

# **Economic Integration in East African Countries: The Grand Ethiopian Renaissance Dam as an Opportunity**

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## **Abstract**

The concept and theory of economic integration has evolved as sub stem of international trade theory, reinforced by globalization that encompasses socio-political, economic and spatial dimension or location theory. Many years ago, worldwide a number of integration arrangements have initiated and practiced to achieve the goal of socio-economic development for the betterment of the integrating countries, where they share both wonders and blenders. In this aspect international waters like Abay/Nile have both integrating and conflicting characters. The integrating nature of international waters is that, through cooperation and agreements, water resources in the form of hydro-electric power have the potential to integrate those countries who are sharing the water resources. The negative impact of that water is the conflicting situation which arises from unfair use of the water resources. Today, Abay/Nile and the GERD have showed such conflicting situation for many years among Egypt, Ethiopia and the Sudan. The positive side of such grand project may be taken as an opportunity to integrate the Abay/Nile sharing riparian countries, if common understanding, collaboration and cooperation are in place. Grand projects such as the GERD can connect East African countries, particularly, the Abay/Nile sharing countries through electrification and water basin managements. This paper analyzed regional economic integration in East African countries arising from the use of the Abay/Nile River, giving special attention to the Grand Ethiopian Renaissance Dam that imposes on regional economic integration. Historical method was used to assess the qualitative and quantitative data obtained from several desktop reviews. From the reviewed literatures and both the qualitative and quantitative analysis, the results revealed that the Abay/Nile has been showed more conflicting situation for many years and continued during the construction of the GERD. But the cooperative agreements on the Abay/Nile are expected to lead to economic integration.

**Keywords:** Blue-Nile basin, Cooperation, Hegemony, GERD, International water, Riparian

## **1. Introduction**

Globalization is the process of integration of economies across the world through cross-border flow of factors of production, products and information (Francis C., 2011). Today globally, continentally and

regionally there is a growing integration of national economies through infrastructure networks that helps the flow of trade, investment, financial flows and movement of labor forces from one continent to the other and/or from one country to the other. The global and transnational economy is the one which transcends the national borders unhindered by artificial restrictions such as government restrictions on trade and factors movements<sup>1</sup>. Today, the world society is moving from alienation to integration, from arrogance to tolerance focusing on cooperation and collaboration. For the realization of cooperation and collaboration, the Abay/Nile River as a trans-boundary river could play the role of regional integration among the basin sharing riparian countries.

To remove the obstacles of free flow of goods and services across the national boundaries, regional cooperation, collaboration and then regional economic integration is an important element for socio-economic development, where coordination and cooperation is fully implemented among the integrating counties or regions.

To fully realize the objectives of regional integration, infrastructure net-work, particularly, road and communication net-work play a crucial role. Trans-national road and communication net-work, regional common resources use and other development projects are key elements to strengthen and sustain regional economic integration. Regionalization of transnational roads net-work and communication facilities are at the heart of regional economic integration, where policy issues for integration are very important.

As its objective the paper has assessed the existing economic integration in African countries in general and East African Abay/Nile sharing countries in particular.

The specific objectives of this study were to:

- Explore the importance of economic integration in Africa in general,
- Assess the current opportunities and challenges of regional integration in East African countries,
- Evaluate the importance of GERD for East-African economic integration, and,
- Design some possible ways to realize regional integration in East African countries.

#### **Research questions:**

The following questions were addressed in this study:

- What is the importance of economic integration for the integrating countries (regions)?
- What are the opportunities and challenges of regional integration in East African countries?

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<sup>1</sup> Ibid, p.83

- Is the GERD an opportunity or a challenge for regional economic integration in East Africa?
- What mechanisms should be in place to enhance regional economic integration in East Africa?

**2. The Importance of Economic Integration for the Integrating Countries**

Since the mid of 1950s, the term economic integration has become part of discussion and also vocabulary in international economics. Economic integration is the process of reducing, then step by step elimination of restrictions on international trade, payments, and factor mobility (Robert, C. F., 2006). Economic integration thus, results in the uniting of two or more national economies in regional trading agreements<sup>2</sup>. In regional economic integration, division of labor and specialization fills the gap of uneven distribution of both natural and man-made resources. For example, proponents of regional economic integration have the view that it has an opportunity to create an enlarged productive base for the whole region through a new allocation of productive factors of production that may help to contribute to a larger share.

