

Chapter 24: Policy, regulatory and institutional frameworks relevant to Ethiopian water governance

Mekete Bekele Tekle

1 Introduction

Ethiopia is a country with varied geographical, hydrological and climatological characteristics with a strategic location in the Horn of Africa region. It receives a substantial amount of rain annually that flows to its rivers, lakes and reservoirs. It has about 100 rivers and 27 lakes and reservoirs, including the Grand Ethiopian Renaissance Dam (GERD), that are found in the 12 river basins of the country. Most of Ethiopia's surface waters flow to the low-lying plains of the neighbouring countries. Ethiopia has a great potential for hydroelectric power generation that could be used for national consumption and export to neighbouring countries in the region. For these reasons, it is considered to be the water tower Horn of Africa.¹ Regardless of receiving sufficient rainfall going by the national average, Ethiopia remains a water scarce country by the international standard of consumable water availability for its population. The cause of the water shortage in the country is not lack of water, but rather lack of proper management and effective administration of the available water resources.

Ethiopia has a population of about 106 million people.² More than 80% of the population live in rural areas and are engaged in agricultural activities that mostly depend on seasonal rains. The use of irrigation is minimal and any change in the rainfall pattern always causes food shortages in the country. Failure of seasonal rains in different parts of the country has in the past caused drought and famine where millions of people had to rely on international food aid for survival. One of the persistent challenges in Ethiopia is ensuring food security, and the Government has adopted different national policies, plans and strategies³ to deal with the root causes of recurring food insecurity.

Ethiopia has many institutions working on water management. These include the: Federal Ministry of Water, Irrigation and Electricity; Water Bureaus of the Regional States and Zonal Administration; River Basins High Councils; Basins Authorities; and

1 See <<https://www.bmiresearch.com/blog/ethiopia-the-water-tower-of-africa>> (accessed 30-11-2017).

2 See <<http://countrymeters.info/en/Ethiopia>> (accessed 26-1-2018).

3 FDRE (1996); FDRE (1997); and FDRE (2005).

municipal water supply utilities. Even though the Federal Government is responsible for administering the shared water resources among the regional states, it is very difficult to determine whether a given water resource is within the exclusive jurisdiction of a regional state. In the absence of properly managed resource allocation, it would be problematic to avoid the overlapping mandates of the regional states among themselves or between a regional state and the Federal Government.⁴ As the water resources are public property and as the Federal Government is duty bound to make water available to all citizens of Ethiopia, it is necessary to transfer water from one basin to another basin or within different regions in the same basin. The Federal Government has the duty to balance the water deficits in the regions with the view of bridging the disparity between the regions.

2 The policy framework for Ethiopian water resources governance

2.1 The Constitution of Ethiopia

The Government of Ethiopia is structured on a federal principle of power-sharing between the central and the constitutive regional states, and the power-sharing modality is indicated in the Federal Democratic Republic of Ethiopia (FDRE) Constitution of 1995. The legal framework for water resource administration in Ethiopia reflects the federal system that allows governance at two levels. The FDRE Constitution, which lays the primary legal foundation for federal and state governments' power, has several provisions that have direct legal and institutional significance for the management of the country's water resources. Article 40(3) of the FDRE Constitution exclusively vests the rights of ownership of both rural and urban land, as well as all natural resources, in the state and peoples of Ethiopia.

The FDRE Constitution also defines the powers and functions of the Federal Government and regional states respectively, with respect to the management and administration of the country's water resources. Accordingly, the Federal Government has the mandate to enact laws for the use and conservation of land and other natural resources, including water resources.⁵ More specifically, the Federal Government is exclusively vested with the power to "determine and administer the utilization" of the waters or rivers and lakes linking two or more states or crossing the boundaries of the national territorial jurisdiction.⁶

4 The 1995 Constitution of the Federal Democratic Republic of Ethiopia gives the Regional States the mandate to administer natural resources that are within their exclusive territory.

5 Article 51(5) of the FDRE Constitution.

6 Article 51(11) of the FDRE Constitution.

Article 51(11) of the FDRE Constitution vests the power to “determine and administer the utilization” of those water resources such as rivers and lakes and that are linking two or more states or crossing the national territorial jurisdiction to the Federal Government. All the powers that are not expressly given to the Federal Government are the residual powers of the respective regional states within which such resources are found. Accordingly, water resources such as ground waters or lakes that do not link two or more states would fall within the residual power of regional states, since powers that are not expressly given to the Federal Government are reserved for the regional states.⁷ As per Article 52(2)(d) of the FDRE Constitution, regional states have to abide by the laws of the Federal Government in administering the water resources within their regions.

Federalism by its very nature is a system of administration where there has to be a certain level of coordination and cooperation between the central and regional states to administer shared natural resources. According to the FDRE Constitution, the Federal Government has the duty to ensure that national wealth is equitably distributed among the citizens. The FDRE Constitution states that: “Government has the duty to ensure that all Ethiopians get equal opportunity to improve their economic conditions and to promote equitable distribution of wealth among them”.⁸ Furthermore, the social objective of the Federal Government is stated in broad terms as to provide necessary facilities and all possible amenities within its reach, including clean water, to the public. Article 90(2) of the FDRE Constitution provides: “[T]o the extent the country’s resources permit, policies shall aim to provide all Ethiopians access to public health and education, clean water, housing, food and social security”. The Government has the duty to administer land and other natural resources (including water) in the common interest of the people.⁹ Accordingly, it is possible for the Federal Government to facilitate the transfer of water resources from one state to another to make it available to the needy people of the respective states.

On the other hand, the regional states may issue laws on the administration and management of the water resources falling within their exclusive territorial jurisdiction, and some of the regional states have already enacted such laws.¹⁰ Though the regional states are given the power to enact laws on the management of natural resources falling within their jurisdiction, there are restrictive provisions put in place in the regional states’ constitutions to avoid a potential conflict of laws.¹¹

7 Article 52(1) of the FDRE Constitution.

8 Article 89(2) of the FDRE Constitution.

9 Article 89(5) of the FDRE Constitution.

10 For example, Afar Regional State Water Works Construction Enterprise (Proclamation No. 27/1998, Article 6(4)), and the Oromia Irrigation development Authority (Proclamation No. 199/2008, Article 39) deal with issues of water resources utilisation for irrigation purposes.

11 For example, the provisions of Article 47(2.3) of the Revised Amhara National Regional State Constitution (2001) and Article 47(2)(c) of the Tigray National Regional State Constitution

2.2 Environmental policy and development plans of Ethiopia

Ethiopia has ratified many international treaties and adopted the common principles of the sustainable use of natural resources that are enshrined in the national laws and policies. There are a series of strategy documents developed by the government that can be used as sources for the preparation of laws and policies. The Conservation Strategy of Ethiopia (CSE)¹² of 1996 is one of the documents that deal with the country's natural resource base. The strategy document is organised in five volumes and was prepared to serve the purpose of developing future national resource policies for the country. One of the national policies that arose through this process is the Environmental Policy of Ethiopia (EPE),¹³ which contains a section on water resource management. Some of the most important policy guidelines on water resource use and conservation are stated under Section 3.4 of the EPE:

- 1) To ensure that the control of environmental health hazards be a necessary condition in the design, construction and use of dams and irrigation systems;
- 2) To ensure that any proposed introduction of exotic species into water ecosystems be subject to detailed ecological studies and environmental impact assessment;
- 3) To promote the protection of the interface between water bodies and land (e.g. lake shores, river banks and wetlands);
- 4) To subject all major water conservation, development and management projects to the environmental impact assessment process and to include the costs and benefits of protecting watershed forests, wetlands and other relevant key ecosystems in the economic analysis of such water projects; and
- 5) To promote, through on-site training, effective water management techniques at the farm level for improved performance of medium to large-scale irrigation schemes.

