
Published by Center for Environmental Science, College of Natural and Computational
Science, Addis Ababa University, P.O. Box 1176, Addis Ababa, Ethiopia
Tel +251 116 551910
URL: www.aau.edu.et and www.ces-aau.org

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This publication can be cited as: Satishkumer Belliethathan, Ayele Anabu, Mellese Damite, Dagmawi Melaku, Dejene Biru, Teshome Soromessa, Ahmed Hussen and Dejene Tsegaye (2017). Policy, Legal and Organizational Study for Addis Ababa Rivers and Riversides Development Plan Project, Center for Environmental Science, Addis Ababa University, Addis Ababa.

ADDIS ABABA RIVERS & RIVERSIDES DEVELOPMENT PLAN PROJECT

FINAL PROJECT. SEPTEMBER, 2017

POLICY, LEGAL & INSTITUTIONAL ANALYSIS

Client : Addis Ababa Rivers and Riversides Development and Climate Change Adaptation Project Office, Addis Ababa City Administration

Consultancy Service Provider: Center for Environmental Science, Addis Ababa University

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1. General Introduction

The concepts of sustainable development have featured on the international policy landscape since the 1970s. It has been on the international agenda for four decades. The United Nations Conference on Environment and Human Development that has brought the concept of sustainability as a key norm which would shape economic growth. Then sustainability agenda has received a more concrete foundation in 1987 with the publication of the United Nations World Commission on Environment and Development Report, *Our Common Future* (the Brundtland Report). The report defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” The concept accommodated ‘three pillars’ - economic growth, human development (social) and environmental protection.

The Brundtland Report laid the foundations for the 1992 UN Conference on Environment and Development in Rio (the “Earth Summit”), which recognized sustainable development as a key guiding principle and delivered a range of outcomes which promote sustainable use of finite resource. The Earth Summit produced an action plan (Agenda 21) which demands “integration of environment and development concerns, and greater attention to them will lead to the fulfillment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future” on international, national, regional and local scales to implement sustainable development.¹

In 2002, the World Summit on Sustainable Development that was held in Johannesburg adopted decisions that were built on the Earth Summit’s outcomes. Subsequently, in June 2012, heads of state and high-level officials of more than 190 nations met at the Rio +20 Conference, that is marking the 20th anniversary of the 1992 Rio Earth Summit. This session renewed political commitment to strengthen sustainable development path. The outcome of the conference called ‘The Future we Want’ outlined key immediate actions to create “a pathway for a sustainable century”, and urges countries to follow a ‘Green Economy’ pathway in the context of sustainable development and poverty eradication.

Over the past several decades, many countries especially those in developing regions have witnessed substantial increase in the population in the Cities. It is expected that by 2020 more than fifty percent of the global population will dwell in Cities. The rapid increase in population brings with it numerous problems and prospects. The urban area of Addis Ababa has expanded dramatically over the past decades. The built-up area of Addis Ababa – featuring ultra-modern buildings adjacent to slums – lies within the Big Akaki and Little Akaki river basins which has a catchment

1- <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

area of about 540 square kilometers. The Big and Little Akaki rivers, with their dendritic tributaries, drain the City from north to south. The inappropriate practices of dumping domestic and industrial wastes into the river catchments have resulted in turning the rivers in to sewer line services.

Sustainable development includes the sustainable management of rivers and riversides in the urban context. For urban rivers to be sustainable, any human action on the rivers must not lead to pollution, depletion or significant quality failure. All actions should be made in the manner that would enhance the rivers' environmental, social, and economic sustainability. In Ethiopia, all natural resources, including water resources, are public property; the ownership is vested upon the state and the people of Ethiopia.² Rivers as a public resource needs to be controlled to ensure their sustainability. To manage urban rivers' challenges, introducing proper water policy and law – amongst other things – are at the center.³ Most rivers' problems are capable of being solved or at least controlled.⁴ Introducing Sound policy and law can enhance sustainability of rivers. Many of the rivers' crises are partly the problem of inappropriate water policy and law or in several cases lack of implementation of the existing laws and policies. Furthermore, enhanced and strong organizations are crucial for ensuring the sustainability of the rivers and riversides, especially in urban areas.

1.1 Objective

The main objective of the study is to review all existing policy, legal and strategic documents in relation to the instruments compatibility and sufficiency for better management of rivers and riversides in Addis Ababa. The study will also undertake a gap analysis of the Ethiopian legal framework with regards to the rivers and riversides management as well as assessment of governmental organizations that have a stake in the management of rivers and riversides.

1.2 Methodology

The following are the methods and tools used for the legal, policy and organizational assessment that have been undertaken.

1.2.1 Document Analysis

A comprehensive desk review of the literature related to legal, policy and organizational issues relate to river and riversides management was undertaken. This includes reports prepared by governments, organizations and researchers on the area as well as publications prepared by independent observers. The documents for the purpose of the desk review were collected in two ways. One by accessing internet based documents from various organization's websites and research articles by accessing important international scientific journals and the other by visiting various government ministries, agencies and also various CSOs and collecting relevant articles, reports etc., published by the organization.

2- Constitution of the FDRE no. 1/1995, articles 40(3) and 51(11).

3- Grey and Sadoff 2007

4- Gleick 1998

1.2.2 Interviews

Subsequent to the questionnaire filling by the relevant ministries and agencies a one to one interview with key officials were held. In several instances the person who was interviewed was the same as that of the resource person who has filled in the questionnaire survey. The list of people who were interviewed are provided in (Annex I)

1.2.3 Semi-Structured Questionnaire

Semi-structured questionnaire was developed and circulated to pre-selected federal level line ministries and city level bureau and agencies that have direct relation with the environment, water and river and riversides development and management (Annex II). The questionnaire survey was specifically done with regards to the organizational assessment undertaken. Wherever requested the authors provided additional details about the questions to the ministries and agencies. The inputs were later on analyzed for the purpose of the organizational assessments. (Annex III) has incorporated the necessary aspects that are most important to the rivers and riversides management. The tables are presented as filled and information provided by the respective organizations and hence has gaps wherever the questionnaire was not filled in.

1.2.4 Approach

Specifically, the organizational assessment aims to highlight the prevailing organizational landscape around the Rivers and Riversides management with the City of Addis Ababa through an organizational mapping and analysis organized into four main areas i) organizational structure ii) relevant regulatory environment iii) typical processes and interactions and iv) capacity and resources .⁵ While the overall assessment was conducted based on the framework the results are presented in four broad categories including mandates, stakeholder engagements, coordination mechanism as well as organizational capabilities.

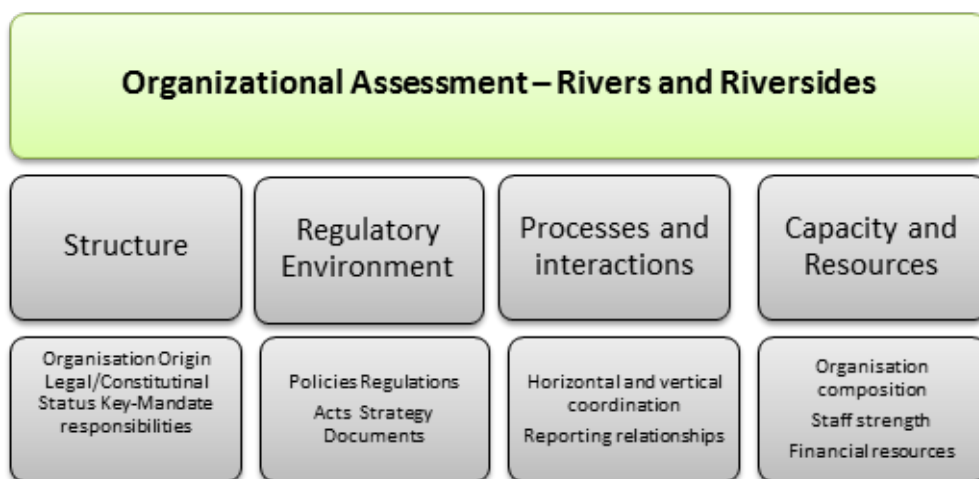


Figure 1: Schematic diagram of Organizational assessment based on Huang, 2014.

List of Stakeholder Organizations Contacted for Assessment

Federal Level

Ministry of environment, Forest and Climate Change
Ministry of Industry
Ministry of Transport
Ministry of Agriculture and Natural Resource
Ministry of Water, Irrigation and Electricity
Ministry of Urban Development and Housing
Construction, Design and Supervision Works Corporation

Addis Ababa City Government

Environmental Protection Authority
Cleansing Management Agency
Beautification, Park, and Cemetery Development Agency
Water and Sewerage Authority
Water and Sewerage Authority- Project Office
Urban Planning Institute
Urban Planning Institute – Project office
Fire and Emergency Prevention and Rescue Authority (FEPRRA)
Industry Development Bureau (IDB)
Addis Ababa City Administration Organization and Restructuring Project Office (AACAOPO)
Oromia National Regional Government
Oromia National Regional State Bureau of Environment , Forest and Climate Change

2. Ethiopian Policy, Legal and Strategy Instruments and their Relevance for ARDCAP

Addis Ababa, as the seat for the African Union, various international organizations and three domestic governments; namely, the FDRE Government, the Oromia Regional State and the City Government of Addis Ababa, needs to be a city that fulfills all the necessary services, which are expected from a modern city. One of such services is the service that is provided by well-designed and developed rivers and riversides. The ARDCAP is launched with the aim of making Addis Ababa rivers and riversides an international standard living, recreational and working environment for its residents and visitors. The implementation of the project requires policy and legal backing. Policies and legal instruments must play a role of a facilitator if not a catalyst, for the effective implementation of such projects. Apart from the National policies and law, as a member of the international community and as the result of the constitutional rule that considers the international instruments ratified by Ethiopia are part and parcel of the Ethiopian law, the City of Addis Ababa is expected to consider international environmental protection instruments such as the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change and International Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, amongst many others.

The Policy, Legal and Institutional Analysis section of this study is composed of the following subsections.

2.1 The FDRE Constitution

The 1995 FDRE Constitution recognizes the right of all persons to live in a clean and healthy environment.⁶ This means, everyone has the right to an environment that is not harmful to their health and wellbeing. Environmental right is a right that allows humans to live in an environment that fulfills the enjoyment of life. Living in a clean and healthy environment is essential to lead a healthy life. To attain this, the environment must be protected and maintained in a good order. Achieving this is not an easy task. It needs the commitment of the government, the people, civil societies, non-governmental organizations and other concerned organs and dedicated individuals. Where environment is not protected and maintained in a good order, it would be degraded. A degraded environment has a major adverse impact on human dignity, since people are unable to enjoy life as they are forced to live in an environment that does not provide the necessary services.

Article 44 (1) of the FDRE Constitution fits well into the spectrum of internationally accepted principles for protecting the quality of life of present and future generations. This constitutional rule echoes the principle of the Stockholm Declaration of Human Environment, Principle 1, which provides for humans' fundamental right to live in an environment that allows them to have a life of dignity and wellbeing. Moreover, Principle 1 of the Stockholm Declaration states that the

6- FDRE Constitution, Article 44 (1).

human species bears a solemn responsibility to protect and improve the environment for present and future generations. This idea has been addressed in Article 92 (4) of the FDRE Constitution as: “Government and citizens shall have the duty to protect the environment.”

Both urban and rural dwellers will not be able to guide a life of wellbeing and dignity if they are forced to live in a polluted and degraded environment including polluted rivers and degraded riversides in their areas. It can be said that people who live in an unhealthy and unclean environment, such as the ones living in squalid conditions on the river banks, have their dignity and wellbeing is violated.

The city of Addis Ababa is recognized by the FDRE Constitution as the capital city of the Federal State and its residents shall have a full measure of self-government by being represented in the House of Peoples’ Representatives.⁷ The full measure of self-government of the residents of Addis Ababa has been further provided in the Addis Ababa City Government Revised Charter Proclamation No. 361/2003.⁸

2.2 Environmental Policy of Ethiopia, 1997

The overall policy goal of the EPE is ensuring sustainable development by improving and enhancing the health and quality of life of all Ethiopians through a sound management and use of natural, human-made and cultural resources and the environment as a whole. The above policy statements which have been prescribed by the EPE need to be implemented in a way that is fulfilling this general objective of the EPE.

The Environmental Policy of Ethiopia (EPE) anticipates that the urban population in Ethiopia will rise to 30 percent by the year 2020. However, there are not sufficient infrastructures to accommodate this level population in the Ethiopian urban centers, even if there are efforts on urban development initiatives. As the result of this, in Ethiopian urban centers including Addis Ababa, there are serious deficiencies in sanitation services. These are caused by random defecation, inappropriate solid waste disposal and the conversion of rivers into open sewers. Rivers and streams in Addis Ababa are one of the main sources of infections resulting in diarrhea and other diseases.⁹

For these and other many environmental and social problems, especially related with rivers and riversides, the EPE provides the following policy statements, among others, as mechanisms to solve such problems:

- Promoting the protection of the interface between water bodies and land (e.g. lake shores, river banks and wetlands);
- Designing well developed waste collection and disposal mechanisms, including hazardous wastes;
- Tree planting for ecological and economic (e.g. fuel wood, construction) purposes, agroforest-

7- See Article 49 (1), (2) and (4).

8- Refer to section 1.17 discussions on Charter on the mandate of the City of Addis Ababa on the management of rivers and riversides

9- See Environmental Policy of Ethiopia of 1997, § 1.2.

ry, upstream forests; and

- Creating healthy urban environment, providing habitats for plants and animals to ameliorate urban micro-climate.

The EPE is a general policy that is applicable over the territories of the country including rivers and riversides of Addis Ababa. Fulfillment of the overall policy goal of the EPE and solving environmental and social problems stated in the EPE involve working on all environmental and social initiatives.

2.3 CRGE Strategy, 2011

One of the pillars for the development of a green economy is forestry, which could well include forestry activities in the riversides. The CRGE Strategy underlines on protecting and reestablishing forests for their economic and ecosystem services including as carbon stocks. ARDCAP is in line with this and is hoped to mitigate emissions. The CRGE Strategy is relevant for the rivers and riverside development activities for the following reasons.

- Building of Green Cities is one of the fundamental initiatives in the CRGE Strategy. The Green Cities initiative under the Strategy contributes to the creation of sustainable urban environments;
- Urban development that successfully leapfrogs traditional forms of development of metropolitan cities;
- Using solid and liquid wastes for energy generation for effective GHG emissions mitigation.

2.4 GTP II

GTP II is a relevant document for the implementation of the ARDCAP as it has a number of provisions which can be directly applied by the Project. In its § 1.3.5 GTP II anticipates that Ethiopia is bound to face rapid urban growth which requires proactive management and long-term planning such as increasing job opportunity, addressing housing problems and providing adequate solid and liquid waste disposal management system. The development of rivers and riversides in Addis Ababa could well fall under this kind of proactive and long-term planning to meet the needs of ever increasing population of the city. In its section 1.3.4 (e), GTP II prescribes the importance of establishing and improving urban sewerage systems, which is one of the major tasks of the ARDCAP.

In another section (3.1.6), the implementation of strategies for urban development and housing has been specified and one of these strategies is ensuring green-clean urban development. The other implementation strategy is urban land development and management reform program which targets on the preparation of land for different development activities based on the land use classification system. This can even guide the ARDCAP in defining what activities should be done in which parts of riversides.

2.5 Agricultural Sector GTP II

§1.7.3 of the Agricultural Sector GTP II deals with the need to work on expansion of urban hor-

ticulture to meet the demand for horticultural crops for increasing urban centers in Ethiopia. It notes that the horticultural crops, especially vegetable production, around the cities have limited supply to satisfy the demand, and with different problems of sanitation. In order to tackle these constraints and benefit the producer and serve the consumer, it recommends measures such as strengthening the capacity of urban horticulture quality control. As it is known, most of the urban horticultural activities in Addis Ababa are being done around the banks of rivers and there are severe sanitation problems in the products. As the ARDCAP aims at having clean river water flow in all of the city's rivers, it fits with this prescription of the Agricultural Sector GTP II.

Section 1.13.5 of the Agricultural Sector GTP II is devoted for urban agriculture issues. It states that in the developed world it is common to promote agricultural development in urban and peri-urban areas which supply about 40-60% of vegetables consumed in urban centers. It also indicates that in Ethiopia there has not been a clear direction in urban agriculture and the need to prepare detailed strategy and work plan to operationalize the urban agriculture policy designed by Addis Ababa city council which has a potential to create job opportunity, sustainable urban development and establish green environment. The implementation of the Agricultural Sector GTP II should be aligned with urban development and land use.

As a research study indicated, urban farming in Addis Ababa is found to contribute significantly (65 %) to livelihoods of urban farmers at both sectoral and household levels, for which livestock and crop production accounted for 40 % and 45 %, respectively. Cultivating vegetable crops is the most common practice for urban producers (Duressa 2007). When the ARDCAP is completed, it is hoped that the city's urban agriculture sector will create more jobs for the growing number of residents as well as fresh and healthy food source for the consumers of the city.

2.6 The Water Resources Policy of 2000

The overall goal of Water Resources Policy is to enhance and promote all national efforts towards efficient, equitable and optimum utilization of the available water resources of Ethiopia for socio-economic development on sustainable basis. As ARDCAP intends to attain a sustainable socio-economic development by working on job creation, tourism, recreation pollution control and other important activities on the rivers and riversides of Addis Ababa, it fits into the overall goal of this Policy. In addition to the overall goal, the Policy also has objectives which are relevant for ARDCAP. One of these policy objectives is combating and regulating floods through sustainable mitigation, prevention, rehabilitation and other practical measures.

In addition to the overall goal and specific objectives, some sections of the Water Resources Policy provide for specific policy statements. These include:

- Establish guidelines and regulations for the development of storm drainage and sewerage in urban areas (§2.2.3(f)(2))
- Establish procedures and mechanisms for all actions that are detrimental to water resources including waste discharges, source development, catchment management (§2.2.2 (c)(3))
- Control and ensure that water bodies are protected from pollution by waste water and other wastes indiscriminately discharged by industries and other institutions (§4.2 (c)(5))

This Policy defines the term ‘watershed management’ as:

“A process of formulating and implementing a course of action that involves a region’s natural and human resources taking into account social, political, economic, environmental and institutional factors operating within a watershed, the surrounding river basin, and other relevant regions to achieve desired social objectives.”

As the ARDCAP involves extensive watershed management activities, the definition provided by the Policy is expected to shape the extent and level of watershed management within the project. Moreover, the policy direction on watershed management is provided under section 2.2.2 (B). The policy directions as provided in this section are:

1. Promoting practices of efficient and appropriate watershed management to maximize water yields and quality.
2. Ensuring that watershed management practices constitute an integral part of the overall water resources management.

2.7 Urban Development Policy of 2005¹⁰

In its preamble, the Policy states that urban centers have not been centers of development and remained places of many unemployed people. Problems of development, democracy and good governance have been the main features of urban centers in Ethiopia. The city of Addis Ababa cannot escape the problems stated by the Urban Development Policy.

§4.5.3 of the Policy is devoted for environmental protection activities in urban areas and it has policy statements like:

- Allocation of sufficient green areas and mainstreaming environmental protection measures in all urban development activities;
- The need on the coordination of solid waste management;
- Planting trees in green areas, roadsides, riversides and employing appropriate mechanism to conserve them;
- Converting wastes into useful products.

As can be seen from its contents, this Policy provides general guidelines for urban development and urban environmental protection. The rules and principles of this Policy can be applied in the project activities as rivers and riversides development activities are part and parcel of urban development.

2.8 Ethiopian National Urban Green Infrastructure Standard, 2015

This document recognizes that urbanization creates demanding societies. It also notes that if the rapidly growing urban population and urbanization did not match with the corresponding work on creating good urban environmental conditions, urban centers will not provide good living con-
10- The English version of this Policy is not obtained.

ditions with increased pollution and climate problems. To solve these problems, the document proposes many solutions. The following are some of these solutions provided under various sections of the document.

- Protecting the river lines' and lake shores' natural ecosystem to have safe and better environment, rich biodiversity, to reduce climate change impacts;
- Restoring rivers and lakes from the conditions they are in now;
- Building a healthy river corridor to allow plants and animals to move between different green spaces across the city;
- Improving storm water management and enhancing storm water quality through the regulation of river flow and protection of river banks such as capturing rainfall before it flows into the city's drainage and sewer system;
- Classifying public green open spaces in patches (e.g. parks, gardens, amenity green open spaces, green open spaces surrounding administrative buildings, cemeteries, natural areas etc.) and corridors (e.g. river corridors, rights of way, linear parks etc.);
- Improving the river corridor and/or reestablishing natural channel processes given space to create rich and fertile meadows so as to make rivers to be part of a living green network and to allow plants and animals to move between different green spaces across the city;
- Improving flood storage capacity of the whole river, which contributes to flood protection downstream;
- Making riversides convenient for walking, jogging, cycling, playing, picnicking, and generally connecting with nature;
- Enhancing biological diversity through the protection and improvement of urban wildlife habitats, sensitive natural areas and rare and endangered species to maximize ecological, social and cultural benefits.

This document also provides for prohibited activities on riversides. These include:

- Crop and horticultural growing within 6 meters from the edge of a river;
- Animal husbandry within the riparian buffer;
- Allowing surface drainage from growing areas to run directly into the river; instead, runoff from these areas should be directed to retention areas for infiltration and settlement prior to entry to the river.

In Section VI, where the Urban Green Infrastructure General standards are set, the document provides for specific standards for location, capacity and accessibility of urban green infrastructure. These include:

- Competent authorities shall follow Urban Planning Preparation and Implementation Strategy, (2014)¹¹ to allocate 30% of the land for roads and infrastructure, 30% for green areas and shared public use and 40% for building construction in their urban land management plan.
- Competent authorities shall ensure a minimum of 15m² public green open space per capita within the city boundaries.
- Every inhabitant shall live within 500m from a public green open space of a size of at least 0.3 ha, an area big enough for e.g. playing football and for other informal play.

11- This document is not obtained!

- The public green open spaces in a city should be classified in patches (e.g. parks, gardens, amenity green open spaces, green open spaces surrounding administrative buildings, cemeteries, natural areas etc.) and corridors (e.g. river corridors, rights of way, linear parks etc.).
- Public green open spaces should be connected (1) with each other to create one large UGI network within the city, and (2) with green and nature in the urban fringe and outside the city. Corridors which connect green spaces throughout the city raise the value of the urban ecological system. Existing natural /water/topographical characteristics of the area should be used as starting points to guide the planning of the network and the location of the green open spaces.

This is one of the major instruments that can be applied for project implementation. Many of the standards, principles and rules stated in this instrument align with project activities and the instrument can serve as the main policy tool for project implementation.

2.9 The Criminal Code of Ethiopia, 2005

The Criminal Code is a general code that is enacted with the view to ensure order, peace and the security of the State, its people, and inhabitants for the public good. It also aims at the prevention of crimes by giving due notice of the crimes and penalties prescribed by law and should this be ineffective by providing for the punishment of criminals in order to deter them from committing another crime and make them a lesson to others, or by providing for their reform and measures to prevent the commission of further crimes. Regarding pollution, it provides in its Article 519 (1) that, anyone who discharges pollutants into the environment is punishable with fine not exceeding Ethiopian Birr (ETB) 10,000, or with rigorous imprisonment not exceeding five years. The punishment shall increase to a rigorous imprisonment not exceeding ten years if the pollution results in serious consequences on the health or life of persons or on the environment (Article 519 (2)).

The provisions of Article 519 of the Criminal Code may relate to the discharge of pollutants into the general environment. The Criminal Code also has a provision on crimes related with contamination of water bodies. It prescribes this as:

Article 517— Contamination of Water

1. Whoever intentionally contaminates by means of substances harmful to health drinking water serving the needs of man or animals, is punishable, according to the circumstances and the extent of the damage, with fine or simple imprisonment for not less than one month, or, in more serious cases, with rigorous imprisonment not exceeding seven years.
2. In cases of intentional poisoning of wells or cisterns, springs, water holes, rivers or lakes, the punishment shall be rigorous imprisonment not exceeding fifteen years.
3. Where the crime under sub-article (1) or (2) above is committed negligently, it is punishable with simple imprisonment, or, if less serious, with fine.

The Criminal Code is one of the most applicable laws in deterring criminal acts against pollution and contamination of water bodies including rivers and riversides. As the result of this, it is one of the legal arms of the project activities.

2.10 The Civil Code of 1960

A civil code is not limited to a certain particular legal aspect but instead it is a systematic collection of laws designed to comprehensively deal with the core areas of private law such as contracts and property. The 1960 Civil Code of Ethiopia has some provisions which are relevant for the project at hand.

The first issue relates with ownership of water. According to Article 2228, the community shall have priority in the usage of all running and still water and such water shall be controlled and protected by the competent authority. The project's main aim is ensuring the interests of the community and the competent authority (e.g. ARDCAPO) in cooperation with other relevant organs needs to ensure the benefits of the community as the primary beneficiary.

The other point which has relevance to the project is prohibited activities on water bodies such as the rivers and riversides of Addis Ababa. The people who have the right to use such water have also the right to oppose activities which may affect their rights. For instance, they can object the construction of any work such as a sewer or latrine, or have the right to demand the destruction of such works done in disregard of their rights.¹² From this it can be seen that the Civil Code gives broader power for those who have the right to use water to prohibit any activity that can go against their interests.

2.11 Ethiopian Building Proclamation No. 624/2009

The purpose of this Proclamation is to determine the minimum national standard for the construction or modification of buildings or alteration of their use in order to ensure public health and safety.¹³ The Proclamation divides buildings into three categories; Category A, Category B and Category C, those buildings with one story and 7 meters or less, those with two or more story's and more than 7 meters and those public or institutional building, factory or workshop building or any building with a height of more than 12 meters respectively.

In its Article 39 (1), the Proclamation provides that: "No person may cause or permit sewage discharged from any sanitary fixture to enter any water drain or constructed watercourse, river, stream, street or any other site." This rule is in tandem with the ARDCAP in that it aims at creating rivers and other water bodies protected from any form of pollution created as the result of allowing discharges to them.

2.12 Environmental Pollution Control Proclamation No. 300/2002

This is a proclamation issued to protect the environment and human health from various kinds of pollution, including hazardous wastes. It defines pollution as "any condition which is hazardous or potentially hazardous to human health, safety, or welfare or to living things created by altering any physical, radioactive, thermal, chemical, biological or other property of any part of the environment in contravention of any condition, limitation or restriction made under this Proclamation or

12- *The Amharic version of the Civil Code more clear in this regard.*

13- *See the first preambular statement of the Proclamation.*

under any other relevant law.”¹⁴ The Proclamation tries to give a wider perspective to the meaning of pollution and it gives legal flavor to the definition.

The underlying rationales for providing the pollution control proclamation have been set out in its preamble and they recognize the negative impacts of some social and economic development endeavors on the environment and could even be counterproductive to such endeavors. Hence protection of the environment and human health and wellbeing the duty and responsibility of all and it is appropriate to eliminate or, when not possible, to mitigate pollution as an undesirable consequence of social and economic development activities.

From these rationales it can be seen that, if development or investment initiatives are not made environment friendly, their long term costs could be more expensive than their short-term benefits and it is important to vigilantly check the environmental and social problems from pollution.

One of the mechanisms for protecting the environment and human health from pollution is by creating standards based on scientific and environmental principles where no pollution is allowed above and beyond these standards. One of the sets of these standards relate to standards for the discharge of effluents into water bodies and sewage systems. The major organ to lead the preparation of the standards is MEFCC, in consultation with other relevant competent agencies. The Pollution Control Proclamation is one of the pillar legal instruments in congruence with ARDCAP, which also aims at creating pollution free rivers and riversides in Addis Ababa.

2.13 Solid Waste Management Proclamation No. 513/2007

The objective of this Proclamation is to enhance at all levels capacities to prevent the possible adverse impacts while creating economically and socially beneficial assets out of solid waste.¹⁵ Solid waste management is defined by the Proclamation as ‘the collection, transportation, storage, recycling or disposal of solid waste, or the subsequent use of a disposal site that is no longer operational’.