The success of Europe in forming the European Economic Community (EEC) and then European Union (EU) has motivated many countries, including Africa to design regional or sub-regional economic integration with many ups and downs (Table 1). There are various benefits from regional economic integration: economies of scale, international trade, foreign direct investment, transfer of technology and resources sharing among the integrating countries. Chronologically, regional integration starts from free trade area, and then moves to customs union, common market, economic union and finally political union, which may take a long journey (Dugassa M., 2019).

Free trade area is an agreement between several countries to eliminate internal barriers to trade but maintaining the existing barriers against non-member countries, whereas customs union is an agreement between several countries to eliminate internal barriers to trade and to erect common barriers against non-member countries (Michael, M. and Steven, H., 1995).

One of the major aspects of international trading relations during the post-war period has been the development of regional trading groupings primarily in the form of customs union (Bo Souderton and Geoffrey R., 1994).

Table 1. Levels of regional economic integration (Dugassa M. (2021) Macroeconomics: Theories, Policies and Applications, p.409)

Levels of Integration
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<sup>2</sup> Ibid p.266.  
*Dugassa Mufugeta, 2024*

5.	Political Union	Free among countries	trade member	Common external commercial policy	Free mobility within the market	factor economic policy	Harmonized	Super-national organizational structure
4.	Economic Union	Free among countries	trade member	Common external commercial policy	Free mobility within the market	factor economic policy	Harmonized	
3.	Common Market	Free among countries	trade member	Common external commercial policy	Free mobility within the market	factor economic policy	Harmonized	
2.	Customs Union	Free among countries	trade member	Common external commercial policy	Free mobility within the market	factor economic policy	Harmonized	
1.	Free Trade Area	Free among members	trade					

To enhance regional economic integration, infrastructure facilities, particularly road net-works and communications system availability play a fundamental role to develop regional integration. Trade is one of the major drivers of global or regional economic integration (Francis C., 2011) given that other logistics and infrastructure facilities are available.

Table 2. Trans-African road network to accelerate regional integration in Africa (Sources: Author’s compendium from various sources)

No.	Highway from....	To.....	Distance ( KM)
1	Cairo Highway	Dakar Highway	8636
2	Algiers Highway	Lagos Highway	200
3	Tripoli Highway	Cape Town Highway	10808
4	Gaborone Highway	Cape Town Highway	10228

5	Dakar Highway	Ndjamena Highway	4500
6	Ndjamena Highway	Djibouti Highway	4219
7	Dakar Highway	Lagos Highway	4560
8	Lagos Highway	Mombasa Highway	10269
9	Beira Highway	Lobito Highway (Angola)	3523



Figure 1. Trans-African Highway that enhances African net-works for integration (Source: <https://www.webuildvalue.com/en/infrastructure/trans-african-highway-roads-and-railways-to-make-cargo-move.html>)

To realize the objectives of regional economic integration on the African continent, investment in roads, railways, communications and other social infrastructures such as education, health and hydro-power supply can facilitate economic integration and socio-economic development both at regional and continental levels.

As depicted from the Table 2 and Figure 1, the road network (West to East and North to South) the trans-African Highway is a good hope for the African Renaissance and socio-economic development, if realized and sustained in the long-run perspectives, meanwhile, the GERD has the potential to connect East-African regions through power supply for needy countries.

The benefits of regional economic integration include the following elements, but not limited: increased regional as well as international trade of goods and services, flow of financial capital through foreign direct investment, regional and/or international movement of labor power, transfer of technology and know-how, advancement in transportation to facilitate flow of goods and services, and enhancement of communication among the integrating nations and/or regions.

However, there are critics who stand against economic integration for various reasons. One of such argument is the problem of national sovereignty and cultural issues that may become under jurisdiction of the regional integration. Theoretically, such issues can be resolved under the principles of socio-economic harmonization of the integrating countries at different stages of integration processes.

### **3. Opportunities and Challenges of Regional Economic Integration in East African Countries**

Even though, the region is full of conflicts on the Abay/Nile River for many years, particularly Egypt, Ethiopia and the Sudan, the Abay/Nile sharing East African countries have a good opportunity for integration and co-development, given that co-ordination, cooperation, and peace are in place, there is a vast opportunity for regional cooperation in the region.

In the Nile Basin Initiative (NBI), it has stated that the basin sharing countries agreed to achieve sustainable socio-economic development through equitable utilization of, and benefits from, the common Nile Basin water resources (NBI, 2020), which creates a platform for the regional cooperation and then economic integration.