The EPE also steers the monitoring and evaluation of policies towards community participation and the protection of the available natural resources, including water.¹⁴ It also envisages public and state institutions' cooperation in monitoring and evaluating processes to enhance the review of the policy itself.

The other important national policy is Ethiopia's Climate-Resilient Green Economy (CRGE) Strategy¹⁵ adopted in 2011, which aims at achieving middle-income status in

indicate that the Regional State shall administer land and natural resources in accordance with the laws enacted by the federal government.

12 See generally, Environmental Protection Authority and Ministry of Economic Development (2001). Volume I of the strategy document establishes the setting by evaluating the state of the natural resources, the environment and development in Ethiopia and examining the interconnected causes and effects of the existing situation. Volume II presents a policy and strategy framework aimed at ensuring a sustainable use and management of natural resources. Volume III deals with institutional arrangements to implement the strategies. Volume IV deals with a plan of prioritised actions within the framework of cross-sectoral and sectoral programmes. Volume V gives a listing of projects with estimated costs.

13 FDRE (1997).

14 Ibid: Section 5.3(e).

15 FDRE (2011).

the country by 2025 while developing a green economy. The CRGE Strategy is a blueprint for development activities to achieve the predetermined targets of the government. In relation to water management, the CRGE provides that:¹⁶

This category includes the promotion of terracing, particularly in hilly regions with high soil erosion hazards, and the improvement of water harvesting and irrigation structures, such as providing supplementary irrigation by focusing on increased water use efficiency, which can enhance carbon storage in soils through enhanced yields and residue returns.

Ethiopia is running a series of successive national development plans. The current plan series is the Growth and Transformation Plan (GTP), being the second five-year-plan period, (i.e. GTP-II). The transformation plans are geared toward moving the country from an agrarian economy to moderate industrialisation within the successive GTP planning periods. GTP-II has relevant provisions on watershed management that set targets to be achieved by the end of the plan period. The following major targets are set for watershed management during GTP-II:¹⁷

- 1) The number of community watersheds within a development plan is projected to increase from 19,748 in 2014/15 to 93,713 by the end of the plan period;
- 2) The area of land rehabilitated through area closure is projected to increase from 10.86 million hectare in 2014/15 to 22.54 million hectare by the end of the plan period;
- 3) The area of watersheds supported with physical soil and water conservation structures is projected to increase from 8.12 million hectare in 2014/15 to 27.23 million hectare by the end of the plan period; and
- 4) 1.5 million jobs are to be created for citizens through development works in watershed management.

Since the GTP documents are dealing with development targets, the water sector of the plan of GTP-II has set the abovementioned goals. Accordingly, building on the achievements gained by GTP-I, GTP-II set targets for urban and rural potable water supply, irrigation developments and industrial water supply. The major targets of GTP-II with regard to water resource management provide are to:¹⁸

- 1) increase access to clean water from 84% in 2014/15 to 100% at national level during the GTP II period;
- 2) increase rural water supply coverage from 59% in 2014/15 to 85% by 2019/20;
- 3) increase national water supply coverage from 58% to 83% in the same period;
- 4) increase groundwater exploration coverage from 13% to 25% during the period;
- 5) expand integrated catchment and degraded land rehabilitation from 922,520.7 ha to 2,304,801 ha; and
- 6) increase basins and hydrological information systems from 25% to 63% and hydrological mapping coverage to reach 95% during the plan period.

16 Ibid: 141.

17 FDRE (2016).

18 Ibid: 183.

Regarding the water sector development, the current growth and transformation plan envisages a wider scope of cooperation and understanding among the stakeholders. This plan states that “capacity development as well as coordination efforts will be undertaken by all executive agencies and relevant stakeholders” to achieve the targets.¹⁹

2.3 Ethiopian water resources management policy

The Ethiopian Water Resources Management Policy (EWRMP)²⁰ has specific goals, objectives and principles. The overall goal of the policy is “to enhance and promote all national efforts towards the efficient, equitable and optimum utilisation of the available water resources of Ethiopia for significant socioeconomic development on a sustainable basis”.²¹ Efficiency, equity and optimum and sustainable utilisation of water are main elements of the goals that have to be achieved through the objectives of the policy. The objectives of the EWRMP are enumerated in Section 1.2 of the document. These are:

- 1) development of the water resources of the country for economic and social benefits of the people, on an equitable and sustainable basis;
- 2) allocation and apportionment of water, based on comprehensive and integrated plans and optimum allocation principles that incorporate efficiency of use, equity of access, and sustainability of the resource;
- 3) managing and combating drought as well as other associated slow onset disasters through, inter alia, efficient allocation, redistribution, transfer, storage and efficient use of water resources;
- 4) combating and regulating floods through sustainable mitigation, prevention, rehabilitation and other practical measures; and
- 5) conserving, protecting and enhancing water resources and the overall aquatic environment on a sustainable basis.

In addition to the objectives listed above, the EWRMP contains a set of fundamental principles and rules which are derived from the different laws, including the FDRE Constitution. The first fundamental principle is the recognition of public ownership of water, along with other natural resources, which has already been entrenched in the FDRE Constitution. The EWRMP further states that the Government of Ethiopia shall make every effort to provide every citizen with water of sufficient quality and quantity. What has been emphasised in the policy is the fact that “water shall be recognized both as an economic and a social good”²² under the Ethiopian legal system. The importance of this principle is to facilitate and to determine the modalities of providing the

19 Ibid: 184.

20 Ministry of Water Resources (1999).

21 Ibid: Section 1.1.

22 Ibid: Section 1.3(2).

resource depending on the type of water use in question. Accordingly, water can be supplied at a production cost price, a subsidised price or for free, depending on conditions of water availability or scarcity in a given area of its provision. The general direction of the national policy in this regard is stated as follows:²³

Although all water resources development ought to be based on the “economic value” of water, the provision of water supply services to the underprivileged sectors of the population shall be ensured based on a special “Social Strategy”.

The core principle of the EWRMP is the principle of integrated water resources management (IWRM). There are various conceptual definitions of IWRM submitted by different writers. One author defines it as a “systematic process for the sustainable development, allocation and monitoring of water resource use in the context of social, economic and environmental objectives”.²⁴ The EWRMP, being a guiding instrument for any water management activity, defines IWRM as a concept that “addresses the interdependence of the different uses and users of water resources”.²⁵ The EWRMP recognises hydrologic boundary or ‘basin’ as the fundamental planning unit for water resources management in Ethiopia.²⁶ This includes management aspects such as water tariff setting and watershed management plans. Taking into account the fact that the country is a federal state, the policy promotes the integration and institutionalisation of “meteorological and hydrological services at all levels (from the centre up to the lowest administrative structure)” and ensures that the agricultural sector receives the utmost benefit from these services, and the services are monitored by the appropriate organs of the regional states. It is also possible to transfer water from one basin to another, as necessary. To this effect the EWRMP provides that:²⁷

As deemed necessary, promote that inter-basin transfer of water is to be one of the basic principles for the development of water resources, in view of the disparity of available water amongst the different basins and the erratic devastations due to the extremities of drought and floods.

