Progress Evaluation Workshop report on Climate-Resilient Water Safety Plan on Building adaptation to climate change in health in least developed countries through resilient WASH

17-18 May, 2010

East Gate International Hotel, Bishoftu Ethiopia

Photo 1 .Workshop participants

The Overall progress evaluation report on CR-WSP from the National point of view up to respective pilot implementation sites at regional perspectives.

Summary Report

Background

Climate resilient water safety plan (CR-WSP) implementation started at Ministry of Water, Irrigation and Electricity as a National level starting from 2014 in order to enhance the capacity of the country in the area of climate change adaptation for the health sector. Ethiopia is among the four countries targeted for Building adaptation to climate change in health in least developed countries through resilient WASH with the technical and financial support of WHO/DFID.So far major progress have been made from national level in facilitating and leading the major directions to enhance the program by selecting six pilotsites in three selected regions and gradually by considering the good practices in the area of the CR-WSP implementation then the project has been expanding into 9 urban utilities and 16 rural water supply and addressing a total of 31 sites in five regions; Oromia, Amhara, SNNPR, Tigray and BenshangulGumuz.

The main objective of the workshop is to assess overall progress of Climate Resilient Water Safety Plans (CR-WSPs) the project implementation and also to present major works and share their best practices from selected water utilities and small community water supplies by awarding and certify those relatively better implementing during the implementation of the tools effectively. Moreover, it has been organized to give a general direction and reach to agreements on CR-WSPs scaling up on design and implementation throughout the country.

DAY ONE

Mr, Eyob Abebe from MoWIE, one of the training facilitator, introduced the objective and the agenda of the workshop (Attached as **Annex A** in page --- the report) briefly and invite Mrs. Semunesh Golla from Ministry of Water, Irrigation and Electricity Hydrology and water Quality directorate director and focal person for CR-WSP project in the Ministry for addressing the opening remark welcome participants and highlights the major impacts of climate change on water sector and mentioning the following issues as follows:-

The government of Ethiopia developed and has been implementing water resources management policy and water sector development program to ensure access to sufficient water of adequate quantity and acceptable quality. The water sector policy underlines the following basic principles including:

- As far as conditions permit, every Ethiopian citizen shall have access to sufficient water of acceptable quality, to satisfy basic human needs.
- Promote practices of efficient and appropriate watershed management to maximize water yields and quality.
- Ensure that watershed management practices constitute an integral part of the overall water resources management.
- Create appropriate mechanisms to protect the water resources of the country from pollution and depletion so as to maintain sustainable development and utilization of water resources
- Promotion of the participation of all stakeholders, user communities; particularly women's participation in the relevant aspects of water resources management.

Thus, Water Safety Plan approach is a tools in the continuous management of risks to water safety from catchment to consumer that help the community to manage risks that threaten the water supply, taking steps (over time) to improve and sustain water safety using available resources. In general, the existing policy and revised Universal Access Plan (UAP-2) has emphasized the issue of water quality and safety.

As you may be aware, Ethiopia is among the four countries implementing the project titled "Building adaptation to climate change in health in least developed countries through resilient Water, Sanitation and Hygiene (WASH)". One of the project outputs involves progress **evaluation** of Climate Resilient Water Safety Plans (CR-WSP) for urban and rural water utilities.

The Ministry of Water, Irrigation and Electricity has been implementing Climate Resilient Water Safety Plan in five regions; Oromia, Amhara, SNNPR,BenshangulGumuz and Tigray at pilot level since 2014 in collaboration with WHO. It is also known that good progress and achievement have been made in developing policy and guideline document on CR-WSP (including legal frame work and implementation guidelines) with pilot implementation at 14 urban utilities and 17 rural water supply sites.

Currently, through WHO and DFID technical and financial support we have been working in the implementation of 'Building adaptation to climate change in health in least developed countries through resilient WASH' project (In particular Output 3: design and implementation of **Climate Resilient Water Safety plan**).