Table 3. Historical development of the Abay/Nile River agreements & conflicts

Year	Countries (parties)	Agreement	Conflicting issues	Resolved issues
1906	Britain, France & Italy	Tripartite	Nile water use	Ethiopia deprived
1929	Britain <sup>3</sup> & Sudan	Bilateral <sup>4</sup>	Nile water use	48/4 BCM <sup>2</sup>
1954	Egypt & Sudan	Bilateral	Nile water use	Agreement
1959	Egypt & Sudan	Bilateral	Water sharing <sup>5</sup>	55.5/18.5 BCM <sup>2</sup>
1999	10 Countries	Multilateral	Fair water sharing	NBI Established
2010	10 Countries	Multilateral	Fair water sharing	CFA <sup>6</sup>
2010/13	6 Countries <sup>7</sup>	Multilateral	Fair water sharing	Signed the CFA
2015	Egypt, Ethiopia & Sudan	Tripartite	Fair Abay sharing	DOP <sup>8</sup> signed

*Source: Author's Compendium from various sources*

If the conflicting situation (hydro-politics) among the riparian countries, especially, among Egypt, Ethiopia and the Sudan, peacefully resolved through coordination, cooperation and common understanding, the Abay/Nile and then the GERD will supply hydro-electric power for the needy regions (countries) and enhance regional socio-economic integration among the basin sharing countries. The conflicting situation can be resolved through discussion and common understanding for betterment of all parties. "By coming together to jointly manage their shared water resources, countries can build trust and prevent conflict (Atwan M., 2018).

To solve conflicts and contradictions between two more countries, continuous discussions, dialogues and consensus is very crucial. "The value of consensus, the value of tolerance, the value of hard work, and an emphasis on the communalities among us rather than the divergences<sup>9</sup>" are noble ideas to achieve regional integration in East African countries in particular, and on the African continent in general.

Table 4. Abay/Nile sharing East African Countries (Source: Source: Author's compilation from [www.worldometers.info](http://www.worldometers.info) 2021)

<sup>3</sup> Great Britain acting on behalf of its East African colonies

<sup>4</sup> Water share of Egypt 48 billion cubic meter, while Sudan's share was 4 billion cubic meter

<sup>5</sup> Water share of Egypt and Sudan (55.5 and 18.5 Billion Cubic meters) respectively

<sup>6</sup> Cooperative Framework Agreement

<sup>7</sup> Burundi, Ethiopia, Kenya, Rwanda, Tanzania and Uganda

<sup>8</sup> Principle of Declaration on Fair & equitable use of Abay/Nile River

<sup>9</sup> Democracy and the Social Questions, p.100.

No.	Country	Area (Km <sup>2</sup> )	Population
1	Burundi	27,834	12,259,430
2	Congo (D.R)	2.345 million	92,387,839
3	Egypt	1.002 million	104,343,930
4	Ethiopia	1.112 million	117,923,915
5	Eritrea	117,600	5,182,058
6	Kenya	582,646	55,006,704
7	Rwanda	26,338	13,285,989
8	S. Sudan	644,329	14,228,267
9	Sudan	1.886 million	44,913,965
10	Tanzania	945,087	61,501,267
11	Uganda	241,038	47,240,053
Total Population of East African Countries			568,273,417

Source: Source: Author's compilation from [www.worldometers.info](http://www.worldometers.info) 2021

As indicated by Table 4, more than half billion of the African population is living around the Abay/Nile basin and this huge population number requires electric power supply from the Abay/Nile, where power supply from GERD can be taken as an opportunity to connect this the basin sharing regions so that there will be a hope for regional connectivity and then regional integration.

Table 5. Regional grouping of African countries to strengthen economic integration (*Source: Dugassa M. (2021) Macroeconomics Theories, Policies & Applications, and P.418*)

No.	Eastern Africa	Western Africa	Central Africa	Northern Africa	Southern Africa
1	Burundi	Benin	Angola	Algeria	Botswana
2	Comoros	Burkina Faso	Cameroon	Egypt	Lesotho
3	Djibouti	Cape Verde	Central African R	Libya	Namibia
4	Eritrea	Cote d, Ivoire	Chad	Morocco	South Africa
5	Ethiopia	Gambia	Congo	Sudan	Swaziland
6	Kenya	Ghana	DR. Congo	Tunisia	
7	Madagascar	Guinea	Equatorial Guinea	Western Sahara	
8	Malawi	Guinea-Bissau	Gabon		
9	Mauritius	Liberia	Sao Tome & Principe		



