



Overview on Climate Resilient Water, Sanitation and Hygiene Sub-Program (CR-WASH)

Water Development Commission

Aug , 2019

Presentation Outline

- Introduction
- CR-WASH Objective
- Features of CR-WASH Water Supply System
- The Key tasks
- Major stakeholders
- Sub-program management
- Financial Requirement
- On-going activities
- Required support



1. Introduction

- By 2015, as per GTP1 service level the water supply coverage of Ethiopia reached to 84% providing access to safe water supply to about 41 million people during the planning period
- Ethiopia has met the MDG target in water supply
- In spite of this, still about 40 million people have no safe water supply access and the service level is also not adequate
- From 2016, Ethiopia is implementing GTP-2 rising the service level of water supply
- The water supply access target set for GTP-2 is 85% (from 58% for the base year 2016)
- Most of the unserved population is located in these arid and semiarid areas

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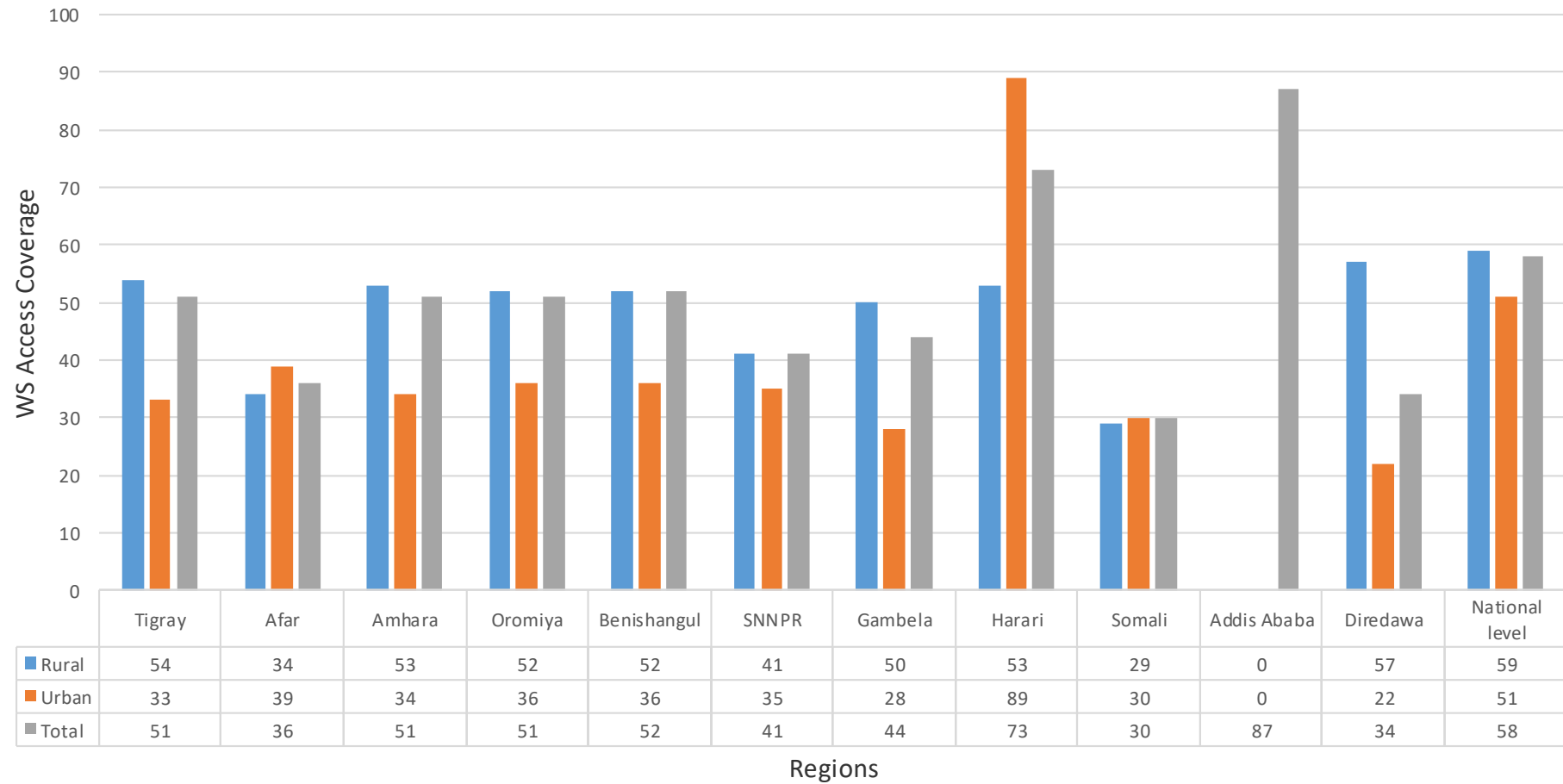


