

Community-Led Accelerated WASH (COWASH)



Guideline for Social, Environmental and Climate Risks Screening and Management

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1 ACRONYMS

CMP	Community Managed Project
COWASH	Community Led Accelerated WASH
CRGE	Climate-Resilient Green Economy
DA	Development Agent
DW	Deep Well
ED	Environmental Degradation
EIA	Environmental Impact Assessment
FHH	Female Headed Household
ESMP	Environmental and Social Management Plan
FTC	Farmer Training Center
HDW	Hand Dug Well
HEW	Health Extension Worker
KWT	Kebele WASH Team
MHH	Male Headed Household
MSEs	Micro and Small Enterprises
MoWIE	Ministry of Water, Irrigation and Electricity
NRM	Natural Resources Management
PAPs	Project Affected Peoples
ROWs	Right of Ways
RPS	Rural Pipe System
RSU	Regional Support Unit
SECRs	Social, Environmental and Climate Risks
SECRSMP	Social, Environmental and Climate Risk Screening and Management Plan
SW	Shallow Well
ToT	Training of Trainers
WASH	Water Supply, Sanitation and Hygiene
WASHCO	Water Supply, Sanitation and Hygiene Committee
WoAg&NR	Woreda office of Agriculture and Natural Resource
WoE	Woreda office of Education
WoH	Woreda office Health
WoW	Woreda office of Water
WPs	Water Points
WWT	Woreda WASH Team

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4 INTRODUCTION

The term 'environment' is used to describe our surroundings

- the natural physical surroundings such as the land, water, climate, plants and animals that we can see
- the places in which we live with their social, cultural, economic and spiritual dynamics (usually called the human environment).

People depend on the natural environment for survival. Our food including water, medicines, shelter, fuels and clothing are all sourced from it.

Environmental degradation (ED) is the consequence of past and present generations using up or damaging natural resources faster than nature can restore them. The effects of climate change are already being experienced. The impact of climate change has been felt the most in developing countries, due to their geographical location and lack of capacity to cope with it. There is a great need to develop projects to respond effectively to the climate change and to ensure that project activities do not negatively impact the environment.

Climate change and environmental degradation affects all types of development projects in all countries. Development projects on WASH must give consideration to the climate change adaptations and environmental degradations as they have an impact on the project's sustainability. Climate change and environmental degradation are proceeding rapidly and are already affecting many rural communities in developing countries like Ethiopia.

Social, Environmental and Climate risk (SECR) assessment is a project planning tool to assess the impacts of individual projects on the local environment and the impacts of the change in the local environment on the project. The assessment helps local government development workers to determine if there is a need to modify the project design or change the project location. It also helps to compare alternative projects to select the least harmful and most beneficial solutions.

In order to ensure that the WASH developments activities are sustainable, it is essential to integrate social, environmental, and climate risks into development interventions. Social, environmental and climate risk assessment and management have been recognized as effective tools for facilitating the inclusion of the principles of sustainable development into development activities.

4.1 OBJECTIVE OF THE GUIDELINE

The objective of the guideline is to establish clear procedures and methodologies for integrating social, environmental and climate risks in planning, reviewing, approving and implementing (construction and post construction) of COWASH project activities. This guideline is prepared to serve as a safeguard instrument to ensure that the Social, Environmental and Climate Risks (SECRs) are properly considered during WASH facility

planning, design and implementation. It guides identification of SECRs, design of appropriate measures, and plans to prevent, minimize, and mitigate adverse impacts and enhance positive outcomes.

4.2 WHO USE THE GUIDELINE?

This guideline will be used by all COWASH woreda implementing sector offices when implementing COWASH activities to screen the WASH facility projects. It also helps to develop and implement management plans to avoid, minimize or mitigate the risks. Regions and zones use it in case where woreda delegate them to conduct the feasibility and design of high-tech water supply technologies such as deep wells..

4.3 COWASH PROJECT ACTIVITIES

Description of project activities is crucial in order to understand which COWASH project activities include social, environmental and climate risks. The main COWASH project activities which have social and environmental risks, and are also affected by the climate change and environmental degradation are:

- construction of new water schemes such as spring developments (on spot, with collection chamber, RPS,..), HDW, shallow wells, and deep wells;
- construction of latrines (school, health post, public centers like FTC, market center, Kebele administration centers, veterinary clinics, etc);
- rehabilitation of water schemes; and construction of stores and offices for micro and small enterprises (MSEs) working on Sanitation Marketing (SM) and spare part supply.

The nature and scale of these activities range from micro to small scale. Their impact on the environment is minimal. However, the environmental degradation, and climate change and variability may significantly affect their sustainability. They do not require full environmental and social impact assessment. However, they require some sort of social, environmental and climate risk analysis, and preparation of management plan to prevent, minimize and mitigate the risks.

5 POLICY AND LEGAL FRAMEWORK

This section of the guideline is important for the WASH practitioners as it helps them to have clear understanding of the existing policies and legal frameworks related to social, environmental and climate risks in planning and implementing development projects. Ethiopia has different policies, strategies, proclamations, regulations and guidelines to ensure that the biophysical and human environments are protected from harm as a results of development intervention, and adapt and mitigate the impact of climate change so as to bring sustainable development.

The major policy and legal frameworks relevant to COWASH project activities are:

- The constitution of Ethiopia,
- Environmental policy of Ethiopia,
- Environmental impact assessment proclamation and guideline,
- Water resources management policy and water sector strategy,
- Land expropriation and payment of compensation: proclamation and regulation,
- National Climate Resilient Green Economy (CRGE) strategy of Ethiopia,
- Climate Resilient (CR) strategy: water and energy sector developed by Ministry of Water, Irrigation and Electricity (MoWIE) etc...

Summary of the aims of these policies, strategies proclamation, regulations and guidelines are outlined below. For the detail of this please refer annex 2 of this guideline.