Solid waste is mainly the problem of urban centers, and that is why the Proclamation focuses on urban administrations for designing and implementing their solid waste management plans. Solid wastes comprise different types of wastes which include plastic bags. According to the Solid Waste Proclamation, as of the date fixed under a directive to be issued by MEFCC, it would be unlawful to put on the market any plastic bag that is not labeled whether it is biodegradable or not. It is also prohibited to grant permit for the manufacture or importation of any non-biodegradable plastic bags with a wall thickness of 0.03 millimeters and less than 0.03 millimeters. However, MEFCC shall, through the issuance of a directive, determine the conditions under which plastic bags with wall thickness of 0.03 millimeters and less than 0.03 millimeters may be imported or manufactured locally for specified purposes.¹⁶ Plastic bags are known for clogging sewerage systems. They also clog rivers especially during dry seasons.

Article 11 of the Solid Waste Management Proclamation is devoted to management of household

14- Article 2 (12).

15- See Article 3 of the Proclamation.

16- See Article 8 of the Proclamation.

wastes. It regulates that – the head of each household shall ensure that recyclable solid wastes are segregated from those that are destined for final disposal and are taken to the collection site designated for such wastes. Urban administrations are required to ensure the presence of adequate household solid waste collection facilities. The Proclamation prohibits disposal of litter on streets, waterways, parks, bus stops, train stations, sport fields, water bodies in urban areas or in other public places while litter bins are available.¹⁷ This provision of the Proclamation may encourage people to do these prohibited activities where there are no litter bins. The said litter bins are scarcely available in Addis Ababa and other urban centers in Ethiopia.

This Proclamation is one of the most relevant legal instruments for the project at hand as it deals with one of the major causes of pollution of rivers and riversides in Addis Ababa. Solid wastes, in addition to their problems in causing damage to the environment and human health, they cause severe overflowing of storm waters by clogging sewers and ditches. For the effectiveness of implementation of the ARDCAP, enforcing the rules of the solid waste law is a crucial step. As one study indicates, however, there are factories which are producing plastic bags below the legally set standards.¹⁸

2.14 Technical Guidelines on Households Waste Management 2004

Due to lack of sufficient data, these guidelines were prepared based on the UNEP guidelines on Household Waste Management. The Guideline gives more emphasis for solid household waste management but also has some aspects of liquid waste management. The Guideline describes the environmental impacts of household wastes. In this regard, it states that inadequate collection, transport or improper disposal of household waste can have adverse environmental impacts, such as air pollution and unpleasant odors; potential health hazards from accumulation of polluted water, which provide breeding grounds for mosquitoes and attract flies, vermin; injuries from infected sharp objects; loss of productive land due to the presence of non-biodegradable items; and contamination of soil, ground and surface waters by leachate with resultant environmental effects or health hazards.

In the section that deals with disposal operation, the Guideline provides that if household liquid waste which is disposed to sewer drains into surface water courses, it will cause pollution of the aquatic environment with resulting health hazards. Therefore municipal wastewater must be collected and properly treated before discharging to surface water courses. From this ruling of the Guideline it can be seen that no untreated wastewater must be discharged into rivers.

2.15 Urban Planning Proclamation No. 574/2008

This is also another important legal instrument that provides rules which can be applicable for the ARDCAP implementation. In its preamble, it provides some general guides which include:

17- Article 11(3)

18- *Over Dozen Plastic Factories Producing Sub-Standard Bags in Addis Ababa, available at:*

<http://www.ena.gov.et/en/index.php/environment/item/1058-over-dozen-plastic-factories-producing-sub-standard-bags-in-addis-ababa>.

- The proliferation of unplanned urban centers needs to be regulated and guided by sound and visionary urban plans to bring about balanced and integrated national, regional and local development;
- It is vital to create a favorable condition for public and private stakeholders to fully participate in the process of urban plan initiation, preparation and implementation on the basis of national standards;

Having sound and visionary urban plan and engaging all stakeholders including the general public is in line with the ARDCAP in that the project also involves planning works in rivers and riversides in Addis Ababa.

Moreover, this Proclamation provides two principal objectives in its Article 4. These are:

1. To establish a legal framework in order to promote planned and well developed urban centers;
2. To regulate and facilitate development activities in urban centers and thereby enhance economic development of the country.

These principal objectives of the Proclamation are also related with the general guides stated in the preamble. They are also in tandem with the project purposes in that both of the principal objectives lead to a city with cautiously planned infrastructural developments that contribute to the socioeconomic development endeavors.

The Proclamation recognizes two types of urban plans; city wide structure plan and local development plan. Structural plan mainly indicates, among others, the magnitude and direction of growth of the urban center, principal land use classes, housing development, environmental protection aspects and industry zones. On the other side, some of the items that should be indicated in the local development plan include; zoning and land use type, building height and density, urban renewal, upgrading and reallocation intervention areas, green areas, open spaces, water bodies and places that might be utilized for common benefits.¹⁹

2.16 Ethiopian Water Resources Management Proclamation No. 197/2000

The objective of this Proclamation is included in its Article 3 and it states that:

The purpose of the Proclamation is to ensure that the water resources of the country are protected and utilized for the highest social and economic benefits of the people of Ethiopia, to follow up and supervise that they are duly conserved, ensure that harmful effects of water are prevented, and that the management of water resources is carried out properly.

Although this is a wider water resources proclamation, it can also be applicable for the ARDCAP purpose as it underlines on the protection and utilization of water resources for the benefit of the Ethiopian people via their effective management.

Part Seven of the Proclamation is devoted to water banks and harmful effects of water. Accordingly,

19- See Articles 9 (2) and 11 (3) of the Urban Planning Proclamation.

the supervising body (the Ministry of Water, Irrigation and Electricity or its delegate) in collaboration and in consultation with the appropriate public body may delimit the boundaries of the banks of certain water bodies for the purpose of prohibiting the clearing or cutting trees or vegetation and prohibiting construction of residential houses within the delimited banks of water bodies. Moreover, Part Seven of the Proclamation provides for the need to control the harmful effects of water. To achieve this, the appropriate public bodies shall, before allowing or causing the founding of towns or villages, request the supervising body for technical advice in order to prevent or avoid damage, adverse impacts or accidents which may occur as a result of floods and other factors related to water.

In addition to the relevance of its rules included in the Proclamation, it also prescribes for a coordinated and concerted effort among key stakeholder institutions for the effective utilization of water resources from rivers such as the rivers under the project in Addis Ababa and to engage in tier development and in the reversal of negative impacts which might arise from the water bodies.

2.17 Addis Ababa City Government Revised Charter Proclamation No.361/2003

In its preamble, the AACG Revised Charter of 2003 puts its general objectives and some of these objectives are:

- To make Addis Ababa a suitable urban space for work and residence measurable by modern standards in view of the fact that it is the capital of the federal government of and the seat of the African Union and of a variety of international organizations;
- To make the city competitive by ensuring its development through attraction of investment to the improvement of the lives of its residents and to the opening up of a way for the economic development of the country.

It is clear that all the project activities are in line with the AA Revised Charter of 2003 as the Charter is the governing rule regarding undertakings that run within the territory of the city. The Charter empowers the City Government of Addis Ababa to administer land and other natural resources within the territories of the city, in the ambit of the existing laws of the country. However, when it comes to the management of rivers which link two or more states, in this case, the rivers linking both Addis Ababa and Oromia Regional State, the administration will be the mandate of the Federal government according to Article 51 (11) of the FDRE Constitution. Though the establishment of the Project Office is a necessity considering the extent of the pollution and the enormity of the interventions need to manage the Rivers and Riversides of Addis Ababa, it needs to fully comply with the law of the land. Therefore, given the current situations, the Federal Government may engage both the City Government of Addis Ababa and the Oromia Regional State in the management of the Rivers and Riversides through an appropriate institutional arrangement.

2.18 Addis Ababa City Government Rivers, Riversides Development and Climate Change Adaptation Project Office Establishment Regulation No. 75/2015

In its preambular statement this Regulation recognizes that the health condition of the dwellers of Addis Ababa has been suffering from the pollution resulting from dangerously polluted liquid and solid wastes of rivers, their tributaries and river banks. The preambular statement continues stating that it is necessary to protect Addis Ababa city rivers and riversides from construction, and pollution to keep their natural features; to safeguard them from air pollution, to make them clean, catchy, and green through the participation of the public and the stakeholders and to build an international recreational standard river banks that would enable recreational center for the dwellers and tourists and to prevent climate change on the city as well to create a city resistant to such by adapting in case it occurs; showing the reasons for the need to the project and major activities it is going to achieve.

The Regulation defines riversides as a place demarcated as a preserved river bank area in accordance with the master plan of the city and not permitted to be used for any construction services as well as any activity which has influence on or influenced by the river.²⁰ From this it can be seen that the distance of the riverbank from the center of the river is not determined uniformly throughout a given river but shall be decided based on the Addis Ababa Master Plan, which may vary from place to place depending on the prevailing circumstances. Moreover, the Project Office has the power to decide on the delineation of the boundaries of the riversides.²¹ The project activities may be part of the municipal activities which include and related with sewerage, city sanitation and beatification. One of the eight objectives of the AACG is making the city a naturally balanced, clean, green and favorable spot through the prevention of environmental pollution.²²

A very interesting aspect of the Regulation is that it is not limited to rivers and riversides but also applicable to the climate regime of the city of Addis Ababa which makes it to consider also on greenhouse gas emissions in addition to solid, liquid and other forms of gaseous wastes. The Project Office also has overall powers and functions on the rivers and riversides in AA as a lead institution. Accordingly, it has powers on the cleanliness of rivers and riversides, development activities to be conducted on the same, payment of compensation for those who must be displaced as the result of project implementation, etc.²³

2.19 Addis Ababa City Government Structural Plan Approval and Implementation Regulations No. 16/2004

The definition of structural plan is provided in the Regulation as maps and plans prepared for the City of Addis Ababa and include: structural land use plan and various parts of the structural plan such as the road network map, public transport map, mixed residential place map, the environment protection map, major social services map, the city centers map, historical sites and building

20- Article 2 (10).

21- See Article 8 (3) of the Regulation.

22- See Article 9 (8) of the Charter.

23- See Article 8 of the Regulation.

map, industry and warehouse map. The ARDCAP can be seen as part and parcel of the general structural plan provided by Regulation No. 16/2004.

The structural land use plan is going to be prepared with a scale of 1:20,000 and indicates, among other things, residential areas, green areas, and environmental protection areas.²⁴ Likewise, the environmental protection map distinctly indicates green places of parks, roads and squares, forest places, green areas found on riversides, agricultural places, places for prevention and conservation of the southern underground water, places for solid waste disposal and liquid waste refinery and disposal sites. Within the environmental protection map, those persons who possess forest development areas are obliged to plant trees, maintain and preserve the old and the newly planted as well as shall plant substitute plants on behalf of the felling ones. The Regulation also prohibits cutting, pruning, or causing destruction of trees in any other manner in the areas that are indicated on environmental map for forest without the permission of the office of urban agriculture.²⁵

2.20 Rivers and River Buffer Green Infrastructure Design Standard Implementation, Manual No.17/2016

This Manual, prepared by Ministry of Urban Development and Housing, recognizes that the natural riparian buffers have been lost in many places over the years and restoring them will be an important step forward for water quality, river bank stability, wildlife, and aesthetics. It also considers that river buffers provide enormous benefits for the society, wildlife, water quality and the environment.

The rationale for the issuance of the Manual is to make rivers and river buffers provide their natural and normal ecological functions by improving the situations in which they are now with the view to making rivers and river buffers biodiversity rich and convenient for various conservation and economic activities.

The general objective of the Manual to introduce an integrated and participatory conservation and development works on rivers and river buffers for the purpose of averting pollution of water bodies, livelihood improvement and creating suitable and greener living environment resilient to climate variability.

The specific objectives of the Manual are:

- a. To reduce the amount of sediments and other pollutants disposed to the rivers and river buffers and create greener urban centers suitable for living through plantation and/or reclamation of the river buffers with suitable trees, shrubs, herbs and grasses along the different river buffer zones;
- b. To enhance economic, environmental, social and cultural contribution of the river buffers through consumptive and non-consumptive use of the river buffer resources;
- c. To enhance awareness level of different actors and involve in river buffer conservation and development; and
- d. To contribute in minimizing water pollution and hence enhance water availability both in

24- See Article 6 of the Regulation.

25- See Article 11 of the Regulation.

quality and quantity, conserve biological diversity and maintain urban green infrastructure connectivity.

As the outcome of the implementation of the Manual, a number of benefits are expected. The expected benefits include:

- Diversity of flora and fauna both in terrestrial and aquatic environment would be enhanced;
- Increased and improved job opportunity;
- Improved wildlife corridor and
- River buffer aesthetic value enhanced and hence suitable recreation and enjoyment sites established.

This Manual is particularly relevant for the project implementation and can be used as the primary reference during its lifetime.

3. Survey of Legal Instruments for Institutional Arrangements

Mapping the institutional arrangements of, particularly, governmental institutions and closely studying their roles and responsibilities in relation to project implementation is an important step. It is necessary, among other things, to:

- See the relevant powers/functions of the institutions in relation to the project;
- Identify the overlapping of powers/duties, if any, within institutions and the possible conflict of interests and
- Consider the existence of functional linkages within institutions.

As it is well known by everyone, the project at hand can only be implemented by exerting a concerted effort by all the relevant stakeholders. So as these stakeholders play their respective appropriate roles and responsibilities, their roles and responsibilities must be defined by the law. When the roles and responsibilities of these stakeholder institutions are clearly identified, it will be clearly known that what particular roles are to be played by which institution. This in turn will help in identifying the overlapping of roles and responsibilities. Although it is difficult to completely avoid overlapping powers or responsibilities, such situations may lead to unnecessary conflicts among institutions which share similar responsibilities. Such problems can be solved if overlapping of powers and responsibilities are seen as an opportunity to collate and collect these powers and responsibilities in a way that they reinforce each other and augment the project activities. This in turn requires working together in a spirit of partnership instead of competing over activities with the intent of overshadowing others' activities.

Partnership in overlapping activities can be thought through creating an overarching organ that is mandated to link all of the institutions with overlapping powers and responsibilities. It is also important to develop a guideline that prescribes the ways by which the linkage is effected instead of the linkage that exists simply when needs arise and when a command is made by a higher official. Defining functional linkages can also be used to resolve conflict of interests which might be created during implementation of overlapping powers and responsibilities. The institutional analyses also help in identifying the respective capacity of the institutions related with human capacity, infrastructure and financial capacity.

In the following section, different legal instruments will be examined to see the relevant powers and responsibilities of different institutions.

3.1 Addis Ababa Executive and Municipal Service Organs Reestablishment Proclamation No. 35/2012

This Proclamation reestablished the Addis Ababa city municipal service providing organs by redefining their roles and responsibilities. Many of these service providing institutions have relevant

functions as far as implementing the project activities of rivers and riversides development and climate change adaptation are concerned. In the following paragraphs, we will consider the powers, roles and responsibilities of various service provider institutions in relation to the project activities.

3.2 The Addis Ababa Environmental Protection Authority (AAEPA)

Article 11 of the Proclamation states the roles and responsibilities of the AAEPA. Most of the powers and functions of the AAEPA are in congruence with the project activities. The major powers and functions in line with the project are:

The AAEPA:

- Follows up and controls the disposition of industrial residues, byproducts and wastes;
- In consultation with the concerned bodies, prepares and submits strategies of environmental protection; ensures implementation of same upon approval;
- Studies the economic, social, cultural and environmental benefits of various plant species and implement same; determines the plant types and quantity to be planted on areas designated for recreational parks, forests, riversides and other green areas in accordance with the master plan of the city;
- Causes the undertaking of forest development and soil conservation activities on forest areas and riversides designated as green areas in accordance with the master plan of the city; in collaboration with concerned organs and residents of the city, designs strategies and gives support for growing selected species of trees;
- Ensures that reserved forest areas under the holding of the city government are properly preserved; gives professional support and awareness creation educations on continued basis; studies and presents additional sites that can be used as riverside and forest areas;
- Follows up and controls that forest areas, riversides, green areas which are designated for public use are serving the purpose sought.

The AAEPA is the forerunner institution as far as environmental protection activities in the city of Addis Ababa, including the environmental protection works in rivers and riversides are concerned. In addition to its regulatory functions as regulator of the environmental performance of other institutions, it also engages in environmental development activities such as greening the riversides. These activities of the AAEPA made it one of the major stakeholders in the project activities.

3.3 Addis Ababa City Government Rivers, Riversides Development and Climate Change Adaptation Project Office

This is the overarching institution in the implementation of the ARDCAP. It is established by Addis Ababa City Government Rivers, Riversides Development and Climate Change Adaptation Project Office Regulation No. 75/2015. Generally, the Project Office is accountable to the board. However, regarding technical activities, it is accountable to the city manager.²⁶ The powers and functions of the Project Office include:

26- Addis Ababa City Government Rivers, Riversides Development and Climate Change Adaptation Project Office Regulation No. 75/2015, Article 5 (2).

- Delineating boundaries of rivers and riversides;
- Demarcating and legalizing river banks as per the master plan and causing detail studies to be conducted;
- Removing hazardous and any solid and liquid wastes from polluted rivers and cleaning river sides;
- Identifying areas which are vulnerable to flood, and designing and implementing prevention strategies on climate change.
- Causing the city to have strong correlation with other sisterly cities, adopting, complying and implementing best practices thereof.²⁷

As owner of the project, this Office is expected to spearhead the project activities by engaging all stakeholder institutions.

3.4 The Beautification, Parks and Cemetery Development and Administration Agency

This Agency has the power to develop, administer and control, under ownership of the AACG, recreation places, zoos, cemetery, riverbanks identified in accordance with the city's plan and develop closed parks, open green areas identified for park purpose, festival and plaza squares, river banks.²⁸ Moreover, this Agency directs, controls and coordinates development and administration works of the city's recreation centers, green areas, squares, cemeteries; prepares design of recreation centers, cemeteries, squares and dividing lines of roads; evaluates the project proposal submitted by private investors, religious institutions or others who are willing to involve in the service of recreational parks and cemeteries; develops and administer nurseries where species of trees and flowers, that contribute to beautification, recreation and maintain ecological balance of the city; prepares and determines standard of recreational centers.²⁹

3.5 Addis Ababa Roads Authority

This Authority has the power to ensuring the designation of adequate green areas during construction of new roads and expansion of existing roads, identifying and determining the types and quantity of trees to be planted on the sides of major and sub-major roads or on road junctures.

Although these greening activities of the Roads Authority are restricted to the roadsides, its activities are relevant for the project activities as the ARDCAP also constitutes activities of road (bicycle and footpath) construction on the riversides. The Authority's roles are expected to extend to these riverside roads.

3.6 Land Development and City Renewal Agency

In relation to the project activities, this Agency has the power to develop and renew areas of the city which are damaged and deteriorated. In addition to this, it has the power to fix and effect the proper compensation payments to persons displaced due to different development and renewal

27- See Article 8 of Regulation No. 75/2015.

28- Article 56 (1 & 2)

29- See Article 56 (4, 5, 10, 11 & 12)

works in the city. As most of the riversides of Addis Ababa are highly degraded and deteriorated, the activities of this Agency are highly relevant to the project activities. The Agency's functions of fixing and effecting compensation payments to displaced persons are also relevant for the project activities as there are people who are going to be displaced as the result of implementation of the project.

3.7 Cleanliness Administration Agency

This Agency is responsible to collect and dispose solid wastes generated from residential houses, various institutions and roads. Article 55 of the proclamation defines the roles and responsibilities of the Agency. Accordingly, the following are among these roles and responsibilities.

- Directs, controls and coordinates integrated solid waste management works;
- Introduces and causes the implementation of a work procedure of the city solid waste handling and collection works which are fast, effective and customer focused and that enable perform in a way not affecting public health and not causing environmental pollution;
- Prepares, improves, follows up and controls different working directives, manuals, standards, and levels that enable implementation of integrated solid waste management;
- Follows up and controls implementation, at different levels, of policy and laws issued and approved at city level to implement integrated solid waste management works;
- Introduces a system by which solid wastes would be minimized and identified from their sources.

Although the Proclamation does refer that the Agency's tasks have a direct role on rivers and riversides, it is clear that its functions have direct impacts on rivers and riversides as its main task is dealing with solid waste management works. Solid wastes are one of the major sources of pollution on rivers and riversides. As the result of this Agency is also one of the major stakeholders in the project activities.

3.8 Solid Waste Recycling and Disposal Project Office

This Project Office is responsible to administer the solid waste transfer stations, recycling and disposal site projects, following up and controlling their proper implementation. Moreover, it is responsible to introduce and implement a system by which solid waste would be recycled by extending recycling and fermentation centers, among other things.³⁰ The roles and responsibilities of this Project Office are large when considering the situations of Addis Ababa where it is in the midst of an ambitious plan to transform its solid waste management, collection, and disposal systems that includes: responsibly closing down its five-decade old dump site at Repi and converting that site into a public park; opening a new sanitary landfill in Sendafa,; and designing an improved waste management system and hierarchy for collecting and separating waste before it is transferred to the new landfill.³¹

The functions of this institution are highly relevant for the ARDCAP as a proper solid waste recycling and disposal can positively contribute for the cleanliness of the rivers and riversides of Addis Ababa.

30- See Article 58 (1 & 6)

31- See report at http://ethiopia.usembassy.gov/pr_2015_20.html.

3.9 Water and Sewerage Authority

This Authority is administered by a board and the following are some of its project related responsibilities.

- Preparing and submitting, to the board of directors, short, medium and long term plan to improve the supply of potable water and discharge of sewerage and implementing the same upon approval;
- Causing the system of liquid waste disposal and performing its construction guided by the master plan.³²

One of the ARDCAP activities is working for cleaner rivers in Addis Ababa. This institution's roles and responsibilities are geared towards reinforcing the project activities and hence it is key stakeholder in the implementation of the project.

In addition to institutions of the Addis Ababa City Administration, the Federal Government institutions have also relevance in the institutional mapping. The most relevant legal instrument in this regard is, Definition of Powers and Duties of the Executive Organs of the Federal Democratic Republic of Ethiopia Proclamation No. 916/2015. This Proclamation, in addition to defining the powers and duties of executive organs of the Federal Government, it reestablished them. One of the reestablished institutions is MEFCC. This new Ministry is spearheading environmental issues in the country and some of its activities in relation to project at hand include:

- Coordinating activities to ensure the environmental objectives provided under the Constitution and the basic principles set out in the EPE are realized;
- Establishing a system and following up the implementation for undertaking EIA or SEA on social and economic development policies, strategies, laws, programs and projects set by the government or private firms;
- Establishing a system for evaluating and decision making, in accordance with the EIA Proclamation, the impacts of implementation of investment programs and projects on environment prior to approvals of their implementation by the concerned sectoral licensing organ or the concerned regional organ;
- Proposing incentives or disincentives to discourage practices that may hamper the sustainable use of natural resources or the prevention of environmental degradation or pollution;
- Coordinating actions on soliciting the resources required for building a climate resilient green economy in all sectors and at all Regional levels as well as providing capacity building support and advisory services;
- Establishing a system for evaluating and decision making, in accordance with the EIA Proclamation, the impacts of implementation of investment programs and projects on environment prior to approvals of their implementation by the concerned sectoral licensing organ or the concerned regional organ;
- Preparing programs and directives for the synergistic implementation and follow up of environmental agreements ratified by Ethiopia pertaining to the natural resources base, desertification, forests, hazardous chemicals, industrial wastes and anthropogenic environmental hazards with the objective of avoiding overlaps, wastage of resources and gaps

32- See Article 59 of Addis Ababa City Government Executive and Municipal Service Organs Reestablishment Proclamation No 35/2012

during their implementation in all sectors and at all governance levels;

- Coordinating and as may be appropriate, carrying out research and technology transfer activities that promotes the sustainability of the environment and the conservation and use of forest as well as the equitable sharing of benefits accruing from them while creating opportunities for green jobs.

The other federal institution that has a strong stake in ARDCAP is the Ministry of Federal Affairs.³³ The major role that is played by the Ministry of Federal and Pastoralist Development Affairs in relation to ARDCAP is valuation of property of those people who vacate as the result of project implementation. The powers of the Ministry are enshrined in Expropriation of landholdings for Public Purposes and Payment of Compensation Proclamation No.455/2005.³⁴

33- Now a nomenclature change is made and now this ministry is renamed as Ministry of Federal and Pastoralist Development Affairs.

34- See Article 12 of the Proclamation.

4. Overlapping of Roles and Responsibilities of Various Institutions

A number of similar or related roles and responsibilities are allocated for various institutions by different legal instruments. The following paragraphs will briefly indicate the major overlapping roles and responsibilities.

The following table summarizes the major overlapping powers and functions of various institutions as is evident from the policy documents.

No.	Institution	Waste	Green areas/Parks/ Forests	Compensation Pay- ment
1.	AAEPA	Follows up and controls the disposition of industrial residues, byproducts and wastes.	<p>Conducts studies on various plant species and determines the plant types and quantity to be planted on areas designated for recreational parks, forests, riversides and other green areas in accordance with the master plan of the city;</p> <p>Causes the undertaking of forest development and soil conservation activities on forest areas and riversides designated as green areas in accordance with the master plan of the city;</p> <p>In collaboration with concerned organs and residents of the city, designs strategies and gives support for growing selected species of trees;</p> <p>Ensures that reserved forest areas under the holding of the city government are properly preserved;</p> <p>Studies and presents additional sites that can be used as riverside and forest areas;</p> <p>Follows up and controls that forest areas, riversides, green areas which are designated for public use are serving the purpose sought.</p>	

2.	ARDCPO	<p>Removes hazardous and any solid and liquid wastes from polluted rivers and cleaning river sides;</p> <p>Prepares programs and directives for the synergistic implementation and follow up of hazardous chemicals, industrial wastes and anthropogenic environmental hazards.</p>	<p>Prepares programs and directives for the synergistic implementation and follow up of environmental agreements ratified by Ethiopia pertaining to the natural resources base, desertification, forests, etc.</p> <p>Coordinates and carries out research and technology transfer activities that promote the sustainability of the environment and the conservation and use of forests.</p>	Cause payment of compensation for those who must be displaced as the result of project implementation.
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<p>3.</p>	<p>CMA</p>	<p>Collects and disposes solid wastes generated from residential houses, various institutions and roads;</p> <p>Directs, controls and coordinates integrated solid waste management works;</p> <p>Introduces and causes the implementation of a work procedure of the city solid waste handling and collection works which are fast, effective and customer focused;</p> <p>Prepares, improves, follows up and controls different working directives, manuals, standards, and levels that enable implementation of integrated solid waste management;</p> <p>Follows up and controls implementation of policy and laws issued and approved at city level to implement integrated solid waste management works.</p> <p>Introduces a system by which solid wastes would be minimized and identified from their sources.</p>		
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4.	SWRDPO	<p>Administers solid waste transfer stations, recycling and disposal site projects, following up and controlling their proper implementation;</p> <p>Introduces and implements a system by which solid waste would be recycled by extending recycling and fermentation centers;</p> <p>Designs an improved waste management system and hierarchy for collecting and separating wastes before they are transferred to their final destination.</p>		
5.	AAWSA	<p>Causes the system of liquid waste disposal and performs its construction guided by the Addis Ababa Master Plan.</p>		
6.	BPCDAA		<p>Develops, administers and controls recreation places, zoos, cemetery, riverbanks and develops closed parks, open green areas, festival and plaza squares, and riverbanks;</p> <p>Evaluates the project proposal submitted by private investors, religious institutions or others who are willing to involve in the service of recreational parks and cemeteries.</p> <p>Directs controls and coordinates development and administration works of the city's recreation centers, green areas, squares, and cemeteries.</p>	

7.	AARA		Ensures the designation of adequate green areas during construction of new roads and expansion of existing roads, identifying and determining the types and quantity of trees to be planted on the sides of major and sub-major roads or on road junctures.	
8.	LDCRA		Develops and renews areas of the city which are damaged and deteriorated.	Fixes and effects proper compensation payments to persons displaced due to different development and renewal works in the city.
9.	MFPDA			Follows up and ensures the provisions of Compensation Proclamation are complied with; Prepares, in collaboration with other relevant organs of the Federal Government, national valuation formula for the determination of compensation payable under Compensation Proclamation

5. The Relations between the City of Addis Ababa and the Oromia Regional State

The FDRE Constitution in its Article 49 (5) provides that:

“The special interest of the State of Oromia in Addis Ababa, regarding the provision of social services or the utilization of natural resources and other similar matters, as well as joint administrative matters arising from the location of Addis Ababa within the State of Oromia, shall be respected. Particulars shall be determined by law.”

