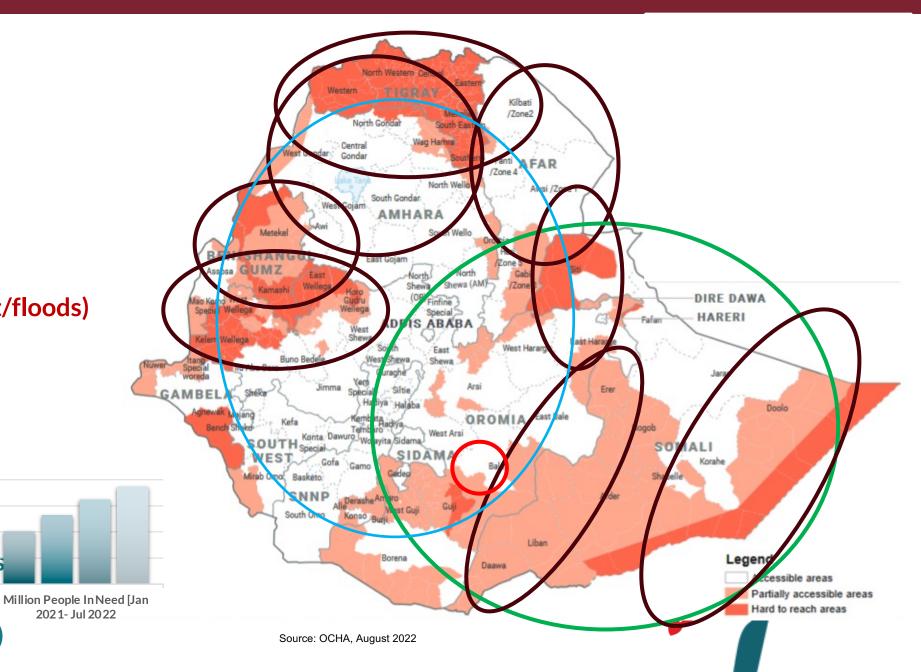
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Health related (cholera)

### **Characteristics**

Protracted/recurring crisis

 Worsening scale (now 5<sup>th</sup> response globally)



## Ethiopia context - Extremely fragile with multiple displacements

ETHIOPIA

### Refugees and Asylum-seekers

IDP: 2.8M | PIN: 18.7

Requirement \$133M

**Shocks and stressors** 

**Security related** 

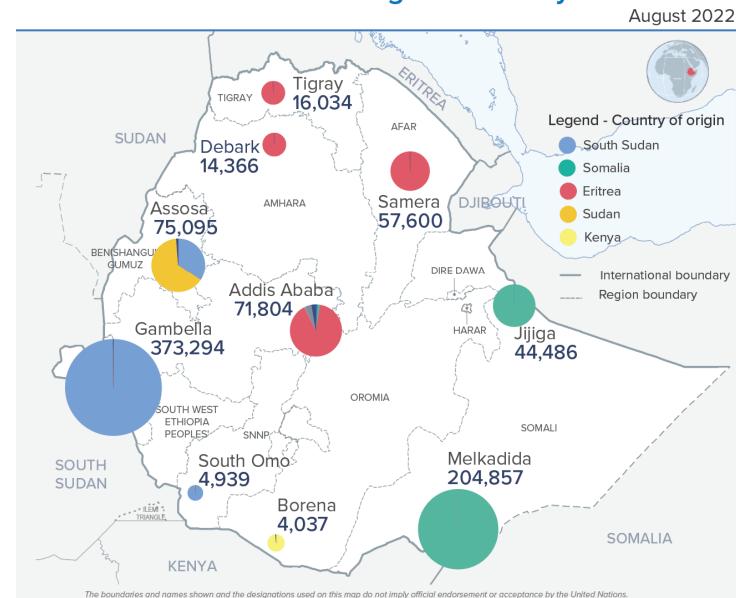
Climate induced (drought/floods)

Health related (cholera)