- Ensure that all persons have the right to live in a clean and healthy environment.
- All persons who have been adversely affected or whose rights have been adversely affected as a result of state programs have the right to commensurate monetary or alternative means of compensation, including relocation with adequate state assistance.
- People have the right to full consultation and to the expression of views in the planning and implementation of environmental policies or projects that affect them directly.
- Improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through the sound management and use of natural, human-made and cultural resources and the environment as a whole so as to meet the needs of the present generation without compromising the ability of future generations to meet their own needs.
- Enhance and promote all national efforts towards the efficient, equitable, and optimum utilisation of the available water resources of Ethiopia for significant socio-economic development on sustainable basis.
- Ensure access to water for everyone fairly and in a sustainable manner, protect water resources and sources, and promote cooperation for the management of river basins.
- Conserve, protect and enhance water resources and the overall aquatic environment on sustainable basis.
- Ensure the integration of environmental considerations in development planning processes, in order to make use of natural resources in a responsible manner to protection and enhance the quality of all life forms.
- Ensure the implementation of appropriate watershed management practices to promote water conservation, maximise water yields, improve water quality, and reduce reservoir siltation and flooding.
- Protect the country from the adverse effects of climate change and build a green economy.

Therefore, all the above principles has to be taken into account and well addressed when planning, designing, and implementing WASH project activities.

6 PROCEDURE FOR SECR SCREENING, AND MANAGEMENT PLAN PREPARATION

Important notes

- When we say environmental impact assessment/study, consideration should be given for both the assessment of impact of the project on the environment (social, physical, biological and cultural environment), and the impact of the environment (degraded environment) on the project sustainability. The impact of the environment on the project should be considered because it may affect the success or long term sustainability of the project. For example, for a water supply project, if the environment/micro-watershed where the water supply project is to be constructed is degraded, we may not get sufficient yield especially during the dry period, and there will be flood hazard due to high run off from that degraded land causing infrastructure damage and pollution of water sources. Expanding gullies and landslides are also another threat to the water schemes to be considered. It is important also to assess possible pollution sources around the water source, and plan for its management. So, the impact of the environment on the project should be taken into account when planning, designing and implementing WASH projects.
- The water source which is to be developed and the technologies selected for water resource development should also be resilient to the impact of climate change and variability. Water sources and WASH facilities are vulnerable to the impact of climate change and variability. The risks of climate change should be identified, appropriate adaptation measures should be planned, implemented and monitored so that the water supply system provide sustainable services to the intended community.
- WASH activities have also social impacts related to land acquisition and property losses. When water schemes are constructed, they may take piece of land from farmer/s. According to the Proclamation **No. 455/2005** (*Expropriation of Landholdings for Public Purposes and Payment of Compensation*) and Regulation **No. 135/2007** (*Regulations on the payment of compensation for property situated on landholdings expropriated for public purposes*), the owner/s of the land (land holder/s) where the water scheme is to be constructed should be consulted meaningfully, compensated (if required) either in cash or kind like land for land or both.
- The other social impact as a result of project development is impact on cultural heritages and religious sites. This may includes construction of water points on or near grave sites, demolishing of local cultural site, and development of holy water for the community water supply. If you construct water points in these sites and abstract water from spiritual water and around grave site, they may not use it, and it will be a waste of resources.

- According to the Environmental Impact Assessment (EIA) guideline, COWASH project activities fall under schedule 2 of the guideline (annex 2). Hence it needs environmental and social analysis and preparation of Environmental and Social Management Plan (ESMP) including its implementation and monitoring of its effectiveness.
- When identifying impacts and evaluating risks you need to have clear understanding of:
 - ✓ The nature and scale of the project activities to cause impact on the social, cultural and biophysical environment,
 - ✓ The vulnerability and adaptive capacity of the project to cope up with the impact caused by climate change and variability, and environmental degradation, and
 - ✓ The vulnerability and adaptive capacity of the environment to cope up with the impact from climate change and project intervention.

6.1 STAGED APPROACH OF SECR SCREENING AND MANAGEMENT PLAN PREPARATION

Risk assessment is the formal process of evaluating the consequences of an impact and probabilities of impact occurring. Therefore, social, environmental and climate risks are determined using the combination of the **consequence** of an impact and the **propability** of the impact occurring. It addresses

- a) what can go wrong,
- b) what the consequences are, and
- c) how likely the consequences are.

It involves four stages:

1. Identifying the impacts
2. Assessing the potential consequences of the impacts
3. Assessing the probability of the impact occurring
4. Evaluating the risk level

6.1.1 Identifying impacts

Impact is an effect on natural and human systems. It generally refers to effect on lives, livelihoods, health, ecosystems, economies, societies, cultures, services, and infrastructure due to hazardous events occurring within a specific time period and the vulnerability of an exposed society or system. For example, the impacts of climate change on geophysical systems, including floods, droughts, and sea level rise, are a subset of impacts called physical impacts. Impact identification is determining which impacts will result from the implementation of each project activities, and as a result of climate change and environmental degradation.

6.1.2 Assessing the potential consequences of the impacts

Consequence of an impact is an adverse effect to health, property, the environment, or other things of value. It refers to the extent to which a project might affect the environment, and the environmental degradation and climate change affect the project sustainability. When determining the consequence of an impact/hazard, consideration should be given to the *intensity/severity of the impact, extent/scale of the impact, and the duration of the impact.*

Intensity is related to the magnitude of the impact in relation to the sensitivity/adaptive capacity of the environment and or the project, taking into accounts the degree to which the impact may cause irreplaceable loss/damage of resources/project activities. It is expressed in terms of relative severity of the impact. Intensity also takes account of other aspects of impact whether or not an impact is reversible and the likely rate of recovery. The value of project activities/WASH facilities should also be taken into account. For example, RPS and hand HDW have no equal value interms of investment. On the orher hand, if RPS serving hundreds of HHs is impacted by climate chnage, and/or environmental degradation, the severity of the impact much more that that of the impact that occures on HDW serving a maximum of 50HHs.

Extent/scale of the impact indicates the geographical area over which the impact of the project on the environment will be experienced. It will also measure the extent of which the WASH facility is impacted by climate change and environmental degradation. A description should be provided as to whether impacts are either limited in extent or affect a wide area or group of people. For example, impacts can either be site-specific, village, kebele, woreda, regional, national or international. The extent of an impact may also be damage to part of the WASH facilities, the whole facility at one site, a number of facilities in adjoining site, and so forth.

Duration of the impact tells the time frame over which the impact will be experienced and its reversibility (0-5years, 6-10 years, greater than 10 years, permanent).