As understood, the Oromia Regional State has a stake in the management of the Addis Ababa Rivers and riversides due to the trans-regional nature of the rivers, as per the provisions of the Constitution and other laws of the country. Apart from this the Oromia Regional State has a strong stake in the Addis Ababa Rivers and riversides because of its special interest in the City of Addis Ababa.³⁵ Hence, it can be inferred that the Oromia Regional State can have a part to play in the management of the rivers and riversides of City of Addis Ababa. There are a number of issues which Addis Ababa and Oromia share together and work together. The Constitution also indicates that particular issues in which how the interests of Oromia can be materialized be determined by laws. Unlike the Federal Constitution the Oromia Regional State Constitution does not mention anything about the relation between the Oromia Regional State and Addis Ababa. However, the Addis Ababa City Government (AACG) Revised Charter Proclamation No.361/2003 touches on this relation in a very general language.

Article 62 of the Charter provides the relationship of the City Government and Oromia Regional State as follows:

1. The City Government shall have such a relationship with the Oromia Region as rests on fruitful cooperation.
2. The special interest of the Oromia Region shall be respected as provided under Article 49 (5) of the Constitution of the Federal Democratic Republic of Ethiopia. The details thereof shall be set out by agreement to be made between the AACG and the Oromia Region or by law to be issued by the House of People’s Representatives.

According to this provision of the Revised Charter of 2003, to define the relationship between the city of Addis Ababa and the Oromia Regional State regarding the implementation of the special interest, one of two things must happen. These are: (1) Enacting a law that defines the relationships; (2) Making agreements between the City Administration and the Oromia Regional State. Regarding the first option, no law has been issued by the Federal Government, the State of Oromia or the City Government of Addis Ababa. With respect to the second option, agreement made between

35- As can be seen from the provision of the Charter, special interest is related to provision of social services, utilization of natural resources and joint administrative matters.

the two entities has not been found. What has been observed is existence of some ad hoc and informal interactions but not through formal channels. Currently, it is evident that there are no formal agreements of partnership between the two governments with respect to the management of the rivers and riversides of the City of Addis Ababa, even though the Oromia Environmental Pollution Control Proclamation No. 177/2012 states about the working together between the Regional State and neighboring regions and cities, especially the City of Addis Ababa.

Article 24 of the Proclamation provides the relations with neighboring regions and cities as follows:

1. The Bureau³⁶ shall work in collaboration with neighboring regions to halt the spreading of environmental pollution from Oromia Region to neighbor regions and from neighboring regions to Oromia.
2. The Bureau shall work in collaboration with Addis Ababa City Administration based on laws and directives issued to control environmental pollution and wastes released from Addis Ababa City Administration.

36- *Oromia Rural Land and Environmental Protection Bureau*

6. Legal Instruments on Compensation

Implementation of rivers and riversides project may entail displacement of people. If the displacement of people is not properly managed, it may in turn result in massive violation of human rights, environmental degradation and loss of livelihoods of people. Proper management of displacement can avoid the associated problems with possible minimum impact on people and the environment. Ethiopia has policy and legal frameworks which assist the administration of resettlement and/or compensation payment for the displaced persons. These policy and legal frameworks are guided by universally accepted principles, such as; compensation payment which is prompt (advance or prior) and adequate. To properly enforce the Ethiopian policy and legal frameworks for the effective protection of human rights and the natural environment, it is important to clearly understand the rights of people on land and their relations to the land they occupy.

In Ethiopia, land ownership is constitutionally regulated and it is owned by the State and People of Ethiopia. As representative of the people, government administers all lands in the territories of the country. This means that individuals have only usufruct (use + deriving the fruits thereof) right over land. This means that, land is not subject of sale or any means of exchange but can be utilized by individuals or a group of individuals in different tenure arrangements. As the result of this, compensation payment assessments are not related to the land but to the development and improvement made to the land by the landholder. It is this fact that warrants cautious consideration in the assessment of compensation payment. Unless assessment for compensation payment is made in acceptable standards, it may seriously affect the rights of persons who are going to be displaced.

It is to address these issues that the FDRE Constitution provides, in its Article 44 (2) that: “All persons who have been displaced or whose livelihoods 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.” Moreover, in its Article 40 (8) it provides that – when government expropriates private property for public purposes, it shall make advance payment of compensation that commensurate the value of the property.

Generally speaking, it is hoped that the Ethiopian policy and legal frameworks to follow the principle of providing better livelihood conditions for the displaced and resettled people in comparison to their previous livelihoods. It is based on this principle that the Environmental Policy of Ethiopia (EPE) of 1997 requires that the (re)settlement areas need to be prepared in a manner that the newly established areas should satisfy the physical, social, economic, cultural and other needs of the people who are going to be relocated.

6.1 Expropriation of Landholdings for Public Purposes and Payment of Compensation Proclamation No. 455/2005

Based on the framework provided by the Constitution, a proclamation and a regulation were issued by the federal government. These are: Expropriation of Land Holdings for Public Purposes and Payment of Compensation Proclamation No. 455/2005 (Compensation Proclamation) and

Payment of Compensation for Property Situated on Landholdings Expropriated for Public Purposes, Council of Ministers Regulation No. 135/2007 (Compensation Regulation).

One of the underlying reasons for providing this law, as indicated in its preamble, is facilitating conditions for land redevelopment for construction of residential houses and infrastructure for the ever increasing urban areas.³⁷ The Compensation Proclamation is issued with the view to defining the basic principles that have to be taken into consideration in determining compensation to a person whose landholding is going to be expropriated or has been expropriated. The Proclamation is applicable on both rural and urban lands, including the riversides of Addis Ababa. The general condition for which land and property can be expropriated is for public purpose which is defined as “the use of land by the appropriate body or development plan to ensure the interest of citizens to acquire direct or indirect benefits from the use of the land and to consolidate sustainable socio-economic development.” (Article 2 (5)).

The basis and amount of compensation payment is prescribed under Article 7 of the Compensation Proclamation. According to this Article:

1. A landholder whose holding has been expropriated shall be entitled to payment of compensation for her/his property situated on the land and for permanent improvements s/he made to such land.
2. The amount of compensation for property situated on the expropriated land shall be determined on the basis of replacement cost of the property. For an urban dweller this means that, the amount to be paid may not, in any way, be less than the current cost of constructing a single room low cost house in accordance with the standard set by the concerned region.
3. The cost of removal, transportation and erection shall be paid as compensation for a property that could be relocated and continue its service as before.

Compensation payment may also relate to displacement compensation. For an urban landholder whose landholding has been expropriated, displacement compensation is paid in addition to the compensation payable under Article 7 of the Proclamation. According to Article 8 (4) of the Compensation Proclamation, the urban landholder, whose landholding is expropriated shall:

- a) be provided with a plot of urban land, the size of which shall be determined by the urban administration, to be used for the construction of a dwelling house; and
- b) be paid a displacement compensation equivalent to the estimated annual rent of the demolished dwelling house or be allowed to reside, free of charge, for one year in a comparable dwelling house owned by the urban administration.

Compensation payment also involves procedures like valuation of property (Article 9), establishment of property valuation committee (Article 10) and complaints and appeals in relation to compensation (Article 11).

Compensation is paid to any landholder that includes individual, government or private organization. According to the Compensation Proclamation, landholder can be an individual, government or private organization or any other organ that has legal personality and in lawful possession over

37- See the second preambular statement of the Proclamation.

the land to be expropriated and owns property situated thereon. (Article 2 (3) of the Compensation Proclamation) Thus, the ones who are eligible to receive payment of compensation are those who have legally occupied the land and those who have property on such land developed through their labor and capital. Lawful occupants are expected to produce evidence for their legal landholding.

Land assets can be classified as movable and immovable. For movable assets, compensation will be paid for inconvenience and other transition costs. Immovable assets can also be classified as urban and rural. In urban areas, this category of properties includes residential houses, business installations, institutional structures, stores, fences and public service providing installations. The Compensation Regulation No. 135/2007 defines the word building as: “any structure constructed or under construction in an urban center or a rural area for residential, manufacturing, commercial, social or any other service.” As will be discussed below, buildings are subject to compensation assessment without considering where they are situated.

On the basis of Article 7 of Proclamation No. 455/2005 expropriation of landholdings for public purposes, compensation will be made at replacement cost. With this method of valuation, depreciation of structures and assets will not be taken into consideration. Compensation rates and valuation of properties will be based on a nationally set formula based on data collected from local market assessments. Compensation is commensurate with loss of assets; however replacement cost does not seem to consider location value.

Valuation of property will be done by certified institutions or individual consultants on the basis of a valuation formula determined at the national level. Procedures for valuation are to be determined by specific regulations or directives. To this end, the Council of Ministers issued a Regulation No. 135/2007.

The Compensation Proclamation requires that the expropriation order has to be given prior to the relocation. Such order shall not be less than 90 days before the relocation (Article 4 (2)); however, if there is no crop or perennial plant, farm land could be expropriated within 30 days of receipt of the expropriation order. (Article 4 (4)) The law also rules that compensation has to be paid prior to the actual relocation. The intention of the law in doing this is clear – reducing the inconvenience of displacement. In addition to this, mitigating economic, social, cultural and environmental problems which might be caused as a result of relocation is the major legal and policy direction of the country. This is because; mitigating these problems can help in maintaining the community institutions and social networks, productive skills of members of the relocated people.

6.2. Payment of Compensation for Property Situated on Landholdings Expropriated for Public Purposes, Council of Ministers Regulation No. 135/2007

This is a Compensation Regulation issued by the Council of Ministers for the implementation of the Compensation Proclamation. It focuses on assessment of compensation and its main purpose is not only paying compensation but also assisting displaced persons with the view to restoring their livelihoods. Compensation assessment is specifically provided for various structures and im-

provements on land. These include, compensation for buildings, fences, crops (perennial and annual), relocated property and cemeteries.

The Regulation also provides for a formula with the view to calculating the amount of compensation payment based on the rules and principles provided by the Compensation Proclamation and the rules of the regulation itself. In addition to this, the Regulation deals with issuance of replacement land and payment of displacement compensation. The provision of replacement land to an urban dweller whose landholding has been expropriated for public purpose shall be governed by directives issued by Regional States in accordance with Article 14 (2) of the Compensation Proclamation.³⁸

38- *The Addis Ababa City Government can be taken as a regional state.*

7. Gap Analysis on the Ethiopian Legal Framework

The laws/policies which could assist the implementation of the project are found scattered in various policies and legal instruments. Even if it is not possible to state that these policy and legal elements which are scattered in various instruments are sufficient for the effective implementation of the project, they can assist the project implementation well. However, the laws and policies have their own limitations. The major problem associated with these policy/legal elements which are scattered in various instruments is that – they provide general rules rather than specific guidance. That is, they generally state that polluting rivers and other water bodies is prohibited or they merely state the importance of developing and greening riversides. In this section, analyses of the major gaps of laws will be made. One of the major gaps identified during the assessment is the absence of proper regulations on designation of buffer zones and its management. Furthermore, the study also identifies that lack of legal framework on environmental flow for the purpose water extraction from the rivers for various purposes with a view to ensuring the continuous flow of rivers is a major gap identified. Same is true with the issues pertaining to water abstraction rules (surface and underground water) in relation to the rate of recharge.

8. Gaps on Compensation and Resettlement

The following sections provide an overview of the gaps on compensation and resettlement as identified by the analysis.

8.1 Compensation

The major gap in relation to compensation under Ethiopian compensation laws is the amount of payment given to people who lose their landholdings and other properties. A number of studies on compensation revealed that the amount paid to the landholders is small.³⁹ These studies even argue that there is still gap between the laws and the actual practice on the ground.

The other gap with respect to compensation payment is that – the compensation laws/policies do not recognize that location is a compensable property interest. Instead, the amount of compensation for property situated on the expropriated land is determined on the basis of replacement cost of the property. The relative proximity of a location to main roads, market places, city centers and other public service delivering institutions has its own value. However, this is not usually considered during valuation of property. There are also other types of losses that are not considered by compensation laws/policies such as trade loss due to trade interruptions as a result of the expropriation and displacement of landholders.

8.2 Resettlement

The Ethiopian policy and legal frameworks on resettlement give general directions on the mitigation measures for social, economic, environmental and cultural impacts as a result of involuntary settlement. To fill this gap, efforts have been made by developing Resettlement Policy Frameworks (RPFs) for various project activities with the view to providing guidance to project implementers to ensure that prior to implementation of any project, project-affected people are consulted, and appropriate preventive and mitigating measures are exhaustively considered and implemented. The objective of various RPFs is clear – making life good in the new areas for the relocated persons. Irrespective of these efforts, there are some gaps to be considered here. This may help to bring about the attention of the Ethiopian policymakers to consider the gaps and take the appropriate measures.

The following can be taken as gaps in the resettlement policy for project implementation.

39- For instance: see, Daniel W. Ambaye, 'Urban Land Transfer and State Monopoly in Value Capture in Ethiopia', Paper prepared for presentation at the "2016 WORLD BANK CONFERENCE ON LAND AND POVERTY" The World Bank - Washington DC, March 14-18, 2016; Elias N. Stebek, 'Role Conflict between Land Allocation and Municipal Functions in Addis Ababa' MIZAN LAW REVIEW, Vol. 7 No.2, December 2013; and Belachew Yirsaw Alemu, 'Expropriation, valuation and compensation practice in Ethiopia: The case of Bahir Dar city and surrounding, Property Management, Vol. 31 No. 2, 2013.

- The right to participation of the people is recognized in the Ethiopian laws and policies in a general language. It is not clearly defined, except that there are clues that participation may mean engaging in decision making.⁴⁰ It is important to clearly define the essence of public participation, especially those who are directly affected by development projects.
- As it is known from around the world, displaced persons are classified into three groups. These are: (a) those who have formal legal rights to land; (b) those who do not have formal legal rights to land; and (c) those who have no recognizable legal right. The latter are usually people who occupied the area after cut-off date established by a responsible body such as the Compensation Committee. According to these criteria for eligibility, those who are covered under (a) and (b) are eligible to compensation for the land they lose, and other assistance. Those who are covered under (c) will be provided with resettlement assistance in lieu of compensation for the land they occupy, and other assistance, as necessary, to achieve the objectives set out in this policy, if they occupy the project area prior to a cut-off date established. This will effectively avoid those persons who encroach on the area after the cut-off date from payment of compensation or any other form of resettlement assistance. Regarding criteria for eligibility, the Ethiopian laws/policies do not give detailed guidance. Instead, the Compensation Proclamation refers to the eligibility criteria indirectly by defining the term 'landholder' as "an individual, government or private organization or any other organ which has legal personality and has lawful possession over the land to be expropriated and owns property situated thereon." This implies that only lawful possessors of land and those who have property on the land are eligible to get compensation and other sorts of benefits.
- The Ethiopian laws and policies do not specifically address the vulnerable groups such as those below the poverty line, the landless or homeless, the elderly, women, children and the infirm while dealing with displacing them of their landholdings and resettling them. Generally, it is important to give special attention to the resettlement of people who are classified as vulnerable groups.
- It is important that Ethiopian laws/policies make it a mandatory requirement of credit facilities, training or job opportunities for the relocated persons. In the absence of such facilities, relocated people may suffer from changed situations. When resettlement is an agenda, the primary issue to be considered is about the forthcoming livelihood of the displaced people. The point here is that the livelihoods of people after resettling in the new area must be improved as compared to their former livelihoods. If that is not possible, the minimum requirement is, restoring their previous livelihoods. The new life must not be worse off.

40- See for instance, see *Environmental Protection Organs Establishment Proclamation No. 295/2002, Article 15 (1)*

9. Gap Analyses on Selected Policy/Legal Instruments

9.1 Ethiopian National Urban Green Infrastructure Standard, 2015

This document tries to provide the activities which are not allowed to be conducted on the riverbanks. For instance, it provides that the following activities are not allowed:

- Crop and horticultural growing within 6 meters from the edge of a river;
- Animal husbandry within the riparian buffer;
- Allowing surface drainage from growing areas to run directly into the river; instead, runoff from these areas should be directed to retention areas for infiltration and settlement prior to entry to the river.

But it is not clear from the wordings of this document that all other activities (other than the ones mentioned) are allowed on the riverbanks and riparian buffer.

9.2 Ethiopian Building Proclamation No. 624/2009

Even if this Proclamation classifies buildings in three categories, it does not specify which of the categories can be built in the riverbanks and which are not allowed to be constructed in the same.

9.3 Addis Ababa City Government Revised Charter Proclamation No.361/2003

Although the FDRE Constitution provides that the special interests of the Oromia Regional State shall be determined by law and one of such laws is the Addis Ababa Charter, no such details are indicted in the Charter regarding the special interest of Oromia in relation to social services, utilization of natural resources and joint administrative matters. The reason for the special interest of the State of Oromia in Addis Ababa was the location of the latter within the former. In addition to this, the city is serving as a seat for the Oromia Regional State. This condition also increases the interests and also responsibilities of the Oromia Regional State in Addis Ababa. It is also important to underline here that the Oromia Regional State is one of the major stakeholders in the ARDCAP.

9.4 Addis Ababa City Government Rivers, Riversides Development and Climate Change Adaptation Project Office Establishment Regulation No.75/2015

This legal instrument is the major law in the implementation of ARDCAP. Even if it is made by

considering many issues, still it has some gaps. Its major gap is its failure to list down, at least, the major stakeholders in the implementation of the project. Even if the board members are going to be selected from 9 to 11 public institutions, it is not expected that these are the only institutions which can take part in the implementation of the ARDCAP. Listing down the major stakeholders, including nongovernmental and private organizations, by a legal instrument is important for effective coordination which also entails accountability.

10. European and African Regions Experiences

European Union has developed two water laws in 1991– the Urban Waste Water Treatment Directive (UWWTD) and the Nitrates Directive. The main objective of the UWWTD aimed to regulate ‘collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors’ ‘to protect the environment from the adverse effects of urban waste water discharges.’⁴¹ The Agricultural Nitrates Directive, on the other hand, was adopted to control water pollution from agricultural ‘run-off’.⁴² The Nitrates Directive aimed to control diffuse source pollution.⁴³ The Directive requires each member state to designate the nitrate vulnerable zones of all land draining to waters that were affected by nitrate pollution; establish a voluntary code of good agricultural practice; and establish a mandatory action program of measures for the purposes of tackling nitrate loss from agriculture.⁴⁴

In 2000, the European Union introduced the Water Framework Directive, which accommodated the principles of IWRM and planned to achieve ‘good statuses in all the European water bodies by 2015. Achieving good status under the Water Framework Directive under the European Commission is a general requirement for all surface waters to meet both ecological protection and general minimum chemical standards within a defined period of time.’⁴⁵ Often human-induced water quality failures are caused by point and diffuse pollution.⁴⁶ Point source pollution can be controlled by using regulatory and non-regulatory mechanisms. Diffuse source pollution comes from diverse unidentifiable sources. These include diverse agricultural land use practices. Due to its nature, diffuse source pollution is challenging to control. No one person is responsible.⁴⁷ Often designate protected areas such as buffer zones and continuous awareness creation activities are approaches widely in –use. The WFD obligates the member states to designate and make a register of protected areas for water resources.⁴⁸ Water bodies under the group are given special protection with the purposes their uses for human consumption; protection of economically significant aquatic species; recreational importance; their nutrient sensitivity; and the protection of habitats or species where the maintenance or improvement of the status of water.⁴⁹

Over-abstraction of water is one of the threats to the sustainability of rivers. The water law should need to provide clear guidance on the levels of surface water flows, and incorporate a rule to control water abstraction and ensure sustainable environmental river flow across a river basin. Different actors must take into account a long-term average water recharge level for groundwater, to limit or

41- Council Directive 91/271 concerning urban waste –water treatment OJL135/40.

42- Council Directive 91/676 concerning the protection of waters against pollution caused by nitrates from agricultural sources, OJL 375/1, article 3

43- *ibid*, article 4.

44- *ibid*, article 3.

45- *ibid*.

46- The Comptroller and Auditor General Environment Agency, *Tackling diffuse water pollution in England*, 8 July 2010.

47- *ibid*.

48- WFD, article 6.

49- *ibid*, Annex IV.

prevent over-exploitation. Once there is rule for environmental flows, its effective implementation is paramount to achieve a 'good status' in terms of quantity.

At the African Union level, water bodies' management has given much attention by adopting the *Africa Water Vision for 2025*.⁵⁰ The Africa Water Vision for 2025⁵¹ provides a blue print how member states would reform their national water policy and law. It underlines the need for 'an Africa where there is an equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation, and the environment'.⁵² The African water policy highlights;

- Sustainable access to safe and adequate water supplies and sanitation to meet the basic needs of all sufficient water for food and energy security
- Adequate water for sustaining ecosystems and biodiversity both in terms of quantity and quality
- Reforming institutions that deal with water resources to create an enabling environment for the effective and integrated management of water in national and trans-boundary water basins, including management at the lowest appropriate level
- Water basins that serve as a basis for regional cooperation and development, and are treated as natural assets for all within such basins;
- An effective and financially sustainable system for data collection and assessment; dissemination for national and trans-boundary water basins
- Effective and sustainable strategies for addressing natural and man-made water-resources problems, including climate variability and change
- The finance and pricing of water to promote equity, efficiency and sustainability; and, above all, political will, public awareness and commitment for sustainable water-resources management, including the mainstreaming of gender issues and youth concerns and the use of participatory approaches.

To tackle rivers' threats, the AU has adopted the comprehensive African Water Vision for 2025. The Water Vision for 2025 also calls: equitable and sustainable use; demand and supply management; water quality protection; integration; cooperation and collaboration; and participation and subsidiarity. Despite the Africa Water Vision's recognition that water challenges is at the heart of the AU's social and economic development and environmental sustainability, the status of the AU's legislative competence to intervene in shaping WRMPs is weak. The AU's Water Vision is 'calling' the member states to take actions. African Ministerial Council on Water (AMCOW) and the heads of government of certain African countries have subsequently formulated a range of declarations that facilitate the implementation of the Africa Water Vision. Since 2000, the AU has adopted a dozen WRM declarations. The continent does not have a comprehensive water law. The influence that the policy has brought is insignificant.

50- Economic Commission for Africa, *The Africa Water Vision for 2025: Equitable and Sustainable Use of Water for Socioeconomic Development*, 1.

51- *ibid*

52- *ibid*

11. Lesson Learnt from International and Regional Experiences

Designating rivers buffer has many significant recognized benefits, addressing over-encroachment challenges and improving the environment. River zonation can help significant biodiversity quality, provide ecosystem services and serve as wildlife corridors. Before designating river buffer zones, all sites to be appropriately assessed to know whether buffer zone designation is sustainable, considering: social issues, economic factors (local economy and demand for housing) and environmental impacts and benefits. The rivers buffer zones as not simply being seen protected areas their values also should be accounted and valued for the urban economy. These green greenbelts need to be seen in holistic terms that deliver diverse benefits for urban communities.

Healthy urban rivers need setting of a defined goal or vision. It also needs defined actions ensure meeting the goals with a rigorous and frequent review and improvement cycle. This should be complemented with effective legal policy instruments, which address major human pressures. The compliance with legal and policy instruments should be evaluated against pre-defined indicators. As part of the Vision, the project office should produce periodic reports showing progress on meeting defined indicators to create healthy and clean urban rivers.

12. Experiences from Other Countries with regards Riversides Development

It is common to develop rivers and riversides (or river banks) in other parts of the world, including African countries. The following paragraphs briefly assess the experiences of other countries in their efforts to develop rivers and riversides. The countries are chosen because they are located in Africa and their levels of economic development are closer to Ethiopia.

12.1 Kenya

Kenya has a number of legal instruments that deal with development and protection of river banks. The laws have not been consolidated into a single body of regulation but rather scattered in different legal instruments. One of these legal instruments is the Legal Notice No. 19 the Environmental Management and Coordination (Wetlands, River Banks, Lake Shores and Sea Shore Management) Regulations, 2009. Article 17 of this legal instrument provides general principles and these are:

- Resources on the river banks, lake shores and the sea shore shall be utilized in a sustainable manner;
- Environmental impact assessment as required under the Act shall be mandatory for all major activities on river banks, lake shores and the seashore; and
- Special measures, including prevention of soil erosion, siltation and water pollution are essential for the protection of river banks, lake shores and the seashore.

Article 20 of the Regulation lists, the duties of a District Environment Committee. These include:

- Require, in writing, the lead agency to take appropriate action;
- Ensure protection of all the riverbanks and shores; and
- Assist local communities in conservation and sustainable utilization of the resources and services for ecological, aesthetic and social economic purposes.

From these provisions of Legal Notice No. 19/2009 it can be seen that high level of protection is given by the law and the powers of the local committees in the protection of riversides is immense. As local people are the closest people to the riversides, their effective engagement in the protection of the riversides based on local segments of riversides is a lesson to be learned from this Kenyan law.

Various studies have been made in the development of River Nairobi based on zoning compartments created along the river banks. These studies indicate that Kenya has been urbanizing at 7-8%. Due to high rate of population growth, proliferation of business, increased demand for development activities, there is high pressure on the city of Nairobi. The studies have proposed a policy change in the development and protection of riversides. For instance, Arthur MunyuaMwaura

suggested, among others, the following:⁵³

For Zone 3, the following are proposed.

- Mixed Use-commercial and residential;
- Flat development, maximum of 2 to 4 floors, depending on the area;
- The open space/recreational site development can be done on areas to be reclaimed from informal settlement.

For Zone 4, the following are proposed.

- No development of flats and apartments;
- Maisonettes and town houses can be allowed based on circumstances of a specific area.

For Zone 5, the following are proposed.

- Development of residential houses;
- No development of flats and apartments;
- Offices, bars and restaurants and residential hotels not permitted outside the designated commercial node.

From these proposals it can be seen that different parts of the same river can be used for different purposes.

Another study also reveals that:

- More often than not, the rivers are used for discharging raw sewage;
- The Nairobi River Basin is home to more than 50% of Kenya's manufacturing and service enterprises and is the most polluted river basin in the country.⁵⁴

The study also states the challenges in the development and protection of rivers and riversides in Nairobi. These include:

- **Fragmented legislation:** Fragmented legislation is a problem in rivers and riversides development in Kenya. There are laws such as Water Act (2002), Environmental Management and Coordination Act (2012), Physical Planning Act (2010), Survey Act (2012), Local Government Act (2009), and City Council by-laws. It is also indicated in this report that most of these legal instruments put a minimum of 6 meters and a maximum of 30 meters for any work from the bank of urban river.⁵⁵
- **Institutional overlaps and bottlenecks:** there have been areas of overlap of mandatory roles that have resulted in duplication of and sometimes conflicting activities across institutions. A typical example is between National Environment Management Authority

53- See Arthur MunyuaMwaura, *Policy Review for Zones 3, 4 and 5, Nairobi, Kenya, 42ndISoCaRP Congress 2006*

54- Charles (2010)

55- *ibid*

(NEMA) and the City Council of Nairobi, where environmental approvals by one party have not always been in regard of the other's concerns causing conflict either in implementation or enforcement.⁵⁶

- **Inadequate capacity:** despite having a clear vision and understanding of what needs to be done, many actors are still unable to operationalize such actions to significant levels due to inadequacy in equipment and technical expertise, human resource, and financial aspects.
- **Lack of database:** there is very scanty baseline information on riparian areas that interventions by various actors would be based on. Both government and non-governmental agencies have identified this as a major setback in the management of riparian reserves. The bulk of the information is outdated and in most cases not digitized.
- **Lack of land bank:** The bulk of riparian areas are occupied by human settlements and other economic activities that will need relocation to pave way for rehabilitation. However, there is hardly any appropriate land reserve within the city to relocate these activities without drastic adverse effects. The little land available is of low quality, not serviced, and far from employment areas. Thus, any suggestions to relocate people to such areas are likely to be strongly resisted.
- **Low level of awareness:** there is minimal understanding of the implications of dense occupation and intense exploitation of riparian reserves by the occupying communities. Most of the lessons are acquired through adversities such as flooding, otherwise the indirect and cumulative side-effects go unnoticed. Likewise, it is difficult to promote the need for riparian conservation from the ecological services perspective since this does not have immediate and direct effect on the occupants of such areas and such functions have to compete with other pressing needs like shelter.⁵⁷

12.2 Egypt

According to the Working Paper prepared by the Institute of Urban and Regional Development and the University of California, as urban waterfronts around the world de-industrialize, cities are increasingly capitalizing on these opportunities to provide open space and alternative commuting routes along riverbanks, bringing residents and visitors back to the waterfronts.⁵⁸

The Working Paper continues commenting on that the urban population in Egypt is undeserved by parks and other public open spaces. It also states that the Nile is the origin of culture, history and life itself. Connecting Cairo to the Nile renews access to the spiritual, recreational, social, and cultural vitality embodied owing origin of culture, history and within this great river.⁵⁹

The Working Paper also suggests a strategic plan for the proposed purpose of connecting the people with the Nile River. The strategic plan has the following objectives.