Finally,Mrs. Semunesh noticed that this workshop organized to evaluate the overall implementation progress of CR-WSP ,lessons ,gaps and challenges to put further way forward and to expand the implementation program thought the other regions and also wish, the organizers, and participants a fruit full and officially opened the two day workshop .

Photo 2 Opening Remark by Mrs. SemuneshGolla Ministry of Water, Irrigation and Electricity, Hydrology and Water Quality Directorate Director

Following this all participants from the relevant directorates from MoWIE, the regional Water offices, model selected implementation sites representative and development partners introduced each other briefly including their responsibilities briefly for detail list see **Annex B.**

The workshop conducted based on the schedule in which the progress of CR-WSP at the National level presented by Mr. BalewYibel from MoWIE senior water quality expert describes the main progress of the programme, lessons, gaps and challenges , way forwards and summarized the main points as follows :-

- ✓ Government & WASH development partners of MSF-5 took Water Quality as one undertaking through Water Safety Plans in 2012

- ✓ Taking these in to an account WHO Ethiopian country office with the support of DFID in collaboration of Ministry of Water, Irrigation and Electricity developed

project in title “Building adaptation to climate change in health in least developed countries through resilient Water, Sanitation and Hygiene (WASH)”. One of the project outputs involves progress **evaluation** of Climate Resilient Water Safety Plans (CR-WSP) for urban and rural water utilities.

- ✓ Developing strategic frame work, guideline documents (for urban managed piped drinking water supplies and Community managed rural drinking water supplies) on CR-WSP and implementation at 12 urban utilities and 19 rural water supply sites.
- ✓ Describe successful implementation in 13 sites Five days training was conducted at 13 different sites for a total of 588 participants from 24 selected sites of the country (urban utilities, community managed water supply)
- ✓ Developed detail Plan of action/ improvement plan for the respective site and also baseline assessment data also recorded for respective water supply scheme/sites
- ✓ Brieflydescribing the intervention done in the implementation CR-WSP from the source to point of use such as fencing around the source ,flood protection, plantation , fencing reservoirs, replacement pipes by HDP, better management of water loss,triggering on how to handling & hygiene practice fencing of public points/taps etc.

The presenter focusing the basic lessons during the implementation which summarized as:-

- ❖ Utilities now considering CR-WSP as part of their water supply operation and management system/tools
- ❖ Most pilot implementation sites established mini laboratory & implemented improvement plan & also developed SOP(Standard operational procedure)

- ❖ Convincing officials ,experts CR-WSP tool is a good Substantial approach to address and monitor water quality issues and Health based targets
- ❖ CR-WSP is encountered in the wider context of WASH Program
- ❖ Facilitated better interaction among different stakeholders (Ministry and regional offices and even with development partners)

Finally the presenter describes the challenges and way forwards summarized as follows:-

I. Challenges

- Lacking of information and knowledge on ground water potential
- Information generations for planning and improving actions at large scale
- Limited hazardous event prediction for large scale water shade level
- Limited institutional capacity
- Gaps on interpretation of water quality data and information generation.
- Absence of Institutionalization of CR-WSP activities at all level as a regular program.
- The lack of established reference water quality laboratory
- Less involvement of mobilizing as sectors/actors as expected in the team and implementation process.

II. Way forwards

- Low Community involvement on water quality/ safety in terms of risk factor identification & mitigation.
- CR-WSP a better tool to address the water quality and health targets so better to link one WASH Program expandingthroughout the country.
- Collaboration between Government and other WASH development partner to support the implementation of Climate Resilient Water Safety Plan is highly demanding.
- supports based on identified and assessed risks in the water supply system and incremental improvement plan developed accordingly to ensure safe water supply from source to consumption taking in to account climate change impacts
- Scaling up CR-WSP implementation at large scale incorporating in the wash activities
- Engaging Universities and Research Centers in capacity building and Knowledge management consistency on CR-WSPs
- Dissemination of Vulnerability and Adaptation Assessment report of water sector to Climate Change