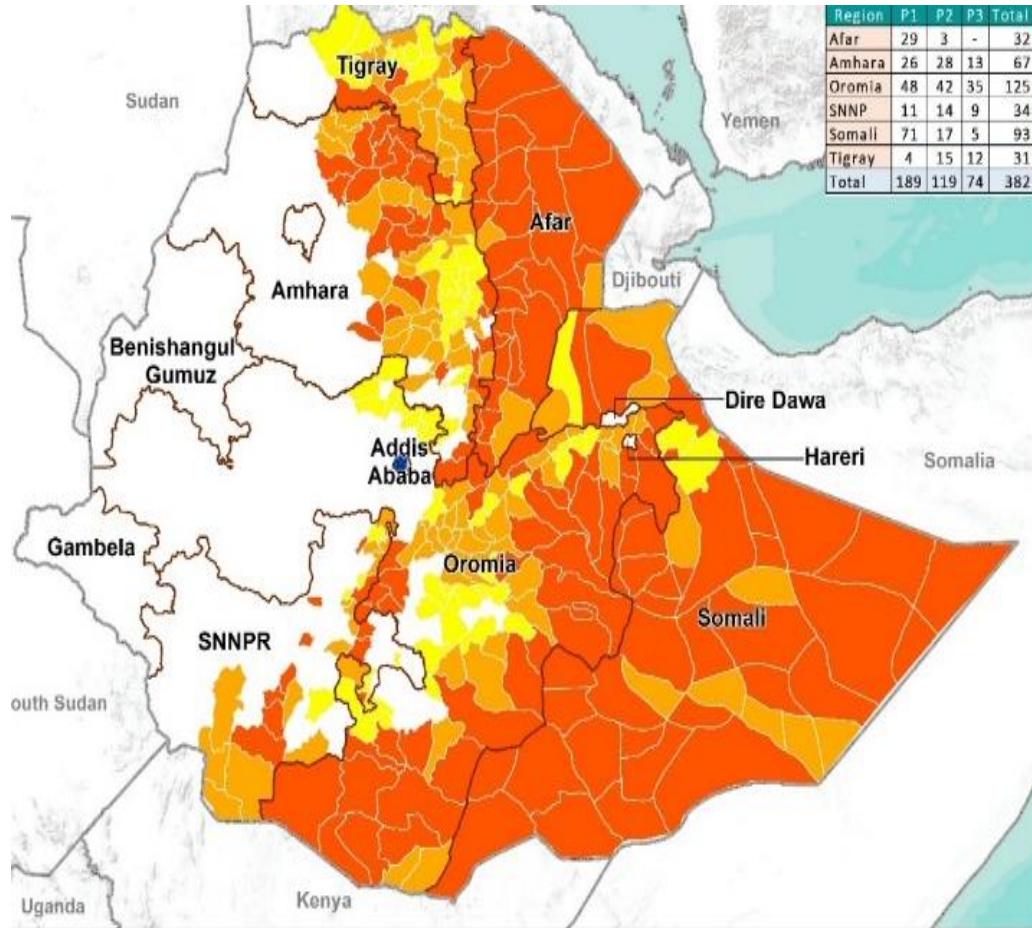
Fig. 12 . Water Supply Access Disparity Among Regions as of 2015 (as per GTP-2 standard service level)