1. Create a continuous pedestrian and bicycle network along the Nile from central business district to Maadi;⁶⁰

56- *ibid*

57- *ibid*

58- *Connecting Cairo to the Nile: Renewing Life and Heritage on the River, Working Paper 2011-06.*

59- *ibid*

60- *Maadi is a suburban district in the south of Cairo.*

2. Expand the water-based ferry transit system along the Nile;
3. Improve air quality by reducing automobile traffic along the Nile;
4. Create walkway connections to transit nodes and landmarks;
5. Develop an open-space network for all Cairenes, as well as tourists, to experience the Nile;
6. Construct continuous pedestrian trail for the purpose of cycling, walking, or sitting along the riverbanks;
7. Increasing the amount of open green space in Cairo, which currently consists of less than 0.092903 m²per person; and
8. Establishment of an open green space network.

From this strategic plan and its objectives it can be seen that rivers and riversides development activities can enhance:

- Non-motorized transport system and consequently reduce greenhouse gas emissions;
- Long distance walking culture along the riverside footpaths which entertain people and improve their health conditions;
- The connection between biodiversity nodes along the riversides by enhancing the movement of organisms.

In the following table, excerpts of some features of Ghana Riparian Buffer Zone and the Uganda National Environment (Wetlands, River Banks and Lake Shores Management) Regulations, No. 3/2000 are included.

12.3 Ghana and Uganda

Ghana

Ghana prepared a Riparian Buffer Zone Policy in 2011. According to this Policy:⁶¹

- Human induced activities have exposed most of Ghana's rivers and water bodies to the vagaries of the weather, and may as a result, account for the many streams and rivers, which used to be perennial, but are now experiencing periodic drying up.
- The Buffer Zone Policy is intended to protect, regenerate and maintain the native /established vegetation in riparian buffer zones to improve water quality by instituting proper procedures for managing and controlling the above activities along river banks and generally in catchments of surface water bodies.

The Buffer Zone Policy provides guiding principles in its § 2.1 based on the recognition of national perceptions and local needs as expressed in the Ghana National Water Policy and the African Water Vision 2025. The key principles that have guided the buffer zone policy preparation include:

- The principle of preventing, mitigating and managing water-related events associated with potential effects of climate variability, viz. floods and droughts;
- The principle of recognizing that socio-economic activities and the livelihoods of local communities are interlinked with the integrity of riparian aquatic ecosystems;

61- *Riparian Buffer Zone Policy Ghana (2011)*

- The principle of subsidiarity in order to ensure the involvement of local communities through a participatory approach at all levels of decision-making in the management of buffer zones;
- The precautionary principle that seeks to minimize activities and change attitudes and perceptions that have the potential to negatively affect the integrity of water and riparian buffer zones.

§ 7.2 of the Riparian Buffer Zone Policy Enumerate the Key Policy Objectives. These are:

- a) To encourage the restoration and protection of riparian ecosystems and the corridors that link them to flood plains/wetlands;
- b) To reduce unsustainable land use practices and pollutant loads into water bodies and waterways in order to improve fresh water supply in urban and pre-urban areas;
- c) To resource the appropriate agencies and other stakeholders to prepare and implement zoning planning schemes;
- d) To preserve or establish green spaces as riparian buffers along waterways in areas that are practically difficult for regeneration and reforestation of riparian vegetation as a more efficient way of preventing drinking water contamination and flooding; and
- e) To promote the recognition of the value of environmental services and its sanitation implications.

§ 7.2 prescribes the Policy measures/or actions

The objectives will be achieved by:

- i. Protecting, restoring and maintaining riparian buffers and flood plains as natural and long term defenses against the harmful effects of floods.
- ii. Enforcing the 'zone/area of no development' along streams and water bodies by the removal, demolition and the prohibition of unauthorized structures and incompatible land use practices on flood plains, fringes, and corridors.
- iii. Managing runoff as close to the source as possible by trapping rainwater, silt, sediment and debris or by directing runoff to natural infrastructure such as gardens, and green parks.
- iv. Promoting the development/establishment of green spaces with native grass along waterways and protecting them from future encroachment and environmental damage by restricting the zone from the removal of soil, trees and other natural features except for purposes of conservation, research, recreation or uses accessory to permit uses.
- v. Encouraging approved edge gardening and flood recession farming only for purposes of mitigating erosion and water pollution and for sustenance of livelihoods.
- vi. Encouraging a sense of municipal and community ownership of green spaces and provide local communities access to green space facilities (recreational parks, walkways etc.) at all times.
- vii. Ensuring that economically important trees such as bamboo and fruit trees (e.g., mango, coconut, and pawpaw) are planted along and within the buffer for the benefit of local communities.

§ 9.3.7 Legislative initiatives

Government agencies may make regulations pertaining to restrictions on development activities and utilization of buffer zones, including:

Construction and commercial activities:

- Stream banks and other areas within the riparian buffer zone shall be left in a stabilized condition upon completion of development activities. The vegetative condition of the entire buffer zone shall be monitored and landscaping or stabilization performed to repair or control soil erosion during and after construction to minimize turbidity of rivers by following minimum requirements wherever practicable. Roads should as far as possible be located away from natural drainage channels;
- The selection of stream crossing points which will involve a minimum of disturbance to banks and existing channels or the angle of crossing shall be perpendicular to the stream or buffer in order to minimize clearing requirements. Where possible, the design of roadways and lots within a development should be aligned such that all streams are either to the rear or the side of individual lots, but not along the front;
- Building of physical structures shall not be allowed in the riparian buffer zone with the exception of open type recreation areas, green park facilities and walking trails as approved by the appropriate authorities;
- Excessive cuts and dirt accumulations, which tend to block natural drainage, will be avoided. To this effect, individual trees within the riparian buffer zone may be cut down if in danger of falling, causing damage to dwellings or other structures, or causing blockage of stream flow. The remaining root stump should be left in place, where feasible, to maintain soil stability and in-stream habitat. Requests to remove unsightly or undesirable trees that are not in danger of falling, causing damage to dwellings or other structures, or blocking of stream flow may be made to the appropriate authority on a case by case basis. The tree removal requests should not cause damage to the stream bank or the overall effectiveness of the stream's tree canopy. Should the authorized agency approve a tree removal request then replacement trees shall be planted; and
- Clear restriction of commercial activities like repair and washing of vehicles with likely negative impacts on water bodies, shall be enforced.

Logging and harvesting:

- A logging code requires a buffer zone of sufficient width to be established to confine within the zone any visible sediment resulting from accelerated erosion;
- Selective harvesting, which often leaves residual tree stumps, and tends to reduce the extent of disturbance and runoff in buffer zones shall be encouraged; and
- With sawmill operations, no person shall dump any saw dust and other waste into any freshwater body such as rivers and lakes.

Farming practices:

- Good agronomic practices, low external input use and properly cultivated catchment areas can reduce sediment yield and other pollutants from drainage water before it enters streams or reservoirs;
- Where vegetation cover is removed for agriculture, the slope must be terraced to stabilize the slope and prevent erosion;
- Controlled farming can provide better protection in urban areas where natural vegetation does not provide sufficient protection for water bodies from indiscriminate waste dump-

ing or car washing;

- Livestock watering shall be limited to certain points or entirely excluded from the riparian areas when necessary in order to achieve buffer zone objectives; and
- Controlled grazing of livestock may be permitted as a public amenity in marginal areas outside riparian areas

Water pollution hazards: The following land uses and/or activities are designated as potential water pollution hazards and must be setback from any stream or water body by the following distances:

- Storage of hazardous substances – 45 meters
- Raised septic systems – 75 meters
- Solid waste landfills – 90 meters

Uganda⁶²

Definition: River bank means the rising ground, not more than 100m long, bordering or adjacent to a river in the form of rock, mud gravel or sand and in cases of flood plains includes the point where the water surface touches the land, that land not being the bed of the river;

Management of River Banks and Lake Shores

- The Government or a local government shall hold in trust for the people and protect river banks and lake shore for the common good of the citizens of Uganda. Government or a local government shall not lease out or otherwise alienate any river bank and lake shore.

Objectives

Objectives of the management of river banks and lake shores part of the Regulations include:

- Facilitate the sustainable utilization and conservation of resources on river banks and lake shore by and for the benefit of the people and community living in the area;
- Promote the integration of wise use of resources in river and lakes into the local and national management of natural resources for socioeconomic development;
- Provide for the regulated public use and enjoyment of river banks and lake shores;
- Prevent siltation of rivers and lakes and control pollution or degrading activities.

Principles

- Resources on the river banks and lake shores shall be utilized in a sustainable manner;
- Environmental impact assessment as required under the statute is mandatory for all major activities on river banks and lake shores; and
- Special measures are essential for the protection of river banks and lake shores such as preventing soil erosion. Salutation and water pollution.

62- *The National Environment (Wetlands, River Banks And Lake Shores Management) Regulations, No. 3/2000*

12.4 Major Lessons from the Experiences of Other Countries

1. The fact that proper administration of rivers and river buffers contributes for sustainable development of cities and also countries.
2. The importance of empowering communities on the conservation, management and utilization of rivers and their buffers for the biophysical nature of the rivers and riversides and socio-economic development of the residents of cities.
3. The importance of separating rivers and riversides into different segments for effective and efficient management of rivers and riversides. Various activities are allowed/prohibited in various segments.
4. Consideration of rivers and riversides as spiritual, historical and cultural sites in addition to their consideration as biological and physical structures.
5. The importance of creating continuous and interconnected networks for movement of different species of organisms.

12.5 Key Recommendations

- Generally speaking, the level of law enforcement in Ethiopia is low. The situation is even worse when it involves environmental issue. The squalid conditions in which the Addis Ababa Rivers and riversides would clearly show the deep rooted problems of law enforcement in pollution control. Even if there are legal instruments for controlling pollution, they have never been implemented to the level that they are expected to protect environmental pollution. Although the law provides for polluter pays principle, there are serious problems of enforcing this principle. One of the problems is the sources of most pollution are not clearly known, which are known as diffused pollution sources. There are also problems with the point pollution sources, though the sources of these are known. For instance, although a maximum of 5 years of grace period is given to existing factories to fully comply with the provisions of the Prevention of Industrial Pollution Council of Ministers Regulation No. 159/2008, many of the factories have not yet complied with the provisions of the Regulation as far as their discharge into the environment is concerned.⁶³ For diffuse source pollution, the best solution is working on the buffer zone so that it could filter the pollution. For agricultural pollutions (they are diffused in many instances), preparing code of conduct and implementing it may help reduce the problem. For instance, the code of conduct may prescribe prohibition of using agricultural chemicals during heavy rainfall seasons.
 - Developing and implementing an effective land use plan may be helpful in reducing the problems associated with point source pollution. As it is clearly observed, most of the old factories were placed along the riversides in Addis Ababa. By applying a prudently prepared land use plan, it may help in relocating the factories which are concentrated on the banks of rivers.
 - A new law (Addis Ababa City Government Rivers, Riversides Development and Climate Change Adaptation Project Office Regulation No. 75/2015) has been issued in 2015 that estab-
- ⁶³⁻ As reports from the AAEPa reveal, some factories are still asking for additional grace period. The reports also indicate that some factories, although they built treatment plants, they are not using them.

lished ARDCAPO and prescribed its powers and functions. It is commendable that this new office is established with important powers and functions. However, a number of powers and functions in relation to rivers and riversides still remain with other institutions by creating overlapping of functions. Unless certain mechanisms are created to handle this situation, it may lead to conflict of interest among various institutions. The problem of overlapping of roles and responsibilities of various institutions can be resolved by creating an overarching organ that oversees and coordinates the institutions so that their tasks would be accomplished synergistically. Example can be set by Addis Ababa City Government Executive and Municipal Service Organs Re-establishment Proclamation No 35/2012 where Land Development and Management Bureau coordinate various institutions, even if these institutions are individually accountable to the Mayor of Addis Ababa.⁶⁴

- In addition to the above issue, it would have been good if the new law also lists down the stakeholder institutions, which could play key roles in project implementation. Since the rivers and riversides management requires long period of time it is important that all relevant organizations are involved in the activities on the ground. Attempts should be made to establish a coordination unit within the City to successfully achieve the objectives of the rivers and riversides management.
 - a) Even if it is expected that the City Government of Addis Ababa and the National Regional State of Oromia work together on aspects of social services, natural resource utilization and administrative affairs, no specific law has seen the light of the day which is enacted the FDRE Constitution, Article 49 (5). As the Regional State of Oromia has special interests in the City of Addis Ababa, it is high time that the Federal Government should enact the said law incorporating matters related to Addis Ababa rivers and riversides development, among others. Until the Federal Government issues such detailed law, both governments must work on the basis of bilateral agreements reached between them. Especially, higher executives of the Oromia Regional State and the City of Addis Ababa, including President of Oromia, Mayor of the City should create room or forum to hold regular joint discussion on joint matters, including the development of Addis Ababa rivers and riversides.
 - b) Meaningful participation of the people, which allows them to take part in decision making pertaining to management of rivers and riversides, has to be conducted. All decisions pertaining to the management of the rivers and riversides has to be consulted and agreed upon by those people who are in direct relationship with the rivers and riversides, apart from other citizens of the city.

64- See Article 35 (1, 2) of Proclamation No 35/2012.

13. Organizational Assessment

13.1 Introduction

Institutions are the written and unwritten rules, norms and constraints that humans devise to reduce uncertainty and control their environment. These include (i) written rules and agreements that govern contractual relations and corporate governance, (ii) constitutions, laws and rules that govern politics, government, finance, and society more broadly, and (iii) unwritten codes of conduct, norms of behavior, and beliefs. Menard and Shirley (2008). Based on this, Fisher et al., (2011), defined institutions as rules and norms such as property and use rights, legal frameworks, official language, trust-building mechanisms and social capital (especially between ethnicities as well as between administrative units), as well as regulatory culture. In contrast, the authors have indicated that, organizations are bodies such as government departments, autonomous regulatory bodies and non-government organizations. Institutions and organizations are key in determining the status of an environmental resource, benefits deriving out of them and how those benefits are shared and the penalties for abuse.

The current study is conducted to undertake both an institutional and organizational analysis with regards to Rivers and Riversides management in the City of Addis Ababa.

13.2 Background

The City Government of Addis Ababa through a Proclamation (No 75/2008) has established the Rivers, Riversides Development and Climate Change Adaptation Project Office by the City of Addis Ababa in 2015. The project office's major duties and responsibilities can be categorized into three broad areas including studying the rivers and riversides, designing appropriate plans and strategies for a sustainable river and riverside development and management and implementing the same in a structured and planned manner. This involves issues pertaining to ecosystem management, climate change adaptation and mitigation, use of innovative technologies and inventions etc. Considering that the mandate has been given only to a Project Office, rather than an institution, the current organizational assessment has been undertaken to place the mandate of the Rivers and Riversides management within an appropriate organizational structure based on a comprehensive assessment to be undertaken.

13.3 Scale of Organizational Assessment

The Rivers running through the City of Addis Ababa have a trans-boundary nature with the major watershed in the Northern part of the City lying in the Oromia region as well as the let out downstream South Western part of the City again running into the Oromia region. According to the FDRE Constitution the Federal Government is responsible for the management of all trans-boundary rivers in Ethiopia. Hence the organizational assessment that would be undertaken

will take into account the organizations at the Federal level that would have a bearing on the Rivers and Riversides management at the City level. Few relevant organizations at the regional level will also be assessed for the purpose of this study.

There are number of organizations, the mandates of which have a bearing on the Rivers and Riversides Management in Addis Ababa, the project aims to map them at all levels and will provide recommendations for future organizational structure for the Rivers and Riversides Management. Considering that the Rivers and Riversides Project Office has a mandate to operate within the limits of the City of Addis Ababa the assessment will comprehensively look into the organizations that are mandated to address the environmental issues within the Cityie the assessment will focus on 'City Scale' rather than at a wider basin level. Furthermore, this has been done with the understanding that the flood risk governance as part of the Rivers and Riversides governance, that the office has been mandated to address, are a critical issue for the City of Addis Ababa and is best addressed if the mandates are decentralized rather than at the Basin Level. The 'City Scale' framework is also based on the economic, social and administrative aspects that govern these rivers. Larrue et al., (2016) have indicated similar frameworks for the rivers running through certain cities in Europe.

13.4 Addis Ababa Governing Bodies and Functions

The constitution of the country states that Ethiopia is a Federal Democratic Republic with a parliamentary system (FDRE, 1995). The federal legislature is bi-cameral and is composed of the House of Peoples' Representatives (HPR) with 547 members and the House of the Federation (HF), which has 110 members representing 58 "nations and nationalities". The tenure of the two houses is 5 years. The country is composed of nine Regional States and two City Administrations councils. Members of the two parliaments, the House of Representatives and House of Federation are elected bodies from the people across all the regions and nationalities. The regional states and city administrations are subdivided into administrative Woredas/districts. These are further divided into Kebeles which is the smallest administrative unit in the governance system. The highest governing body of each national regional state is the respective Regional Council, which is responsible for legislative functions. With the intention to promote decentralization and meaningful participation of the population in local development activities, public service delivery has to a large extent fallen under the control of the regions. The regional councils define the region's policy and have all legislative, executive and judiciary powers regarding the region, except for those under the responsibility of the central government, such as defense, foreign affairs, and economic policy, etc. The Addis Ababa City Administration is structured in a stratum where in the city council is the highest legislative body comprised of audit and inspection body, city government executive body and city government courts and judicial body. Under the city government executive body is the city mayor, which constitutes the city manager, state functions, bureaus (cabinet), the mayor's office and sub-city executive body. The city manager is in charge of municipal services like land development, solid waste disposal and reuse, emergency prevention and control, road construction, water construction and drainage, etc. Environment protection is under the mayor's office. The sub cities are further divided into woredas, which are the last interfacing point between the administration and city dwellers.⁶⁵

⁶⁵- Proclamation 9th Year No. 86 FDRE, 2003.

The City Government is mandated, among others, to formulate and implement policies concerning the socioeconomic development of the city. It also organizes Sub-cities and woredas/districts, demarcates their borders, and allocates budgetary subsidy to them. The role and duties of the woreda administration, among others, is to encourage Wereda residents, Governmental and Non-Governmental Organizations for development being a center for direct participation of Wereda residents in development and a focal point of services delivery for those that can be delivered at Wereda level. A detailed review of the institutional arrangement in terms of the power, function and governance system and implementation capacity of the federal system and the city of Addis Ababa reveals the following key points. The city is governed by democratically elected officials; the city prepares its own sectoral policies, strategies and development programs; it allocates budget to development programs, implements and follows up implementations. The city has its own institutional structure that stretches from city to district levels to implement policy and development plans approved by the city council. For instance, the city has an environmental protection authority that formulates and coordinates climate change related programs, controls river pollution, conducts environmental impact assessments; and a water supply and sewerage authority to plan and implement water supply and sewerage activities. The constitution and the water policy provide the city the right to use the water resources within and outside its boundary. Special arrangements can be developed with neighboring Oromia Region for resource use and discharge of pollutants.⁶⁶

13.5 River and Riverside Governance

While the assessment is done at the 'City Scale' the models of governance of rivers at different scales are reviewed. For any effective governance system to be in place, it should be robust in nature, meeting the key principles, required for managing sustainable common property resource (Ostrom, 2011). As part of the governance systems organizations hold key to the successful addressing of the problems associated with urbanization vis a vis Rivers. The scale of the river governance is provided in a schematic diagram as envisaged by the authors (Figure 2).

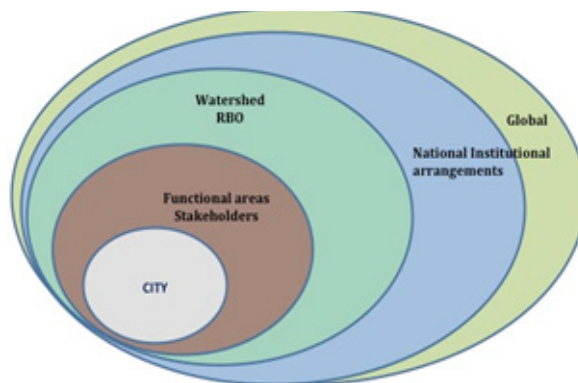


Figure 2: Scale of River Governance in Addis Ababa

With regards to organizations managing common property resource Svendsen et al (2005) distinguish two basic organizational pattern for basin governance. The first is the centralized (uni-66- *Weldesilassie(2014)*)

centric) model, in which a single unified public organization is empowered to make decisions regarding management of the basin. This centralized organization is not necessarily 'authoritarian', but does centralize authority under a governance process that may be more or less democratic. The second is the decentralized (polycentric, coordinative) model, in which the actions of existing organizations, layers of government and initiatives are coordinated to cover an entire river basin or sub-basin. While new structures may be created, the bulk of routine work is done by existing organizations that are not specific to the basin. Although both models are characterized by separations among the three basic roles of management, regulation and service provision, the firewalls between them are typically stronger in the coordinative model where separate organizations are involved. In the case of Addis Ababa while a unicentric authority responsible for the rivers has been established, with the mandate to coordinate, collaborate and facilitate numerous activities with other agencies and offices based in Addis Ababa. The function of organizations can help identify the role for interventions. For the purpose of this study a comprehensive assessment of all existing organizational structures at national and at the level of the City of Addis Ababa that which are dealing with Rivers and Riversides are undertaken.

Institutions and organizations evolve as demand calls and resources permit. The water sector organizational setups in Ethiopia have gone through many transformations since the first water institutions were established in 1956. All institutional arrangements are characterized by instability, shortage of resources, and lack of demarcation of appropriate mandates among different institutions. An overview of the development of the water sector organizations in Ethiopia are given in Annex IV. Currently, at the Federal level the mandate of the issues pertaining to the rivers rests with the River Basin Authorities. Particularly the rivers within the City of Addis Ababa come under the preview of the Awash River Basin Authority. Addis Ababa is located in the upper part of the Awash River basin and divided in to two major sub-watersheds. Kebena, Little Akaki and Big Akaki are the three major rivers that flow through the city from north to south. River water suffers from pollution and is used for irrigation purposes downstream in the river basin. Addis Ababa is vulnerable to riverine as well as flash floods due to extreme climatic events and upper catchment activities and the vulnerability to flooding is more aggravated due to a poor drainage system, rapid housing development along river banks and using inappropriate construction materials.⁶⁷ Furthermore, according simulations in the coming 90 years there may be a net annual flow increase in Akaki River due to climate change. It may also aggravate the recurrent flooding problems in Addis Ababa and its surrounding area.⁶⁸ Hence, there is a need to strengthen and streamline the responses towards the flood management with regards to the Rivers of Addis Ababa.

The Rivers related issues within the City of Addis Ababa had been attempted to be addressed over the past decade or so. The National Environmental Protection Authority established in 1995 was the first legal entity with specific mandates to protect rivers and river ecosystems. The Addis Ababa EPA⁶⁹ has since then been responsible for designing, monitoring and evaluating, as well as enforcing strategies to protect the rivers, riversides of Addis Ababa. Organizations that operate to rehabilitate Rives and Riversides and their mandate can be of different nature. It could be set up as Commissions,⁷⁰ Basin Authorities etc. that are working to serve the rivers and riversides and it

67- Birhanu, et al., (2016)

68- AbaynehAlemu (2011)

69- Proclamation 35/2012

70- Various commissions (Save the Country Land Trust and Nine Mile Creek Conservation Council)

is done either within the section of the rivers⁷¹ or the whole rivers. The efforts could also be led by Government, Other Stakeholders and Communities themselves.⁷² The objectives could also be different starting from flood projection to ecosystem restoration to several others. Flood protection, environment management, recreation, transportation and socio-economic sections, historical and cultural environment.⁷³

The demand for a more robust intervention has led to the establishment of the Rivers, Riversides Development and Climate Change Adaptation Project Office by the City of Addis Ababa in 2015. The Rivers, Riversides Development and Climate Change Adaptation Project Office was established with the following mandates and functions including designing and developing rivers and riversides, protecting from floods and related natural hazards, improving and managing biodiversity for urban river ecosystem services, while integrating the rivers and riversides to the urban fabric, adding value to the economic competitiveness of the City, creating jobs, to make it the center for spiritual, social, research and education, mainstreaming climate change mitigation and adaptation strategies, collaborating with local and international partners (Proclamation No 75/2008). The Project Office, geographically and thematically is limited to Addis Ababa rivers development and climate change adaptation and mitigation on the city environment. Regarding to specific activities, the rivers and riversides development collaborate with different city government agencies and research and education centers. Currently, the Rivers and Riversides Project office activities are overseen by a General Manager who in turn report to the Manager of the City who handles six environment related offices including Cleansing and Waste Management Agency.

13.6 Results of Organizational Assessments

The assessment was undertaken in several organizations at both federal and national levels and the results of the assessment are categorized into broader themes such as mandates, stakeholder engagements, coordination mechanisms and organizational capabilities those which are more relevant for the purpose of this assessment and the ensuing recommendations/proposals.

13.7 Mandates

The Federal Democratic Republic of the Government of Ethiopia has been structured in parliamentary system. The council of Ministers is the highest political body next to the House of People's Representative and accountable to the Prime Minister. The ministries have been established by proclamation with their pertaining mandates, duties and responsibilities.

An organizational mandate refers to the power and duties pertained to the organizations by legislature. To this end, every organization has its own mandates, duties and responsibilities for which it is established to accomplish. These mandates are derived from policies, strategies and guidelines at different levels. The current assessment particularly focused on mandates specifically related to water and rivers and riversides management, as well as environmental resource management in general. Below is the description of the organizational mandates of selected organizations/sectors

actively

71- Nine mile creek

72- This community-based revitalization plan designed for Onondaga Creek Basin

73- Chengachong river restoration

with respect to rivers and riversides management at the Federal and City level, based on the results of the assessment undertaken.

13.7.1 Federal level

The findings of the assessment have indicated that the ministries have their respective mandates, which are formulation of the policies, strategies and guidelines that give direction for the regional states and the chartered two city administrations. The organizational assessment result has pointed out that all the federal level organizations have mandates of environment, water and riversides management⁷⁴ with different scopes as per the objectives they established for.

With this regards the major mandates of Ministry of Environment, Forest and Climate Change are to coordinate measures to ensure that the environmental objectives provided under the constitution and the basic principle set out in the environmental policy are met, establish a system for environmental impact assessment for public and private projects, as well as social and economic development policies, strategies, laws and programs. These mandates while emanating from the overall constitutional obligation of the Rights to Healthy Environment for every citizen is derived and facilitated by various policies and strategies that the ministry has facilitated. The ministry has led in the formulation of the Environmental Policy of Ethiopia of 1997, amongst others. These policies and strategy documents provide a vision to ensure healthy environment including that of Rivers and Riversides Management. The ministry is also mandated to coordinate actions and resources required to ensure environmental sustainability and to build CRGE in all sectors and governance levels as well as to provide capacity building support and advisory services to the sector line ministries and their regional counterparts.

