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ADDIS ABABA UNIVERSITY
COLLEGE OF SOCIAL SCIENCES
DEPARTMENT OF POLITICAL SCIENCE AND
INTERNATIONAL RELATIONS

**The Role of Infrastructural Connectivity for Boosting
Economic Integration in the Horn of Africa**

By

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Addis Ababa

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This thesis entitled “The Role of Infrastructural Linkage for Boosting Regional Integration in the Horn of Africa” is conducted by Muluken Tariku who submitted it in partial fulfillment of the requirements for the Degree of Master of Arts in International Relations and Diplomacy. The thesis has undergone the due process of examination for originality.

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Declaration

“The Role of Infrastructural Linkage for Boosting Regional Integration in the Horn of Africa” is an original work I, Muluken Tariku, conducted. The research is being submitted to Addis Ababa University, Department of Political Science for the first time as a requirement for a Master’s degree in International Relations and Diplomacy. I, thus, declare that the research has not be submitted to any institutions for any purpose before.

All sources of information and data used in this research have been duly acknowledged and cited in accordance with academic and ethical standards. Any assistance received in the course of this study has been appropriately credited.

Signed: _____

Date: _____

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Acronyms

AECs	The Africa's Economic Communities
AfDB	The African Development Bank
AMU	Arab Maghreb Union
AU	Africa Union
CEN-SAD	Community of Sahel -Saharan States
CEWS	Conflict Early Warning System
EAC	The East African Community
EAPP	The East African Power Pool
ERCA	Ethiopian Revenue and Custom Authority
FTA	Free Trade Area
GERD	Grand Ethiopian Renaissance Dam
IGAD	Intergovernmental Authority on Development
LAPSSET	The Lamu Port-South Sudan-Ethiopia-Transport
MoFA	Ministry of Foreign Affairs
UNECA	United Nation Economic Commission for Africa
UNSC	United Nations Security Council

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Abstract

This research investigates the roles of infrastructural connectivity in boosting regional integration in the Horn of Africa – a sub-region known for fragile economy, political instability and less viable connectivity. The multifaceted challenges and opportunities observed in the region call for fostering regional integration. Existing studies have investigated the challenges and prospects of regional integration in the Horn of Africa. Nevertheless, there is a gap in the literature as the role of infrastructure connectivity in boosting regional integration is less covered aspect. As such, fresh data that depicts the status of existing infrastructure connectivity along with the implications on regional integrations is a missing link in the thematic area. The study aims to answer, among others, what the status of the current connectivity in the sub-region is; how different factors are affecting regional integration efforts; as well as what types of challenges and opportunities can be identified behind regional integration schemes. The study employed qualitative research approach by gathering up-to-date data from primary and secondary sources. The study demonstrated that the status of cross-border infrastructure in the HoA is characterized by uneven development and critical missing link. Further, the study indicated the main roles of infrastructure connectivity, namely transportation, energy and digital linkage, in enhancing regional integration in the sub-region. The study identified financial bottlenecks, structural problems, political instability as well as reluctant policy harmonization efforts as main challenges that hindered regional integration effort. The study called for further researches on the topic by identifying the social, economic and political challenges of connectivity in the region by assessing the challenges, which each member states in the region face in their intra-regional infrastructure connectivity.

Key words: Regional Integration, Infrastructure Connectivity, Horn of Africa, Challenges and Opportunities

Chapter One: Introduction

1.1 Background

Regional integration is a comprehensive political and economic concept behind the joining of two or more nation-states agree to co-operate and work closely together to achieve peace, stability and wealth (McCormick, 1999). In both economic and political aspects, regional integration is regarded as a condition through which geographically closer countries come together to maximize their mutual economic gains and foster regional peace and stability (Abdi and Seid, 2013). In support of this, an explanation of regional integration by Belassa (1961) which depicted it as closely-knit political and economic relationships is worth noting. From the economic side, regional integration allows countries to come together and use their resources for the advancement of their development (Morgan, 2015).