Table 1: Rate, definition of rate and score of the consequence of an impact

Rate level	Definition of rating for impact of the project on environment	Definition of rating for impact of climate change and environmental degradation to the project	Score
Low	<p>Minor effects on biophysical, social and cultural environment so that functions and process of the environment is not affected. Piece/strip of land is taken from farmer, and farmer's livelihood is not affected. Insignificant impact on cultural and religious sites.</p> <p>The impact is site specific. The impact can be managed immediately and is reversible.</p>	<p>Minor damage to WASH facility. Mostly repairable impacts from the impact of environmental degradation and climate change and variability. Though there is pollution source in the area, it is not a threat to the water source or scheme. The catchment is well protected and the size of the catchment is sufficient enough to serve the beneficiaries of the water scheme to be constructed. The facility is giving service.</p> <p>The hydrogeological environment is good interms of storage capacity of the aquifer, water quality, reliability of yield/transmissivity, digability, stability, and others.</p> <p>The impact is limited on the project specific site, and only parts of the facility is impacted. The impact can be managed immediately and is reversible.</p>	1
Medium	<p>Moderate effects on biophysical, social and cultural environment but not affecting the ecosystem function though some impact occur (for example water and soil are polluted but not serious, no significant depletion of freshwater water resource, low deforestation and no wildlife and plant species loss, no drainage of wetlands, and so forth). Impact beyond the project site but not far beyond adjoining sites.</p>	<p>The WASH facilities are flooded, and the flood cause damage to the facility but it still is giving service. There is reduced yield due to drought, insufficient recharge or insufficient catchment size and or catchment degradation. There is also pollution source that may affect the quality of the water but is easily manageable with appropriate mitigation measures.</p> <p>The hydrogeological environment is average interms of storage capacity of the aquifer, water quality,</p>	2

Rate level	Definition of rating for impact of the project on environment	Definition of rating for impact of climate change and environmental degradation to the project	Score
	<p>Moderate cultural and religious sites impact (such as demolition of cultural and religious structures by the construction water points, construction of water points on or near grave sites , development of spiritual water for the community water supply, but all these impacts are not serious).</p> <p>Land acquisition and property losses of farmer/farmers affected their livelihood moderately(the land taken/properties lost is relatively big so that the income from that farm/land will affect the income/livelihood of the farmer/farmers but not serious). The impacts lasts from 0-5 years, and are reversible.</p>	<p>reliability of yield/transmissivity, digability, stability, and others.</p> <p>These impacts are beyond the project site but not far beyond adjoining sites. The whole facilities may be impacted. Beneficiary community using that facility will be affected (minor water quality related health problem). It is medium term effect (lasts up to 5 years).</p>	
High	<p>Biophysical, social and cultural functions and processes are altered seriously to the extent that it will temporarily ceases (for example water and soil are polluted, depletion of freshwater water resource causing water shortage, deforestation causing wildlife loss and loss of plant species, drying of wetlands, and so forth).</p> <p>Land acquisition and property losses of farmer/farmers affected their livelihood seriously (the land taken/properties lost is relatively big so that the income from that farm/land will affect the income/livelihood of the</p>	<p>The WASH facilities temporarily stopped functioning due to contamination, infrastructure damage due to flood, land slide and gully expansion. The yield is reduced highly and facility does not function due to drought, insufficient recharge or insufficient catchment size and or catchment degradation.</p> <p>The hydrogeological environment has problem interms of storage capacity of the aquifer, water quality, reliability of yield/transmissivity, digability, stability, and others (low yielding aquifer, it is rocky to dig, etc...).</p> <p>Beneficiary communities using those facilities will be</p>	3

Rate level	Definition of rating for impact of the project on environment	Definition of rating for impact of climate change and environmental degradation to the project	Score
	<p>farmer/farmers). It may impact the environment at Kebele level. It may last from 6-10 years.</p>	<p>seriously affected (major water quantity or quality problem causing health problem). Impact a number of facilities within a kebele, and sometimes beyond kebeles. It may lasts from 6-10 years.</p>	
Very high	<p>Biophysical, social and cultural and religious environment functions and processes are altered very seriously to the extent that it will permanently cease (water and soil are highly polluted, depletion of freshwater water resource, deforestation causing wildlife loss and loss of plant species, drying of wetlands, and so forth). Impact which may have more than one kebele effect concern, and it may be woreda level extended impact.</p> <p>Land acquisition and property losses of farmer/farmers affected their livelihood seriously (the land taken/properties lost is relatively big so that the income from that farm/land will affect the income/livelihood of the farmer/farmers seriously).</p> <p>The impact may be permanent.</p>	<p>The WASH facility permanently damaged and ceases giving service due to climate change and environmental degradation (flood, land slide, gully expansion and wider catchment degradation), and contamination.</p> <p>Beneficiary communities using those facilities will be seriously affected (water quality related health problem).</p> <p>The hydrogeological environment has serious problem interms of storage capacity of the aquifer, water quality, reliability of yield/transmissivity, digability, stability, and others (low yielding aquifer, it is rocky to dig, etc...).</p> <p>Impacts a number of facilities even beyond Kebele, and may be woreda level extended impact (intense rainfall that cause flooding and infrastructure damage of a number of water points located in more than a kebele, pollution of these water points by flood, draught that results shortage of water in a number of waters located beyond one kebele, series of land slides and gullies found in the adjoining kebeles</p>	4

Rate level	Definition of rating for impact of the project on environment	Definition of rating for impact of climate change and environmental degradation to the project	Score
		damage a number of water points, mictocatchment highly degraded resulting less recharge and hence dry during the driest period). The impact may be permanent.	

6.1.3 Assessing the probability of the impact occurring

The probability of occurrence of an impact is the description of likelihood that the impact is occurring. It is indicated as improbable, possible, probable, and definite as indicated in the table 2 below.