The next presentation is the overall progress of CR-WSP in Oromia region by Mr. Million Garedew from Oromia Water, Energy ,Mineral Bureau senior water quality expert and regional CR-WSP focal person briefly describe the efforts performed in the implementation sites the pinpoints summarized as follows :-

- ✓ The first round of the CR-WSP project was implemented in DandiWereda (West Shoa Zone); at Ginchi Town and AsgoriKebele, (2015).
- ✓ It was also started at Bushoftu town (East Shoa Zone) in this round, but lately.
- ✓ In the second round four different water suppliers, one urban water utility, two weredas, and one rural kebele, were selected. (Waliso town urban water utility, YayaGulale, ArsiNagele and HaroWanchiKebele,)
- ✓ The main activities in performed at the first stage conducting technical training CR-WSP in utilities and other sectors (Accordingly, a total of 225 members were attending the technical training in both rounds 104 from urban and 121 from woredas attending the training)
- ✓ Sensitization and advocacy training also conducted284 members were participated

(That means at urban water utilities 228 members and 56 members from Woredas).

The basic intervention in the CR-WSP implementation describes by the presenter as follows:-

- ❖ Preparation of improvement plan based on risk assessment
- ❖ Preparation of SOP (draft) for water quality test
- ❖ Improvement of monitoring systemby water suppliers, for example they organized their own water quality laboratory and fulfilled by equipment and professionals
- ❖ Identifying buffer zones and protecting the area from pollution sources.
- ❖ Rehabilitation of springs and plantation around the catchments.
- ❖ Fencing the reservoirs and public taps in most of the sites based on their plan.

At the afternoon the workshop continues the overall progress implementation of CR-WSP in Amhara region by Ato YilkalMiskir senior water quality expert from Amhara Water, Irrigation and Energy Bureaubriefly describes the main achievement obtained in the region when they implement the programme in addition to that the challenges and the points summarized as follows :-

- ✓ The CR-WSP implementation started in 2015 in first round at Durebetie town water supply and Lalibella Community managed water supply.

- ✓ In the second round the implementation expands to two urban water utilities (DebreMarkos, Debretabour) and three rural water schemes (TachiGaynte,Gozamen and Tarimaber)
- ✓ A total of 153 members were attending the technical training in the region.
- ✓ A total of 297 members were attending sensitization /advocacy training in the region.
- ✓ Organize CR-WSP team in each respective sites develop improvement plan based on risk assessment identified during the training.
- ✓ Protection of water source catchments fencing the source ,plantation, fencing reservoirs ,replacing old pipes with HDP and fencing public points in the implementation sites .

Photo3 Flood protection and fencing around the source at Deberemarkos utility best implementer of CR-WSP in the region

The next presenter from SNNPR Water and Irrigation Development Bureau Ato MelakuWater resource management core process head describe the overall progress of CR-WSP implementation in the region .In the presentation explaining the main achievement in the pilot sites briefly. Moreover, the presenter also designates the initiation to cascade the progamme as a regular activities in the sector throughout the regional water schemes and the main achievements and challenges in the region summarized as follows:-

- ✓ The CR-WSP programme implementation started in one urban utility Butajira and Eli rural water supply service in 2015.
- ✓ The implementation expands to other two urban utilities namely Wolaytasodo and Arbaminchi towns and three rural water supplies (ArbamichiZuryia ,Yemi and Bensa) with a total of seven sites benefitting around 340,022 population in the region .
- ✓ In each implementation sites conducting technical and sensitization of training for relevant stakeholders and organized CR-WSP teams and develop system description of the water system and developed planed based on the identified risk assessment matrix.
- ✓ Perform necessary intervention from the source to point of use in the implementation sites such as flood protection, fencing the source, reservoirs and public points and also replacing of old pipes by HDP.
- ✓ Better initiation in organizing mini water quality laboratory by some urban utilities to perform water quality testing after they started the implementation as their major tasks.
- ✓ The regional water and irrigation development Bureau allocating budget to perform CR-WSP as a regular programme.