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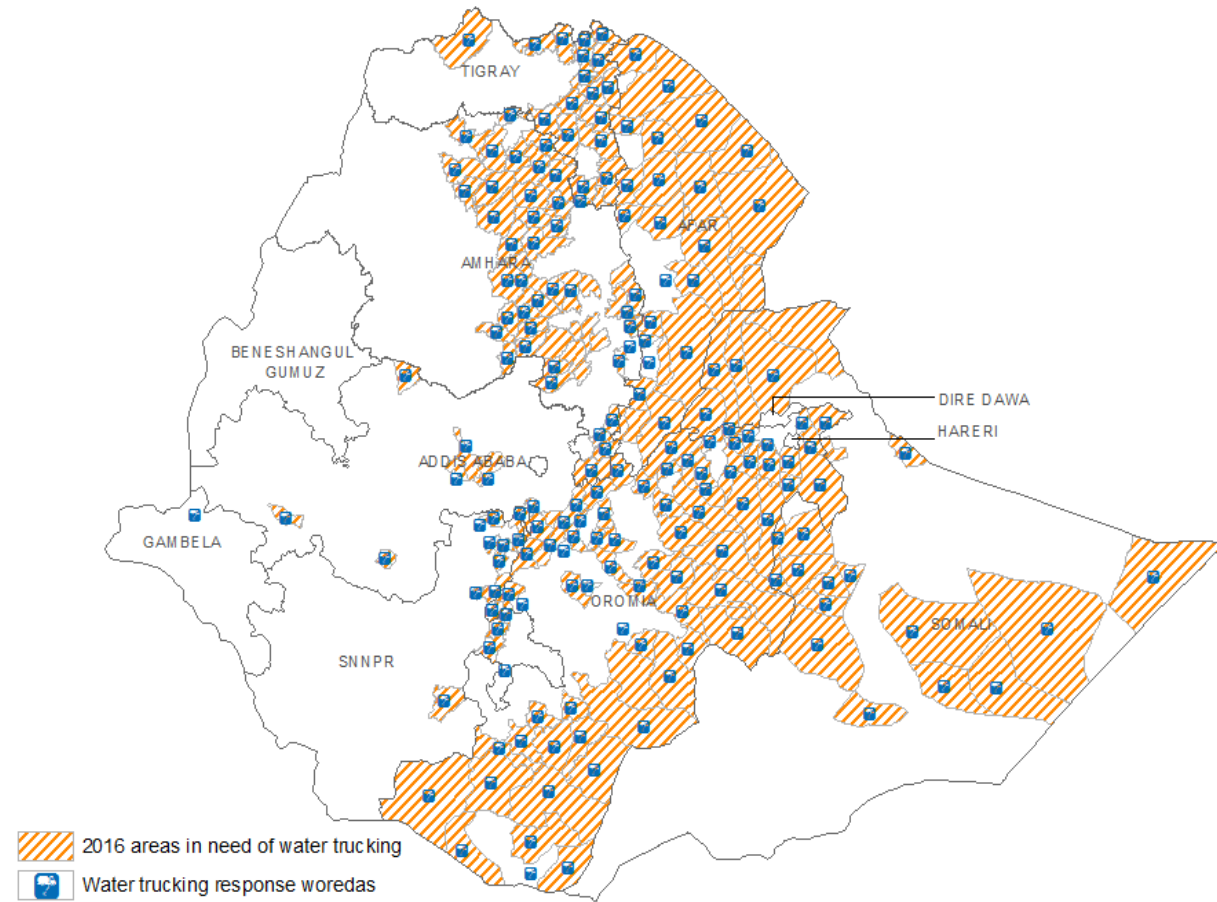
- As the people of these areas are mostly pastoralists, water is also critical not only for the people also for livestock. It is also key to unlock the positive potential of drylands
- On top of this, the water supply problem of these areas is further exacerbated with **increasing severity, frequency, area of coverage and duration of draught**,
- In the last 128 years Ethiopia has experienced about **18 draughts** with a total of **33 draught years** implying that about 25.8% of the year was draught affected years (in average about 2 years/draught),
- Of these, **11 draughts affected the whole country**, 5 draughts northern and north eastern part of the country, and **2 draughts southern, south east and central** part of the country,
- People in the range of **4-9 million** are affected per draught with increasing trend,
- **The frequency of occurrence** has also significantly increased from **1956** onwards,

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Areas affected by 2016 draught