The IWRM principles mentioned in the EWRMP give clues for the transfer of water from a water-abundant basin to a water-scarce basin. This principle is applicable in the inter-basin and intra-basin contexts where a meaningful and mutually fair cooperation is expected between the Federal Government and the concerned regional states for equitable use of the water resources located in the basins.²⁸ For the equitable use and fair sharing of costs and benefits among the water users, a basin is an important aspect of good governance. There are dry river basins where the water resources are scarce and insufficient to satisfy the development activities in the area. The IWRM activities

23 EWRMP, Section 2.1.1(12).

24 CAP-Net, Global Water Partnership & UNDP (2005: 7).

25 Ministry of Water Resources (1999: Glossary section).

26 Ibid: Section 2.1.1(6).

27 Ibid: Section 2.1.1(10).

28 Ibid: Section 2.2.7(4).

in such dry basin areas must be geared toward rainwater harvesting and protecting the groundwater in the hydrological area.

The EWRMP provides for water use priorities. First priority is given to home consumption, which is considered as the basic minimum requirement in any water allocation plan.²⁹ The water use for home consumption includes uses such as drinking, cooking, sanitation and watering cattle. The other types of water uses are prioritised on the basis of their impact on socioeconomic benefits.³⁰ Special consideration is made for drought-prone areas while allocating water based on the prevailing conditions within the given basin, sub-basin and other hydrological boundaries.³¹ It is believed that water management can be best handled if it is done at the local level and if a proper maintenance framework that provides reliable and sustainable water supply systems is put in place in all regions. Encouraging community participation in the operation and maintenance of water systems, and promoting operation and maintenance of water systems at lower levels, is an additional policy consideration in water resources allocation and apportionment.³² It is believed that managing water based on a decentralised system will enhance its sustainability.

The EWRMP considers water as a natural resource with an economic value and clearly state that users of the services should be charged. The policy also suggests striking a balance between high and low water price settings. The policy suggests that “the price for water should be neither too high (and discourage water use) nor too low (and encourage abuses and over-use of water)”.³³ There is also a consideration of the provision of water for free to those communities that cannot afford to pay for the water used for basic human needs. The policy emphasises the importance of this economic consideration and includes the following statement:³⁴

Ensure that the basic human needs of water for disadvantaged rural communities, who cannot afford to pay for development of water systems, shall be borne by the government, as appropriate, and in so far as the communities are able and willing to cover the operation and maintenance costs on their own.

The enabling environment for water resources management include: developing institutions at both federal and regional levels; building capacity at all levels for the personnel involved in water management; creating a legislative framework for the formulation of water resources laws and regulations that enable citizens to have access to water; facilitating participation of all stakeholders (including water users’ associations, the community and particularly women) to play a central role in water resource management activities; and creating the necessary legal framework for the citizens to get

29 Ibid: Section 2.2.1.

30 Ibid.

31 Ibid.

32 Ibid: Section 2.2.3 (D).

33 Ibid: Section 2.2.5(B)(4).

34 Ibid: Section 2.2.5(B)(6).

access to water resources.³⁵ There are specific sectoral policies for different types of water use that are addressed under separate subheadings in the EWRMP. Section 3 of the EWRMP has detailed paragraphs on: water supply and sanitation (including sub-sectoral policies on drinking water, livestock water supply, water supply for industry and other uses, sanitation and integrated water supply); an irrigation policy; and an hydropower policy.³⁶

3 The legal framework for water resources governance

The legal framework for water resource administration in Ethiopia reflects the federal arrangement of the country with a shared responsibility of governance between the federal and state governments. The FDRE Constitution, which lays the primary legal foundation for federal and state governments' power, has several provisions that have direct legal and institutional significance for the management of the water resources of the country. Article 40(3) of the Constitution exclusively vests the rights of ownership of both rural and urban land as well as all natural resources, including water resources, in the state and peoples of Ethiopia. In addition to the constitutional provision that governs the allocation of natural resources, there are specific laws and regulations that have been issued to regulate water resources utilisation. The main water resources governance laws and regulations will be discussed in the subsections below.

3.1 Ethiopian water resources management laws

The main water governance law is the Ethiopian Water Resources Management Proclamation No. 197/2000. The key purpose of the Proclamation is to ensure that the water resources are put to the highest social and economic benefit for all people through appropriate protection and diligent management.³⁷ The Proclamation reaffirms that water resources are under public and state ownership. Article 6 of the Proclamation sets out the fundamental principles that should guide the management of water resources. One of the fundamental principles is to introduce integrated basin master plan studies. The other fundamental principle is to establish a supervising body to administer the water resources in accordance with the water policy and to subject the management of water resources to a permit system.³⁸ The Proclamation provides that domestic use "shall have priority over and above any other water uses".³⁹ The Proclamation also

35 Ibid: Section 2.2.13.

36 Ibid: Section 2.3.1 to 2.3.3.

37 FDRE (2000).

38 Ibid: Article 6(3) and (4).

39 Ibid: Article 7(1).

puts an end to any claim of having an existing allocated or planned use when it comes to the prioritisation of domestic use.

As opposed to the previous practice in the country, the Proclamation provides for the establishment of the Supervising Body⁴⁰ for water resources administration and subjects certain types of water uses to a permit system. According to the relevant provisions of the law, activities such as waterworks construction, supply of water, and release or discharge of waste into water resources shall not be performed without obtaining a permit from the Supervising Body.⁴¹ Though hand-dug wells and traditional irrigation may not be subject to the permit system, the Supervising Body may issue directives to prevent inappropriate use and wastage of water whenever it appears necessary to do so. The Supervising Body has the power to suspend or revoke a water use permit at any time.⁴² The permit system requires the applicant to hold a certificate of competence to become engaged in the waterworks envisaged in the submitted application.

The Proclamation provides for the payment of a service fee (charge) for any water use type, except for certain prescribed exempt types of use. The Supervising Body may also allow a discharge or release of waste into water resources by fixing the amount to be paid. Accordingly, the Council of Ministers of Ethiopia issued the Water Resources Management Regulation No. 115/2005. The Regulation provides for the protection of the environment by imposing an obligation on the applicant for the permit to: install and use a waste treatment method; discharge only the type and volume of treated waste permitted; and to allow the Supervising Body to take a treated waste discharge sample at any time.⁴³

The Ministry of Water, Irrigation and Electricity (MoWIE) is a federal body established to undertake the management of water resources, water supply and sanitation, large and medium scale irrigation and electricity. MoWIE is a regulatory body that governs: the planning, development and management of resources; and the preparation and implementation of guidelines, strategies, policies, programmes, sectoral laws and regulations.⁴⁴ It is a supervising authority for all national (federal) water resource matters with the mission of playing a significant role in the socio-economic development of Ethiopia through the development and management of its water and energy

40 Ibid: Article 8.

41 Ibid: Article 11(1).

42 The Supervising Body may, at any time, suspend or revoke a permit in whole or partially where the holder fails to observe or fulfil his/her obligations. The details shall be determined by the regulations to be issued for the implementation of this proclamation (Article 17 of Proclamation No. 197/2000).

43 The opening statement of Article 12(1) of Council of Ministers of Ethiopia, which issued the Water Resources Management Regulations No. 115/2005, enumerates sets of obligations that any person using water for industry or for any other purposes which may cause pollution shall have.