Photo 4 Damaged galvanized pipes replaced by HDPE, more than 1.2 km, Wolaytasodo

DAY TWO

Ato HagosGigar from Tigray Water and Irrigation Bureau CR-WSP focal person briefly describes the main achievements and gaps in the implementation during his presentation describes overall progress of the progamme at regional level. The main points cited summarized as follows:-

- ✓ The CR-WSP implementation started in six sites which estimated139,028Population benefited in the region(3 urban utilities namely as Adigrat ,Axum , fasti and 3 rural water service community managed water schemes,Zalanbessa andDeygue).
- ✓ Organize CR-WSP team in each respective site and outline the basic water system map and arranged the necessary information according to the CR-WSP step develop improvement plan based on risk assessment identified during the training.
- ✓ Make diversion ditches for the water sources to protect them from floods.
- ✓ They perform catchment protection to protect the formation of large gully around the source, plantation, fencing the sour
- ✓ Fencing the reservoirs and public points and changed galvanized pipes into HDPE.
- ✓ Some of the implementation sites established mini laboratory test startedcontinuous monitoring water quality test.

Photo 5 Fencing and construction of divert ion ditch at source of water supply of Aksum town before and after implementation.

The next presenter overall progress implementation of CR-WSP Benishangulgumez Region by Ato Lake Dires from Regional water ,Irrigation and Energy Bureau water quality expert serving as CR-WSP focal person in the region narrate the main activities to implement the tools and challenges which are summarized as follows:-

- ✓ The CR-WSP implementation started in four sites which estimated106, 00 population benefited in the region (Assosa urban water utility and three rural water services Meniga, SelgaKebele 23, 24).

- ✓ There is intervention around the source catchment protection and fencing and plantation around the source.

- ✓ Manhole constructed in the main junctions and maintenance old pipes and fittings minimize water loss.

After the presentation suggestions and questions raised by the participants which are summarized as follows:-

- o Technical team member's integration from relevant sectors especially at woreda level is important for the successful implementation of CR-WSP. However, from the previous time supportive supervision conducted, most of the technical team members did not come on board. The work is given only to water office.
- o Limited top management support to the technical team at national, regional and woreda level.
- o Lack of relevant sectors integration at all levels particularly regional and woreda level.
- o Limited technical support from zone and region sector departments and bureaus to Woredas.
- o High staffs turn over both the technical team members and top management members.
- o For the monitoring and verification of CR-WSP undertaking water quality analysis is crucial. However, most CR-WSP piloting woredas did not perform water quality analysis due to absence of the test kit, test kit battery problem, reagent problem, and lack of trained water quality experts in the woredas.

- Still more emphasis should be given buffering zone around the water sources for proper water resource management system /catchment management/, hence the vulnerability of water schemes by climatic factors which also exacerbated by none climatic factors significantly will be affected the whole water supply system. Therefore, more focus in catchment protection in wider context to cope up the problems encountered now and in the future.

Action points

- ❖ All stakeholders, as indicated on the CR-WSP strategic framework and guideline, shall work together to ensure the successful implementation of CR-WSP. Therefore, the regional CR-WSP working group should be strengthened by providing resources to its work and involving all the stakeholders as indicated in the framework and guideline.

- ❖ Advocacy workshop which the government has been conducting at regional and woreda levels should be continued to create a clear understanding of the benefits of the approach and to provide management support for the successful implementation of the CR-WSP thought the country.

- ❖ Integrate/mainstream CR-WSP into the WASH sector plans of One WASH and One WASH Programs as indicated in the CR-WSP strategic framework objectives, and GTP-II section 3, under goal 2.6 & 3.4.
- ❖ CR-WSP should be ***planned, budget, implemented***, ***monitored*** and ***reported*** as other WASH sector activities
- ❖ Water bureau and CR-WSP team at woreda and regional level should follow the implementation of CR-WSP by others partners and stakeholders which implement CR-WSP in the regions.
- ❖ Woredas implement watershed management activities in the wider catchment with the objective of improved recharge & hence improved and sustained yield, flood protection and prevention of contamination of the source due to flood loaded contaminants from the upper catchment

- ❖ Better to consider flood and drought prone area in site selection.
- ❖ Encourage involvement of zonal structure in monitoring and evaluation of CR-WSP activities.