Table 2: Probability – the likelihood of the impact occurring

Rating	Definition of rating	Score
Improbable	The possibility of the impact to occur is very low, either because of design, historic experience or implementation of adequate corrective action. Could occur at some time but has not been observed; may occur only in exceptional circumstances.	1
Possible	There is a distinct possibility that the impact will occur.	2
Probable	It is most likely that the impact will occur.	3
Definite	Almost certain to occur or may have already occurred. The impact will occur regardless of any prevention or corrective action.	4

6.1.4 Evaluating the risk level

Having identified the impacts involved, they need to be assessed or measured in terms of the chance (probability) they will occur and the severity or amount of loss or damage (consequence) which may result if they do occur. Therefore, risk can be rated by:

- *the chance of the impact happening – 'probability'*
- *the amount of loss or damage if the impact happened – consequence).*

$$\text{Risk of an impact} = \text{Consequence of impact} \times \text{Probability of impact}$$

See table 3 below for the risk evaluation.

Table 3: Risk level rating

		Probability			
		Improbable (1)	Possible (2)	Probable (3)	Definite (4)
Consequence	Low (1)	Low (1)	Low (2)	Medium (3)	Medium (4)
	Medium (2)	Low (2)	Medium (4)	High (6)	High (8)
	High (3)	Medium (3)	High (6)	Very high (9)	Very high (12)
	Very high (4)	Medium (4)	High (8)	Very high (12)	Very high (16)
Risk score		≤2	3-4	6-8	≥9
Risk level		Low	Medium	High	Very high
Definitions of risk levels	Low	The potential impact may not have any meaningful influence on the decision regarding the proposed activity/development. It is not a priority but need monitoring of the impact.			
	Medium	Medium to long term priority and needs attentions. Risk is of marked concern that will necessitate action for mitigation that need to be demonstrated as effective. Social, environmental and climate risk management plan (SECRMP) including monitoring plan should be prepared.			
	High	The risks under this category are perceived as unacceptable and a strategy is required to manage the risk like SECRMP including monitoring plan.			
	Very High	The proposed activity should only be approved under special circumstances. It may need further assessment and need preparation of the SECRMP including monitoring plan.			

6.2 PREPARE SECRSMP

Table 4 below is template for Social, Environmental and Climate Risk Screening and Management Plan (SECRSMP). It contains the project activities, the impacts, consequence of the impacts, probability of the impact, risk, risk mitigation measure, institutional arrangement to implement the mitigation measures, schedule to implement the plan and the cost of implementation of the mitigation measures. The table shows how to screen a risk and prepare management plan. Table 4 is included in this document (annex 3) by filling all the elements of the table except risk (col. 3-5) and cost columns (col. 9). This is done to make easy for woreda team of experts, who are responsible for the screening and management plan preparation. Basically, all the columns of the table should be filled by the Woreda experts. What is expected from Woreda team of experts is to fill the risk and cost columns. Therefore, Woreda experts should use annex 3 when screening and preparing management plan. SECR management plan is not a one time activity. It is a continuous process. When monitoring the implementation of the prepared plan, additional risk may be encountered for which management plan should be prepared, implemented and monitored.

Table 4: SECRSMP template

Region: _____; Zone: _____; Woreda: _____; Kebele: _____; Site: _____; WP: _____

No	Risk Screening				Risk Management				
	Project activity (1)	Impact (2)	Risk			Mitigation measures (MMs) (6)	Responsible body (7)	When to implement (8)	Cost for MMs (9)
			C (3)	P (4)	RL (5)				
I	Impact of the project on the Biophysical Environment								
1									
2									
3									
II	Impact of the project on the Social Environment								
1									
2									
III	Impact of Environmental Degradation on the Project Sustainability								
1									
2									
3									
IV	Impact of Climate Change on the Project Sustainability								
1									
2									

N.B: C: Consequence of an impact; P: Probability of the impact occurring; and RL: Risk Level (L-Low, M-Medium, H-High, & VH-Very High).

6.3 PREPARE SECRM MONITORING PLAN

Having SECRSMP, social, environmental, climate risk management (SECRM) monitoring plan is required to assess whether the various mitigation measures planned in the SECRMP are implemented, mitigation measures are effective, and to take action to manage un-anticipated impacts or other unforeseen changes. Table 5 below shows the template for SECRM monitoring plan. Example of SECRM monitoring plan is included in Annex 4 of this guideline. Monitoring plan is also continuous process, and should be prepared and accomplished.

Table 5: SECRM monitoring plan template

Region: _____; Zone: _____; Woreda: _____; Kebele: _____; Site: _____; WP: _____

No	Potential Impacts that need mitigation ^c	Description of mitigation (elements to be monitored) ^d	Responsible body	Indicators to be monitored	Monitoring method	When to monitor	Monitoring Cost
I	Impact of the project on the Biophysical Environment						
II	Impact of the project on the Social Environment						
III	Impact of Environmental Degradation on the Project Sustainability						
IV	Impact of Climate Change on the Project Sustainability						

^c: Taken from SECRSMP table 4 above (col. 2)

^d: Taken from SECRSMP table 4 above (col. 6)

NB: Table 4 and 5 should be documented at WASHCO, and in respective Woreda WASH sector office (in water office for community WASH, in education office for school WASH, and health office for health WSSH project activities).

6.4 TEMPLATE TO COLLECT DATA ON LAND ACQUISITION AND PROPERTY LOSSES

If COWASH project activities involve land acquisition and property losses, the land holder/s should be consulted, and agreement should be reached before the commencement of the construction. In most cases, farmer/s is/are willing to provide land for free for the construction of WASH facilities. In some cases, if the land taken and property lost is big, their livelihood will be affected and may need compensation. In both cases, the land owner/s should be consulted meaningfully and legally binding documents (the minutes of consultation, and table 6 below filled) should be signed and documented at Woreda Water Office, Kebele administration, WASHCO and the land owner/s. This will be done together with Kebele/subkebele administrator. The minutes of the consultation should be signed by the community including WASHCO members and the land owner/s. If the water point is constructed on communal land which belong to the beneficiary community, table 6 will not be filled and documented. That means, table 6 shown in the next page will be filled and documented along with the minutes of consultation, if and only if land taken is private land. The template for the minutes of community consultation is included in annex 5 of this guideline.