44 See <<http://www.mowie.gov.et/Overview>> (accessed 9-12-2017).

resources in a sustainable manner, and the provision of quality and equitable supplies to the entire country.⁴⁵

3.2 Sectoral laws on water resources

In addition to MoWIE, there are other federal institutions that are directly or indirectly involved in water resource management. The Ministry of Agriculture and Natural Resources is tasked with expanding small-scale irrigation schemes development and the Ministry of Livestock and Fisheries is obliged to “follow up the expansion of water resources, infrastructure necessary for livestock resource development⁴⁶ in the pastoral areas and establish a system for natural and irrigated rangeland development and utilization.”⁴⁷

Furthermore, the Ethiopian Construction Works Corporation (ECWC) is established and responsible for “construction, upgrading and maintenance of works relating to dams, irrigations, hydro power generations, water supply systems, sewerage system, drainage, deep water wells, reclamations, and river diversions...”.⁴⁸ The ECWC is specifically entrusted “to acquire, own and administer irrigation dams, deep water wells and as may be necessary water supply canals constructed and to be constructed by the federal government budget and collect charges from the beneficiaries of such dams”.⁴⁹ The same scheme is prescribed in the legal framework regulating the construction of waterworks by the Afar Regional State Water Works Construction Enterprise.⁵⁰

Water for irrigation could also be provided through private investments in the development of irrigation and related water works.⁵¹ Investors are allowed to engage in irrigation development activities that may cover more than 50 hectares.⁵² The purpose of the Regulation to Provide for Irrigation Development Investment Incentives is to provide incentives “to investors engaging in irrigation development to bring about an accelerated economic development of the country by increasing the role of private sector in developing irrigation through utilizing the huge available irrigable land and water resources of the country”.⁵³ Regulation No. 162/2009 stipulates incentives to be granted to include “exemptions from water use charges and making available for

45 See <<http://www.mowie.gov.et/Vision>> (accessed 8-12-2017).

46 Proc. No. 916/2015, Article 19(1)(o).

47 Proc. No. 916/2015, Art. 20(1)(i).

48 ECWC Establishment Council of Ministers Regulation No. 366/2015, Article 5.

49 Ibid: Article 5(3).

50 Proclamation No. 27/1998, Article 6(4).

51 Council of Ministers Regulation to Provide for Irrigation Development Investment Incentives (No. 162/2009).

52 Ibid: Article 2(3).

53 Ibid: Article 4.

further development of major irrigation structures such as dams, main canals and access roads at government cost”.⁵⁴

The federal regulation of water resource management provides legal frameworks for the registration of water users’ cooperative societies established to undertake medium- or large-scale irrigation. These water users’ cooperative societies established to undertake small-scale irrigation are registered by an organ established by law at regional or city administration level. However, the regional or city administration organs that organise and register small-scale irrigation water users’ cooperative societies must transmit information to the Supervising Body.⁵⁵

The Irrigation Water Users’ Association Proclamation No. 841/2014 governs the management of farmers’ of irrigation and drainage systems “which are formed on irrigation infrastructures constructed by the federal government throughout Ethiopia”.⁵⁶ This Proclamation envisages that irrigation water users five or more may form an association.⁵⁷ Irrigation water users’ associations may be formed through two procedural mechanisms. The Water Resources Management Proclamation No. 197/2000 entrusts the Supervising Body with facilitating the establishment of water users’ associations.⁵⁸

The guiding principles for the operation of water users’ associations envisaged under the Irrigation Water Users’ Proclamation include:⁵⁹

- ensuring fairness and equity in decision making and the allocation of irrigation water;
- preventing wastage and the pollution of water;
- applying transparency and participatory decision-making processes; and
- complying with a system of cost recovery and the efficient use of resources.

Each association is expected to operate within a defined service area without overlapping with other service areas. The charge payable by an association to a service provider for the delivery of water shall be determined by the Supervising Body.⁶⁰

The Ethiopian Water Resources Development Fund Establishment and its Administration Proclamation No. 268/2002 (as amended by Proclamation No. 581/2008) has the objective of enabling institutions engaged in water supply and sanitation services to be efficient in their service to the community and make a contribution towards attaining food self-sufficiency by expanding irrigation development.⁶¹ The Public Health Proclamation No. 200/2002 prohibits the provision of water of which the quality is not

54 Regulation No. 162/2009, Article 6(1)(3).

55 Council of Ministers Ethiopian Water Resources Management Regulations (No. 115/2005), Article 29.

56 Irrigation Water Users’ Association Proclamation No. 841/2014, Article 3.

57 Ibid: Article 10(1).

58 Ethiopian Water Resources Management Proclamation No. 197/2000, Article 27.

59 Irrigation Water Users’ Association Proclamation No. 841/2014, Article 5.

60 Ibid: Article 55(1)(2).

61 Water Resources Development Fund Establishment Proclamation No. 268/2002 (as amended), Article 4.

verified by the relevant health authority and into which untreated liquid waste is discharged from polluting sources.⁶² The Food, Medicine and Health Care Administration Proclamation No. 661/2009 also refers to the assurance of the quality of transregional water supply for the public.⁶³ According to this law, violations of water supply quality standards are offences punishable by imprisonment and fines.⁶⁴ The Environmental Pollution Control and Environmental Impact Assessment Proclamations No. 299/2002 contain important provisions dealing with the protection of water resources. Both Proclamations provide for the protection of water and the need for setting water quality standards for different users.⁶⁵ The Federal Ministry of Health is directly responsible for the verification of water quality standards in Ethiopia as stated in the National Water Quality Monitoring and Surveillance Strategy document.⁶⁶

3.3 Ethiopian river basin laws

The management of water resources at basin level is said to be the most logical approach for the “planning and optimum utilization of available water resources” in a given river basin.⁶⁷ Both the EWRMP and the Water Resources Management Proclamation emphasise water management plans and strategies to be developed at basin level. Regarding the relevance of a basin master plan, the Proclamation states that:⁶⁸

The social and economic development programmes, investment plans and programmes and water resources development activity of any person, shall be based on the country’s Water Resources Policy, the relevant Basin Master Plan Studies and Water Resources laws.

A basin is defined by the Proclamation as: “a geographical area, described by the watershed limits of a water system including surface and underground water flowing into a common terminus”.⁶⁹ Additional laws and regulations have been issued to implement the IWRM principles in the context of river basin water-use planning and administration. All recent water resources-related legal documents focus on the equitable and efficient use of the available water resources of the country. In line with EWRMP, the River Basin Councils and Authorities Proclamation No. 534/2007 has been issued. This Proclamation defines the term ‘basin’ in exactly the same manner as it is defined

62 Public Health Proclamation No. 200/2000, Article 10.

63 Food, Medicine and Health Care Administration and Control Proclamation No. 661/2009, Article 4(20).

64 Ibid: Article 53(i).

65 Environmental Impact Assessment Proclamation No. 299/2002, Article 2(20); and Environmental Pollution Control Proclamation No. 300/2002, Article 6(1)(a).

66 FDRE (2011: 5).

67 Awulachew et al. (2007: 4).

68 Ethiopian Water Resources Management Proclamation No. 197/2000, Article 6(2).

69 Ethiopian Water Resources Management Proclamation No. 197/2000, Article 2(15).

by the Water Resources Management Proclamation, and lists the 12 river basins of the country under Article 2(1).⁷⁰

The River Basin Councils and Authorities Proclamation No. 534/2007 is a framework law that facilitates the establishment of basin high councils and basin authorities across the river basins. The Council of Ministers is mandated to establish river basin high councils and river basin authorities for each basin. According to the River Basin Councils and Authorities Proclamation, two or more river basins may be under the jurisdiction of a single basin high council and a basin authority.⁷¹ Ethiopia has so far established three basin high councils (BHCs) and basin authorities (BAs), all of which have been made accountable to the Council of Ministers.⁷² The remaining nine basins do not as yet have basin high councils and authorities. The water resources management activities in these basins are being carried out by the water bureaus of the respective regional states in these basins. The objectives, powers and duties of the basins so far established are somewhat similar to the provisions of the River Basin Councils and Authorities Proclamation. Article 4 of this Proclamation prescribes the objectives of the BHCs and BAs as:

The overall objectives of river basin High Councils and Authorities shall be to promote and monitor the integrated water resources management process in the river basins falling under their jurisdictions with a view to using of 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 EWRMP emphasises the need to “develop long term water balances/drought models with different scenarios including interventions like inter-basin water transfer”.⁷³ Taking into account the disparity of water availability and severe scarcity in many of the areas, the promotion of inter-basin transfer of water is considered to be one of the important basic principles for the development of water resources to manage the devastation caused by the extremes of drought and floods among the different basins.⁷⁴ The establishment of the BHCs and BAs may help create a common understanding of the IWRM system across the basins and thereby alleviate the calamities that may arise as a result of water scarcity.