- Undertake regular monitoring and evaluations programs to cascade the tools as a regular activities.
- Develop monitoring and evaluation checklist.
- Shows women roleinevery steps in the implementation and the achievements.
- Need to give more attention for Climate change component.
- Encourage awareness creation in respective offices at all levels from national,regional, zonal and woreda levels.
- Functional of national taskforce to harmonize the activities.
- Conduct Capacity building and community awareness creation sessions on climate resilient water safety plan need to be intensified using different communication tools.
- Relevant sectors such as Health, Agriculture, Environment and other sectors to involve in the implementation of Climate resilient water safety plan.
- Strengthen partnership between Ministry of Water, Irrigation and Electricity, Regional water bureaus, zone and woreda water offices to enhance capacity on Climate resilient water safety Plan.
- Experience sharing between different regions and pilot sites for expanding best practices all over the country.
- Develop road map for continuities
- Scaling up using the following bench as current major issues
    - Become Existing water quality assessment low
    - 39% Non-revenue water which is under international average

Concluding Remarks on the Workshop:

In general participant's reflection on the workshop was excellent. This workshop will definitely be pivotal in building the capacity of participants on climate change adaptation in health through resilient WASH.

Representative from WHO, Ethiopia Ato Solomon acknowledged the workshop facilitators and participants for their active participation throughout the workshop. Moreover, they have underlined that impacts of climate change is currently a global challenge and need to work together through better resilient. Finally as shown the picture below Mrs.SemuneshGolla the representative from MoWIE and Ato Solomon from WHO, Ethiopia Country office Award and certificate for selected water supply servicesfor best implementers of CR-WSP in which one best pilot sites from each the five regional states.

Photo 6 Recognition for best implementers of CR-WSP by Mrs. Semunesh Golla from MoWIE and Mr. Solomon from WHO Ethiopia Country office

Annex A: Agenda

Ministry of Water, Irrigation, and Electricity

Progress Evaluation work shop on Climate Resilient Water Safety Plan Ministry of Water, Irrigation and Electricity in collaboration with WHO

17 May 2018		
Local Time	**Activity**	**Facilitation/Presentation**
2:30-6:30	**Introduction session**	
2:30-3:00	Registration	MoWIE
3:00-3:20	Opening address	MoWIE
3:20-4:00	Presentation of the overall Progress report on CR-WSP at National level	MoWIE
4:000-4:30	Comment and Discussion	Participants
4:30-5:00	Tea break	
5:00-6:00	Over all Progress report implementation of CR-WSP Oromia Region	Region focal person
6:00-6:30	Comment and Discussion	Participants
6:30-8:00	Lunch break	
8:00-9:00	Over all Progress report implementation of CR-WSP Amhara Region	Region focal person
9:00- 9:30	Comment and Discussion	Participants
9:30-10:00	Tea break	
10:00-11:00	Over all Progress report implementation of CR-WSP SNNPR Region	Region focal person
11:00-11:30	Comment and Discussion	Participants
18 May 2018		
2:30-3:00	Registration	MoWIE
3:00-4:00	Over all Progress report implementation of CR-WSP Tigray Region	Region focal person
4:00-4:30	Comment and Discussion	Participants
4:30–5:00	Tea break	
5:00- 6:00	Over all Progress report implementation of CR-WSP Benishangulgumez Region	Region focal person
6:00–6:30	Comment and Discussion	Participants
6:30-8:00	Lunch break	
8:00-9:30	Open discussion on the future work on sustainability and institutionalization of CR-WSP implication	MoWIE
9:30-10:00	Tea break	
10:00-11:00	Closing remark and recognition for best implementers of CR-WSP	MoWIE

Annex B: List of participants

S/N	Name of Participant	Organization	Email	Telephone
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