10	Mozambique	Mali	Regional grouping are constantly developed in multiple ways either internally, by adding new dimensions to the existing ones, or by creating new blocs (Michael R.C. <i>et al.</i> , 2003). East African region is the largest one among the African regions, where most of them share the Nile basin and this large population number creates a huge demand for electric power supply.
11	Reunion	Mauritania	
12	Rwanda	Niger	
13	Seychelles	Nigeria	
14	Somalia	St. Helena	
15	South Sudan	Senegal	
16	Uganda	Sierra Leone	
17	Tanzania	Togo	
18	Zambia		
19	Zimbabwe		

#### **4. Is the GERD an Opportunity or a Threat for Regional Integration in East African Countries?**

The primary purpose of the Grand Ethiopian Renaissance Dam is to produce electricity that solves much of the problem of acute energy supply in Ethiopia in the medium range and in the long-run to export electric power to the neighboring East African countries. In addition to electric power supply, the Dam and the Abay River have the potential to create regional cooperation and economic integration among the Abay/Nile sharing East African countries.

Therefore, better cooperation and greater investment in shared water basin is needed (Kinfu A., 2004) by the Abay/Nile sharing countries for equitable and sustainable use of the river.

Inside Ethiopia, both the Dam and the Abay River have the synergy to create and enhance intra-local collaboration and cooperation among the western, south-western and central Ethiopian universities bounding the Abay River and its tributaries. For example, Universities such *Debark, Gondar, Debre-Tabor, Mekedela-Amba, Wollo, Bahir Dar, Debre Markos, Injibara, Debre Berhan, Sellalie, Ambo, Wollega, Assosa, Dembi Dollo, Mettu, Gambella and Mizan-Tepi* are proxy and/or bounding the Abay River or at least its tributaries. These rivers and tributaries feed Abay in the West, Tekezze in the North-West that form the Blue-Nile basin and Baro-Akobo & Alero in the South-West which forms the White-Nile, “River resources of Ethiopia (Bekure W., 2017).



Figure 2. Sources of Blue-Nile and White-Nile from Ethiopia and the GERD (Source: International Rivers 2008)

Therefore, the Dam and the river possess a huge potential for intra-collaboration, cooperation and local or regional integration in Ethiopia too. To keep the Abay basin and its bio-diversity, the above enumerated universities have the opportunity for collaboration and cooperation to make researches that help river basin management, environmental protection and bio-diversity conservation for sustainable socio-economic development of the country as well as East-African regions.

Socio-economic significance and opportunities of the GERD are electric power supply for Ethiopia and neighboring countries, Creation of artificial lake between Ethiopia and Sudan, inland water transport, natural resources conservation and river basin management, port formation and tourist attraction, and fishery and job creation, and finally economic integration among the Abay/Nile sharing East African countries,

The challenge of the GERD is that the controversial issues on the Abay/Nile River among the riparian countries, particularly, Egypt, Ethiopia and the Sudan for water “Hegemony” by Egypt as imprinted by the colonial legacy of Great Britain.

In order to find the way out of this conflicting situation, the three countries in particular, and all the riparian countries in general, need to design “win-win” solutions that do not cause any harm to the

parties involved by looking into various collaboration and cooperation for the betterment of the Abay/Nile river sharing countries.

“Throughout history, human beings have responded to the need to pool their efforts and share resources in the interests of the larger security. Water, in particular, has been one of humanity’s historic learning grounds for community building. We should see it as a potential source, not of conflict, but of agreement....for the transition from culture of war to a culture of Peace (Kinfe A., 2004).

It is believed that discussion; negotiation, recommendation, and then action can change the conflicting situation into an opportunity for the Abay/Nile sharing countries, where all the riparian countries share both the wonders and blenders of the regional “commons” to realize the “possibility of the impossibility”. This is the only avenue to adjourn the long-lasting conflicting agenda among Egypt, Ethiopia and the Sudan.

## **5. What Mechanisms should be in Place to Enhance Regional Economic Integration in East Africa?**

The Abay/Nile belongs to all the riparian countries and no single nation including Egypt can claim “exclusive right and control” over the river and its blessings. “It is an open secret that the major force behind this.....is Egypt, which is trying to thwart Ethiopia’s legitimate right to benefit from the waters of the Blue Nile, the sources of which, as well-known is located in Ethiopia (Teklebirhan G., 2021)” . Whereas, Ethiopia is the net contributor to the water of the Nile (86%), it gets nothing while Egypt, contributing not even a drop of water gets almost everything from the river Nile. But for the past fifteen years discussions, dialogues and confrontation through the Nile Basin Initiative (NBI) brought about the move from conflict to compromise among Egypt, Ethiopia and the Sudan.