Refugees: 875,000

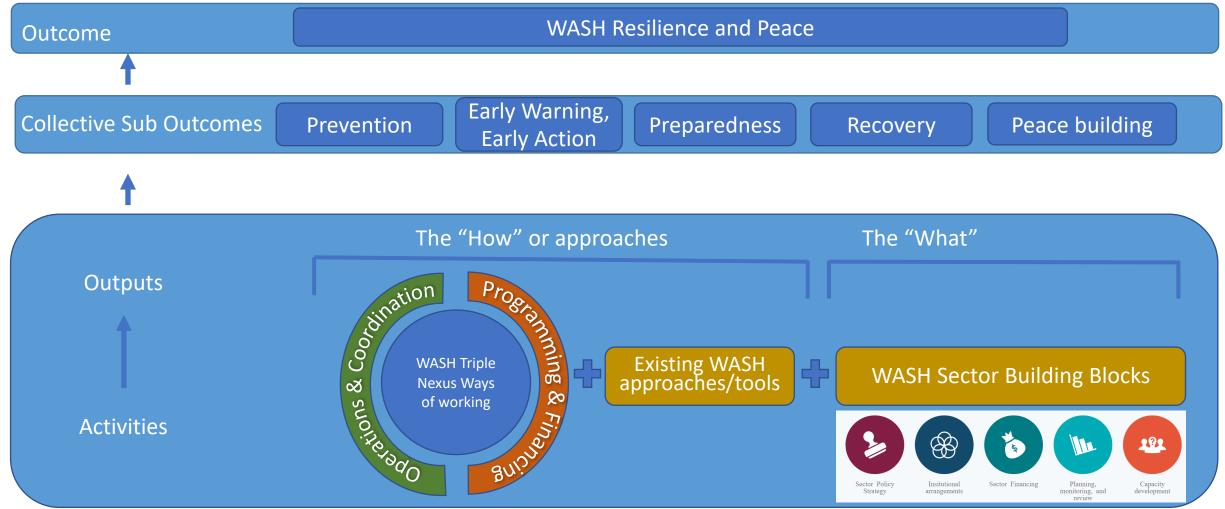
#### **Characteristics**

- Protracted/recurring crisis
- Worsening scale (now 5<sup>th</sup> response globally)



# WASH emergency resilience and peace triple NEXUS framework







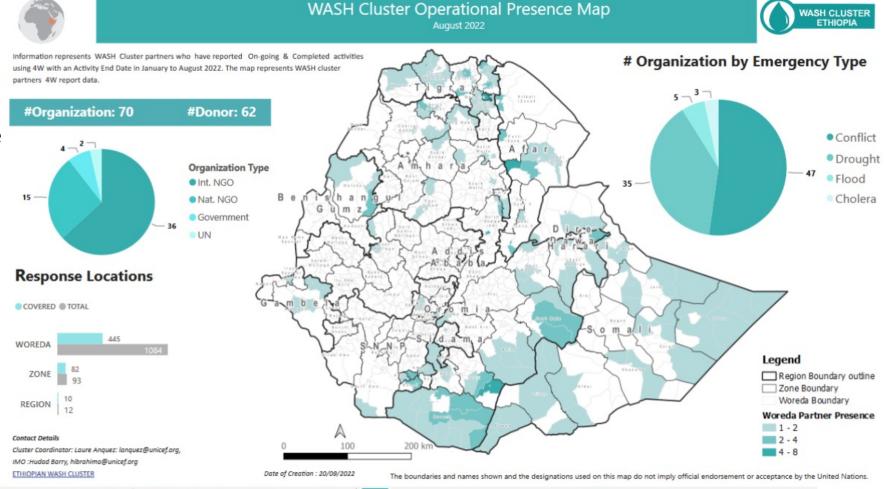


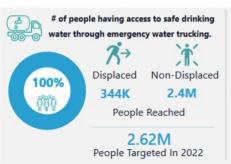
## **Emergency response through WASH cluster**

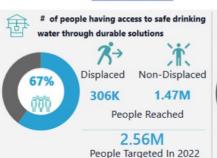
70 partners across the country

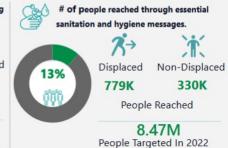
**8 regional coordination hubs** close to response

Collaboration with **government** counterparts













## Ethiopia Rapid Response Mechanisms (RRM)

### **Principles:**

- Early warning system
- Prepositioning of supplies/partners with dedicated funds
- Standardised approach/assessment/reporting:

alert > rapid assessment > intervention [first line, then second line] > monitoring

- Timebound first-line response
- Coordination with WASH cluster

Financial & operational pipeline facility

Ethiopia has several RRMs (UNICEF/BHA, ECHO/IRC, OCHA/SWAN)