Table 6: Land acquisition and property lose risk management information data collection form

Region: _____; **Zone:** _____, **Woreda:** _____; **Kebele:** _____; **Site:** _____, **WP:** _____

1. Is land taken for the WASH Facility construction private or communal? Private: <input type="checkbox"/> Communal: <input type="checkbox"/>									
2. If private farmer/s land is taken, fill the information below.									
Name of the farmer/s (MHH/FHH)	# of HHs	Amount expropriated/taken (m ²) including the ROWs for footpath, fencing...		% of land expropriated from what the farmer/s has/have in total	Risk level (from table 4)	Risk management			
		Crop land	Grazing land			Voluntarily given	Compensated		
							In kind/land (m ²)	Cash (birr)	Both (m ² , & birr)
1.									
2.									
3.									
Total									
Name and signature of parties									
Parties		Name			Signature		Date	Remarks	
1. Land Ownwer									
2. WASHCO chairperson									
3. Kebele Administrator									

7 INSTITUTIONAL ARRANGEMENTS

7.1 SECR SCREENING, SECRMP PREPARATION, IMPLEMENTATION AND MONITORING

Woreda water office is the lead institution for SECR screening, preparation of SECRMP, implementation of the plan and monitoring activities for community water points. Woreda education and health offices are also responsible for the same activities in their institutional WASH activities. Though these institutions take the lead in their respective WASH project activities, all the SECR Screening, management plan preparation, implementation and monitoring activities will be done by woreda team of experts. The team of experts includes water supply engineer and geologists/hydrogeologist from Water Office (or technical experts that do these jobs if these experts are not available), NRM expert from Agriculture and Natural Resources office), environmental health expert from Health Office. Kebele health extension workers and NRM Development Agents (DA) are also part of the woreda technical team at kebele level. The beneficiary community and WASHCO should be fully involved in all of these processes in terms of providing information during screening and management plan preparation, contributing for the implementation of the management plan (cash, labor, in kind or both), and monitoring activities. SECR screening should be done as part of the field appraisal activity.

Woreda office of Agriculture and Natural Resources and its structure at Kebele level (NRM DA) is responsible for the implementation of mitigation measures related to NRM, ground water recharge and flood protection structures. Woreda health office and its structure at Kebele level (HEW) is also responsible for the implementation of environmental health related mitigation measures like pollution prevention and control. Memorandum of understanding (MoU) may be needed with these offices. However, beyond the MoU, these offices should come to on board through inviting on WWT meetings, lobbying, inviting on trainings and works should so that they will be part of the process. This is true at regional level with these offices.

RSU, regional water bureau and zone water department will provide technical support in accomplishing all the above mentioned activities.

7.2 REPORTING AND DOCUMENTATION

CMP supervisor is responsible to prepare quarterly and annual report on the performance of SECR management and submit to RSU. This will be done as part of the COWASH performance reporting (under output 1.5). The CMP also receive the same report from Woreda office of education and health, and compile the report including water office one and send to RSU. RSU compile and send to Federal COWASH.

Both woreda and region will review the performance of social, environmental and climate risk screening and management having annual performance review workshop either together with the COWASH annual performance review workshop or by its own. The report of the review workshop will be summarized and send to FTAT.

8 TRAINING

For the successful implementation of the SECR management activities, relevant institutions' experts at region, zone, woreda, and kebele level should get the required training and awareness. The beneficiary community should also get awareness on how to manage risk and their role in this regards. Regions will first take ToT on this guideline for three days at federal level, and will cascade the training to zone and woreda along with CMP appraisal training. Woreda technical team who took the training will aware Kebele level technical experts (NRM experts and HEW), WASHCO and the beneficiary community. See table 7 below for the experts that will participate on the training, and their institutions.

Table. 7: Experts to be trained on SECRSM at different level

S. No	Level of training	Proposed field specialization of experts	Bureau	Quantity per region/zone /woreda	Total	Remark
1	Federal ToT: For regional experts					
		Water supply engineer	Water Bureau	1	5	
		Hydrogeologist	Water Bureau	1	5	
		NRM expert	Ag&NR Bureau	1	5	
		Team Leader/CMPS	RSU	1	5	
		CMP specialist	RSU		2	No CMP specialist in Amhara, BGRS & Oromia
		CBS	RSU	1	5	
		Zonal advisors from Amhara region	RSU	2	2	Only in Amhara
	Subtotal				29	
2	Regional level: For zone and woreda experts					
	From Zone	Zone water supply engineer	Zone water department	1/zone		This is per zone participant
		Zone NRM expert	Ag&NR	1/zone		Only for Amhara
		Zone Environmental health expert	ZoH	1/zone		Only for Amhara
	From Woreda	Water supply expert and CMP supervisor	WoW	2/woreda		
		Hydrogeologist/geologist	WoW	1/woreda		
		NRM expert	WoAg&NR	1/woreda		
		COWASH Focal Person	WoH	1/woreda		
	COWASH Focal Person	WoE	1/woreda			

NB: 1. Region will provide the training for zone and woreda experts when they are giving CMP/appraisal training by adding one additional day for the SECRSM training.

2. Woreda will orient NRM DAs and HEWs when they are giving KWT training on CMP managment.

3. In Amhara region as indicated table 7 above, NRM and environmental health experts are participants from Zone for the regional level training. But not the case for the other regions. This is because, in Amhara region, the strategy is that region give training to Zone and zone give to Woreda. So, only the water supply engineer cannot cascade to woreda.

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ANNEX 1: DEFINITION OF KEY TERMS

Adaptive Capacity: Adaptive capacity is defined as the ability of a system [human or natural] to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.

Climate: Climate is "average" weather for a given place or a region. It defines typical weather conditions for a given area based on long-term averages. For example, on average, Addis Ababa is expected to be sunny in May, rainy in July and cold in January but there may be annual deviations.

Climate Change: According to IPCC definition Climate Change refers to any change in the climate over time, whether due to natural variability or as a result of human activity.

Climate variability: It refers to the climatic parameter (temperature, rainfall,...) of a region varying from its long-term mean. Every year in a specific time period, the climate of a location is different. Some years have below average rainfall, some have average or above average rainfall.

Ecosystem: An ecosystem is a dynamic complex of plant, animal and microorganism communities and their non-living environment interacting as a functional unit.

Ecosystem functions: Ecosystem functions/services are the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth.

Environmental degradation: It is the deterioration of the *environment* through depletion of resources such as air, water and soil; the destruction of ecosystems and the extinction of wildlife. It is defined as any change or disturbance to the *environment* perceived to be deleterious or undesirable.