Ministry of Water, Irrigation and Electricity has also major mandates that are directly focusing on the water, river and riversides management and development. Some of the main mandates of MoWIE are development of the water resources for economic and social benefits on equitable and sustainable basis, conserving, protecting and enhancing water resources and the overall aquatic environment on sustainable basis. Similarly, MoA&NR has mandates of watershed management; soil and water conservation and rehabilitation of degraded landscapes. The MoWIE also hosts the River Basin Authorities (RBOs). The River Basin Organizations and Authorities Proclamation No 534/2007, issued in 2007 has the overall aim of ‘...promoting and monitoring the integrated water resources management processes in the river basins falling in the respective basins with a view to using the basins’ water resources for the socio-economic welfare of the people in an equitable and participatory manner, and without compromising the sustainability of the aquatic ecosystems.’ The Awash River Basin High Council and Authorities were established under proclamation No.534/1999 E.C. so as to implement the principle of an integrated water resource management. Awash Basin Authority, thus, is established in accordance with Awash Basin High Council and Authorities establishment Council of Ministers Regulation No.156/2000 E.C. The Authority is mandated to work in water resources development in Addis Ababa. Furthermore, the Eco-hydrology section within the Basin Authority Directorate and the Water, Supply and Sanitation Directorate of the MoWIE have mandates to work on water resource management in general and on rivers and riversides specifically. The assessment has also indicated that MoT and MoUH have concerns of

74- Ministry of Agriculture & Natural Resource, Ministry of Transport, Ministry of Environment, Forest and Climate Change, Ministry of Water, Irrigation and Electricity

river and riversides management and MoI has a mandate to oversee and ensure the treatment of effluents being discharged to the rivers and properly managing the solid wastes in order to maintain the quality of water and rivers. These mandates are in line with that of the mandates provided to the Rivers and Riversides Project Office.

13.7.2 City Level

13.7.2.1 Addis Ababa Environmental Protection Agency

The Authority is part of the executive organs of the city government. It has its own legal identity and is accountable to the city mayor. The current status and mandate of the EPA comes from the latest proclamation in 2012 where it was re-established. The AA-EPA is the highest authority on environmental management at city level, and is involved in legislation, planning, program designing, implementation as well as motivation & evaluation. The Authority has the following powers and functions relevant to this study: (the latest ones coming from Proclamation 35/2012)

When it comes to direct mandates with regards to rivers and riversides, AA-EPA, has the mandate to design strategies to protect the environment (including rivers, riversides and ecosystems) from pollutions. It has also a mandate to develop the City's environmental protection standards in accordance with the standards prepared by Federal agency. These standards are tools to reduce pollution into the environment including the Rivers and Riversides amongst others. Also, AA-EPA has the mandate to develop and undertake conservation of areas (forest development and soil conservation) designated as green areas (including beaches) as designated by the master plan of the City and it is also obligated to do this in consultation with the concerned bodies, which include the Rivers and Riversides Project Office. It has also been mandated to reserved forests under the holding of the City Government are properly preserved which are held in the watershed areas, and which can should be put to public use serving the purpose sought.

Some of the important regulations that EPA has brought regarding the municipal regulations in existence include: Environmental Audit Regulation; Municipal solid waste policy and regulation (includes waste water); Environmental Impact Assessment (EIA), and pollution control regulation; Industrial Effluent Emission, and Ambient, Air and Water Quality Control regulation; and Green Area Management regulation (UN Habitat 2005).

As a regulatory power AA-EPA has a central role in protecting river and riversides ecosystems as it has the legal responsibility to follow up and control the disposition of industrial residue, by-products and waste, which are some of the main threats to the city's water bodies. It also has a mandate to issue professional license and supervise those engaged in the drilling of underground water and quarries, which have a direct bearing on the rivers and riversides management. Moreover, the responsibility to coordinate stakeholders and create public awareness with regards to environmental protection falls under AA-EPA. It also has a mandate to consult with the concerned bodies, prepare and submit strategies of environmental protection and ensure the implementation of the same.

13.7.2.2 Cleansing Management Agency

The CMA is part of the AA city administration municipality organ and accountable to the City manager. The agency is primarily responsible for program design & planning as well as monitoring & evaluation of implementation of action plans and regulations concerning dry waste management in Addis Ababa. The CMA works towards promoting community participation in order to prevent the adverse effect and to enhance the benefits resulting from solid waste through actions at the lowest administration unit of the administration. The mandate and roles of the Cleansing Management Agency emanates from Solid waste proclamation 513/2007; Waste management, collection and disposal regulation of the Addis Ababa City Government Regulations No. 13/2004.

Cleansing management Agency is the highest authority in the management, collection and disposal of solid waste in Addis Ababa. Challenges in the solid waste management system (including illegal dumping in rivers and at riversides) is also a major threat to Addis Ababa's rivers, which makes the CMA an important stakeholder for the reclamation and rehabilitation of rivers. The responsibility, through the solid waste management planning, is to ensure, apart from the building of the solid waste disposal sites, these sites are environmentally audited and that environmental impact assessments are undertaken (whenever new solid waste disposal sites are built or when previously built sites undergo modifications) is under CMA. It has been also mandated to ensure that the management of household solid wastes is taken care of.

13.7.2.3 Beautification, Parks Cemetery Development and Administration Agency

The BPCDA was re-organized in the reestablishment Addis Ababa City's administration executive bodies and municipal services through the proclamation No. 15/2009 G.C. based on part three chapter one. Earlier (before 2010) it was categorized under sanitation and beautification administration before it was established as an agency. The agency has received the power of developing and administering green areas, parks and cemeteries of the city emanating from Proclamation 35/2004 and Proclamation 15/2009.

BPCDAA also has a direct mandate to develop, administer, and control green areas in Addis Ababa, including river banks under the city administration. The agency also has the power to contract out (outsource) the administration of such places to voluntary developing investors for a period of time. BPCDAA also has the mandate to prepare and issue regulations, directives, standards and manuals on the development of such places (including river banks). BPCDAA also has responsibility to implement procedures of follow up and control in relation to the development, preservation, care and use of designated areas including riverbanks. The mandate also includes the important aspect of building capacity through education programmes as well as the monitoring and evaluation of the development of these areas.

13.7.2.4 Addis Ababa Water and Sewage Authority (AAWSA)

The Authority is part of AA city government executive and municipal service organs. It is accountable to the city mayor. The current status and mandate of the authority comes from the latest proclamation in 2012.

The authority works on water service planning, water allocation and distribution, water quality monitoring, constructing hydraulic facilities (including water treatment plants) and maintenance of water service facilities, which has a direct bearing on the reclamation and rehabilitation of the Rivers and Riversides within Addis Ababa. The authority is also involved in planning, program de-

signing, implementation as well as monitoring and evaluation of activities related to water resource management. AAWSA is currently working on the manage the sewage collection and treatment in three catchments Kaliti (40% capacity), Eastern (30%) and South Akaki (30%). It is also undertaking a World Bank project in Akaki for sewage treatment which will treat 40 % of the sewage of the City. The treatments are also done according to the EPA standards.

13.7.2.5 Urban Planning Institute

The institute is under (and accountable to) the Land Development and Management Bureau, which is part of the AA city government municipality service organ. The latest organizational arrangement and mandate of the UPI comes from the Regulation No 16/2012. It has the purpose to define, in accordance with the state-of-the art urban planning principles, a system that would ensure a healthy and sustainable development of growing urban centers. Urban Planning Institute has the highest authority in preparing the city's structural plan as well as environmental development plans, conduct necessary research required and practice important ideas based on the best case examples from both within and outside the country.

The mandate also extends to the execution of the plans of the City based on the approved plans. Currently the institution works to develop Land Use Plan (LUP) for the city at different administrative levels. That is determining what the different types of land in Addis Ababa will be used for. This includes demarcation of riversides and buffer zones, as well as green and protected areas. The institution is also involved in planning, program designing as well as monitoring and evaluation of implementation. The institute is also mandated to prepare proclamation, regulation, and standard, directive to be used for preparation and execution of the urban plan and implement the same upon approval.

13.7.2.6 Conclusion

The mandate of the federal level organizations is mainly to formulate policies, strategies and directives of their respective organizations to realize the objectives they are established for in general and the organizations have specific mandates to do in particular. However, overlapping of mandates with respect to water resources management in general and rivers management is observed among the sampled organizations that can cause conflicts of interests, which subsequently has affected their implementation. On the other hands, there are limitations in understanding of the scope of their mandates, which have again affected the effective implementation of the organizations. The involvement of the Awash Basin Authority and synergization of activities pertaining to the City of Addis Ababa will definitely support the river rehabilitation and restoration within the City of Addis Ababa.

With regards to the City of Addis Ababa, AAWSA and CMA are key stakeholders on the waste management aspect. When it comes to reducing the actual threats from liquid and solid waste dumping directly/indirectly to rivers and/or on riversides, AAWSA and CMA and their activities are crucial. Regarding the development and management of riversides, BPCDAA and AA-EPA have substantial role to play as they both have been mandated to undertake some or all of the activities envisaged for the purpose of Rivers and Riversides management. Hence, it is important to address and clarify possible mandate overlap between AA-EPA and BPCDAA possibly through a re-organized organizational setup.

13.7.2.7 Challenges

When it comes to main factors hindering each key organization from efficiently and effectively carrying out mandates of organizations within the City of Addis Ababa, especially with regards to the Rivers and Riversides Management, several responses were provided. The following are some of the most frequently mentioned reasons: Low levels of priority and political commitment; Lack of capacity - particularly technical manpower, lack of involving experts with diverse academic and professional backgrounds, leading to low capacity of implementation; Low levels of awareness of staff as well as management about environmental concerns, challenges and possible solutions; Lack of authority and enforcement capacity (especially when it comes to protecting ecosystems); Presence of overlapping mandates and unspecific regulations (particularly when it comes to management of riversides and buffer zones, as well as waste management); Weak communication and coordination with stakeholders amongst others.

13.8 Coordination Mechanisms

The main purpose of the assessment was also to understand if and how the organizations those have a stake in rivers and riversides interact with each other (both vertically and horizontally) and how does that have a bearing on their activities on the ground. In general the coordination mechanism refers to the communication and interactions between the different stakeholder organizations and the nature and purpose of these interactions

13.8.1 Federal Level

13.8.1.1 Vertical Coordination

Box I

The coordination of CRGE implementation both horizontal and vertical are examples to be considered for emulation. Coordination both vertical and horizontal are one of the best case example. Coordination at the vertical level involved capacity building, developing investment plans, monitoring and evaluation of CRGE projects etc. Moreover, there have been very good coordination and communication mechanisms established among the CRGE priority sectors, whereby the facility (MEFCC and MoFEC) have taken the lead of the coordination role. Every sector sends progress report concerning CRGE fast track project implementation to MEFCC on monthly base. The coordination is while planning, implementation and monitoring evaluation. Eg. The fast track project in the six CRGE priority sectors; MoA&NR, MoI, MoT, MoW-IE, MEFCC and MoFEC. MoFECC also has shown clear coordination successes in its Revision of National Environmental Policy, Development of Environmental Strategy, Preparation of National Adaptation Program etc. which has validated the point of being national documents considering that all the relevant stakeholders have been involved in the process leading to the sustainability of the programs and projects and better implementation at the lower levels

The study conducted assessment to understand the coordination mechanisms within the organization from the head of the organization to the subordinate staffs and the coordination mechanism between the organizations at the federal level and their structures at the regional/city level. The results of the organizational assessment have indicated that the existing vertical coordination mechanism within the organizations at the federal level is good. There have been good work relationships between the experts and immediate boss, proper guidance for the subordinate staffs and timely feedback on the reports and other issues at each ladder of authority. In most of the organizations, the assessment result indicates that there has been insufficient manpower, which affects the vertical coordination in the organization as well as the federal and regional level organizations.

The vertical coordination and communication among the federal level organizations and their regional counterpart structures is not strong, because some federal organization have no similar organization at the regional level, leading to lack of structural linkages and this imposes challenges on the communication mechanism and thereby the implementation of the activities.⁷⁵ According to the assessment results, Ministry of Agriculture and Natural Resource and Ministry of Water Irrigation and Electricity have relatively better coordination and communication with the regional bureaus; there is biannual consultation meeting as well as annually performance review meetings with their regional bureaus. Some organizations have shown improvements in working in coordination with their regional counterparts. The interview discussion with MEFCC indicates that there has been some progress in coordination and communication with the regional structures recently. The ministry has made efforts to influence that the structures at regions to align with its structure at the federal level in order to strengthen the coordination and communication between the federal level and regional level structures. The ministry has planned to undertake consultation meeting biannually and performance review annually with its regional structures, which improves the coordination and communication between the ministry and its regional structures in protecting environmental pollution and degradation.

13.8.1.2 Horizontal coordination

Box. 2

The CRGE facility Advisory Board consists of development partners, representatives of relevant multilateral organizations, international NGOs and civil society Organizations, the private sector and academia. It has been hosted and chaired by development partners, on an annual rotational basis. The Advisory Board will review investment plans, SRAPs and provide comments and suggestions to both the CRGE Task Force and Management Committees. However, the Advisory Board is not part of the decision-making process, except as donor representatives on the Management Committee with regards to approval of funds from the International Account.

Horizontal coordination refers to the intra organizational coordination existing; among the departments; directorates, and case teams in the organizations as well as inter organizational coordination that existing among the organizations; the coordination and communication mechanisms across the line ministries. Horizontal coordination and communication among the sectors and the directorates of the same organization as well as across different organizations devised to improve

75- Ministry of Industry, MEFCC, Transport

the efficiency of resource utilizations and avoid duplication of efforts, such as joint planning, implementation, monitoring and evaluations. The assessment conducted illustrated that there has been coordination among the directorates, case teams in the organizations; sharing of information and feedback, working in team of experts drawn from different directorates.⁷⁶ on some assignments of their respective organizations, whereas the respondents from MoWIE, MoT and MoI have expressed that the horizontal coordination and communication among their respective sectors, and directorates, are weak.

The other horizontal coordination is the collaboration and partnership among the federal level ministries in planning, implementation, and monitoring and evaluation of projects and/ or development initiatives. Regarding the horizontal coordination mechanisms across different organizations at the federal level, it was tried to assess the way of coordination, stages of coordination and the types of coordination mechanisms existing in the organizations/ sector line ministries. To this end, the assessment results have depicted that there is no strong coordination mechanism among organizations taken as the sample at the federal level in sharing of information, joint planning, implementation, and monitoring and evaluation of projects and regular development initiatives. However, recently there have been some improvements in coordination of the organizations in planning and sharing of information, thereby they have started jointly planning, implementation and monitoring and evaluation of projects. CRGE initiatives can be described as the best practice in creating coordination among the sectors as well as the NGOs and civil societies. All the CRGE priority sectors have regular base meeting to discuss and update the progress of the CRGE implementation. The coordination and communication between ministry of Environment, Forest and Climate Change and Ministry of Finance and Economic Cooperation as well as the CRGE priority sectors have been improved since 2011, after the official launching of the CRGE strategy. The Coordination and collaboration of MEFCC, MoWIE, MoI and MoT is very determining in conservation and protection of environment in general and rivers and riversides development and management in particular.

13.8.2 City Levels

13.8.2.1 Vertical Coordination

All the major governmental stakeholders at city have set up a vertical administration structures and all have offices at Sub- city levels across Addis Ababa. This vertical administration structure also extends down to Wereda levels except for Urban Planning Institute (UPI), which has office at Sub-city level only. The collected data indicates that more or less vertical communication across administrative levels within organizations is smooth.

However, Cleansing Management Agency (CMA) and Parks Beautification and Cemetery Development Agency (BPCDAA) both reported that the current vertical structure that puts their respective offices (at Sub-city and Wereda levels that is) accountable to both the Sub-city manager's office, which in turn is hampering the coordination process including the flow of information (upward and down ward), authority and decision flow pattern. Also, according to the respondents this dual accountability creates frustration among officials and employees. On the other hand, this is not given as a challenge by the other key stakeholders i.e., AAWSA this could be because the lower

administrative offices are directly accountable to their respective agencies and not only to the Sub-city. AA-EPA also indicated that this is not a challenge for their activities considering that they are only regulatory organization and not an implementing body. Respondents from CMA and UPI indicated that the communication with organizations at higher or lower level is adequate, while the remaining organizations indicated that they are inadequate.

13.8.2.2 Horizontal Coordination

Regarding the sector specific platforms between stakeholder organizations (i.e., platforms to communicate specifically on relating water, rivers and riversides), it can be said from the collected information that there is hardly any established, official and periodic platform to involve and bring together stakeholders, particularly on river and riversides management.

The Deputy Mayor of the City of Addis Ababa invites all the relevant offices for a coordination meetings usually once in every month. The organizations that are dealing with road, sewage and water management, housing and electricity are invited. Usually the organizations report their problems and prospects and see support from each other for their activities. While there are no direct linkages with each other these meetings try to bridge the gaps between these organizations. One of the coordination mechanisms which each of the organization follow is to invite relevant stakeholders organization while undertaking annual planning processes. Fe AAWSA and ACRA invite each other for planning meeting before the annual planning is completed considering that most of the time their work needs to go hand in hand so that it would not be affected.

Information was gathered on different levels and types of communication using selected indicators of institutional communication. This inquiry revolved around six questions and respondents were asked to rate each types of communication as excellent, adequate, inadequate, and poor or does not exist. Information from all key government organizations states the current cross sectoral communication within organizations is adequate. The frequency of the cross-sectoral communication within organization is considered to be inadequate except for the CMA, which indicated that it is adequate. In contrast, the horizontal communications with stakeholder organizations and cross-sectoral communications with stakeholder organizations as well as the frequency of communication is given as inadequate by all the informants from all organizations assessed.

The status, purpose as well as the mode of communications and interactions was also assessed. The information on these interactions between different government stakeholder organizations at city level is summarized in the table below.

Table 1: Mode of Communication

Organization	Communication	Purpose
AA-EPA	- Data not available	- Data not available

CMA	<ul style="list-style-type: none"> - EPA - AA Parks, Beautification and Cemetery Development Agency (BPCDAA) - Ministry of Urban Planning and Construction 	<ul style="list-style-type: none"> - for implementation and enforcement (with EPA and BPCDA) - with Ministry of Urban Planning and Construction for strategy/program design and planning
BPCDA	<ul style="list-style-type: none"> - Construction bureau - AAWSA - Land development administration bureau - AACRA - AA City Administration - CMA - AA EPA 	<ul style="list-style-type: none"> - strategy/program design and/or planning (with EPA, City administration AACRA, Construction bureau). - with Construction Bureau and EPA on policy/strategy enforcement. The agency also works with these organizations and Cleansing Management Agency on implementation.
UPI	<ul style="list-style-type: none"> - MUDH (ministry of urban development and housing?) - AA-EPA - AAWSA - ACCRA - EEPCO - BPCDA - Internal stakeholders under the City government Land Development and Management Bureau 	<ul style="list-style-type: none"> - For program design/planning UPI works mainly with the city Land Development and Management Bureau and MUDH. - Yearly plans are shared between AAWSA, ACCRA, EEPCO, Beautification, Parks and Cemetery Development and Administration Agency and IUP. The UPI interacts with the above for program implementation.

13.8.2.3 Conclusions

When it comes to vertical coordination, the information collected implies that there is a more or less smooth interaction and good decision flow pattern between higher and lower administrative structures. Another key finding was two of the key stakeholder organizations assessed i.e. CMA and BPCDAA have a slightly different vertical administration set up, in which the Sub City and Wereda offices are also accountable to Sub city manager (in addition to their respective agencies). This double accountability is said to cause some challenges when it comes to information flow and decision making. However, all responses implied that horizontal coordination is inadequate, particularly when it comes to the horizontal communication and collaboration between stakeholder organizations (including communication between governmental stakeholders and cross sectoral communications). Also, there is hardly any official and periodic platform to bring together stakeholders and address issues specifically related to rivers and riversides management sector.

13.8.2.4 Challenges

Key informants were also asked to respond to semi-structured questions to help identify reasons and factors behind weak and inefficient communications among stakeholder organizations. For the purpose of this assessment, respondents were given a list of possible reasons that are commonly recognized as challenges. Then, based on the experience of each organization, respondents were asked to rank each factor (from very high influence to no influence). The factors most commonly listed by majority of the key organizations as having a 'very high influence' and 'high influence' on the existing organizational communications are the following: Information flow pattern (upward and downward); authority (decision) flow pattern; willingness to communicate among organizations; the presence of overlapping mandates of institutes; lack of and/or weakness of established platforms for institutional communication.

14. Stakeholder Engagement

The current status of stakeholders' engagement including NGOs, CSOs and Developmental Partners were assessed. Also, where there was engagement with any of the stakeholder organization, the type of engagement (either financial, technical or other) and level of cooperation between each group of stakeholders and the respective organization is also given by the respondents.

14.1 Federal level

Most of the federal organizations have been working in partnership with NGOs, development partners and civil society organizations, even if the extent of engagement may vary amongst them. According to the data from the organizational assessment, ministry of Agriculture & Natural Resource, and ministry of Environment Forest and climate Change have better partnerships with INGOs, local CSOs and development partners. Ministry of Agriculture & Natural resource has a long lasted partnership with various NGOs and development partners that have helped improve the technical expertise of the staff. Similar results have been observed with respect to MEFCC.

Although the Involvement of the private sectors in the development is vital, the organizational assessment has indicated that the partnership of government organizations / sectors with the private sectors is very limited. There are clear indications that considerable efforts have to be undertaken to bring private sector on board so that they could actively involve in the developmental process in the country. Apart from technical assistance, most of the organizations assessed also partner with INGOs, CSOs and development partners in terms of financial support. The respondent from Cities' Climate resilient bureau of Ministry Urban Development and Housing has indicated that there has been a public forum comprises construction contractors, construction consulting companies and the supervisors, which have been meeting on the regular base to discuss on the environmental friendly, climate resilient and sustainable construction works. The respondent explained that in addition, the City Climate Change resilient Bureau has been closely working with the Addis Ababa City EPA on Addis Ababa City Rivers cleaning initiatives. Similarly, the respondent from MEFCC has indicated the CRGE facility advisory board as a show case that has brought different stakeholders together to facilitate the implementation of the CRGE strategy. The following are some of the forums that are currently functioning towards achieving the objectives identified by their respective organizations.

14.1.1 Water Sector Forum

This is a forum organized by Ministry of Water and Energy usually two to three times a year. The forum discusses on the problems and prospects of the sector and also identifies key areas of intervention as agreed by the various stakeholders. Various initiatives are also launched during these forum meetings.

14.1.2 River Basin Authority Public Forum

These public forums act as an agenda setting meetings for concrete actions on the ground and also acts as a place to establish partnerships for various organizations with that of the public themselves. The public forum also capacitates the public with necessary information and opportunities for making decisions.

14.1.3 Upper Awash Eco-Hydrology Task Force

The task force is intending to undertake multilateral agreements with the roles and responsibilities of each of the organization clearly mentioned. The aim is also to establish sub-committees and a major task will be to undertake river rehabilitation works.

14.2 City Level

Overall, the state of involvement of NGOs (i.e., technically, financially or otherwise) in all the stakeholder organizations is given a rank of weak (at best) and even non-existent. For instance, BPCDAA does not currently work with NGOs and development partners while AAWSA and UPI only mentioned the World Bank as the only major partner. Regarding community and Civil Society participation, all organizations involve representatives of civil societies. This is mainly revolved around youth and women's associations, as well as Edir and religious organizations. However, the involvement of Civil Societies is mainly limited to annual campaigns (predominantly tree planting or cleaning campaigns).

The data collected about the involvement of the private sector implies that there is a private sector engagement which can be described as between weak and moderate. Cleansing Management Agency (CMA) and BPCDAA particularly have a stronger relation with private sectors. This mainly revolves around outsourcing certain service to local small and micro scale enterprises. The following are some of the forums that are currently functioning towards achieving the objectives identified by their respective organizations.

14.2.1 Dembenyayoch Forum

AAWSA has an established, periodic community engagement platform known as 'Denbeganwoch Forum'. This forum is organized and held by AAWSA's eight branch offices. For each of the forum nearly 300 to 500 people turn up. Different community representatives, Civil Societies (including Edirs, religious organizations) participate in this forum. Apart from AAWSA, ELPHA, Telecommunications and other different organizations whose activities have direct bearing on the general public attend the meeting. Chief administrators also attend the forum and make contributions.

14.3 Conclusions

The collected data show that the majority of organizations under study have limited involvement with NGOs and development partners (and some do not have any type of engagement). Enhancing

this could significantly help to narrow the technical and financial gaps that pose a serious challenge to the city's environmental governance.

Even though almost all organizations engage with and involve civil societies and communities to some degree, the information also indicates there is a need to make this participation more effective and genuine. CMA, BPCDAA and AAWSA have a relatively more clear policy when it comes to public participation (and periodic official platforms for the same), and the former two also have stronger relationships with local private sectors (small and micro enterprises).

15. Organizational Capacity

Organizational capacity refers to the human capacity, financial capacity and physical resources needed to fulfill and achieve its goals and objectives. In this specific assessment, it has given emphasis to assess the organizational capacity to manage the natural resources; water resources, rivers and riversides management.

15.1 Federal Level

The results of the assessment indicated that the human capacity of all the organizations /ministries (in terms of expertise, quantity and experience) to carry out any specific activities related to rivers and riversides management is inadequate. The organizations have described the human capacity gaps as a determinant factor for the failure to achieve their respective objectives. From the organization that have responded, only Ministry of Industry replied that even though some position are not occupied by the experts, the ministry has sufficient capacity/staff members to implement the tasks. According to the response from the assessment, the majority of the human resources gaps have been observed at the lower positions in most organizations, which have been resulted from the high staff turnover.

Regarding the financial capacity of the organizations, the obtained data indicates that it is insufficient to effectively implement the objectives of the respective organizations. They have illustrated that the majority of the budget in all of the ministries has been allocated from the federal government treasury and there is also some budget from multiple sources for ministry of Environment Forest and Climate Change, and Ministry of Agriculture and Natural Resource. The assessment explicitly has showed that the physical resources; office infrastructure like office equipment, technology and transportation are not adequate in most of the organizations⁷⁷, subsequently held back the pace of their implementation.

15.2 City Level

Specific qualitative information about availability of critical resource (i.e., technical man power, infrastructure and office facilities, and financial resources) was collected to get general information about organizational capacity. In addition, quantitative indicators like total number of employees and annual budget (capital plus regular) are also collected.

The main budget source for these organizations is the city administration. AAWSA and CMA also collect income from different public services they render. AAWSA-PO also gets funding from development partners like the World Bank. Limited involvement of private sectors and the city government being primary financial source can be key factors behind the budget, implementation and technical shortcomings faced by these organizations.

77- MEFCC, MoI, MoT, and MoUH

The information about the financial and human resources about the key stakeholder organizations is summarized below.

Organization	Average annual budget in ETB	Number of Employees
AA-EPA	20, 803,000	N/A
AAWSA	4,000,000,000	>100
CMA	225,940,000	117
BPCDAA	173,071,931	127
UPI	17,290, 159	51

Regarding resource availability i.e., financial, human resource and infrastructure (office facilities and equipment, logistics etc.) different responses were given by the different key organizations. Lack of technical man power was the most commonly given challenge by the organizations at city level, followed by financial challenges and infrastructure (including technology and logistics).

16. Operations at Sub-city and Wereda

16.1 Process Interactions at Sub-city and Wereda Levels

CMA, BPCDAA, AA-EPA and AAWSA all have vertical administrative structures. These go down to Sub-city and then to Wereda levels. The Sub-city and Wereda CMA and BPCDAA are under the sub-city managers' office but accountable for the respective agencies. Sub city AA-EPA and AAWSA offices are directly accountable to the respective authorities. There is no official and periodic platform for coordination and communication between CMA, BPCDAA, EPA and AAWSA at sub-city and Wereda levels. However, there are frequent, issue – based communications between the concerned offices. This happens both officially and unofficially. The purpose of interaction is usually to address common issues or challenges, and to share each other's plans for smoother implementations.