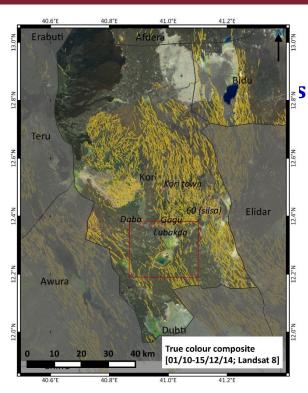
Strengths: fast; agile; can quickly fill gaps in emergency response

**Opportunities:** allows also for system rehabilitation

**Challenges:** in protracted situation -> limited provision for sustainable exit or post construction support; small rehabilitation only; needs larger than RRM capacity

Data

## Early action/preparedness - Groundwater **Suitability Mapping**



#### **Innovation and Climate Resilience**

Strategic partnership between UNICEF, Ministry of Water and Joint Research Center (EU) - 2018-2020

Increasing deep well success rates from 40-50% to >90% in the Lowlands

More than 100 woredas mapped through UNICEF/EU and UKAid, currently expanding with UNICEF and WB funding





https://gw4e.acaciadata.com/

#### **INPUT DATA**

#### RS-derived data

- SRTM
- TARCAT, CHIRPS
- MODIS
- Landsat 8

#### Other data

- Geological maps
- Ground information

#### **DATA PROCESSING & ANALYSIS**

#### THEMATIC MAPS

#### Type 1

- Slope
- Lineaments
- Recharge\*

#### Type 2

- TWI
- NDVI
- Flow accumulation
- Drainage network
- True/false colour composites

#### Type 1

Permeability

#### Type 2

Water points

#### **CLASSIFICATION & WEIGHTING OF TYPE 1 LAYERS**

#### **WEIGHTED FACTOR LAYERS**

**OVERLAY ANALYSIS** 

#### **GROUNDWATER PROBABILITY MAP**

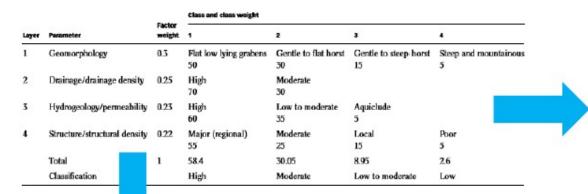
**VALIDATION WITH TYPE 2 LAYERS & GROUND INFORMATION** 

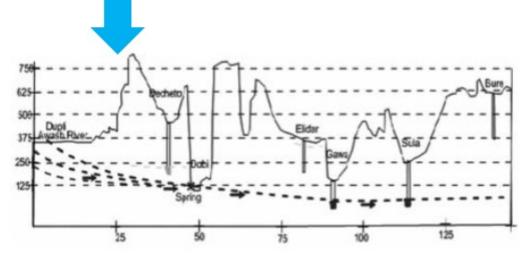
**SELECTED SITES FOR DETAILED STUDY** 

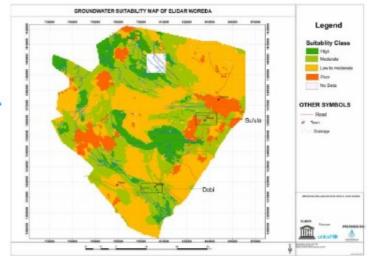


## Early action/preparedness - Groundwater Suitability Mapping

## **Groundwater Suitability Map**







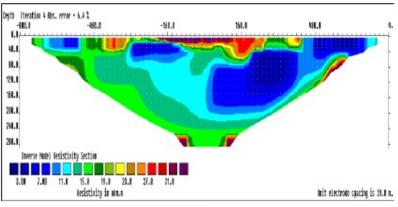


Figure 5. 5. 2D Resistivity Imaging section, Musley.

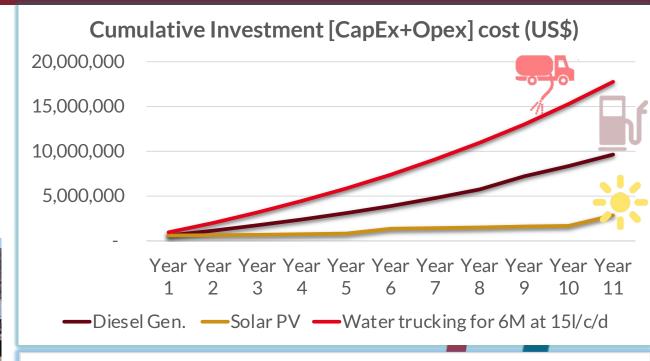
## Climate Resilience – Shift to durable systems