Impact: It is an effect on natural and human systems. It generally refers to effect on lives, livelihoods, health, ecosystems, economies, societies, cultures, services, and infrastructure due to hazardous events occurring within a specific time period and the vulnerability of an exposed society or system. For example, the impacts of climate change on geophysical systems, including floods, droughts, and sea level rise, are a subset of impacts called physical impacts.

Resilience: Resilience can be defined as the ability of a system [human or natural] to resist, absorb and recover from the effects of hazards in a timely and efficient manner, preserving or restoring its essential basic structures, functions and identity.

Risk: Risk is the probability that negative consequences may arise when impacts interact with vulnerable areas, people, property and environment.

Sensitivity: Sensitivity is the degree to which a given community or ecosystem is affected by climatic stresses. For example, a community dependent on rain-fed agriculture is much more sensitive to changing rainfall patterns than one where mining is the dominant livelihood. Likewise, a fragile, arid or semi-arid ecosystem will be more sensitive than a tropical one to a decrease in rainfall, due to the subsequent impact on water flows.

Vulnerability: It is the degree to which a system (natural or human) is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude and rate of climate change and variation to which a system is exposed, its sensitivity, and its adaptive capacity.

Weather: Weather is the current atmospheric condition in a given place. This includes variables such as temperature, rainfall, wind or humidity. Anyone looking outside can see if it is raining, windy, sunny or cloudy and can find out how hot it is by checking a thermometer or just feeling it. Weather is what is happening now, or is likely to happen tomorrow or in the very near future.

ANNEX 2: POLICY AND LEGAL FRAMEWORKS

The Constitution of Ethiopia, 1995

The Constitution has an exclusive article on the environment and therefore states in its Article 44 Sub Article 1 that: "All persons have the right to live in a clean and healthy environment." Furthermore, concerning compensation to Project Affected Peoples (PAPs), Sub Article 2 provides that: "All persons who have been adversely affected or whose rights have been adversely affected as a result of state programs have the right to commensurate monetary or alternative means of compensation, including relocation with adequate state assistance." Regarding public consultation and participation, in Article 92 sub Article 3, it states that: "People have the right to full consultation and to the expression of views in the planning and implementation of environmental policies or projects that affect them directly."

Environmental Policy of Ethiopia, 1997

The overall policy goal is to improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through the sound management and use of natural, human-made and cultural resources and the environment as a whole so as to meet the needs of the present generation without compromising the ability of future generations to meet their own needs.

The principal features of the Environmental Policy are:

- ✓ Provides for protection of human and natural environments,
- ✓ Provides for an early consideration of environmental impacts in projects/program design,
- ✓ Recognizes public consultation,
- ✓ Includes mitigation and contingency plans,
- ✓ Provides for auditing and monitoring,
- ✓ Establishes legally binding requirements, and
- ✓ Institutionalizes policy implementation.

Ethiopian Land Tenure laws

Related to land acquisition and property losses due to project development, there is one proclamation and one regulation as indicated below. The proclamation and regulation strongly support that projects plan must include attractive and sustainable resettlement strategies to the people who are going to be displaced as a result of the development plan, and they have to be meaningfully consulted, fully convinced, compensated and have to participate in all phases of the project implementation. It is the right for existing land owner to be compensated fully and satisfactorily if land is expropriated by the state for public purpose. Related to this, there are one proclamation and one regulation to enforce the proclamation. These are:

- ***Proclamation No. 455/2005: Expropriation of Landholdings for Public Purposes and Payment of Compensation:*** The proclamation address issues related to *Public domain Entitlement, Property laws, Land asset classification and valuation, customary laws, Procedures for expropriation, Procedures for grievance redress.*

- **Regulation No. 135/2007:** Regulations on the payment of compensation for property situated on landholdings expropriated for public purposes: It addresses regulation for the payment of compensation for property situated on landholdings expropriated for public purposes. It describes the detail implementation procedures in when settling issues related to public domain entitlement, property laws, land asset classification and valuation, customary laws, procedures for expropriation, procedures for grievance redress.

Ethiopian Water Resources Management Policy, 1999

The overall goal of the national water resources management policy is: *to enhance and promote all national efforts towards the efficient, equitable, and optimum utilisation of the available water resources of Ethiopia for significant socio-economic development on sustainable basis.* The policy aims to ensure access to water for everyone fairly and in a sustainable manner, protect water resources and sources, and promote cooperation for the management of river basins. The following are five major water management policy objectives.

- Development of the water resources of the country for economic and social benefits of the people, on equitable and sustainable basis.
- Allocation and apportionment of water resources based on comprehensive and integrated plans and optimum allocation principles that incorporate efficiency of use, equity of access, and sustainability of the resource.
- Managing and combating drought as well as other associated slow on-set disasters through, *inter-alia*, efficient allocation, redistribution, transfer, storage, and efficient use of water resources.
- Combating and regulating floods through sustainable mitigation, prevention, rehabilitation and other practical measures.
- Conserving, protecting and enhancing water resources and the overall aquatic environment on sustainable basis.

Environmental Impact Assessment Proclamation No 299/2002

This Proclamation establishes the requirement of an Environmental Impact Assessment (EIA) procedure for projects, and provides the processes and procedures to be followed by project owners with respect to EIAs. As per this proclamation, the objectives of the EIA process are:

- Integration of environmental considerations in development planning processes, in order to make use of natural resources in a responsible manner; and
- Protection and enhancement of the quality of all life forms.

The Environmental Impact Assessment (EIA) Guideline, May 2000

The EIA guideline is the basic foundation for environmental and social studies of development projects. It provides basic framework of potential impacts of various sectors of development activities. The aim of the guideline is to guide all stakeholders that prepare,

review and approve EIA report. In addition, it also classifies the type of development projects into three based on whether or not a full EIA is required as indicated below.

- **Schedule 1:** Projects which may have adverse and significant environmental impacts, and may, therefore, require full EIA.
- **Schedule 2:** Projects whose type, scale or other relevant characteristics have potential to cause some significant environmental impacts but not likely to warrant an environmental impact study. Water and Sanitation projects are under this schedules/category. Activities under this schedules need preparation of Environmental and Social Management Plan (ESMP) with recommended measures to prevent, minimize, mitigate or compensate for adverse impacts. This needs some environmental and social analysis of the project activities.
- **Schedule 3:** Projects which would have no impact and does not require environmental impact assessment.