16.2 Community Engagement at Sub-city and Wereda Levels

CMA & BPCDAA both have an established platform and periodically meet towards engaging the communities. Community meetings take place every quarter and involve community representatives as well as CSOs including youth and womens' associations, Edirs, religious organizations etc. The primary purpose of these periodic community engagements is to discuss on quarterly implementations of activities as well as to present upcoming quarter plans. The community engagement is strong at Sub city and Wereda levels because of the established official platforms. However, as indicated by the respondents, the representativeness of the participants (on the side of community and CSOs) and whether such platforms are genuinely utilized is sometimes questionable.

16.3 Challenges at lower Administrative Structures

There are challenges faced by lower administrative levels particularly when it comes to implementing plans. The following were identified as main implementation challenges at Sub city and Wereda levels: Lack of appropriate manpower as well as weak implementation capacity (mainly enforcement capacity, technical capacity and logistics) to match the vast work that needs to be done especially on environmental resources management and protection, and solid and dry waste management; Lack of awareness about environmental challenges, solutions and approaches; Lack of genuine commitment; Lack of genuine community involvement from early stages. CMA, BPCDAA, AAEP and AAWSA indicated that they face problems in the process of planning, implementation and enforcement at the lower administrative levels for their activities.

16.4 Proposals

The City Government of Addis Ababa has tried to address the enormous problem of rivers and riversides pollution through a project office, while the mandates regarding the river rehabilitation

rests with several of the existing Agencies. Furthermore it was observed that there was disconnect between the policy and implementation and overlap of mandates in the case of rivers and riversides management, amongst the existing organizations. The creation of the project office has undoubtedly facilitated the speeding up of the management of the Rivers and Riversides, however due to the duplication of mandates it has also led to unclear future course of action with regards to the management of the Rivers and Riversides. Hence, based on the results of the study, the following are proposed to enhance the ability of the City to address the rehabilitation and restoration of the Rivers and Riversides in Addis Ababa. While the scope of the paper restricts its mandate to that of the Rivers and Riversides protection, the proposals related to the organizational structures are placed within the context of Environmental Governance of the City of Addis Ababa and hence suggests various actions considering that rivers and riversides are a natural resources and public good that requires effective governance structures. This is also done with the understanding that the Cities Governance structures affects the natural, capital and human resources available to manage water, the role of local authorities (regulators, facilitators and service providers) and the way cities deal with interdependencies across institutions, places and sectors (OECD 2015). The proposals are divided into three I. Organizational Structure and mandates II. National and Inter-regional platforms III Stakeholder Engagement

16.5 Organizational Structure and Mandates

The team recommends the division of mandates related to the policy and regulatory aspect of the Rivers and Riversides Rehabilitation and Restoration and that of the implementation part for effective and efficient management of the work. Based on the assessment the authors propose the following.

16.5.1 Implementation of Activities Related to Rivers and Riversides

There are two major organizations a) Addis Ababa Environmental Protection Authority b) Parks, Cemetery and Beautification Agency that have direct overlapping of the mandates with that of the Project Office and others which have a stake in the management of the rivers including Addis Ababa Water and Sewage Authority. Considering that the regulatory aspects are mainstreamed within the Addis Ababa Environmental Protection Authority the proposal clearly envisages that the Project Office to be elevated to a department to be placed within an agency which would coordinate the activities related to the implementation on the ground for better environmental management. Hence, the authors propose to establish **Addis Ababa Catchment, Rivers and Parks Agency** following an organizational restructuring provided below so as to consolidate the implementation of environmental activities.

This agency to also be placed under the Manager who would also be responsible to oversee the organizations that are mandated to work on Water, Solid and Liquid Waste and Sewage management issues. The activities undertaken by these reorganized and new structures will be undertaken with the inclusion of the public participation and decentralization principles.

For Addis Ababa City, the green area index is very small. Currently, the city has 22 public parks with a total area of 117.4 ha. The public green space per person is 0.35 m²/person. This signified that access to green areas and parks is very low by international standards. Hence, there is a urgency to develop accessible green areas and parks to reach the minimum requirement towards Africa's

standard i.e. 7m²/person. It is expected that the green area can be increased with the riverside development work that is being undertaken by the City Government of Addis Ababa. Furthermore, there are number of parks that are adjacent to the rivers running through the City and they need to be integrated into the planning and designing process of the riversides so as to provide a 'Networked Green Area' towards the wellbeing of the Citizens of the City. Furthermore, the management of the green areas along the riversides and that the parks in the City needs to be synergized so that the space could also act as a repository of endemic and important plant species. Moreover, as observed in the analysis it is very clear that both these organizations have overlapping and duplicated mandates. Hence the proposal of establishment of an Agency that incorporates both the existing Project Office and that of the Addis Ababa Beautification, Parks, Cemetery Development and Administration Agency. The proposed new agency will be also addressing the issues pertaining to watershed management considering the fact that the rivers of Addis Ababa sources water from the upper catchment areas and that the activities at the level of catchment has an immediate and direct impact on the quality and quantity of the rivers.

16.5.2 Catchment, Rivers and Parks Agency

The Agency to have the following three major departments that would be mandated to implement activities for effective management of the environmental resources within the City of Addis Ababa Agency to have replica offices within all the sub-cities of Addis Ababa and the sub-city offices to directly report to the Agency.

16.5.3 Rivers and Riversides Management Department

The department to be responsible for the Rivers and Riversides Management aspects and hence will have the mandate to manage the physical boundaries, as identified by the output of the management plan, of the Rivers and Riversides Project and all the parks in the City that are adjacent to the Rivers for effective and efficient implementation. The authors also indicate that the Department should forgo any policy and regulatory aspects of the rivers and riversides management considering that they are the mandates of Addis Ababa Environmental Protection Authority. It is also recommended that the Department forgoes the Climate Change Adaptation part considering that the responsibility of mainstreaming, policy and regulatory aspects of the issues pertaining to Climate Change is under the purview of the AAEP. The core functions of the department hence will include the following, upon appropriate approval process and issuance of the necessary regulations.

1. Designing, planning and implementation of the Rivers reclamation and restoration.
2. Managing the rivers and riversides, including the parks adjacent to the rivers as per the physical boundaries identified through the management plan developed by the Center for Environmental Sciences.
3. Undertaking necessary disaster preparedness and flood control measures as necessary
4. Undertake educational aspects of rivers and riversides ecosystems in collaboration with AAEP and higher learning institutions.
5. Undertake flood control measures along the rivers and riversides also according to the results of the currently prepared Flood Risk Map.
6. Create awareness and run advocacy and educational programs for the rivers and riversides

management.

16.5.4 Catchment and Forestry Management Department

Considering that the proper management of the catchment areas will ensure yearlong water and at sufficient quantities, the department, which will be newly established, will be mandated to handle all the watershed areas that feed into the Addis Ababa river systems as identified by the management plan developed by the Center for Environmental Sciences. The core functions of the department hence will include the following, upon appropriate approval process and issuance of the necessary regulations.

1. Delineate the watershed areas that feed into the Addis Ababa river systems and review, finalize the watershed management plan as included in the management plan prepared the Center for Environmental Sciences.
2. In collaboration with the Oromia Regional Government, through the inter-agency coordination platform, to develop a joint implementation plan for the watershed management building on the watershed management plan developed by the Center for Environmental Sciences. The mandates of the catchment management will depend on the physical geography of the respective governments as identified by the watershed management plan.
3. In collaboration with the Oromia Regional Government, manage the respective forest and agriculture areas of the watershed and implement the appropriate land use plan as identified in the management plan.
4. Undertake flood prevention and control measures including any plans from the Food Risk Map that has already been prepared by the City Government of Addis Ababa.

16.5.5 Urban Agriculture, Parks and Beautification Department

The department will be responsible and mandated to work on the Parks and Beautification work and urban agriculture issues. The Department will be a reformed Parks, Beautification and Cemetery Development Agency and will exclude the management of riversides and parks adjacent to the Rivers of Addis Ababa and will include the function of Agriculture from its current mandate. The office will work with the following core functions

1. Manage by developing, administering and controlling of the parks and green areas as well as recreational places of the City of Addis Ababa based on appropriate plans developed, excluding the parks adjacent to the rivers.
2. Urban agriculture, excluding the watershed areas, including urban farming and urban food gardening, excluding farming done within the watershed areas.
3. Undertake educational and awareness creation works at various levels that bring about change in attitude and conduct of the society so that it could own and be major actor of beautification works; provide trainings in the subject matter.

17. Regulatory, Policy and Research Related to the Rivers and Riversides Management

It is envisaged that the policy, research and the regulatory aspects to be dealt differently than the implementation part of the Rivers and Riversides Rehabilitation and Restoration. In this regard, considering that the Regulatory and Policy issues related to the Environment is currently being handled by the Addis Ababa Environmental Protection Authority it is proposed that the Authority should handle all policy and regulatory aspects related to the Rivers and Riversides management. Considering that that environmental monitoring is crucial for proper and successful regulation it is envisaged that the monitoring aspects, including the quality of the Rivers and Riversides management based on an agreed upon goals, targets and indicators framework set by the Rivers and Riversides Management Department, will also be undertaken by the Authority. The Authority to also revisit the proclamation related to rivers management in the City of Addis Ababa synergizing all the existing policies and also ensuring the involvement of all the relevant stakeholders.

Scientific research outputs are crucial for effective implementation of the environmental activities. The paper proposes that a River Restoration and Rehabilitation Research unit to be set up within the Authority as the research outputs will also feed towards effective monitoring of the rivers and riversides.

18. National and Inter-Regional Platforms

It has been observed that the vertical linkages with respect to environmental issues between the Organizations at the Federal level and the coordination of environmental issues with the adjoining Oromia Regional Government are not strong enough. Hence the paper proposes the following

18.1 Rivers Management Group

The City Government of Addis Ababa should establish a Rivers Management Group with the following agencies part of the core group AACMA, AAEP, AWASA, Land Administration Agency, Industry agency and other relevant agencies. For any river restoration and reclamation work the activities the other agencies are extremely important and hence a RMG should be established and chaired by the Manager of the City of Addis Ababa. All activities related to the River Rehabilitation and Restoration should be implemented by these agencies based on their differential mandates and activities. The City should develop a common work package for the Rivers and Riversides Management and all the activities of these agencies pertaining to Rivers and Riversides management are to be synergized and implemented based on a common work package.

18.2 River Basin Task Force

Addis Ababa Rivers are part of the Awash River Basin. The environmental issues of the basin are currently handled by the Awash River Basin Authority (ARBA) of the Ministry of Water. The authority is currently undertaking numerous activities related to the sustainability of the rivers at the basin level, including within Addis Ababa. Rivers and Riversides Management Department (RRSMD) to act as a focal point for Awash River Basin Authority within the City of Addis Ababa. The Basin Authority to act as a window to the collaboration with the Ministry of Water, Irrigation and Energy and its various directorates including Eco-hydrology Department and Sanitation Directorate.

18.3 Disaster Reduction Task Force

Originally established in 1926 as 'Fire Emergency Elimination' to deal with fire hazard in the city, the Fire and Emergency Prevention and Rescue Authority is now also responsible for disaster prevention based on the proclamation no. 37/2013 of the Addis Ababa city council). The authority is a stakeholder in the management of rivers and riversides since it is mandated for flood control under its Disaster Risk Management Program. Currently the authorities' key objective focused is toward prevention of flood in the city and is mainly targeted toward addressing flood risk from drainage clogging. Also, the authority engages in responses such as evacuation and emergency provisions to flood affected communities after occurrences. Furthermore, the disasters including floods are managed at the national level by the National Disaster Risk Management Commission.

The Fire and Emergency Prevention and Rescue Authority (FEPRRA) has finalized the flood risk profile of the city including the list of hot spot areas that are most vulnerable to flood have been mapped out. However, the existing mandates of flood prevention will rest with Catchment, Rivers and Parks Agency considering that the watershed as well as the riversides will be managed by this proposed agency. Hence, a joint task force to be set up between the Catchment Rivers and Parks Agency, ARBA, FEPRRA, Oromia Regional Bureau of Environment, Forest and Climate Change and NDRMC to come up with joint action plan for implementation within the City of Addis Ababa and to synergize the activities.

18.4 International Linkages

Furthermore, that the river restoration and rehabilitation work have a substantial part in attaining the international goals and targets as agreed by Federal Democratic Republic of Ethiopia by being party to various multilateral environmental agreements it is quite important that the City of Addis Ababa synergizes its goals and targets in tandem with the internationally agreed environmental goals and targets. The Ministry of Environment, Forests and Climate Change is the focal organization for all these MEAs and hence it is important that Addis Ababa EPA acts as a focal point for all the environmental matters with the ministry particularly pertaining to the implementation of the internationally agreed upon environmental goals and targets including that of the those related to Rivers and Riversides Management

18.5 Intern-regional Environmental Platform (IREP)

Considering that Addis Ababa lies within the wider Awash River Basin and that much of the watershed area of Addis Ababa River systems lie within the Oromia Regional State, there is a necessity to enhance the cooperation between the two regions on environmental matters. The results of the analysis is clear that the management of the Rivers interlinked between two regions is mandated to the Federal Government as per the constitutional provisions and at the same time there is a need to collaborate with the Oromia Regional State based on the Special Provisions indicated in the legal documents. While there are strong cooperation between the two regions on environmental matters on waste management and others, there is a need to institutionalize this cooperation. It was evident that the establishment of the Project Office needs to be institutionalized vis a vis its collaboration with that of the Oromia Regional Bureau of Environment, Climate Change and Forests.⁷⁸

This is more so important with the Rivers and Riversides Management, considering that Addis Ababa region obtains fresh water from Catchment areas of Oromia Regional State and currently lets out untreated wastewater downstream into Oromia Regional State,. Hence, it is proposed to establish an Inter-Regional Environmental Platform (IREP), so as to address the environmental issues in a more concerted and systematic manner. The IREP to have the following characteristics.

1. The platform to be co-chaired by the President of the Oromia Regional State and the Mayor of Addis Ababa.
2. The secretariat of the inter- regional environmental platform will be jointly managed by Addis Ababa Environmental Protection Authority and Oromia Regional Bureau of Environment, Climate Change and Forests.

78- Interview with Oromia Regional Bureau of Environment, Climate Change and Forests

3. The IREP to have its own work plan jointly prepared and agreed upon and will involve all relevant stakeholders while preparing the work plan. Specific emphasis to be given to the water resource management including that of Rivers and Riversides Management.
4. The mandates of the activities agreed upon will rest within the respective physical boundaries of the region and the activities will be undertaken by all relevant organizations based on their respective mandates and capabilities within the two regions.
5. The IREP to meet bi-annually to monitor and review the implementation of the activities identified through the work plan.
6. Finances for the activities identified by the IREP to come from both the governments based on the Polluters Pay, Precautionary and Common but Differentiated Rio Principles.

19. Stakeholder Engagement

Creation of a Stakeholder Coordination Group within the Rivers and Riversides Office. The stakeholder engagement should provide enhanced attention to the involvement of the local institutions in the agenda setting and implementation of the activities related to river restoration and rehabilitation. The platform should provide an opportunity for mainstreaming of the issues pertaining to rivers and riversides restoration and rehabilitation into the respective organizations activities. This platform should also have common agenda towards rehabilitation and restoration of the rivers and riversides considering that the various organizations have differential capabilities to undertake their respective activities. Creating a platform for Public Participation so as to involve them in Decision Making processes with regards to the Rivers and Riversides management as well as ensure their participation in the activities related to river restoration and rehabilitation.

20. Addis Ababa Rivers Buffer Zone Guideline Document

20.1 Preamble

Buffers adjacent to water bodies provide numerous conservation benefits which can include the following ; restoring and maintaining the chemical, physical and biological integrity of the water resources; removing pollutants delivered in urban storm water; reducing erosion and controlling sedimentation; stabilizing stream banks; providing infiltration of storm water runoff; maintaining the base flow of streams; contributing the organic matter that is a source of food and energy for the aquatic ecosystem; providing tree canopy that shades streams and promotes desirable aquatic organisms; providing riparian wildlife habitat; maintaining critical floodplain setbacks and furnishing scenic value and recreational opportunities.

In the Ethiopian Legal system, buffer zone designation and management are poorly developed although there are some initiatives in place. Notably it is paramount to define buffer zone and provide rules make it clear interconnection with other zones. Often river challenges and opportunities are not limited at small strips of land rather transcending, clear laws to address such interconnections. The Addis Ababa River Development and Protection Project has made the study to identify the status, pressures and challenges that the Addis Ababa exposed within defined sections of the city. The study aimed to provide sustainable solutions for the rivers restoration and conservation whilst aiming to extend piloting best practices to the whole urban rivers. The study informs unsustainable management practices chronically damaged the Addis Ababa River and riversides. The suggests sustainable conservation and restoration of Addis Ababa rivers may not be materialized without providing sustainable solutions to waters quality, quantity and water systems human pressures.

In order to facilitate implementation of the study outcomes, it important to design a guideline that provide short and clear of implementation direction for different actors who engage in the development, conservation and use of the Addis Ababa Rivers. The overall goal of the guideline is to enhance effectiveness in the implementation of the study outcomes. The guideline uses as a key tool to promote a holistic, participatory approach to address Addis Ababa Rivers' by unsuitable human intervention challenges.

20.2 Guiding Principles Urban Buffer Zone Designation

- The key principles that guide the Addis Ababa buffer zone guideline preparation include:
- Sustainable use of urban rivers and river sides;
- Urban rivers and riversides conservation and protection;
- Restoration of polluted urban rivers to create healthy urban environment;
- Ensuring the sustainability of water resources, in quantity and quality and vital water system protection and rehabilitation;
- Recognizing socio-economic activities and the livelihoods of urban communities to enhance green urban development and participating urban communities at all levels of decision-making in the management of buffer zone;

- Mitigating development activities that have the potential negative impacts that affect the integrity of urban rivers and their buffer zones; Coordinating actions of stakeholders across of the watershed areas;
- Maintaining sustainable environmental flow for the rivers and
- Resilience building, mitigating and managing climate change impacts on urban rivers and their buffer zones.

20.3 The Overall Objectives of the Guideline are to

- Establish standards for the design of buffers to protect the streams, wetlands and floodplains of the Addis Ababa Rivers and Riversides; protect the water quality of water courses reservoirs, and lakes within the region; protect vital systems of the river buffer zones;
- Enhance restoration of urban rivers from unsustainable human interventions;
- Protect, conserve and develop rivers buffer zone within urban boundaries and outside;
- Improve the rivers and riversides greening to sustain environmental, social, economic and cultural benefits;
- Improve water quality of urban through trapping pollutants in the buffer zone;
- Stabilize stream banks and build resilience against flood and soil erosion;
- Enhance urban rivers environmental flow.
- Raise public and stakeholders awareness and ensure their participation in the management of rivers and riversides;
- Promote research in the sustainable management of urban river buffer zones
- Promote coordinated management of rivers and riversides through coordinating and harmonizing interventions amongst various stakeholders, and enhance the participatory management and
- Conserve natural scenic areas of recreational value and benefit the urban community, in terms of eco-tourism and promote complementary use of rivers and riversides for recreational purposes and infrastructure.

20.4 Designation of Buffer Zone

River buffer zone is defined as any area, often peripheral to a protected area, inside or outside, in which activities are implemented or the area managed with the aim of enhancing the positive and reducing the negative impacts of conservation on neighboring communities and neighboring communities on conservation. There is no-one-fit for all width for a given a river's core area and buffer zone rather the size is variable, depending on the functions of designation. The minimum buffer widths and riparian vegetation zoning required to meet the river health, biodiversity conservation and social-economic objectives. For this guideline;

1. The minimum buffer widths take into account the scale of vegetation required to provide robust and self-sustaining riparian vegetation communities over the long-term. Narrow buffers require high levels of maintenance and plant replacement to prevent weed invasion, and do not provide the minimum spacing requirements for riparian trees (which are generally required components of healthy riparian vegetation communities in urban developments)
2. The minimum required waterway corridor width varies dependent on stream order, which increases with distance downstream of headwater streams. Smaller waterways in the headwaters of catchments will have smaller riparian zone widths and large waterways in the

downstream area of a catchment will have wider riparian zones.

3. Two distinct riparian sub-zones are identified within the rivers and riversides: (Core zone and buffer zone)
4. A core zone is bank of the river , it shall be decided based on the scientific study undertaken. This zone is absolutely protected zone from human intervention that damages the river system. The width of the core zone will accommodate special need such as:
 - High value species and potential high value habitat
 - Historical sites, spiritual sites, shrines, places with cultural heritage sites and special sites for scientific research and study
 - Where a fuel break is required ‘by relevant authorities’ to mitigate fire risk
 - Where the site contains high value Geo-morphia features or assemblages that may be negatively affected by adopting inadequate setbacks e.g. escarpments or chain of ponds
 - If there is risk of significant channel migration in the future (presence of highly erodible soils)
 - Where biodiversity conservation or storm water quality assets are required within rivers and riversides
 - Existence of natural wetlands. Likewise, the core area may need to be expanded to include wetlands associated with the system or modified to provide an adequate connectivity between the wetland and the buffer zone
5. A buffer zone is a zone that starts from the core area. The minimum width of this area may vary from point to point depending on the existing land use practices and the landscape. The buffer shall begin at the normal water’s edge of the bank of a river. The buffer width shall be increased as necessary to include contiguous sensitive areas, such as wetlands, floodplains, steep slopes or erodible soils.

20.5 General Buffer Plan Requirements

For Addis river buffer zone, it should important competent authority to prepare a buffer zone management plan including the catchment. The river buffer zones management plan should contains detailed assessment of water quality and quantity status, the human pressures and risks on rivers. This facilitates an integrated management of a river buffer zone. As river pressures coming beyond designated buffer zone, it is important to consider an Integrated Catchment Based Approach whilst taking actions at the buffer zone scale. Such measures would address all major challenges of the rivers in integrated manner. The buffer plan shall contain the following information:

1. A location or vicinity key map;
2. A map showing:
 - i) Field– delineated and surveyed streams, springs, seeps, water bodies, and wet lands;
 - ii) Field– delineated and surveyed forest outline, taken at the drip line of the trees;
 - iii) Slopes greater than 15 percent for areas adjacent to and within the minimum 50m of a water body;

- iv) A narrative of the species and distribution of existing vegetation within the buffer
- v) Permanent boundary markers shall be installed prior to clearing and/or grading
- vi) The general information about watersheds pressures and the status the core area of the river, buffer zone and catchments
- vii) Management options
- viii) Defined period of time to restore the buffer zone to desired good status both by its water resources and ecology
- ix) Actors that engage on the development and conservation

20.6 Buffer Management and Maintenance

The buffer Zone, including component wetlands and floodplains, shall be managed to enhance and maximize the unique value of the river and riversides resources. Management includes specific limitations on alteration of the natural conditions of these resources.

The following practices and activities are prohibited within the buffer:

1. Clearing of existing vegetation except the ones that have to be cleared according the management plan;
2. Storage or application of pesticides and other harmful chemicals, except for the spot spraying, when such spraying is necessary;
3. Introduction of alien species unless approved by the concerned body;
4. Housing, grazing, or other maintenance of livestock; and/or
5. Storage or operation of motorized vehicles;
6. Crop production;
7. Site alteration by filling, grading, stripping, or other practices;
8. Drainage by ditching, under-drains or other means.

20.7 River System Management

Sustainable urban rivers development demands a compressive rivers and land management and strategy. Particularly, restoring and maintaining good ecological status is pre-request for sustainable urban buffer zone development.

Thus the guideline:

- Promotes rivers banks, catchment and watershed management practices to maximize sustainable water flows and increase quality of waters in the rivers;
- Encourages community based participatory riversides management practices
- Ensures managing ecological system and land development practices constitute an integral part of the overall urban rivers' management;
- Encourage and enforce the adherence of urban land use plans in order to maintain and improve rivers ecosystem.
- Promote Formulating and enforcing rural land use plans to control unsustainable land use practices
- Ensures designation and development of sufficient core areas' and buffer zones for the rivers as green infrastructures through conservation of the existing forest resources or afforestation and reforestation to minimize water system, water quality and water quantity failures;

- Considers the rivers landscapes management plays central role of in rivers systems management.

20.8 Water Quality Requirement

Rivers pollution may come from point sources such as industries and pipelines; and diffuse pollutions such as agricultural runoff, untreated sewage and unsustainable Solid waste disposals.

To control urban rivers pollution, the guideline:

- Promotes effectively enforcing industrial pollution laws and standards
- Promotes improving urban infrastructures for waste water discharges
- Promotes prevention of direct discharges of waste water in to water bodies by the urban centers
- Promotes Strengthening of enforcement of existing laws on waste water discharges
- Promotes integrated waters resources management to control diffuse pollution from agricultural practices
- Promotes Strengthening of enforcement solid waste disposal control laws to the river bodies
- Promotes industries to develop corporate responsibilities voluntary codes to regulate their behaviors on effluent discharges and solid waste disposal practices
- Promotes clean-up and restoration of polluted urban rivers
- Raises awareness of different actors

20.9 Environmental Flow Management

Effective buffer zone management requires assessing and managing environmental flows across river basin. Sustainable environmental flow needs to introduce and implement science-based environmental flow level for the rivers through assessing existing information. For this ends it should need setting and implementing environmental flow standards for the rivers.

For this end the guideline:

- Promotes setting of minimum environmental flow to avoid water over-take from urban rivers
- Promotes Strengthening enforcement of rules that set to control environmental flow, by regulating water abstraction from the whole part of the rivers
- Promote creation artificial water reservoirs that supports regulated sustainable river flow
- Interconnecting streams by evaluating their chemical contents or treating water chemical nature

20.10 Institutional Set up

Effective institutional arrangements are pre-request for sustainable urban river development. The guideline:

- Encourages establishing special organizational arrangement with a clear mandates that engage urban rivers and riversides development and management.

- Promotes Separation of developmental and regulatory roles of organizations
- Promotes cooperation of major stakeholders for effective management of urban rivers
- Promotes focusing at the buffer zone scale but Work in partnership with other public bodies at different scales and the same level
- promotes establishing and strengthening coordination mechanisms to ensure participatory interventions against unsuitable rivers and rivers sides resources exploitations
- In the case of multiple parties sharing management interests of the buffer zone, a management agreement of some form (options would need to be explored as to the most appropriate for the particular situation) will need to be entered into to ensure effective management.
- Promotes reforming of the existing institutional arrangements and organizational structures with effective coordination and management for the urban rivers and riversides;
- Promotes strengthening of the capacity of key stakeholders at the catchment, urban, river basin and national levels so as to enhance effective and coordinated rivers and riversides' management.
- Promotes reforming legal rules and practices to enhance local people participation in urban rivers management
- Promotes formulation and implementation of urban rivers and riversides sustainable development programe that enhances restoring, protecting, managing and sustainably using the rivers;
- Promotes institutional arrangements to consider both punitive and incentive measures for the urban rivers challenges.

20.11 Public Participation

Stakeholder engagement and involvement in buffer zone management is a key to address rivers pressures. Ensuring and enabling stakeholders' participation should be an integral part of the buffer zone designation process. Moreover effective buffer zone management demands a participatory approach, which brings communities at the center of decision-making process. Thus sustainable urban rivers development is impractical if people exploiting them are left uninvolved. The guideline:

- Promotes developing effective mechanism for local people participation in the planning and implementation of sustainable urban rivers and riversides development projects and programs;
- Promotes local people participation in all phases of urban rivers and riversides development and management, from project conception to planning and implementation to monitoring and evaluation;
- Promotes increased participation of women and youth in urban rivers and riversides development and management
- Encourages private sector investment in urban rivers and riversides development and management
- Promotes the development of institutional arrangements that enhance the participation and engagement of private sectors in urban rivers and rivers sides development and management;
- Encourages formulation and implantation institutional arrangements that attract private sectors to engage in the greening riversides;
- Encourage active involvement of a broad cross-section of stakeholders and enable the exchange of knowledge between regulators, planners, stakeholders and the research community

- Set out and communicate a clear, transparent and accessible process of analysis and decision making

20.12 Environmental Education and Research

The guideline:

- Promotes the teaching of buffer zone education on a multi-disciplinary basis and to integrate it into the ongoing curricula of schools and colleges and at the tertiary level;
- Promotes context driven multidisciplinary Research to solve the buffer zones problems;
- Promotes buffer zone awareness programs to address buffer zones problems;
- Promotes developing communication strategies for buffer zone development and protection
- Promotes recognizing an important role of different medias;
- Encourages the involvement of local community and religious leaders in the awareness creation actions.
- Encourages stakeholders engagement on environmental awareness.