Areas of water tracking by 2016



The cost of emergency water supply is unbearably high

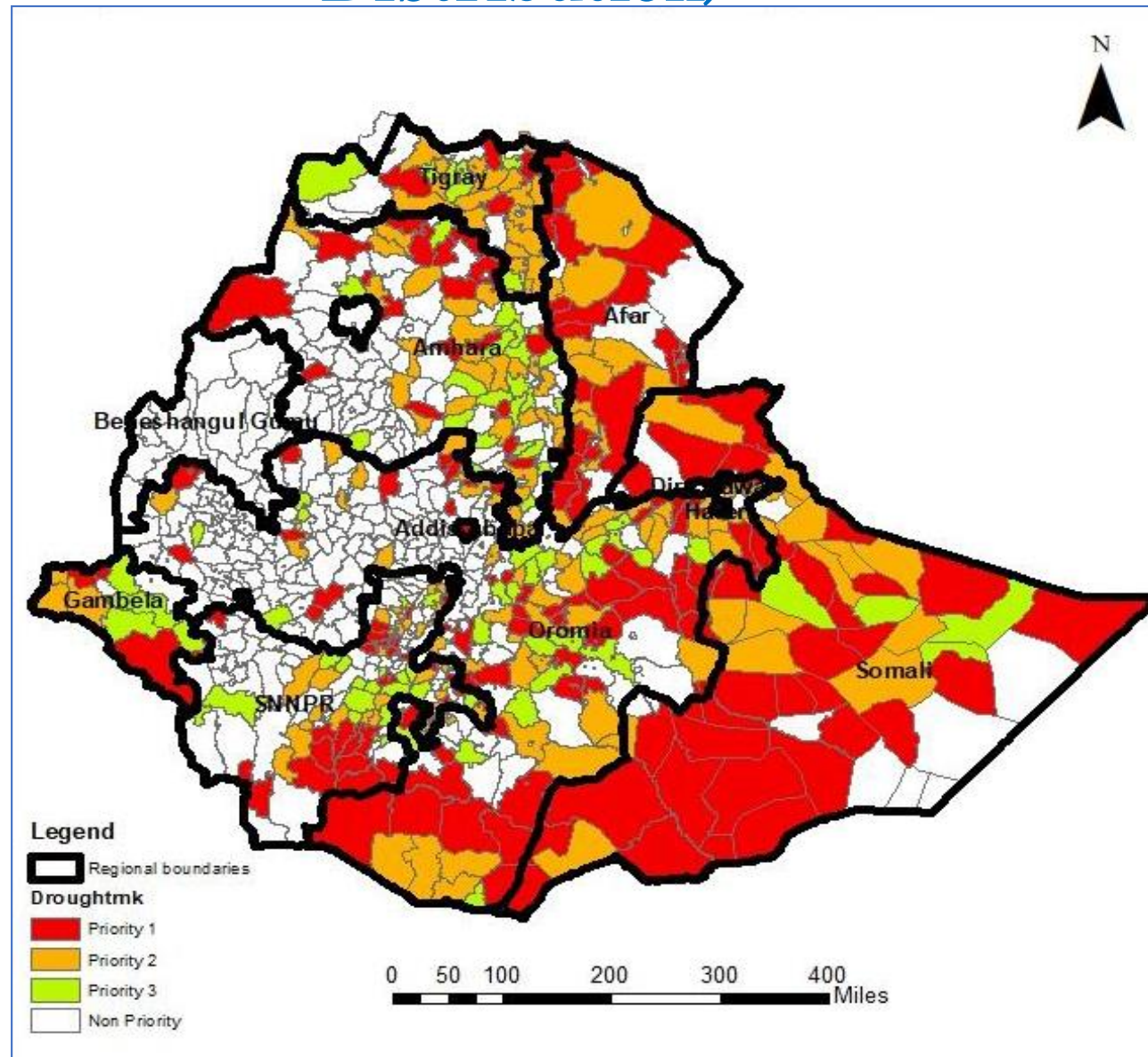
Prioritization of Drought Prone woredas by Region (2018)

Enhanced criteria

- Health and Nutrition
- Water For human
- Agriculture
- Market
- Education
- Flood Relevance

Region	Drought Classification			Total
	Priority one(P1)	Priority two(P2)	Priority Three(P3)	
Amhara	14	29	23	66
Gambella	3	6	4	13
Tigray	7	18	6	31
Oromia	51	55	28	134
SNNPR	27	30	24	81
Afar	23	9		32
Somali	67	26		93
Total	192	173	85	450

Drought prevalence Ranking(Regional Distribution)