For the detail, please refer the EIA guideline.

Environmental Pollution Control Proclamation No 300/2002

This proclamation established fundamental principles and guidelines to control environmental pollution. These major principles are: the protection of the environment in general and the safeguarding of human health and well being, as well as the maintaining of the biota and the value of nature, in particular, are the duty and responsibility of all. It is appropriate to eliminate or, when not possible, to mitigate pollution as an undesirable consequence, or social and economic development activities.

Ethiopian Water Sector Strategy, 2001

The main objective of the water strategy is to translate the national water resources management policy into action. Under this strategy, section 4.1.2, #2, it emphasis the implementation of appropriate watershed management practices to promote water conservation, maximise water yields, improve water quality, and reduce reservoir siltation and flooding.

Again, in the same strategy, section 4.1.10, # 1&2, it states that environment conservation and protection will be treated as an integral part of the water related projects. Towards this aim, Environmental Impact Assessments will be made mandatory for all water resources projects. In this same section, the strategy also indicate that incorporate environmental studies as a component of the studies to be carried out for water resources development projects.

CRGE Strategy of Ethiopia, November 2011

Ethiopia is experiencing the effects of climate change. The impact of climate change is more pronounced in the agriculture, water, and forest sectors. The Government of the Federal Democratic Republic of Ethiopia, recognizing the effect of climate change in all of the development sectors, has developed the Climate-Resilient Green Economy (CRGE) strategy

to protect the country from the adverse effects of climate change and to build a green economy that will help realize its ambition of reaching middle income status before 2025.

Climate Resilient Strategy: Water and Energy

Climate resilience is the ability to cope with, and manage the change brought by weather stresses and shocks. A climate resilient economy is one in which the negative impacts of climatic variability and climate change are minimized and the opportunities realized so that the national growth and development objectives of the country are achieved and sustained. The Climate Resilience Strategy for the water and energy sector, prepared by the MoWIE, sets out the implementation priorities for the Ministry of Water, Irrigation and Energy, building on the Green Economy Strategy. The strategy has three objectives:

- ✓ *Identify the economic and social impacts of current climate variability and future climate change on water and energy in Ethiopia (The Challenge).*
- ✓ *Identify priorities for the water and energy sectors to build climate resilience and reduce the impact of current climate variability and climate change (The Response).*
- ✓ *Map the necessary steps to finance and implement measures in the water and energy sectors to build climate resilience in Ethiopia (Implementation) and deliver an integrated Climate Resilient Green Economy.*

ANNEX 3: SECRSMP TEMPLATE

No	Risk Screening				Risk Management				
	Project activity	Impact	Risk			Mitigation measures (MMs)	Responsible body	When to implement	Cost for MMs
			C	P	RL				
I	Impact of the project on the Biophysical Environment								
1	Construction of water points (HDWs, SW, SD, DW), and latrines	Depletion of ground water due to a number of water point constructed (cumulative impact).				Develop and implement watershed management plan to improve the ground water recharge. Aware the community on water conservation.	WoW, WoANR, community, WASHCO	Throughout the project life	
2		Land slide and gully formation/erosion around the spring capping structure, collection chamber, and latrines as a result of soil excavation work.				Construct retaining wall/protection structure around the spring capping structure and collection chamber. Construct cut off drain above these structures.	WoW, community, WASHCO	During construction	
3		Poor construction quality leads to leakage of water which is wastage of scarce water resource, and pollution of water.				Ensure the construction quality through construction supervision, checking the construction materials, and contracting to experienced Artisan especially for structures which needs it.	WoW, community, WASHCO	During construction	
4		Well water contamination through the well during construction, and as a result of standing water around the well.				Minimize well contamination through educating Artisans. Continuous awareness creation to the community on the cleaning of standing water around the water point/well. Disinfect wells before use. Construct drainage ditch to drain water around the water points especially wells.	WoW, WoH, WoEd, community, WASHCO	During and after construction.	
II	Impact of the project on the Social Environment								
1		Water points are not comfortable to fetch, carry and transport water as the site, technology and design are not comfortable for women and children.				Consult women meaningfully and take into account the opinion of women with respect to site selection, technology selection and design.	WoW, WoWA, community	During site selection, design and construction.	

No	Risk Screening				Risk Management				
	Project activity	Impact	Risk			Mitigation measures (MMs)	Responsible body	When to implement	Cost for MMs
			C	P	RL				
1		Occupational health and safety problem during the construction of water points especially HDWS, SWs & DWs. Artisan and community members may also get injured during the construction time. Animals and human being may enter into wells and die. Abandoned wells also creates to children and animals.				Safety education should be given to the community, WASHCO and Artisans. Prevent the approach of children and animals to the wells till completed. Put temporary fence around the well. If possible safety equipments like helmet shall be dressed by Artisan and excavators. Abandoned wells should be refilled/backfilled by the cart away soil.	WoW, WASHCO, community	During construction.	
3	Construction of water points, public latrines; and store & offices for MSEs.	Land acquisition and property losses of farmers affecting their livelihood.				Consult with the land owner/owners, and settle it before the commence of construction. The agreement should be signed and documented (see section 6.4 of this guideline).	WoW, Kebele, WASHCO, Land owner/s community	During the field appraisal	
III	Impact of Environmental Degradation on the Project Sustainability								
1	Wider catchment degradation: No/limited vegetation cover, and highly eroded. Land slide around water points. Gully within 150m of radius from the water point. Sloppy topography (slop	Water points damaged by flood, land slide and gully. Decrease water yield leading water shortage. Drainage of well water if the well is located above the gully head and well sited in a sloppy area (gullies suck water from springs, dug-wells and hand pumps). All these lead the community to go to unsafe water source, and hence health risk, and lose of capital				Relocate the site of the water point away from flood prone areas, land slide, and gullies at least 150m away from land slide. Develop and implement watershed management plan: construct cut off drain, check dam, terrace, ground water recharge structure, implement biological conservation measures, and others. Construct protection structure like retaining wall, and vegetative measures to avoid the land slide. Design and construct water supply structures in such a way that they resist	WoW, WASHCO, WoANR, community	During design, construction, and the rest of the project life.	