70 The 12 basins of Ethiopia established by the River Basins Councils and Authorities Proclamation No. 534/2007 are: Abbay; Aisha; Awash; Baro-Akobo; Danakil; Genale-Dawa; Mereb; Ogaden; Omo-Ghibe; Tekeze; Rift Valley Lakes; and Wabi-Shebelle basins.

71 River Basins Councils and Authorities Proclamation No. 534/2007, Article 3(2).

72 Abbay Basin High Council and Authority Establishment Regulation No. 151/2008; Awash Basin High Council and Authority Establishment Council of Ministers Regulation No. 156/2008; and Rift Valley Lakes Basin High Council and Authority Establishment Council of Ministers Regulation No. 253/2011.

73 Ministry of Water Resources (1999: Section 2.2.7(4)).

74 Ibid: Section 2.1.1(11).

3.3.1 Basin High Councils

The River Basin Councils and Authorities Proclamation provides for two sets of organisations, namely Basin High Councils (BHCs) and Basin Authorities (BAs), institutions of vital importance for the implementation of IWRM principles in the basins. The BHCs and BAs have detailed powers and duties in the management of the water resources within their respective jurisdictions. Generally, the BHCs have powers and duties to:⁷⁵

- 1) provide policy guidance and planning oversight to ensure a high level of coordination among stakeholders for the implementation of integrated water resources management in the basin;
- 2) direct the preparation of the river basin plan and submit same for approval by the Government;
- 3) propose to the Government the rate of the water charges to be paid by water users in the basin;
- 4) examine and decide on the appropriateness and prioritization of major water works in the basin;
- 5) examine and decide on water allocation rules and principles in normal times and in times of water shortage as well as in times of drought or flooding;
- 6) manage water use disputes between Regional States in the basin;
- 7) provide information and advisory support to the body in charge of negotiating with neighbouring countries with respect to the basin where the basin is part of a transboundary basin; and
- 8) establish standing or ad hoc committees necessary for discharging specific activities.

The accountability of the BHCs is said to be determined by the regulations to be issued to implement the Proclamation in the river basin. According to Article 5(2) of the Proclamation, it appears that each river basin may be accountable to different state organs.⁷⁶ For example, all the three BHCs established to date (Abbay, Awash and Rift Valley Lakes basins) are accountable to the Council of Ministers of the Federal Republic of Ethiopia. The Proclamation and the Regulations envisage the possibility of the establishment of BHCs for different basins, either a BHC for each basins or one BHC for two or more basins.⁷⁷ It is stipulated that the appointment of members of BHCs shall be made by the Government, but no such appointment has been made so far.⁷⁸ There is, however, one national High Basins Council, composed of the high-ranking Federal Government and regional state officials, whose role it is to oversee the activities of all river basin authorities and to make decisions for all the basins in the

75 River Basins Councils and Authorities Proclamation No.534/2007, Article 6.

76 Ibid: Article 5(2) which reads: “The accountability of a BHC shall be determined by a Regulation to be issued b) the Council of Ministers”. But the basin authorities are accountable to the respective BHCs (Article 10(1)).

77 Article 3(2) of River Basins Councils and Authorities Proclamation No. 534/2007; Article 5 of the Abbay Basin, the Awash Basin and the Rift Valley Lakes Basin establishment regulations, respectively.

78 Tamrat (2008); and Mosello et al. (2015).

country.⁷⁹ This is a clear deviation from the law and policy framework that advocates “basin-based management” decentralised administration of water resources.

3.3.2 Basin authorities

Parallel to the BHCs, there are basin authorities (BAs) that serve as the secretariat of the respective BHCs. BAs are accountable to their associated BHCs with respect to issues falling under the latter’s powers and duties. BAs are also accountable to the MoWIE with respect to other issues falling under its jurisdiction. BAs are headed by director generals appointed by the Government, who oversee the functions of their staff carrying out the day-to-day activities in each basin.⁸⁰ Some of the powers and functions of the BAs are to:⁸¹

- initiate policy measures for a conducive environment for the implementation of IWRM in the basin...;
- ensure that projects, activities and interventions related to water in the basin are, in their content, schedule, impacts and management, in line with the IWRM process;
- prepare, and submit to the BHC, the basin’s plan and monitor its implementation upon approval;
- collect, compile, analyse and disseminate information for proper planning, administration and steering of water resources in the basin;
- give advice... to BHC and the Ministry on dispute resolution [on] allocation and use of water resources;
- set up a forum for effective networking among stakeholders; [and] collect water charges from users; and
- undertake studies, surveys and researches that are deemed necessary to carry out its functions.

The list of powers and duties of the BAs provided above is indicative of the trend to devolve the main powers and duties of water resources management from the central administration system to the BAs. According to the current trend of devolution of powers, MoWIE is assisting these newly emerging institutions in terms of budget allocation, human resources allocation and overall technical capacity building.⁸² The devolution of powers to the BAs is a gradual and time-consuming process as the new institutions require time to build their own management capacities. As a responsible federal body for water resources administration, MoWIE undertakes basin studies and verifies the country’s ground and surface water resource potential in terms of volume and

79 The Nation Basins High Council of Ethiopia is currently chaired by the deputy prime minister of Ethiopia and has several ministers and all the presidents of the Regional States within the three already established basins, i.e. Abbay, Awash and Rift Valley Lakes, as its members.

80 River Basins Councils and Authorities Proclamation No. 534/2007, Article 11.

81 Ibid: Article 9.

82 The MoWIE is the supervising organ for the BAs. Plans and programmes prepared by the BAs must be approved by the MoWIE.

quality, and facilitates the use of these until such time that the BAs can have the capacity to take up the task.⁸³ These powers can be delegated to the BAs when they are capable of handling the tasks in the future.

3.4 River basin establishment regulations

The EWRMP and water resources laws and regulations promote the principle of IWRM in the context of Ethiopia's river basins. The River Basins Councils and Authorities Proclamation also reaffirms the need to reconcile the different uses of water within a river basin to achieve their balanced and sustainable development. For IWRM to function in a basin, all stakeholders must have good relationships and work in harmony, notwithstanding their differences in approach, interests and perceptions of the effects of their decisions, plans and activities on the hydrological cycle and other users.⁸⁴

Ethiopia has initiated decentralised water resources management by transferring most of the water resources management powers of the MoWIE to river basin-based institutions. The Council of Ministers Regulations on BHCs and BAs govern the powers and duties of the authorities, while the powers and duties of the BHCs are inferred from the River Basin Councils and Authorities Proclamation. Each of the regulations has its own specific objective and confers detailed powers and duties on the relevant BHCs and BAs. For instance, the Abbay Basin Regulation⁸⁵ has its own list of powers and duties. The Abbay Basin accounts for about half of the total annual discharge of surface freshwater of the country and about 62% of the total discharge that drains into the Aswan Dam in Egypt. The basin is accordingly of both national and international importance.⁸⁶ Article 3 of the Regulation for the Abbay Basin Authority states the overall objective of the authority as promoting and monitoring the implementation of the IWRM process in an equitable and participatory manner. Some of the powers and duties of the Abbay Basin Authority are to:⁸⁷

- undertake activities necessary for, and facilitate, the implementation of IWRM in the basin;
- ensure that projects, activities and interventions related to water in the basin are, in their content, schedule, impacts and management, in line with the IWRM process;

83 Definition of Powers and Duties of the Executive Organs of the Federal Democratic Republic of Ethiopia Proclamation No. 916/2015, Article 28(b).