20.13 Monitoring and Controlling

- Effective urban rivers and rivers sides' development and management may not be achieved without efficient monitoring and controlling. The guideline:
- Promotes setting of long-term goal of achieving good status with defined cycle of implementation periods
- promotes defining actions to be taken to achieve the goal of good status
- setting implementation strategies
- encourages strengthening of monitoring and evaluation of an implementation progress and taking actions that rectify implementation weakness.

20.14 Special Circumstances

The concerned organ may consider:

1. Those development or site alteration projects or activities where it can be demonstrated that compliance with these guidelines is not feasible;
2. Those development or site alteration projects or activities serving a public need where no
3. feasible alternative is available; or
4. The repair and maintenance of public improvements where avoidance and minimization of
5. negative impacts to wetlands and associated aquatic ecosystems have been addressed.
6. Reductions in buffer width may also be considered if deemed appropriate by the staff of the concerned organ as follows:
 - The buffer width may be relaxed and the buffer permitted to become narrower at some points as long as the average width of the buffer meets the minimum requirement and is no less than 15m wide at any point.
 - The proponent shall submit a written justification for the reduction, which shall include rationale and any other information necessary to evaluate the proposed reduction request. The concerned organ may require an alternative analysis that clearly demonstrates that no other feasible alternatives exist and that minimal im-

pact will occur as a result of the project or development.

- In supporting a reduction, the concerned organ may require site design, landscape planting, fencing, the placement of signs, and the establishment of water quality best management practices
- in order to reduce negative impacts on water quality, streams, wetlands, and flood-plains.

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21. Annex

Annex I. List of people interviewed

S.No.	Organization	Name position and address
City Government		
1	AA- Environmental Protection Authority	Ato Masresha (0911978935)
2	Cleansing Management Agency	W/o Ayehuat; -Research Awareness & Contract Administration (0921322557)
3	Beautification, Park, and Cemetery Development Agency	W/o AlemGizaw -Research & Design (0911627124)
4	AA- Water and Sewerage Authority and Project Office	Ato. GemechisTilahun (0911100535)
5	Urban Planning Institute	Ato. Gebresilas Franco (0911747811)
6	Urban Planning Institute – Project office	Ato. LealemBirhanu -Deputy General Manager
7	Addis Ababa City Administration Organization and Restructuring Project Office	Ato. SeifeFekade -General Manager (0911235643)
8	Oromia National Regional State Bureau of Environment, Forest and Climate Change	Dr.HassenYosuf -BEFCC Head Ato. Bona Yadessa -CCD Director
Ministries		
1	Ministry of Environment, Forests and Climate Change	AtoMehari, -Director
2	Ministry of Industry	AtoBentiFirdissa -CRGE Unit Director
3	Ministry of Water, Irrigation and Energy	Wz. BelayneshBiru -Environment Unit Director
4	MoUH	AtoEyob -Expert
5	MoA&NR	BerhanuAssefa -CRGE unit coordinator
6	MoA&NR	H/Michael Ayele -NR expert

7	Water and energy design works sector	Sileshi Ashenafi -Environment and social assessment manager
8	MoT	Yizengawu -CRGE unit coordinator

Annex II – Questionnaire Survey for Organizational Assessment

This questionnaire is prepared to collect various information and data to be used for Addis Ababa River and Riversides Development project. As a stakeholder institution your inputs are highly valuable, therefore please provide the required information accurately.

The information collected will be treated anonymously and will be used for research purposes only

Date: _____

Name of institution/organization/office: _____

Sub City: _____

1. Level of institution/organization/office

- Federal level
- Regional level
- City/State level
- Sub city level
- Kebele level

2. Institutional/Organizational Mandate(s):

3. Please provide details about where the mandate comes from [legislation/proclamation/regulation/directives etc.]

4. Does your office/bureau/ministry deal with the following issues?

- I. Environment Yes / No
- II. Water Resource Yes / No
- III. Rivers and Riversides management Yes /No

5. What is your offices'/bureaus' /ministry's role or function in environmental/ water resource management[Please select all that apply]

- I. Water service planning
- II. Water allocation

- III. Water distribution
 - IV. Water quality monitoring
 - V. Constructing hydraulic facility
 - VI. Enforcing water quality legislatives
 - VII. Protection against water disasters (e.g. flood)
 - VIII. Maintaining water services facilities
 - IX. River management and/or ecosystem protection
 - X. River side development and / or management
- Others (please specify) _____

6. How do you characterize the situation of water resources and its management in the Addis Ababa?

7. What do you think with regards to rivers and riversides management practices in Addis Ababa?

8. Are you aware of any national, policy strategies and legislatives??with regards to:

- I. Environment: Yes / No
- II. Water: Yes / No
- III. Rivers and Riversides [management/development/rehabilitation]: Yes / No

8.1 If you answered YES to any of the above please list them;

9. Are you aware of the local laws [city level], policies and strategies with regards to:

- I. Environment: Yes / No
- II. Water: Yes / No
- III. Rivers and Riversides [management/development/rehabilitation: Yes / No

9.1 If you answered YES to any of the above please list them;

10. How does your organization involve in the following sectors?

	Legislation	Planning	Program designing	Implementation	Monitoring and Evaluation
Environment					
Water					
Rivers and riversides management					

11. Do you think currently there are institutions to sufficiently and efficiently deal with challenges relating to :

- I. Environment: Yes / No
- II. Water: Yes / No
- III. Rivers and Riversides: Yes / No

12. In your opinion/ experience, how effective is the implementation process of national / regional policies and strategies at local [lower administrative] levels?

- I. Successful
- II. Successful but with lots of work still to be done
- III. Not successful
- IV. It is a failure

13. Please give the reasons behind the implementation challenges faced by lower administrative levels [for lower administrative levels only]

14. Institutional Capacity

14.1 Please describe the organizational structure of your office

14.2 Does your office work across different administrative levels ?– at what level(s) does your organization work? [Please select all that apply]

- I. Federal
- II. Region/City
- III. Subcity
- IV. Wereda
- V. Kebele

14.3 What are the vertical administrative structures that have been set up by your office /bureau/ ministry and what are their mandates at each administrative level?

14.4 Resource availability- Please answer the following accordingly for your institution/organization

Resources	Excellent	Sufficient	Inadequate	Poor	I do not know
14.4.1 How well is infrastructure? [e.g. Office Equipment , transportation, technology]					
14.4.2 How well is human resources?[technical man power]					
14.4.3 How well is financial resources?					

14.4.4 How much budget is allocated to your institution annually? [if this varies from year to year please use average budget allocated for the past three years] _____ETB.

14.4.5 Please select the budget source(s) of your organization

Budget source:

Federal Government

Multiple sources

Donors

Regional/City government

Others/ Multiple sources (please specify) (_____

Budget allocation:

Is there budget allocated specifically for the following activities?

- I. Environmental management/protection Yes / No
- II. River management and/or ecosystem protection Yes / No
- III. River side development and or management Yes / No

If you answered Yes to the above, please give indication about the proportion of annual budget used for the above activities in the following table.

Budget source	%age of Budget used for			
	Activity I	Activity II	Activity III	
Federal Govern- ment				
Donors				
Multiple sources				
Regional/City government				

15. What challenges does your office face in undertaking its mandates? Please list them. (For e.g. economical, institutional, social, political, lack of capacity etc.)

15.1.1 How many staff currently work in your organization/office?

Total number: _____

15.1.2 Out of the total employees, how many technical experts are available on the following sectors?

- I. Environment _____
- II. Water resource _____
- III. Rivers/riversides management _____

16. Institutional communication, collaboration and coordination

16.1 Please give information on which government institutions communicate with your office and for which purposes (planning, implementation etc.).

Organization's name	Purpose of interaction: Policy /Strategy/Program			Mode of interaction formal/official?		Remarks/ details
	design/ planing	implementation	enforce- ment	yes	no	

16.2 Please give information regarding platform for institutional communication [sector specific]

Sector	Established communi- cation platform?		If Yes, please give details
	Yes	No	
Environment			
Water			
River and Riversides			

16.3 Please give your opinion on the following to assess the status of organizational communications

Communication	Excellent	Adequate	Inadequate	Poor	Does not exist	I do not know
Cross- sectoral communication (within your organization)						
Cross- sectoral communication with stakeholder organizations						
Horizontal communication with stakeholder organizations						
Vertical (top-down) communication with stakeholder organizations						
Frequency of cross sectoral communication (with in organization)						
Frequency of communication with stakeholder organizations						

16.4 In your opinion / experience, what is the coordination at the organizational level? Efficient / inefficient

16.5 In your answer is efficient what makes the coordination at organizational level inefficient?

16.6 Please rank to each of the following to determine what makes the communication among institutions inefficient/difficult?

	very high influence	high influence	no influence	low influence	I do not know
Information flow pattern (upward and downward).					
Authority (decision) flow pattern					
Willingness to communicate among organizations					
The presence of overlapping mandates of institutes					
Presence of unspecified law and mandates					
Presence of strategies focused on rapid economic benefit					
Weakness in decentralized governance system.					

The interference of periodic centralization					
Effectiveness of strategies developed to improve implementation capacities					
Weakness in strengthening institutional capacity building					
Lack/weakness of established platforms for institutional communication					

Other (please specify and select influence level _____)

16.7 Are you aware of who are the responsible offices for the functions listed above in section 4 (that are not within your offices' mandate?)

Yes/ No

If yes, please list the ones you know

17. Stakeholder engagements

17.1 Government- NGO- CSOs -Private sector linkages

17.1.1 Does your organization work with NGOs and development partners?

Yes / No

If your answer is yes, on what does your organization work with the NGOs?

Please give details of the type of engagement

Name of NGO	Type of Engagement		
	Financial	Technical	other (please explain)

17.1.2 Does your organization work with Civil Society Organizations (CSOs)?

Yes / No

If your answer is yes, on what does your organization work with the CSOs?

- I. Environment
- II. Water
- III. Rivers and Riversides

Please give details of the type of engagement

Name of CSO	Type of Engagement		
	Financial	Technical	other (please explain)

17.1.3 Does your organization work with Private Sectors?

Yes / No

If your answer is yes, on what does your organization work with the private sector?

I. Environment: Yes / No

II. Water: Yes / No

III. Rivers and Riversides: Yes / No

Please give details of the type of engagement

Name of Private Sector	Type of Engagement		
	Financial	Technical	other (please explain)

17.2 Community participation

17.2.1 Is there any established platform for frequent community participation [e.g. in program planning and implementation process]

Yes / No

17.2.2 Is there Community participation in decision making?

Yes / No

17.2.3 Is there Timely notification prior to project commissioning?

Yes / No

17.3 What do you think is the level of cooperation and involvement between your office and the stakeholders?

I. NGOs

Strong / Moderate / Weak / None/ I do not know

II. CSOs

Strong / Moderate / Weak / None / I do not know

III. Private sector

Strong / Moderate / Weak / None / I do not know

IV. Community

Strong / Moderate / Weak / None / I do not know

18. What do you think about the status of environmental and water resource governance in Addis Ababa? [E.g. strong/weak/ etc.]

19. What are the main constraints and bottlenecks that make the overall water/ environmental governance system weak?

20. What actions do you recommend to be taken by your office to help the sustainable management of Addis Ababas' rivers and riversides? Is there anything planned? If not, do you think that you should be planning/undertaking activities with regards to the River and Riversides of Addis Ababa?

21. Are you aware of the Addis Ababa Rivers Riversides and Climate Change Adaptation Project Office? [If the interviewee does not know please explain in details – explain how the office is set up]

22. Do you think the current set up and mandate of the AARRSCCAPO is adequate? Please explain.

Thank you for taking time to complete this survey!

Annex III - Organizational assessment

Ministry of Industry

Issue	Details (Full details to be made available so that we could compare and contrast with each other)
I. Institutional structure	
Key mandates and responsibilities	To formulate policy, strategies and guidelines Provision of technical support to the regions
Mandate – Water	
Mandate – River	
Mandate - Riversides	
Origin	Proclamation
Legal and constitutional status/ identity	
Regulatory environment	
Policies	National industry policy
Regulations	There are regulations of industrial wastes, EIA guideline prepared by MEFCC for the sectors
Acts	
Strategy documents	The line institutions have strategy documents
Others	
Process and interaction	
Coordination mechanism - Vertical	There is coordination mechanisms vertically between its line structures Federal – regional/city administration
Coordination mechanism - horizontal	The horizontal coordination mechanism with the line ministries is very loose. There is coordination and cooperation with the Ministry of Environment, Forest and climate change and MoFEC, NPC
Partnerships (Govt, NGOs, Private etc.) – Provide eggs	There are partnerships with NGOs and development partners both in financial and technical supports like AfDB, JICA, IDH, EU and GIZ There are many private factories and manufacturing closely working with the Ministry of Industry

Capacity and resources	
Organizational composition	The organizational composition is well organized; Minister- state ministers- directors – case teams. However, the lower positions are not filled with adequate experts.
Governance and leadership structure	
Human resources – staff strength	Sufficient
Best Case examples that could be showcased	
Proposals to be used by Riversides office that could be picked up from this particular organization	There should be delineated buffer zone between the riversides and industries in the city. Involve local community in the protection of the riversides and create awareness of the community

Ministry of Transport

Issue	Details (Full details to be made available so that we could compare and contrast with each other)
Institutional structure	
Key mandates and responsibilities	Supporting, coordinating and regulating the overall activities, which are implemented by the transport sector
Mandate – Water	
Mandate – River	There is a mandate to protect the rivers from damage and pollutions
Mandate - Riversides	The ministry has a mandate to manage and protect riversides
Origin	Proclamation
Legal and constitutional status/identity	
Regulatory environment	
Policies	There is national Transport policy
Regulations	There are different regulations for the line institutions under ministry of Transport

Acts	
Strategy documents	There is strategy document and also the line institutions under the ministry have strategy documents, which is relevant to them.
Others	
Process and interaction	
Coordination mechanism - Vertical	There are vertical coordination's and communication mechanisms between federal regional and woreda (from the federal – the regional and woreda Transport offices) transport office.
Coordination mechanism - horizontal	The horizontal coordination mechanism with the line ministries is very loose. There is coordination and cooperation only with the Ministry of Environment, Forest and climate change and MoFEC, NCP
Partnerships (Govt, NGOs, Private etc.) – Provide eggs	There are partnerships with NGOs and development partners both in financial and technical supports like WB, DfID and China EXTM Bank
Capacity and resources	
Organizational composition	The organizational composition is well organized ; Minister- state ministers- other federal transport sectors - directors – case teams. However, the lower positions are not filled with adequate experts.
Governance and leadership structure	Minister- regional – woreda
Human resources – staff strength	The human resource is not Sufficient. There is scarcity of skilled man power. There are 115 staffs are currently working for the Ministry at the federal. Out of this only 4 staffs/ experts are working on the environment.
Best Case examples that could be showcased	
Proposals to be used by Riversides office that could be picked up from this particular organization	The big challenge in the city to the river and riversides is that car washing places are around the river and riversides so that the rivers in the city are much polluted. There should be appropriate place for the car wash and garages, which is far from the river and riversides. Involve local community in the protection of the riversides and create awareness of the community

Ministry of Agriculture and Natural Resource

Issue	Details (Full details to be made available so that we could compare and contrast with each other)
Institutional structure	
Key mandates and responsibilities	Formulate and facilitate the implementation of a strategy for natural resources protection and development through sustainable agricultural development; Establish and direct training centers that contribute to the enhancement of agricultural development and the improvement of rural technologies; Ensure the proper execution of functions relating to agricultural research, conservation of biodiversity and the administration of agricultural investment lands entrusted to the federal government on the basis of powers of delegation obtained from regional states.
Mandate – Water	X
Mandate – River	X
Mandate - Riversides	X
Origin	The mandates emanated from the state policy directives Proclamation No. 692/2010
Legal and constitutional status/identity	
Regulatory environment	
Policies	Environmental policy 1997 Water policy of Ministry of water Irrigation and Energy
Regulations	
Acts	Strategy documents
Others	
Process and interaction	

Coordination mechanism - Vertical	There are well organized coordination and communication mechanisms between the vertical ladder, within the sector federal regional - woreda -Kebele (from the federal – the regional - woreda – Kebele) there are development agents at Kebele level who feed to the woreda.
Coordination mechanism - horizontal	The horizontal coordination mechanism with the stakeholders; line ministries is very loose except for Ministry of Environment, Forest and Climate Change. There is coordination and collaboration with the Ministry of Environment, Forest and climate change especially in CRGE issues.
Partnerships (Govt, NGOs, Private etc.) – Provide eggs	There are partnerships with NGOs and development partners both in financial and technical supports, mostly GIZ, WFP, ACCRA, DNIDA, DfID,CCC-E and ATA
Capacity and resources	
Organizational composition	The organizational composition is well organized; Minister-state ministers- directorates – case teams. However, the lower positions are not filled with adequate experts.
Governance and leadership structure	<p style="text-align: center;">Minister</p> <pre> graph TD Minister --> NR_Minister[NR State Minister] Minister --> Agri_Minister[Agri State Minister] Minister --> Rular_Minister[Rular & Food Security State Minister] NR_Minister --> NR_Dir[Directorates] NR_Dir --> NR_Case[5 Case Teams] Agri_Minister --> Agri_Dir[Directorate] Agri_Dir --> Agri_Case[Case Teams] Rular_Minister --> Rular_Dir[3 Directorates] Rular_Dir --> Rular_Case[Case Team] </pre> <p style="text-align: center;">All the case teams under the directorates have no adequate man power</p>
Human resources – staff strength	The human resource is not Sufficient. There is scarcity of skilled man power. There are 31 staffs are currently working for the natural resource directorate of MoA&NR at the federal. Out of this 10 staffs/ experts are working on the environment and 10 are working for river and riversides management.
Best Case examples that could be showcased	

Proposals to be used by Riversides office that could be picked up from this particular organization	Should treat contributory catchments through bio physical technology and participation of local community. Implementing proper conservation and protection measures with buffer zone around rivers and riversides
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Ministry of Urban Development and Housing

Issue	Details (Full details to be made available so that we could compare and contrast with each other) \
Institutional structure	
Key mandates and responsibilities	The key mandates of Urban Development and Housing is to formulate policy, strategies, standards, guidelines and Manuals Provision of capacity building training for the regions and Monitoring and evaluation of the overall activities implemented by the regional bureaus.
Mandate – Water	
Mandate – River	X
Mandate - Riversides	X
Origin	The mandates emanated from the Urban development policy 2005.
Legal and constitutional status/identity	
Regulatory environment	
Policies	Environmental policy 1997 (<i>The policy is revisited but not yet endorsed</i>) Urban development policy 2005,
Regulations	Environmental pollution control proclamation No. 300/2002 Urban planning proclamation No. 574/2008 EIA proclamation No 299/2002 Urban solid waste management Proclamation No. 513 /2007
Acts	

Strategy documents	
Others	
Process and interaction	
Coordination mechanism - Vertical	The vertical coordination mechanisms are not well established, because. However, at the Urban ministry level there is coordination and communication mechanism established, sharing of plans and reports as per the power ladders. The coordination and communication mechanism vertically from regions to federal (ministry) is invisible because there is no structural uniformity between federal to the regional states.
Coordination mechanism - Horizontal	The horizontal coordination mechanism is the coordination mechanisms existing within the ministry among the directorates and with other line ministries. There is coordination within the ministry among the directorates; jointly planning and jointly performance review, whereas there are some limited coordination and collaborations with the Ministry of Environment, Forest and Climate Change, ministry of Health, institute of biodiversity and ministry of water irrigation and electricity regarding CRGE, environmental and river and riversides management. CRGE advisory board has brought the CRGE priority sectors, CSOs and development partners on the regular basis.
Partnerships (Govt, NGOs, Private etc.) – Provide eggs	There are partnerships with NGOs and development partners both in financial and technical supports, such as Dfid, UNDP, GIZ, WB
Capacity and resources	
Organizational composition	The organizational composition is well organized; Minister-state ministers- directorates – case teams. However, the lower positions are not filled with adequate experts.

<p>Governance and leadership structure</p>	<div style="text-align: center;"> <pre> graph TD MUDH[MUDH] --- UDS[Urban development sector] MUDH --- HS[Housing Sector] UDS --- DIR[Directorates] UDS --- UCCRB[Urban CCRB] UDS --- CT[Case Team] CT --- UGBD[Urban Greenery & Beautification Directorate] CT --- USWMD[Urban Solid Waste Mgt Directorate] </pre> </div> <p>The structure is not uniform down to the regions so that there is sectoral communication problem from federal to the regional states</p>
<p>Human resources – staff strength</p>	<p>The human resource is not sufficient. There is scarcity of skilled man power in specific areas. There are 24 staffs are currently working for the urban climate change resilience bureau of MoUDH at the federal. All of them are working on environment and river and riversides management.</p>
<p>Best Case examples that could be showcased</p>	
<p>Proposals to be used by Riversides office that could be picked up from this particular organization</p>	<p>It is important to give due emphasis to urban watershed management and sewerage management, raise awareness of the public waste management Establishing coordination with all the sectors in planning and implementation</p>

Ministry of Water, Irrigation and Electricity

Issue	Details (Full details to be made available so that we could compare and contrast with each other)
Institutional structure	

Key mandates and responsibilities	The key mandates of water, Irrigation and Electricity is to promote the development of water resources and electricity Undertake basin studies and determine the county`s ground and surface water resources Promote the growth and expansion of electricity energy in the country,
Mandate – Water	X
Mandate – River	X
Mandate - Riversides	X
Origin	The mandates emanated from the water policy, energy policy, and proclamation
Legal and constitutional status/identity	
Regulatory environment	
Policies	EPA, now MEFCC produced environmental policy CRGE strategy, water policy of Ethiopia
Regulations	Environmental pollution control proclamation No. Solid waste disposal guideline EIA proclamation
Acts	
Strategy documents	
Others	
Process and interaction	
Coordination mechanism - Vertical	The vertical coordination mechanisms are not well established, because there is no structural uniformity from federal to the regional states. There are vertical coordination and communication within the ministry from the minister down to the case team through provision of guidance, feedback and reports, but closely working with the regional states is not practical.

<p>Coordination mechanism - Horizontal</p>	<p>The horizontal coordination mechanism among the ministries / sectors is very weak. There is no coordination during planning and implementation except for the MEFCC and MoFEC CRGE issues. There is coordination and collaboration with MEFCC in planning, implementation, monitoring and evaluation of CRGE initiatives and enforcements measures. CRGE advisory board has brought the CRGE priority sectors, CSOs and development partners on the regular basis</p>
<p>Partnerships (Govt, NGOs, Private etc.) – Provide eggs</p>	<p>There are partnerships with NGOs and development partners both in financial and technical supports, such as AfDB, JICA, IDH and EU CSOs – forum for Environment and Ethiopian Forestry Association Private sectors – Google Cook stove producers</p>
<p>Capacity and resources</p>	
<p>Organizational composition</p>	<p>The organizational composition is well organized; Minister- 3state ministers- directorates – case teams. However, the lower positions are not filled with adequate experts.</p>
<p>Governance and leadership structure</p>	<div style="text-align: center;"> <pre> graph TD MoWIE[MoWIE] --- SM1[State Minister] MoWIE --- SM2[State Minister] MoWIE --- SM3[State Minister] SM1 --- D1[Directorate] SM2 --- D2[Directorate] SM3 --- D3[Directorates] D1 --- CT1[Case Teams] D2 --- CT2[Case Team] D3 --- CT3[Case Team] </pre> </div> <p>The organizational structure of MoWIE at the federal level is not uniform with the regional states level so that there is sectoral communication problem from federal to the regional states</p>
<p>Human resources – staff strength</p>	<p>The existing human resource is not sufficient. There is scarcity of skilled man power in specific areas. At the ministerial level there are 950 staffs from which 169 staffs are working on the water resource and 18 are work in on the environmental field.</p>
<p>Best Case examples that could be showcased</p>	

<p>Proposals to be used by Riversides office that could be picked up from this particular organization</p>	<p>In order to sustainably develop and manage the Addis Ababa river and riversides it needs to delaminate buffer zone for all the rivers and riversides</p> <p>Involve the community in the protection of the river and riversides and enhance awareness of the public creation at all levels.</p>
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Ministry of Environment, Forest and Climate Change

Issue	Details (Full details to be made available so that we could compare and contrast with each other)
Institutional structure	
Key mandates and responsibilities	<p>The key mandates and responsibilities Ministry of Environment, Forest and Climate Change is ;</p> <p>Coordinate measures to ensure that the environmental objectives provided under the constitution and the basic principle set out in the environmental policy.</p> <p>Establish a system for environmental impact assessment for public and private projects, as well as social and economic development policies, strategies, laws and programmes</p> <p>Coordinate actions and resources required to build CRGE in all sectors and governance levels, as well as providing capacity building support and advisory services</p>
Mandate – Water	X
Mandate – River	X
Mandate - Riversides	X
Origin	The mandates emanated from the constitution, Proclamation
Legal and constitutional status/identity	Under constitution 1995, articles 44, and 93
Regulatory environment	
Policies	environmental policy 1997 CRGE strategy, Forest policy and strategy
Regulations	Environmental pollution control proclamation No. 300/2002 EIA proclamation No. 299/2002 Solid waste management proclamation No.513/2007 Environmental and social safe guard guideline 2015
Acts	
Strategy documents	CRGE strategy 2011
Others	
Process and interaction	

Coordination mechanism - Vertical	There is a vertical Coordination and communication mechanism within the ministry from the minister down to the directorates; provision Working guidance, planning, feedback and reports. The vertical coordination mechanism from federal to the regional states was not vigorous, because there was no structural uniformity from federal to the regional states. However, efforts have been made to align the regional states` structure with the federal structure and there was for the first.
Coordination mechanism - horizontal	The horizontal coordination within the ministry among the directorates is good; there is sharing of draft plans, drawing of experts for environmental policy revision and environment strategy development. The horizontal coordination mechanism with the line ministries / sectors is inadequate. Recently, there have been some initiatives in coordinating and collaboration with other ministries in planning and implementation of CRGE initiatives. CRGE advisory board has brought the CRGE priority sectors, CSOs and development partners on the regular basis. In addition, for the first time the ministry invited other sector ministries on the performance review of 2008 E.C and consultation of plan of 2009 E.C
Partnerships (Govt, NGOs, Private etc.) – Provide egs	There are partnerships with NGOs and development partners both in financial and technical supports, such as DfID, GGGI, UNDP, UNEP, GIZ, WB, ACCRA, and EU CSOs – forum for Environment, PHE, and Ethiopian Forestry Association Private sectors – Ecnoserve
Capacity and resources	
Organizational composition	The organizational composition is organized; Minister- 2state ministers- general directorates – directorates- case teams. However, all the general directorates and most of the expert positions vacant.