No	Risk Screening				Risk Management				
	Project activity	Impact	Risk			Mitigation measures (MMs)	Responsible body	When to implement	Cost for MMs
			C	P	RL				
	drop off at least 10m within 150m of radius).	resources.				the impact of land slide.			
2	Intensive agronomic practices that use agrochemicals including artificial fertilizer and pesticide	Water source contaminated with chemical, and result health risk to the community				Promoting Integrated Pest Management approaches to manage pests. Treatment of the catchment upstream of the water point where agronomic practices is exercised .	WoW, BoANRM, the community	During the whole project life.	
3	Open defecation around the water points; latrines are constructed not far from the WPs, and waste dumping near water point.	Water source contaminated with microbial and chemical, and result health risk to the community.				Maintain the minimum 30m recommended distance between the latrine and the water source. If that is not possible, upgrade latrines from open pit latrines to either sealed pit latrines or latrines with septic tanks. Aware the community to construct and use latrine.	WoW, WoH, WASHCO, the community	During field appraisal, and the rest of the project life.	
IV Impact of Climate Change on the Project Sustainability									
1	Intensive rainfall	Inundation of spring and HDW-groundwater contaminated by incoming flood. Damage to infrastructure e.g. from landslips, gullies due to high rainfall and resulting flood. As a result water quality deteriorate and cause public health risk.				Implement watershed management activities in wider catchment to reduce severity of floods. Site well away from latrines and other sources of groundwater pollution. Seal any abandoned wells to protect groundwater quality. Relocate the site of the water point away from flood prone areas. Raise the well head and seal the well to prevent any polluted flood water from entering the well. Raise awareness of risks from water quality changes during & after flooding, and need for household water	WoW, WoH, WoEd, BoANR, WASHCO, the community	During field appraisal, design, construction and the rest of the project life.	

No	Risk Screening				Risk Management				
	Project activity	Impact	Risk			Mitigation measures (MMs)	Responsible body	When to implement	Cost for MMs
			C	P	RL				
					treatment/use of safer alternatives. Regularly check and repair infrastructure. Conduct sanitary inspection.				
2	Decreased rainfall	Seasonal or drought-related shortages – insufficient water for demand. Drought resulted in lowering of the groundwater table and as a result HDW, spring and shallow well dried Public health risk from water rationing/cut-backs, or use of alternative (unsafe) sources Public health risk from deteriorating water quality at end of dry season or drought.				Estimate spring yield and catchment size needed to meet current and projected demand. Collate secondary information on geological conditions to understand water availability & supplement with field observations. Analyse seasonal yields of alternative sites with community – select most reliable source(s). Increase capacity of collection and storage facilities. Investigate management practices that might increase infiltration and groundwater recharge – in vicinity of water source and in wider catchment. Monitor water quality during high risk periods at end of dry season or drought.	WoW, WoH, WoEd, BoANR, WASHCO, the community	During field appraisal, design, construction and the rest of the project life.	

N.B: C: Consequence of the impact occurring; P: Probability of the impact occurring; RL: Risk Level (L-Low, M-Medium, H-High, & V.H- Very High)

ANNEX 4: SECRSM MONITORING PLAN EXAMPLE

No	Potential Impacts that need mitigation ^c	Description of mitigation (elements to be monitored) ^d	Responsible body	Indicators to be monitored	Monitoring method	When to monitor	Monitoring Cost
I	Impact of the project on the Biophysical Environment						
1	Land slide and gully formation/erosion around the spring capping structure, collection chamber, and latrines as a result of soil excavation work.	Construct retaining wall/protection structure around the spring capping structure and collection chamber. Construct cut off drain above these structures.	WoW, community, WASHCO	The presence of these structures, land slide and gully formation...	Observation	During the construction time, and after the heavy rainfall	XXXbirr (operational cost- per diem and fuel cost)
II	Impact of the project on the Social Environment						
1	Land acquisition and property losses of farmers affecting their livelihood.	Consult with the land owner/owners, and settle it before the commence of construction. The agreement should be signed and documented (see section 6.4 of this guideline).	WoW, RSU	Minutes of consultation, and table 6 of this guideline.	Document review, interview with the land owner and WASHCO	During construction time	XXXbirr (operational cost- per diem and fuel cost)
III	Impact of Environmental Degradation on the Project Sustainability						
	Water points damaged by flood, land slide and gully. Decrease water yield leading water shortage. Drainage of well water if the well is located above the gully head and well sited in a sloppy area (gullies suck water from	Relocate the site of the water point away from flood prone areas, land slide, and gullies at least 150m away from land slide. Develop and implement watershed management plan: construct cut off drain, check dam, terrace, ground water recharge structure, implement biological conservation measures, and others. Construct protection structure like	WoW, WASHCO, WoANR, community	Water points are safe from flood, gully and land slide. Sufficient water throughout the year. Watershed protected	Field observation, and WASHCO and Community interview.	During construction time, when there is heavy rainfall.	XXXbirr (operational cost- per diem and fuel cost)

No	Potential Impacts that need mitigation ^c	Description of mitigation (elements to be monitored) ^d	Responsible body	Indicators to be monitored	Monitoring method	When to monitor	Monitoring Cost
	springs, dug-wells and hand pumps). All these lead the community to go to unsafe water source, and hence health risk, and lose of capital resources.	retaining wall, and vegetative measures to avoid the land slide. Design and construct water supply structures in such a way that they resist the impact of land slide.		well. Flood protection structures well constructed.			
IV	Impact of Climate Change on the Project Sustainability						

ANNEX 5: TEMPLATE FOR MINUTES OF COMMUNITY CONSULTATION FOR LAND ACQUISITION ISSUE

Minutes of community consultation

1. Date: _____; 2: Time: _____
3. Place: Region _____; Zone: _____; Woreda _____; Kebele _____; Village _____; WP _____
4. Participants (their names and signatures):
 - 4.1. Land owner:
 - 4.2. Kebele administrator:
 - 4.3. Community (name and signature of of the beneficiary community should be registered and attached with this minutes)
5. Agendas: To discuss with the land owner/s on land to be taken from him/her for the purpose of water point construction.
6. Issues discussed and agreement reached.