84 Opening paragraphs of the Preamble of the River Basin Councils and Authorities Proclamation No. 534/2007.

85 Regulation No. 151/2008 Council of Ministers Regulation to Establish Abbay Basin High Council and Authority.

86 FDRE (2016: 4).

87 Regulation No. 151/2008 Council of Ministers Regulation to Establish Abbay Basin High Council and Authority, Article 6.

- prepare, and submit to the BHC, the basin’s plan and monitor its implementation upon approval;
- issue permits applicable to the basin’s water use and water works..., without prejudice to the power given to Regional States by law, ;
- set up a forum for effective networking among stakeholders; and
- provide information for negotiations with other countries concerning transboundary river basins.

The Abbay Basin is part of the bigger Nile Basin that contributes about 85% of the water flowing to neighbouring countries, such as South Sudan, the Sudan and Egypt. The ongoing construction of the Grand Ethiopian Renaissance Dam (GERD) is becoming a major concern to some of the riparian countries, particularly Egypt, regardless of the many advantages that may emanate from the GERD project, including hydropower generation for the region and water conservation of the Nile Basin.⁸⁸ The Abbay Basin Authority is compelled to balance the competing interests of the stakeholders in the basin, by taking care of the right of regional states in the process of issuing permits⁸⁹ and providing the Government with necessary information about transboundary management aspects in the basin.⁹⁰ As part of its obligation under the international treaties and on the basis of its own national law, Ethiopia is bound to abide by the principles of shared water resource management that involves all stakeholders in the process of decision making dealing with or impacting on water resources situated in the basin.

There are about ten riparian states along the Nile Basin that are party to the Comprehensive Framework Agreement (CFA).⁹¹ The Regulation establishing the Abbay Basin Authority is in line with the provisions of the Nile Basin’s CFA,⁹² which refers to “[t]he principle that each Nile Basin State has the right to use, within its territory, the waters of the Nile River System in a manner that is consistent with...basic principles referred to herein”.⁹³ There are many principles that are developed by the Nile

88 Salman (2018).

89 The Regional States have constitutions and other laws that deal with water resources administration in their locality. The Abbay Basin Authority is expected not to tamper with the rights of the Regional States to manage their water resources as they think fit.

90 As the negotiations with foreign countries are being handled by the Federal Government, the Abbay Basin is obliged to supply the necessary information to the Federal Government to aid it in any potential negotiation.

91 These states are: Burundi; DR Congo; Egypt; Ethiopia; Kenya; Rwanda; South Sudan; Sudan; Tanzania; and Uganda. All these countries are members of the Nile Basin Initiative (NBI) and expected to be signatories to the CFA.

92 Agreement on the Nile River Basin Cooperative Framework or Comprehensive Framework Agreement (CFA), at <https://www.internationalwaterlaw.org/documents/regionaldocs/Nile_River_Basin_Cooperative_Framework_2010.pdf> (accessed 15-12-2017).

93 CFA Agreement on the Nile River Basin Cooperative Framework or Comprehensive Framework Agreement (CFA), Article 3 paragraph 6.

Basin Initiative (NBI)⁹⁴ and adopted by the CFA. The main principle is a shared vision to achieve sustainable socio-economic development through the equitable utilisation of the basin and benefits from the common Nile Basin water resources.⁹⁵ The only significant project undertaken by Ethiopia in the Abbay Basin so far is the GERD which aims to generate about 6,000 megawatt of electric power. However, Egypt has raised concerns about the size of the GERD Project, which may pose challenges to the project's success.⁹⁶ Almost all Nile riparian countries are developing projects along the river and Egypt is reviving its old claim of a monopoly over the Nile's waters, an action that may not be accepted by other riparian states which want to have their fair share of the flow of the Nile.

The other basin that has a BHC and BA is the Awash Basin. This is the most used basin in Ethiopia and it covers parts of Afar Regional State, Amhara Regional State, Oromia, Somali Regional States, Southern Nations, Nationalities and Peoples Regional State, and Addis Ababa and Dire Dawa Administrative Councils. The Awash Basin is fed by several tributaries, but part of the catchment in the eastern part of the basin does not contribute any significant surface runoff to the river.⁹⁷ The Regulation for the Establishment of the Awash Basin High Council and the Basin Authority provides the power and duties of the Authority that enable it to function as a water resource governance institution. Most of the provisions are similar to that of the Abbay Basin Authority. The focus in the Awash Basin is on irrigation as there are several irrigation schemes in the basin.⁹⁸ As part of its duty, the Awash Basin Authority advises the Basin High Council and MoWIE on dispute resolution in relation to the allocation and use of water resources in the basin, and it may also provide advice and technical support whenever necessary.⁹⁹

According to the Water Management Proclamation No. 197/2000 and its Regulation No. 115/2005, most uses of the water resources and wastewater discharge in the Awash Basin require a permit. The permit system is, however, not well established within the basin as the Awash Basin Authority has not yet been able to implement a basin-wide

94 The NBI is managed from three Centres: the Secretariat (Nile-SEC) based in Entebbe; Uganda; the Eastern Nile Technical Regional Office (ENTRO) based in Addis Ababa, Ethiopia; and the Nile Equatorial Lakes Subsidiary Action Program Coordination Unit (NELSAP-CU)-based in Kigali, Rwanda. NBI implements three core programs, namely: Basin Cooperation; Water Resource Management; and Water Resource Development.

95 Mekonnen (2010).

96 Lawson (2017).

97 See <http://www.awba.gov.et/?page_id=8> (accessed 16-12-2017).

98 For instance, Article 6(11) and (12) of the Awash Basin High Council and Authority Establishment Council of Ministers Regulation No. 156/2008 has provision dealing with irrigation management issues.

99 Awash Basin High Council and Authority Establishment Council of Ministers Regulation No. 156/2008, Article 6(8).

permit system.¹⁰⁰ The Awash Basin spans several regional states and requires an equitable allocation of water resources among the regional states and other water users within the basin as per the basin-wide master plan.¹⁰¹ Moreover, there is some confusion regarding the demarcation between the mandate of the Federal Government, the regional states and the Awash Basin Authority¹⁰² on water resources management issues. For example, the mandate of the Awash Basin Authority with respect to water charge setting is very limited and it may not be possible for the Authority to impose a charge or collect charges without consulting or obtaining consent from these other institutions.

The Rift Valley Lakes Basin is the other basin for which a BHC and BA have been established. This basin has four sub-basins, namely: the Ziway-Shala Sub-basin; the Awasa Sub-basin; the Abaya-Chamo Sub-basin; and the Chew Bahir Sub-basin.¹⁰³ The Regulation for the Establishment of the Rift Valley Lakes BHC and BA gives similar powers and duties to administer the water resources of the basin area as those given to the Abbay and Awash basins.¹⁰⁴ Even though the Rift Valley Lakes Basin Authority has been established by regulation, it has not yet come into operation. This basin is a water-scarce basin when compared with the two basins mentioned above. The growing number of industries and other water-intensive activities in the basin has caused serious water management challenges in the area, including siltation and pollution of the lakes and groundwater systems.