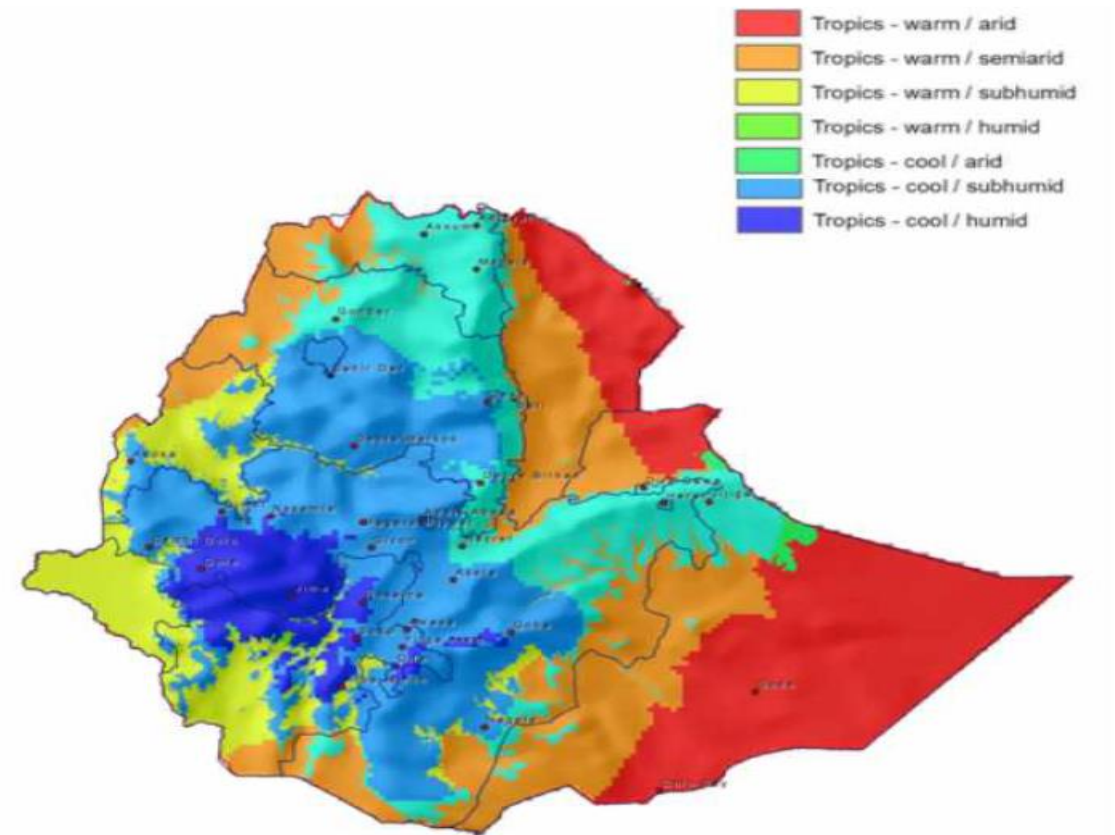
Why CR-WASH?

Due to the aforementioned challenges and specific feature of the arid and semi arid areas of the country in terms of water source availability, climate resilience and population livelihood, **CR-WASH Sub-program** is developed focused to these areas

2. CR-WASH Objective

Provide reliable, sustainable and climate resilient WaSH services to arid and semiarid areas of the country as a component of OWNPN

Around 60% of Ethiopia is characterized (see figure 1) by **high climate variability**, frequent drought in most part and occasional floods in areas close to rivers or flush flood, **arid or semi-arid conditions**, coverage and a low population density.



Resilience: the ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organization, and the capacity to adapt to stress and change.

3. Guiding Principles and Sub Program pillars

Guiding Principles

The OWNP guiding principles of:

- **Integration** with stakeholders
- **Alignment** of partners (planning and Management procedure)
- **Harmonization** of Approaches and activities)
- **Partnership** between implementing parties will be applied with a focus on arid and semi-arid areas

Program Pillars

The sub program's tasks rest on three overarching domains or pillars recommended for OWNP:

- Creating an **enabling environment and good governance**
- Maximizing availability and **efficient use of human and financial resources** to create demand for better WASH services
- **Capacity development** for improved delivery of WASH services at all levels