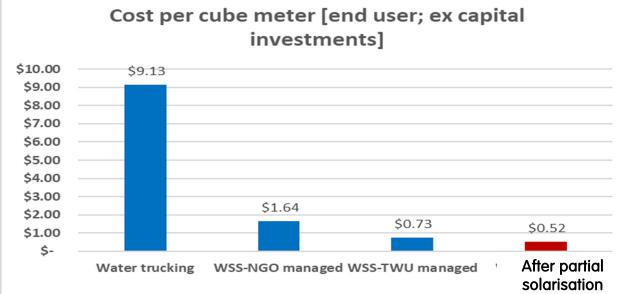
# Business case for 10 yr life cycle of scheme in drought prone area; serving 20,000 people (Sept 2020):

- Water trucking operations (15l/c/d for 6 months/yr)
- Nearly 3 X cost of diesel-powered water systems (50l/c/day for 12 months/yr)

 Nearly 10 X cost of solar- powered systems (50l/c/day for 12 months/yr)

- Cost analysis for durable system system in Refugee host systems: Shift from water trucking to Town Water Utility Managed water service delivery hosting 220,000 refugees and host community of 30,000 people – cost per m3
- Utility cost with cost recovery model = sustain operation and maintenance
- Note: analysis prior to recent fuel cost increases





## WASH for Peace – Conflict Sensitive Programming in fragile contexts

Integrating conflict sensitive and peacebuilding approaches &

Leveraging programmatic entry points in conducive sectors - WASH





https://www.unicef.org/ethiopia/documents/conflict-sensitivity-peace-building-and-social-cohesion-guideline-wash-programming

#### **Entry points and opportunities**

Coordination platforms for programme implementation

Joint action between partners

CSPBSC WASH PROGRAMMING OPPORTUNITIES

OPPORTUNITIES

Aroad amming & Find amming & Fin

System strengthening approaches, prioritising local WASH service providers

Risk informed / conflict sensitive approaches such as ESIA/ESMP

Use mutual accountability system, inclusive of vulnerable groups

Build flexible & sustainable WASH financing strategies

Adaptive management processes to transition from emergency to development





## WASH for Peace - some examples & experiences from Itang

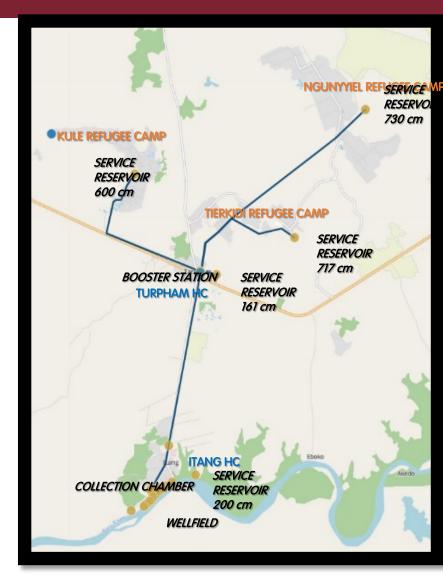
Risk situation: In Jan 2020, low water production in system delivering water to 220,000 refugees and 30,000 hosts

#### Due to:

- 1) Collapse of several wells and powerhouses
- 2) Limited access to spare parts and
- 3) Ethnic diversity between hosts and refugees
- >> Conflict and vandalism of WSS by host community

### How did we resolve the situation: <u>use entry points</u>

- Intensify coordination
- Multi-stakeholder Contingency plan / Business continuity plan with (i) clear responsibility allocation; (ii) budgeted short term, medium- and long-term interventions; (iii) fast tracking upgrade of EM equipment
- Water Utility strengthening with strong O&M and Business plan for full cost recovery





## **Conclusion and way forward**

Need to cover whole spectrum from prevention to peace building

Financial and operational mechanisms to respond specifically to emergency response remain critical

Resilient systems can support fragile situations, but require more time and resources; this is even more challenging in a fragile context

Need to bridge and develop mechanisms / funding facilities that <u>bridge nexus</u> <u>between emergency and development</u>



## THANK YOU

Lavuun Verstraete, UNICEF Ethiopia lverstraete@unicef.org

## All systems go **Africa**

19 - 21 October 2022 | Accra, Ghana

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