Regional, Zonal and Woreda Water Bureaus¹⁰⁵ within the basins are also involved in water administration. MoWIE is actively engaged in capacity-building programmes and strategies for all the basins to enable them to embark on IWRM implementation in their areas, including assisting private service providers that are allowed to provide services in the water sector. As a matter of policy, water supply services are handled entirely by public organisations and the private sector may only engage in the provision of professional services such as consultancy and maintenance services.¹⁰⁶ There are, however, certain practices which do not adhere to the above functional division. For instance, the companies Karuturi Global Ltd and Saudi Star Agricultural

100 Water Governance Centre, (Issue Paper) *Water Governance Capacity: Awash Basin, Central Ethiopia*, The Hague, The Netherlands (April 2013) 15.

101 Water Governance Centre (2013: 17).

102 There is a tendency of the MoWIE to continue the centralised system of managing the water resources in the basins. For instance, the MoWIE wants to have a minimum national average water charge for water abstraction, whereas the water policy and the water laws consider the basins as the planning units for such management.

103 Raventós Vilalta (2010).

104 Rift Valley Lakes Basin High Council and Authority Establishment Council of Ministers Regulation No. 253/2007.

105 The hierarchical of administrative structure in Ethiopia comprises of the following, from the highest to the lowest level: Federal Ministry, Regional State Bureaus, Zonal State Bureaus and Woreda Bureaus.

106 Defere (2015).

Development, which concluded large-scale agricultural land lease agreements with the Ethiopian Government, have been allowed to use both ground and underground water in the areas they lease.¹⁰⁷

4 Water resources-related disputes

Conflict or dispute over water resources can take various forms and can occur at any level of governance. There can be horizontal and vertical conflicts at the local and national levels on the use and management of water resources. There are also certain complaints or disputes by Ethiopia's neighbouring states over the water resources situated in some of the basins. Despite recognition of the principle of the equitable utilisation of shared water resources and the need for international cooperation among countries, there are always conflicts over shared water resources – unless the concerned countries enter into fair water sharing agreements. The need for IWRM arises from the simple fact that different uses of water resources are interdependent.¹⁰⁸ All Ethiopian water resource laws and regulations emphasise the importance of IWRM. However, the existing water resources system is facing actual and potential conflict at the international and domestic level.

4.1 Disputes at the national and local level

Disputes over water resources at the local level usually arise in areas subject to water scarcity. They are often triggered by non-compliance with water permits, creating conflict between permit holders and third parties. These conflicts should be resolved in terms of the relevant legal framework.¹⁰⁹ Any dispute relating to water resource use that is within the jurisdiction of the first instance court must be entertained by the Supervising Body. If the disputes are between the Supervising Body and the permit holder, the matter will be handled by an arbitration process where the arbitrators shall be nominated by the parties. Any party that is aggrieved by the decision of the arbitrators may appeal to a regular court of jurisdiction.¹¹⁰

Conflicts are common when pastoral communities in water-scarce areas migrate to other areas in search of water and other resources for their livelihood. This kind of migration is common among communities in the Oromia Regional State, Somali

107 GRAIN (2012).

108 Cap-Net et al. (2008).

109 Ethiopian Water Resources Management Proclamation No. 197/2000, Article 9; and Council of Ministers Ethiopian Water Resources Management Regulations No. 115/2005, Article 35.

110 Ibid: Article 36.

Regional State and the Afar Regional State.¹¹¹ These kind of conflicts have on several occasions led to all-out wars between competing resource users.¹¹² A case in point is the recurring conflicts over water and grazing areas in the Ogaden Region of Ethiopia.¹¹³ Though not properly institutionalised, there are local dispute resolution mechanisms including using elders to settle the disputes.¹¹⁴ The transregional or transboundary transfer of water may also cause conflict among regions and states. The best strategies to be followed in IWRM would be resorting to transparent, democratic and accountable decision-making processes that include all relevant stakeholders,¹¹⁵ so that they feel that decisions are influenced by their inputs.

4.2 International disputes over water resources

The River Basin Council and Authorities Proclamation envisages negotiation as a method of dispute resolution on water use.¹¹⁶ As a major stakeholder in one of the most shared basins in the region, the Nile Basin, Ethiopia has ratified the CFA of the Nile Basin, and has committed itself to abiding by the terms of the agreement not to cause significant harm to the interests of the lower riparian states. The lowest riparian state, Egypt, is, however, raising issues that are related to old treaties.¹¹⁷ Egypt is particularly concerned about Ethiopia's construction of the GERD Project, a mega hydropower dam, along the course of the Blue Nile (Abbay). Egypt views this project as a potential threat to its water security. It is hoped that Egypt and Sudan will eventually agree to the terms of the CFA on water security and drop their demand for the recognition of their existing use and resource rights to the waters of the Nile River.¹¹⁸ It is also hoped that all parties to the CFA will finally agree on all terms of the agreement, including a peaceful settlement of disputes as per Article 3 paragraph 12 of the CFA.

There are other transboundary river basins that provide fresh surface water to countries neighbouring Ethiopia.¹¹⁹ The Omo-Gibe River Basin, whose waters flow from

111 Tigist (2014). For inter-regional conflicts and the Somali Region in particular see <<https://open-access.leidenuniv.nl/bitstream/handle/1887/13839/chapter%20eight.pdf?sequence=7>> (accessed 18-12-2017).

112 See <<https://www.africaportal.org/documents/5266/ethiopia-2002-2.pdf>> (accessed 16-12-2017).

113 Flintan & Tamrat (2002: 251-253).

114 Edossa et al. (2007).

115 Carr (2015).

116 Article 6(7), River Basins Councils and Authorities Proclamation No. 534/2007.

117 The old treaties over the Nile waters include the 1902 Anglo Ethiopian Agreement, the 1929 Agreement signed between Britain and Italy and the 1952 Agreement.

118 Salman (2017).

119 Baro-Akobo Basin; Genale-Dawa Basin; Omo-Gibe Basin and Wabi Shebele Basin are the river basins with water resources of transboundary nature and calling for the involvement of the relevant stakeholders as per the principles of IWRM system.

the western Ethiopian highlands into its terminus Lake Turkana on the border with Kenya, is one of the Ethiopian river basins assailed with conflict. The construction of hydropower dams and the diversion of the river for irrigation of sugarcane plantations have caused displacements and water shortages for the local population. This has resulted in an uproar by communities concerned with diminution of the lake's water level.¹²⁰ The construction of massive hydropower dams along the basin is stirring constant disputes. There is a fear of possible landslides and even an earthquake of huge magnitude as a result of the construction of Gibe II Dam. The dispute between Ethiopia and Kenya relating to the receding water resource along their common border has led to further conflict over land, livestock and other resources.¹²¹ Since the Omo-Gibe Basin Authority has not yet been formally established by regulations of the Council of Ministers of Ethiopia, the responsibility for administering water resources in the basin rests with the MoWIE or the relevant water bureaus.

5 Conclusion

Ethiopia has embarked on a comprehensive process to restructure its existing water management institutions and amend its existing laws and regulations in order to promote IWRM. This is reflected in the EWRMP and other national documents. The Ethiopian Water Management Proclamation and its Regulations significantly improve the country's water governance system. The establishment of BHC and BAs for better and decentralised governance of the water resources is a wise approach to promote the equitable use of the available water resources in the country. The planning of water resources management at a basin level and the establishment of basin and sub-basin level institutions for decentralised water resources management is a commendable undertaking. The most important task ahead is the implementation of the principles, policies, laws and regulations in order to achieve the sought after goals and objectives.