4. Features of CR-Water Supply System

- Use of reliable and Climate Resilient water sources (deep groundwater, reliable surface water, etc.) for multi-villages/kebeles/woredas
- Water source investigation with the state of the art methodology of study and use of modern technologies,
- Provision of water not only for humans as well for livestock,
- Well organized implementation capacity (federal and region level).
- Well organized O&M management and support system (federal, region, and scheme level: rural water utility),
- Integration and cooperation with sectors like agriculture, livestock development, etc. in addition to the commonly known WaSH stakeholders

Intervention steps to be involved



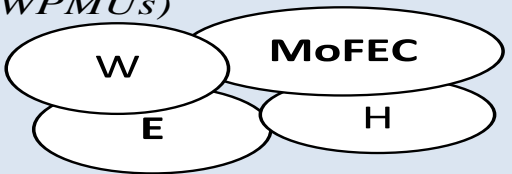
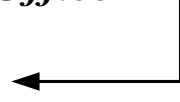
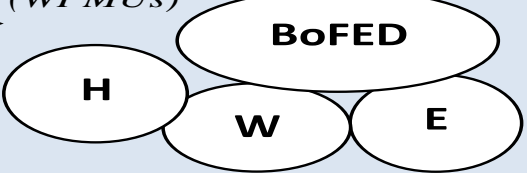

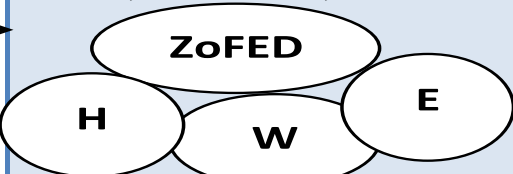
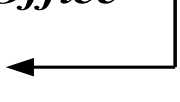
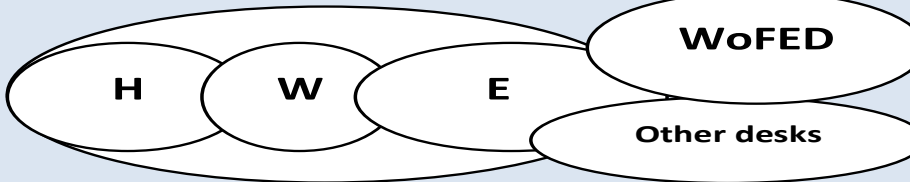
5. Key Tasks of the sub program

Task 1: RS, GIS, DTM and Data Synthesis	<p>An integrated system that collects relevant primary and secondary data collection followed by data synthesis, identification and mapping of ground and surface water potential using Tomography. RS, DTM and GIS and hydrologic techniques will be organized.</p>
Task 2 :Ground Water Development Task 3:Surface Water Assessment	<ul style="list-style-type: none"> • Boreholes already drilled in Afar, Somali, Borena etc. will be used in phase 1-2017-2020 for contracting multi village schemes. Further ground water investigation will be undertaken for scaling up the process towards the end of phase 1 and the whole period of phase 2 • In Phase 2 (2020-2025) required additional boreholes will be drilled along construction of multivillage schemes • Potential surface water sources wherever appropriate will be identified for subsequent development for supporting life in the areas
Task 4: Planning and Design	<p>The plan and design will include:</p> <ul style="list-style-type: none"> - Demand projection on water supply for human and livestock, based on GTP-II and SDG standards - Design of water supply network as multi-village scheme considering proximity of population settlement, urban and rural centers, rural institutions and infrastructure access
Task 5: Fund Raising	<p>The purpose is to mobilize adequate resources for investment. An indicative financial requirement for climate resilient WaSH(CRWaSH) is estimated by taking the current per capita cost of Rural piped scheme for multi village schemes, livestock watering, distance, infrastructure, labor availability , technology, borehole depth, etc. for two phases(i.e. phase 1-2018 to2020; phase 2- 2021-2025) into consideration. A total of 4,892,838,875 USD is required for two phases (2018-2025). See subsequent slide for details.</p>
Task 6: Capacity Development for Operation and Maintenance	<p>Capacity development for post construction support and O&M will be undertaken in parallel with the other activities.</p>
Task 7: Implementation	<p>Implementation takes place in parallel with the studies. Phase 1 will involve piloting, assessment & some scaling up while phase 2 will involve big scale replication of the piloting in phase 1</p>

6. Major Stakeholders To be involved In the process

- The Federal and Regional Governments,
- One WaSH National Program (OWNP) participating ministries (MoWIE, MoH, MoE, MoFEC and development partners), Ministry of Agriculture
- CWA Development Partners (WB, DFID, AfDB, UNICE,Fin,Koica..)
- UN organizations and development partners involved in draught emergency,
- TVETCs, HSCs, Research and higher learning institutes,
- the media,
- CSOs including financing enterprises
- the public at large, etc.