According to Kassa (2015), the Nile Basin Initiative with all its programs and projects has increased the overall level of interdependence among the Nile sharing countries.

The Nile basin has opened opportunities for dialogue, communication and investment, and thus, increase the degree of interdependence among the Nile riparian<sup>10</sup>.

To realize the objectives of regional integration the following agreements should be taken in to account:

The main arguments surrounding regional economic integration are based on some economic and political facts of the “No Pain No Gain” principle that is the opportunity cost principle.

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<sup>10</sup> Ibid

A number of arguments surrounding economic integration are: trade creation and diversion, the effects of integration on import prices, competition, economies of scale and factor productivity and the benefits of regionalism versus nationalism (Michael R.C. *et al.*, 2003).

- Egypt and Sudan could support basin management and development projects related to the Abay/Nile river in Ethiopia, since the origin of Abay/Nile is Ethiopia,
- Ethiopia could commit to secure regular water flow to Sudan and Egypt, and the other riparian countries that lead to a win-win situation,
- Ethiopia could aspire to build an alliance with Abay/Nile sharing countries based on benefits sharing of hydro-electric power export and basin management for water and resources sustainability of the Abay/ Nile basin countries,
- Develop strong institutional base for river basin management in the Abay/Nile sharing East African countries,
- The regional groupings in East and Southern Africa such as COMESA, IGAD and SADC should take a better momentum towards trade creation and diversion among the member countries to foster a scrupulous regional economic integration that sustains socio-economic development in the region.

Realization of the above stated ideas needs better understanding of negotiation, collaboration and cooperation that lead to regional economic integration.

## **6. Conclusion**

In modern economy no one country can exist in an autarky system due to the fact that resources are not equally or evenly distributed all over the globe. To reduce scarcity of productive resources, countries or regions are obliged to form associations, made collaborations and/or regional integrations. East African region is one of such regions that demands cooperation and regional integrations for socio-economic development.

Regional economic integration through rigorous collaboration, coordination and cooperation creates a good opportunity to enhance socio-economic development of the integrating regions and/or countries. The driving forces to materialize this regional integration are trans-highway road-networks, fast communication networks, agreement on common use of international waters such as Abay/Nile and the GERD in East African countries.

Special attention should be given to discussion, collaboration, commitment and cooperation to realize the GERD project “possibility of the impossibility” for Ethiopia, in which the GERD should connect East African countries through supply of electric-power for needy countries or regions.

Ethiopian universities bounding the Abay and/or its tributaries are advised to collaborate and cooperate to make researches on basin management and conservation (preservation) of bio-diversities of the Abay basin.

In the long-run perspectives, it is advisable to a plan for collaboration and cooperation of Ethiopian universities with Cairo and Khartoum universities on the issues of the Abay/Nile basin management and conservation of its bio-diversities that helps to enhance regional economic integration in East African countries.

## **References**

- Atwan, M (2018) Egyptian- Ethiopia Water Relations: A benefit sharing perspectives (Master’s Thesis, the American University in Cairo), <http://fount.aucegypt.edu/etds/472>
- Bekure Woldesemait (2017) A Textbook of Economic Geography of Ethiopia Natural Resources- Population-Interaction-Outcome, Addis Ababa University Press, p.91
- Bo Sodersten & Geoffrey Reed (1994) International Economics, 3<sup>rd</sup> Edition, Macmillan, p.322
- Dugassa M. (2021) Macroeconomics Theories, Policies and Applications, Rehobot Printers, Addis Ababa, p.418
- Dugassa M. (2019) African Economic Integration, Journal of Business and Construction Management Pretor Business College, Vol. 2, No.2
- Francis Cherunilam (2011) International Economics, Tata McGraw Hill Education Private Limited, New Delhi, p.294-98
- Kassa, R. (2015) Integrated Management of the Nile Water: Institutional Effects of the Nile Initiative
- Kinfe Abraham (2004) Nile Opportunities Avenues toward a Win-win Deal, P.187
- Michael, M. Steven, H. (1995) International Economics 3<sup>rd</sup> Edition, Harper Collins College Publisher, New York, 252-253
- Michael R. Czinkota, Ilkka A. Ronkainen, Michael H. Moffett (2003) International Business, Thomson South-Western, P.195-96
- Nile Basin Initiative (NBI, November 2020, p.7: ISBN: 9789970444069
- Robert, C. Feenstra (2006); Advanced International Trade: Theory and Evidence; Princeton University Press.
- Teklebirhan Gebremichael (2021) No Pain No Gain, Articles on the Ethiopian Economy. P.239