The water resource management laws do not have clear provisions on the transfer of water from one basin to another. The actual and potential overlaps of powers and duties of the Federal Regional States in the context of water resources administration and use may create unnecessary institutional duplication. The accountability of BAs to BHCs, on the one hand, provided that they might be established as stipulated, and to MoWIE, on the other, may create dual accountability, which may weaken the mandate of the river basin organisations to make effective decisions on water management issues. As fresh water resources are dwindling owing to climate change and population

120 See generally University of Oxford (2012); Carr (2017).

121 Hathaway (2010); see also <http://www.colinmayfield.com/waterhealth/course5/content/concepts/extra/LakeTurkana/LAKE%20TURKANA%20WATER%20CONFLICT_2015.pdf> (accessed 16-12-2017).

pressure, the conflict over these resources will increase. Accordingly, there must be an appropriate dispute settlement system or a mechanism to prevent conflicts over water resources arising in the first place.

The existing and planned water governance institutions in Ethiopia need to be re-examined with the view to avoiding the problems of overlapping mandates and the bottlenecks that are likely to cause the malfunctioning of the laws and institutions. As the power-sharing between the Federal Government and the regional states is extended to water governance, amending some of the laws that appear to cause overlapping powers and duties among the administrative organs and legislative jurisdiction of the two levels of government may be necessary.

References

- Awulachew, SB, AD Yilma, M Loulseged, W Loiskadl, M Ayana & T Alamirew (2007) *Water resources and irrigation development in Ethiopia* International Water Management Institute Working Paper No. 123.
- CAP-Net, Global Water Partnership & UNDP (2005) *Integrated water resources management: training manual and operational guide*.
- Cap-Net, UNDP & International Network for Capacity Building in Integrated Water Resources Management (2008) *Conflict resolution and negotiation skills for integrated water resources management* Training Manual, at <<http://www.gwp.org/globalassets/global/toolbox/references/conflict-resolution-and-negotiation-skills-from-iwrm-capnet-2008.pdf>> (accessed : 16-12-2017).
- Carr, CJ (2017) *River basin development and human rights in Eastern Africa: a policy crossroads*.
- Carr, G (2015) “Stakeholder and public participation in river basin management – an introduction” 2(4) *WIRE’s Water* 393-405, at <<http://wires.wiley.com/WileyCDA/WiresArticle/wisId-WAT21086.html>> (accessed 24-12-2017).
- Defere, E (2015) *Private sector landscape for WASH in Ethiopia: bottlenecks and opportunities* One WASH plus Programme Report.
- Edossa, DC, SB Awulachew, RE Namara, MS Babel & AD Gupta (2007) “Indigenous systems of conflict resolution in Oromia, Ethiopi” in B van Koppen, M Giordano & J Buttersworth (eds) *Community-based water law and resource management in developing countries* 146 at: <<http://publications.iwmi.org/pdf/H040692.pdf>> (accessed 16-12-2017).
- Environmental Protection Authority and Ministry of Economic Development and Cooperation (2001) *Conservation strategy of Ethiopia phase III project (1996-2001) final evaluation report* Vol. 1, at <https://www.iucn.org/downloads/cons_strategy_ethiopia_final.pdf> (accessed 9-8-2018).
- FDRE / Federal Democratic Republic of Ethiopia (1996) *Ethiopia’s food security strategy*.
- FDRE / Federal Democratic Republic of Ethiopia (1997) *Environmental policy of Ethiopia*.
- FDRE / Federal Democratic Republic of Ethiopia (2000) *Ethiopian water resources management proclamation No. 197/2000*.
- FDRE / Federal Democratic Republic of Ethiopia (2005) *A plan for accelerated and sustained development to end poverty (PASDEP) 2005/06-2009/10*, at <<https://extranet.who.int/nutrition/gina/en/node/7935>>, (accessed 10-7-2018).

- FDRE / Federal Democratic Republic of Ethiopia (2011) *Ethiopia's climate-resilient green economy: green economy strategy*.
- FDRE / Federal Democratic Republic of Ethiopia (2011) *National drinking water quality monitoring and surveillance strategy*.
- FDRE / Federal Democratic Republic of Ethiopia (2016) *Growth and transformation plan II (GTP II) (2015/16-2019/20)* Vol. I: main text.
- FDRE / Federal Democratic Republic of Ethiopia (2016) *The Great Ethiopian Renaissance Dam*, at <[http://www.aba.gov.et/Portals/0/Abbay Basin Book Let.pdf](http://www.aba.gov.et/Portals/0/Abbay%20Basin%20Book%20Let.pdf)> (accessed 15-12-2017).
- Flintan, F & I Tamrat (2002) "Spilling blood over water? The case of Ethiopia" in J Lind & K Sturman (eds) *Scarcity and surfeit: the ecology of Africa's conflicts* 251.
- GRAIN (2012) *Squeezing Africa dry: behind every land grab is a water grab*, at <<https://www.grain.org/Article/entries/4516-squeezing-africa-dry-behind-every-land-grab-is-a-water-grab>> (accessed 24-12-2017).
- Hathaway, T (2010) *Fighting for Lake Turkana: why Kenyan communities are resisting Gibe 3 Dam*, at: <<https://www.internationalrivers.org/sites/default/files/attached-files/laketurkanatripreport0610.pdf>> (accessed:26-12-2017).
- Lawson, FH (2017) "Egypt versus Ethiopia: the conflict over the Nile Metastases" 52(4) *The International Spectator* 129-144, at <<http://www.tandfonline.com/doi/full/10.1080/03932729.2017.1333272>> (accessed 15-12-2017).
- Mekonnen, DZ (2010) "The Nile Basin Cooperative Framework Agreement Negotiations and the adoption of a 'Water Security' paradigm: flight into obscurity or a logical cul-de-sac?" 21(2) *European Journal of International Law* 421-440.
- Ministry of Water Resources (1999) *Ethiopian water resources management policy*.
- Mosello, B, R Calow, J Tucker, H Parker, T Alamirew, S Kebede, T Alemseged & A Gudina (2015) *Building adaptive water resources management in Ethiopia*, at <<https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9648.pdf>> (accessed 8-8-2018).
- Raventós Vilalta, E (2010) *Water resources management in the Central Rift Valley of Ethiopia* MSc Thesis in Civil Engineering, Universitat Politècnica de Catalunya, at <https://nilebdc.wikispaces.com/file/view/Anteneh_Dejenie_IWMI_NBDC_Symposium.pdf> (accessed 15-12-2017).
- Salman, M.A. (2018) "Agreement on the declaration of principles on the GERD: levelling the Nile Basin playing field" in Z Yihdego, A Rieu-Clarke & AE Cascão (eds) *The Grand Ethiopian Renaissance Dam and the Blue Nile Basin: the Implication for transboundary water cooperation*.
- Salman, MA (2017) "The Nile Basin Cooperative Framework Agreement: The impasse is breakable!" *Sudan Tribune* (22-7-2017), at <<http://www.sudantribune.com/spip.php?article62804>> (accessed 8-8-2018).
- Tamrat, I (2008) "Policy and legal framework for water resources management in Ethiopia" International Conference on Water Management in Federal and Federal Type Countries, at <http://www.forumfed.org/libdocs/SpainWater2008/Imeru%20Tamrat%20_%20final%20en.pdf> (accessed 23-12-2017).
- Tigist, KF (2014) *Conflicts among pastoralists in the Borana Area of Southern Ethiopia: the case of Borana and Garri* Master Thesis University of Tromsø.
- University of Oxford, African Studies Centre, (2012) *Lake Turkana and the Lower Omo: hydrological impacts of the Major Dam and irrigation development report* Vol. 1.
- Water Governance Centre (2013) *Water governance capacity: Awash Basin, Central Ethiopia* Issue Paper.