7. Sub-Program Management Organization

<i>Level</i>	<i>Governance & Guidance</i>	<i>Oversight & Management</i>	<i>Program Implementation</i>	<i>Program Coordination</i>
<i>Federal</i>	<i>National WaSH Steering Committee</i>	<i>National WaSH Technical Team</i>	<i>Federal Sectors' WaSH Program Management Units (WPMUs)</i> 	<i>National WaSH Coordination Office</i> 
<i>Regional</i>	<i>Regional WaSH Steering Committee</i>	<i>Regional WaSH Technical Team</i>	<i>Regional Sectors' WaSH Program Management Units (WPMUs)</i> 	<i>Regional WaSH Coordination Office</i> 
<i>Special Zones (or other zones where applicable)</i>	<i>Zonal WaSH Management Team</i>		<i>Zonal WaSH Program Management Units –(Water, Health, Education, and ZoFED)</i> 	<i>Zonal WaSH Coordination Office</i> 
<i>Woreda</i>	<i>Woreda WaSH Steering Committee (Woreda Cabinet)</i>		<i>Woreda WaSH Team</i> 	

8. Estimated Financial Requirement By Regions

Region	Estimated Financial Requirement Based on Design Population as of 2017 Including 10% admin and CB expense (USD)	Budget Distribution in Two Phases								Total Budget including 3.5% inflation per annum
		Phase 1 requiremnt including 3.5% inflation per annum			Phase 2 requirement including 3,5% inflation Per annum					
		2018 (USD)	2019	2020 (USD)	2021 (USD)	2022 (USD)	2023 (USD)	2024 (USD)	2025 (USD)	
Afar	277,267,782	28,697,215	43,045,823	43,045,823	43,045,823	43,045,823	28,697,215	28,697,215	28,697,215	286,972,152
Amhara	694,600,554	71,891,157	107,836,736	107,836,736	107,836,736	107,836,736	71,891,157	71,891,157	71,891,157	718,911,571
Oromia	1,719,588,395	177,977,399	266,966,098	266,966,098	266,966,098	266,966,098	177,977,399	177,977,399	177,977,399	1,779,773,990
SNNP	514,956,412	53,297,988	79,946,983	79,946,983	79,946,983	79,946,983	53,297,988	53,297,988	53,297,988	532,979,886
Somali	1,122,897,545	116,219,896	174,329,844	174,329,844	174,329,844	174,329,844	116,219,896	116,219,896	116,219,896	1,162,198,962
Tigray	398,069,865	41,200,232	61,800,347	61,800,347	61,800,347	61,800,347	41,200,232	41,200,232	41,200,232	412,002,313
Total	4,727,380,553	489,283,888	733,925,831	733,925,831	733,925,831	733,925,831	489,283,888	489,283,888	489,283,888	4,892,838,875

9. On-going activities

- Agreed to include CR-WASH as the fifth sub-component of OWNP-CWA and to allocate program budget separately for it in the second phase of the program,
- The federal government has allocated budget for the program this year to carry out water source investigation study, borehole drilling to secure source, and system design,
- Six regions have selected Woredas from hot spot areas (priority 1 Woredas) for phase 1 implementation to carry out studies with the budget allocated by the government,
- 13 Studies in six regions
- Out of 450 Drought prone woredas, 192 under priority woredas(19Mill. Pop)
11 Mil Pop. Have no access to water
- 4.7 Mill Bir expected to serve 1.2mil pop as immediate intervention
- 38 projects planned (CWA&GOV)

10. Support required for the sub-program Implementation

- Technical support for potential water sources investigation, study and design, construction, and O&M
- Technical support in capacity building of the Ministry, regions and other stakeholders
- Financial and logistical support (including finance for O&M of multi-village RPSs)
- Sharing of research outputs and international experiences in addressing arid and semiarid WaSH services

Thank You