<p>Governance and leadership structure</p>	<div style="text-align: center;"> <p>MEFCC (Minister)</p> <pre> graph TD M[MEFCC (Minister)] --- SM1[Env't & CC State Minister] M --- SM2[Forest State Minister] SM1 --- G1[G/ Directorate] SM1 --- G2[G/ Directorate] G1 --- CT1[Case Team] G2 --- CT1 SM2 --- GD1[G/ Directorates] SM2 --- GD2[G/ Directorates] GD1 --- CT2[Case Team] GD2 --- CT2 </pre> </div> <p>This organizational structure at the federal level was not similar with the structure at the regional states so that there were problems in proper communication of the regions and federal levels</p>
<p>Human resources – staff strength</p>	<p>The existing human resources do not much with the existing spaces. There is a serious human resource capacity gap. As the ministerial level there are 250 staffs from which 80 staffs are working on the environmental sector and 75 are working on the forest sector.</p>
<p>Best Case examples that could be showcased</p>	
<p>Proposals to be used by Riversides office that could be picked up from this particular organization</p>	<p>Proper waste management, conserve and protect the catchments of Addis Ababa rivers, develop riversides with the participation of the public Establish coordination among different actors existing in Addis Ababa on river and riversides development Enhance awareness of the public on waste management and sustainable river and riversides development.</p>

Water and Energy Design and Supervision Works Sector

Issue	Details (Full details to be made available so that we could compare and contrast with each other)
<p>Institutional structure</p>	
<p>Key mandates and responsibilities</p>	<p>To undertake study, design and supervision works of water and energy resource development projects (water supply, irrigation, hydropower, waste water management, renewable energy)</p>
<p>Mandate – Water</p>	<p>X</p>

Mandate – River	X
Mandate - Riversides	X
Origin	Since the corporation is established by the regulation, the origin of the mandates is the regulation.
Legal and constitutional status/identity	
Regulatory environment	
Policies	Environmental policy, water resource mgt policy and strategy
Regulations	EIA, solid waste mgt proclamation, pollution control, water resource mgt
Acts	
Strategy documents	National conservation strategy, urban waste water mgt strategy
Others	
Process and interaction	
Coordination mechanism - Vertical	Weak vertical coordination mechanism and linkage from federal to the regional states.
Coordination mechanism - horizontal	Weak e horizontal coordination mechanism and linkage with the line ministries / sectors.
Partnerships (Govt, NGOs, Private etc.) – Provide eggs	Closely working with water irrigation and energy, AAWSA, regional water bureax, sugar corporation and industry park.
Capacity and resources	
Organizational composition	New organizational set up and structure is under process. The existing organization structure of the enterprise comprises four core processes; design, study, construction supervision and corporate technical center, which are accountable to deputy CEO. Each core process is divided into sub process. Environment and socio- economy study is one of the four sub processes in study core process.

<p>Governance and leadership structure</p>	<p>The organization is organized at federal level and has only project offices at different parts of the country. To execute its duties it works with government from federal to Kebele. The corporation is accountable to the ministry of public enterprise. It is centered in Addis Ababa and has project offices responsible for design and construction supervision of water resource development It has no budget allocated from the government treasury and profit making organization.</p>
<p>Human resources – staff strength</p>	<p>The organization has skilled man power and sufficient budget to accomplish its objectives. There are 446 technical professionals out of which 4 are environmentalist and 442 are working on water resource.</p>
<p>Best Case examples that could be showcased</p>	<p>The river and riversides are considered as dumping and discharge sites for solid waste and liquid waste. Some efforts were made to clean the river before 10 years by Addis Ababa EPA, but couldn't go further.</p>
<p>Proposals to be used by Riversides office that could be picked up from this particular organization</p>	<p>Currently working on study and design of waste water Management projects with Addis Ababa water and sewerage authority that can aid sustainable management of Addis Ababa river and riversides. However, the main constraints are</p> <ul style="list-style-type: none"> • Capacity problem • Institutional aspects • Lack of accountability <p>.Accountable body needs to be established to effectively manage by properly participating the city inhabitants</p>

Cleansing Management Agency (CMA)

Institutional structure	
<p>Key mandates and responsibilities</p>	
<p>Mandate – Water</p>	
<p>Mandate – River</p>	
<p>Mandate – Riversides</p>	

Mandate - other	<p>Waste management</p> <p>The Cleansing Management Agency has the following mandates and roles relevant to the research questions:</p> <ul style="list-style-type: none"> • Solid Waste Management Planning <ul style="list-style-type: none"> - Ensure the participation of the lowest administrative levels and their respective local communities in the designing and implementing their respective solid waste management plans. - Each region of urban administration shall set its own schedule and, based on that, prepare its solid waste management plan and report of implementation. - The plan and report referred to under sub-article (2) of this article shall be consolidated based on the solid waste management plan and implementation report of the lowest administrative units. • Management of Household Solid Wastes • Construction of Solid Waste Disposal Sites <ul style="list-style-type: none"> - Ensure that solid waste disposal sites are constructed and properly used - Ensure that a solid waste disposal site that was under construction or was constructed prior to the coming into force of this proclamation is subjected to environmental auditing as per the relevant law. - Ensure that any new solid waste disposal site being constructed or an existing solid waste disposal site undergoing any modification has had an environmental impact assessment according to the relevant law.
Origin	Solid waste proclamation 513/2007 Waste management, collection and disposal regulation of the Addis Ababa City Government Regulations No. 13/2004
Legal and constitutional status/identity	<p>The agency is part of the AA city administration and accountable to the city manager. The agency is primarily responsible for program design & planning as well as monitoring & evaluation of implementation of action plans and regulations concerning dry waste management in Addis Ababa.</p> <p>The CMA works to achieve the following:</p> <ul style="list-style-type: none"> • Promote community participation in order to prevent the adverse effect and to enhance the benefits resulting from solid waste; • The solid waste management action plans designed by and implemented at the lowest administration unit of urban administration can ensure community participation.
Process and interaction	

<p>Coordination mechanism - Vertical</p>	<p>The CMA has vertical administration structures at Sub city-level and Wereda – levels.</p> <p>The agency also may transfer the following responsibilities to sub city administrative units:</p> <ul style="list-style-type: none"> • The formulation and implementation of action plan on solid waste management; • Ensuring the installation of marked waste bins by street and other public places; • Ensuring the collection of solid waste from waste bins with sufficient frequency to prevent overflow; • Planning and carrying out public awareness raising activities; and, • Ensuring that measures are taken to prevent pollution arising from mishandling of solid wastes. <p>The Sub city and Wereda offices also manage Miro/Small private sector enterprises involved in solid waste collection and transportation.</p>
<p>Coordination mechanism – Horizontal</p>	<p>The agency collaborates with the following governmental stakeholders;</p> <ul style="list-style-type: none"> • EPA • AA Parks, Beautification and Cemetery Development Agency (BPCDA) • Ministry of Urban Planning and Construction <p>The purpose of interaction is for implementation and enforcement (with EPA and BPCDA). While the communication with Ministry of Urban Planning and Construction is for strategy/program design and planning.</p> <p>When it comes to sector specific organizational communication, the agency has communication on issues related environment and water but not rivers and riversides management.</p>

Partnerships (Govt, NGOs, Private etc.) – Provide eggs	<p>The Agency works the following NGOs and development partners;</p> <ul style="list-style-type: none"> • Enda Ethiopia • CRGE facilities • AMEREF <p>The cooperation with the above is both in financial and technical aspects.</p> <p>The agency also works with youth associations and volunteers to engage and mobilize community to undertake periodic cleaning campaigns in public places.</p> <p>In addition, CMA also outsources certain services and works closely with the following private sectors;</p> <ul style="list-style-type: none"> • Local Micro & small scale enterprises : in collection, transportation, use or disposal of solid waste from different parts of the city • Trade associations: to support waste management in areas where there is significantly higher wastage source points (such as Merkato and Atakilt-Tera areas) <p>Regarding community participation, there is no periodic and officially-established platform for community engagement. However, there is often issue- based involvement of community and in most cases timely notification prior to project commissioning.</p> <p>There is also a ‘citizen’s agreement document’ which is used specifically to get citizens consent in certain project commissioning.</p> <p>The level of interactions between the agency Community, Private Sector and CSOs and is described as moderate while the interaction between the agency and NGOs and development partners is weak.</p>
Capacity and resources	
Human resources – staff strength	Number of staff 117
Budget amount and source(s)	<p>Average annual budgets for the last three years 225,940,000 ETB.</p> <p>Main budget source- City government and internal revenue</p>
Best Case examples that could be showcased	‘citizen’s agreement document’ to involve communities and get consent for certain project commissioning
Proposals/ recommendations/ suggestions	<ul style="list-style-type: none"> • There should be a plan in the agency to incorporate the protection of rivers and riversides from illegal waste dumping together with stake holders such as EPA and low level enforce [DenbAskebaris] • More integration with stakeholders (governmental) is a must about the plans, mandates and works of RRCCAPO

Parks, Beautification and Cemetery Development Agency (BPCDA)

Institutional structure	
Key mandates and responsibilities	
Mandate – Water	
Mandate – River	
Mandate - Riversides	X
Mandate -	<p>The established agency has received the power of developing and administering green areas, parks and cemeteries of the city. Some of the powers and functions of the Agency stated on the proclamation are to:</p> <ul style="list-style-type: none"> • Develop, administer, and control, recreation places, zoos, cemetery, and river banks under the ownership of the city government in accordance with the city plan. • Develop closed parks, open green areas identified for park purpose, festival and plaza squares, river banks, and cemetery; contract out the administration of the above places to voluntary developing investors; follow up; control the service delivery in accordance with the contract; take back their possession on lapse of the contract period. • Prepare regulations, consistent with the policies, strategies, programs and laws issued by Federal Government, that are related to the development of recreation centers, cemetery, residence areas and green areas on the bank rivers. In addition to this, prepare and issue directives, standards and manuals. • Install and implement procedures of follow up and control in relation to the development, preservation, care and use of cemeteries, recreation centers, residence and green areas on the banks of rivers, and squares in cooperation with concerned bodies to improve the service delivery. • Provide education to service beneficiaries to protect the developed places. • Prepare design of recreation centers, cemeteries, and squares; dividing road lines; if necessary contracting out their development works; and follow up and control construction works in accordance with the contract.
Origin	Proclamation 35/2004 Proclamation 15/2009

Legal and constitutional status/identity	<p>The BPCDAA was re-organized in the reestablishment Addis Ababa City's administration executive bodies and municipal services through the proclamation No. 15/2009 G.C. based on part three chapter one. Earlier (before 2010) it was categorized under sanitation and beautification administration then it was established as an agency.</p>
Process and interaction	
<p>Coordination mechanism - Vertical</p>	<p>The agency has Sub city- level and Wereda – level offices. However, the Sub city office is under the respective Sub city's administration and is not accountable to the BPCDAA. This has caused challenges in coordinating and implementing activities.</p> <p>The implementation process of policies and strategies at lower administrative levels is described as weak and should be improved a lot. The reason given for this is that even though infrastructure & financial resources are described as sufficient at agency level, technical capacity and man power is still lacking. At Sub-city level, there is a gap in availability of all the above resources, particularly finance & technical man power. The primary reason behind the implementation challenges faced by lower administrative levels are given as:</p> <ul style="list-style-type: none"> • Top-down coordination and communication with the agency (vertical arrangement) • Lack of capacity and resources
<p>Coordination mechanism – horizontal</p>	<p>The BPCDAA collaborates with the following governmental stakeholders;</p> <ul style="list-style-type: none"> • Construction bureau • AA Water and Sanitation Authority (AAWSA) • Land development administration bureau • AACRA • AA City Administration • Cleansing Management agency • AA EPA <p>The mode of interaction with the above organizations is formal and purpose of interaction is for strategy/program design and/or planning (with EPA, City administration AACRA, Construction bureau). While the agency works together with Construction Bureau and EPA on policy/strategy enforcement. The agency also works with these organizations and Cleansing Management Agency on implementation. When it comes to sector specific organizational communication, the agency is involved in and established communication on specific issues relating to environment, but not on rivers and riversides management.</p>

<p>Partnerships (Govt, NGOs, Private etc.) – Provide eggs</p>	<p>The agency works with youth & women’s associations and Civil societies mainly for annual tree planting events. The agency also outsources certain services and works closely with local Micro & small scale enterprises. The partnership is mostly contractual and work includes riversides development and beautification, green areas development, roundabouts and pedestrian constructions. Regarding community participation, it cannot be said that there is an established periodic platform for community engagement. However, there is issue- based frequent involvement of community, and in most cases timely notification prior to project commissioning. The level of interactions between the agency and NGOs, development partners as well as community and CSOs’ is described as weak while the interaction between the agency and private sector is moderate.</p>
<p>Capacity and resources</p>	
<p>Human resources – staff strength</p>	<p>Number of employees - 127</p>
<p>Budget amount and source(s)</p>	<p>The annual budget of the agency (last 3 years average) is about ETB 173,071,931 Primary budget source is AA city government</p>
<p>Best Case examples that could be showcased</p>	
<p>Proposals/ recommendations/ suggestions</p>	<ul style="list-style-type: none"> • More integration with stakeholders (governmental) is a must, particularly about the plans, mandates and works of RRCCAPO. This is very important as BPCDAA has also a legal mandate to manage river buffer zones in Addis Ababa city • Therefore an established platform for sector specific communication between governmental stakeholders is strongly recommended.

Addis Ababa Environmental Protection Authority (AA-EPA)

Institutional structure	
Key mandates and responsibilities	
Mandate – Water	X
Mandate – River	X
Mandate - Riversides	X
Mandate -	<p>The Authority, being accountable to the Mayor of Addis Ababa city, has the following powers and functions relevant to this study:</p> <ul style="list-style-type: none"> • develop the city’s environmental protection standards in accordance with standards prepared by the Federal Environmental Protection Authority; design strategies to protect the environment from pollutions; coordinate stakeholders with regards to environmental protection; • cause the due propagation of environmental protection and the sustainable and non - abuse use of natural resources; aware the public about environmental protection through mass media; • follow up and control that the disposition of industrial residue, by-products and waste are in accordance with the law; • issue in accordance with the environmental laws certificate of competence of pollution prevention for production and service rendering institutions; • issue professional license and supervise those engaged in the drilling of underground water and quarries; • in consultation with the concerned bodies, prepare and submit strategies of environmental protection; ensure implementation of same, • undertaking of forest development and soil conservation activities on forest areas and beaches designated as green areas in accordance with the master plan of the City; in collaboration with concerned organs and residents of the City, • ensure that reserved forest areas under the holding of the City Government are properly preserved; give professional support and awareness education on continued basis; study and present additional sites that can be used as beach and forest areas; initiate the development there of; • follow up and control that forest areas, beaches, green areas for public use are serving the purpose sought; promote and advise on techniques by which they serve same;

<p>Origin</p>	<p>Proclamation 35/2012</p>
<p>Legal and constitutional status/identity</p>	<p>The Authority is part of the executive organs of the city government. It has its own legal identity and is accountable to the city mayor. The current status and mandate of the EPA comes from the latest proclamation in 2012 where it was re-established.</p> <p>The authority is involved in legislation, planning, program designing, implementation as well as motivation & evaluation in issues concerning environment in Addis Ababa.</p>
<p>Process and interaction</p>	
<p>Coordination mechanism - Vertical</p>	<p>The Authority has Sub city- level and Wereda – level offices, all comprising of the two core processes i.e., pollution control and natural resource conservation.</p> <p>However, the collected data shows that at all vertical administration levels i.e., at City, Sub city and Wereda level, there is lack of resources (particularly human resource, office facilities and infrastructure, technical man power and financial resources) as well as challenges relating to organizational capacity. The implementation process of national/regional policies and strategies at local/lower administrative levels is categorized as successful but with lots of work still to be done. Lack of technical manpower, less priority given to the environmental sector and lack of commitment, lack of technical capacity are given as prime reasons behind the implementation challenges faced by lower administrative levels.</p>
<p>Coordination mechanism – Horizontal</p>	<p>Information not provided</p>

Partnerships (Govt, NGOs, Private etc.) – Provide eggs	<p>The authority works with the following NGOs and the engagement is mainly technical cooperation;</p> <ul style="list-style-type: none"> • ENDA Ethiopia • V-SAFE • Pickdo <p>AA-EPA also works with some CSOs on environmental issues but not specifically on rivers and riversides. These are mainly women and youth associations and groups, and the interaction is primarily for periodic tree planting activities.</p> <p>The agency also works with industries and service providing businesses mainly to work together in reducing impact on environment (including issues relating to discharges to rivers and management of areas near water bodies).</p> <p>Regarding community participation, there is no information about an established and periodic platform for community engagement and decision making. However, sometimes there is issue- based involvement of community.</p> <p>The level of interactions between the agency and NGOs Community, private sector and CSOs engagement is described as weak</p>
Capacity and resources	
Human resources – staff strength	-Information not provided
Budget amount and source(s)	Annual budget of EPA is about ETB 20, 803,000 (3 year's average). Primary budget source is city government
Best Case examples that could be showcased	
Proposals/ recommendations/ suggestions	

Ababa Water and Sewerage Authority Project Office (AAWSA-PO)

Institutional structure	
Key mandates and responsibilities	
Mandate – Water	X
Mandate – River	
Mandate - Riversides	
Mandate -	
Origin	
Legal and constitutional status/identity	<p>The Authority project office is part of AA city government executive and municipal service organs. It is accountable to the city mayor. The current status and mandate of the authority comes from the latest proclamation in 2012. \</p> <p>The authority works on water service planning, water allocation and distribution, water quality monitoring, constructing hydraulic facilities (including water treatment plants) and maintenance of water service facilities. The authority is also involved in planning, program designing, implementation as well as monitoring and evaluation of activities related to water resource management.</p>
Process and interaction	
Coordination mechanism - Vertical	<p>AAWSA has Sub city- level and Wereda – level offices which are accountable to the agency. However, the collected data shows that at vertical administration levels i.e., at Sub city and Wereda level, there is lack of skilled personnel, financial resources and lack of awareness regarding policies.</p> <p>The implementation process of national/regional policies and strategies at local/lower administrative levels is described as unsuccessful and lots of work should be done to build capacity and address the above prime reasons behind the implementation challenges faced by lower administrative levels.</p>

<p>Coordination mechanism – Horizontal</p>	<p>AAWSA collaborates with the following governmental stakeholders;</p> <ul style="list-style-type: none"> - AA city council - AAWSA Project office - ERCA <p>The mode of interaction is all formal with the above organizations. For program design/planning AAWSA works with the city while the purpose of interaction with the project office is also for implementation. Lower administrative offices are involved mainly in implementation of project and programs. When it comes to sector specific organizational communication, the agency communicates with stakeholders on issues related to water sector but not in environment and rivers and riversides sectors.</p>
<p>Partnerships (Govt, NGOs, Private etc.) – Provide eggs</p>	<p>The only NGO/ development partner mentioned that the project office works with is World Bank Ethiopia, and the engagement is for program design/planning and financial support. The project office does not work with CSOs. The AAWSA PO also works with industries and private sector (mainly contractors and consultants) on technical issues in designing and construction of water and sewage as well as waste water treatment plants. Regarding community participation, there is sometimes there involvement of community on certain issues and timely notification prior to project commissioning. However, both engagements are very limited, and community participation in decision making is absent. The level of interactions between the agency and NGOs, Community, private sector and CSOs is described as weak.</p>
<p>Capacity and resources</p>	
<p>Human resources – staff strength</p>	<p>The authority has more than 100 employees</p>
<p>Budget amount and source(s)</p>	<p>AAWSA- PO's annual budget (3 year's average) is around ETB 4,000,000,000. The budget source is from multiple sources including City government, Donors and development partners.</p>
<p>Best Case examples that could be showcased</p>	
<p>Proposals/ recommendations/ suggestions</p>	<ul style="list-style-type: none"> • More official coordination and communication between governmental stakeholders is recommended

Urban Planning Institute (UPI)

Institutional structure	
Key mandates and responsibilities	
Mandate – Water	
Mandate – River	
Mandate - Riversides	X
Mandate –Other	<p>Land Use</p> <p>The Addis Ababa Urban Planning Institute has the following mandates and duties to:</p> <ul style="list-style-type: none"> • Prepare structural plan, environmental development plan of the City and city plan standards; update the same; conduct plan revision, where necessary; cause plans prepared approved in accordance with the law. • Conduct comprehensive study and research necessary to prepare city plan; practice important ideas by gathering and organizing international and domestic best experiences; provide capacity building and consultancy service in this area. • Conduct execution, follow up and evaluation to ensure that execution of plans of the City are in accordance with the approved plans and they have brought about the expected result; to this end it shall cause information and reports submitted to it by concerned bodies; in case of violation of plan take measure upon the violator organs or cause it to be taken; • Issue professional qualification certificate to urban planning professionals in accordance with law of the Federal Government; • Prepare city-wide map indicating areas of minerals and the concentration thereof; get it approved; follow up the execution, prepare proclamation, regulation, standard, directive to be used for preparation and execution of urban plan; implement the same upon approval.
Origin	Regulation No 16/2004 Proclamation No 35/2012

<p>Legal and constitutional status/identity</p>	<p>The institute is under (and accountable to) the Land Development and Management Bureau, which is part of the AA city government executive and municipal service organ.</p> <p>The latest organizational arrangement and mandate of the UPI comes from the Regulation No 16/2012.</p> <p>It has the purpose to define, in accordance with the state-of-the-art urban planning principles, a system that would ensure a healthy and sustainable development of growing urban centers.</p> <p>Currently the institution works to develop Land Use Plan (LUP) for the city at different administrative levels. That is determining what the different types of land in Addis Ababa will be used for. This includes demarcation of riversides and buffer zones, as well as green and protected areas. The institution is also involved in planning, program designing as well as monitoring and evaluation of implementation.</p>
<p>Process and interaction</p>	
<p>Coordination mechanism - Vertical</p>	<p>UPI head office has Sub city- level offices which are accountable to the institute. The sub-city offices are responsible to develop, implement, and monitor & Evaluate their own land use plans. However, when it comes to implementation challenges, the collected data shows that at vertical administration levels i.e., at Sub city level, there is lack of institutional capacity to plan and implement, skilled personnel, financial resources and lack genuine stakeholder participation.</p> <p>The implementation process of national/regional policies and strategies at local/lower administrative levels is described as unsuccessful and lots of work should be done to build capacity and address the above prime reasons behind the implementation challenges faced by lower administrative levels.</p>

<p>Coordination mechanism – horizontal</p>	<p>Urban Planning Institute collaborates with the following governmental stakeholders;</p> <ul style="list-style-type: none"> - MUDH (ministry of urban development and housing?) - EPA - AAWSA - ACCRA - EEPKO - Beautification, Parks and Cemetery Development and Administration Agency - Internal stakeholders under the City government Land Development and Management Bureau <p>The mode of interaction is all formal with all the above stakeholders. For program design/planning UPI works mainly with the city Land Development and Management Bureau and MUDH.</p> <p>Yearly plans are shared between AAWSA, ACCRA, EEPKO, Beautification, Parks and Cemetery Development and Administration Agency and IUP. The UPI interacts with the above for program implementation.</p> <p>When it comes to sector specific organizational communication, the institute does not communicate with stakeholders on issues specifically related to water, environment and rivers and riversides sectors.</p>
<p>Partnerships (Govt, NGOs, Private etc.) – Provide eggs</p>	<p>The only NGO/ development partner mentioned that the Urban Planning Institute works with is World Bank Ethiopia, and the engagement is technical, particularly capacity building. The UPI also works with different CSOs. These include religious organizations, EDIRs, youth and women forums.</p> <p>Institute of Urban Planning also involves private sectors (mainly service providers). This is primarily on technical issues including consultants for land use planning and designing and for staff capacity building via acquiring specialized training.</p> <p>Regarding community participation, there is established platform for frequent community engagement, decision making, and timely notifications prior to project commissioning. Community members and representatives are engaged four times per year whenever LDPs are prepared to inform plans and to take feedbacks. This engagement is undertaken at Sub city levels.</p> <p>However, even though there is good platform for community involvement, it should be better utilized for genuine and effective participation.</p> <p>The level of interactions between the institute and NGOs and development partners is described as weak while that of CSOs, community and private sector are described as moderate.</p>
<p>Capacity and resources</p>	<p></p>

Human resources – staff strength	At the institutional level there are about 51 employees
Budget amount and source(s)	UPIs annual budget (3 year’s average) is around ETB 17,290, 159. The primary budget source is City government.
Best Case examples that could be showcased	
Proposals/ recommendations/ suggestions	The RRCAPO should continue to work closely with the Institute, and ensure the river and riversides management plan is in line with the city’s master plan.

Annex IV: Chronology of Major Water Institutions Established in Ethiopia

Year (--to --)	Name of institution*	Selected Major Objectives
1959-1964	Water Resource Department, Ministry of Public Works & Communication	handle a multi-purpose investigation of the Blue Nile Basin
1962-1977	Awash Valley Authority	to establish plans and programmes for the use and development of the resources of the Awash Valley; to coordinate the activities of all Government Ministries and Public Authorities in respect of the use and development of the resources of the Awash Valley; to authorize third parties to construct, acquire, manage, administer and maintain dams, reservoirs, canals, power houses, power structures, transmission lines and incidental works in the Awash Valley; to administer all water and water rights in the Awash Valley and to control the flow of water of the Awash River
1971-1993	National Water Resource Commission, Ministry of Public works & water resources	established to provide full attention to the protection, & efficient utilization & management of all activities relating to water;
1975	Ethiopian Water Resource Authority, M. of Mines, Energy & Water resources (with three agencies)	

1977 - 1981	Valleys Agricultural Development Authority	<p>to establish river valleys Agricultural Development Agencies...</p> <p>...to study or cause the study of agricultural resources of the river valleys;</p> <p>to prepare and implement plans and programmes for the development of and use of agricultural resources in the river valleys;</p> <p>to arrange for the administration, conservation, environmental protection, management and utilization all agricultural resources in the river valleys and to coordinate all the agricultural development activities carried on by different government agencies;</p> <p>to fix and collect fees and charges for the use of water its supplies for agricultural development and for other facilities and services provided by it;</p> <p>to supervise and coordinate the activities of river valley development agencies;</p>
1977-1981	Awash Valley Development Authority (AVDA)	<p>a. to coordinate the activities of all Government and Public bodies in respect of agricultural use and developments of resources of the Valley;</p> <p>b. to conduct studies of agricultural resources of the Valley;</p> <p>c. to prepare plans and programmes for the use and development of agricultural resources in the Valley;</p> <p>d. to issue directives relating to the use of water for irrigation, land and other facilities, and, approve and accept appropriate agricultural practices;</p> <p>e. in consultation with the Ethiopian Water Resources Authority, to administer all water of the Awash River;</p> <p>f. to assign water of the valley for irrigation and to fix and collect fees and charges for the use of such water and other facilities;</p> <p>g. in connection with the directives set by the Authority to design and construct major civil engineering works for the purpose of agricultural development;</p>
1981	National Water Resource Commission (comprising four agencies)	Established as sole authority on the development of the nation's inland and trans boundary water resources and was responsible for the coordination of meteorological services

1987-	Ethiopian Valleys Development Studies Authority	<p>a. conduct studies and research of natural resources, in particular water resources, in the valleys of the country;</p> <p>b. prepare development master plans for valleys;</p> <p>c. conduct studies and research for the protection of the environment;</p> <p>d. conduct studies and research pertaining to transboundary rivers.</p>
1993 -1995	Ministry of Natural Resources & Environmental Protection	It is an amalgam of several agencies and authorities with many objectives, powers and duties
1995- 2009	Ministry of Water Resources	It is an amalgam of several agencies and authorities with many objectives, powers and duties
1998	Awash Basin Water Resources Administration Agency	<p>a) To administer the available water of the Basin ... and regulate the flow of such rivers;</p> <p>b) To issue permits pursuant to appropriate law, to construct and operate water works, ...</p> <p>c) To allocate water to permitted and collect bulk charges for water use as determined by the government;</p> <p>d) To undertake the maintenance of primary irrigation networks and main service roads and collect fees in accordance with a directive issued by the government;</p> <p>e) To initiate improved water management methods, in association with the appropriate institutions, by conducting studies pertaining to uses of water for irrigation;</p> <p>f) To cause measures to be taken by monitoring groundwater level in order to prevent an occurrence of salinity problem in areas where irrigation development works and projects are carried out;</p> <p>g) To insure and regulate the construction of irrigation water distribution and drainage structures; diversion dams; water control gates and dykes in accordance with safety standards to be issued by the Ministry;</p> <p>h) To cause preventive measures to be taken by conducting studies based on continuously collected data pertaining to flood simulators and incidents that causes damage within the basin and carryout or cause to be carried out such planned and successive works having a permanent nature in order to prevent same;</p>

2010 - 2016	Ministry of Water and Energy	It is an amalgam of several agencies and authorities with many objectives, powers and duties
2016	Ministry of Water, Irrigation and Energy	It is an amalgam of several agencies and authorities with many objectives, powers and duties

Adopted from (UWSPE 2012)

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