Different factors dictate countries to form workable regional integration schemes. Some countries preferred cooperation with their neighbors as it allows them to overcome these costly divisions integrating goods, services and factors' markets, thus facilitating the flow of trade, capital, energy, people and ideas (Lombaerde and Van Langenhove, 2007). Further, the connectivity helps to boost investment and enhance regional stability by promoting the bargaining power of smaller economies (Reddy, 2010). To put it in more elaborated way, integrating economies create conditions through which countries benefit from lower tariffs, smaller transportation costs, larger employment opportunity and wider selection of goods (Thompson, 2011).

There are successful regional integration initiatives worldwide that can help us to study the sub-regional level of integration in the Horn of Africa. The European Union (EU) is a prime example of successful regional integration, with member states cooperating on economic policies, trade agreements, and governance structures (Solingen, 2007). The European model of integration has evolved through different levels of policy harmonization (Daniel, 2019). African countries, too, have recognized the multifaceted benefits of regional integration following their political and economic independence (Jurcic et al, 2011). Many of the newly independent states began to aspire regional integration initiatives to facilitate structural transformation and integrate into global economy (Gebregiorgis, 2013).

Over the next few years, independent states of Africa began considering regional integration among themselves to foster their economic development (Jurcic et al, 2011). More importantly, they recognized sub-regional connectivity as an ideal mechanism of forming functional cooperation with their neighboring nations (Gerrit Oliver, 1999; UNECA, 2010). In this regard, the 1994 Abuja Treaty became huge leap forward behind the formation of the eight Regional Economic Communities (RECs) who have continued putting together nations and fostering integration at the continental level (McCarthy 1995; Fantu, 2002; OAU, 2000).¹

Infrastructural system is the major image one perceives behind every regional economic integration aspirations and initiatives in Africa (ECA, 2017). The claim is supported by various studies that indicate the relevance of increased trade volumes, reduced transportation costs, and enhanced regional connectivity in fostering regional economic integration (Byiers and Vanheukelom, 2014 ; Wohlgemuth, 2019). Further, viable connectivity in transportation network, power grid and digital infrastructure enhances economic interdependence among countries in a given sub-region (Chen et al, 2017; World Bank, 2019). Such connectivity is profoundly valuable for landlocked countries that rely on sea outlet of their neighbors in their import and export trade activities (UNECA, 2017). In spite of this, infrastructure connectivity in Africa has always been less reliable and under developed (AfDB, 2014).

Enhanced cross-border infrastructure connectivity in the Horn of Africa enables the countries in the region to share the benefits of connectivity and alleviate their diverse problems. The sub-region exhibits opposing images which are characterized by recurrent draught, inter-state and intra-state conflicts, political instability, active terrorism, and fragile economy (Styan, 2013; Poku, 2017; Daniel 2019) on the one hand; and rich natural resources, agricultural potentials, renewable energy and economically valuable youth population on the other (Verhoeven, 2011; Zelalem, 2021). Accordingly, countries in the HoA have tried to integrate their economies via cross-border infrastructure connectivity and policy harmonization. In this aspect, IGAD has created different enabling conditions through which neighboring countries can harmonize their trade policies, link their territories and foster inter-state infrastructure connectivity (IGAD, 1996; IGAD, 2020).

¹ The eight RECs formally recognized by the African Union are: the Arab Maghreb Union (AMU), Economic Community of West African States (ECOWAS), East African Community (EAC), Intergovernmental Authority on Development (IGAD), Southern African Development Community (SADC), Common Market for Eastern and Southern Africa (COMESA), Economic Community of Central African States (ECCAS) and the Community of Sahel-Saharan States (CEN-SAD).

The diverse cross-border infrastructural linkage between Ethiopia and Djibouti serves as a lens to observe the existing trends of connectivity in the HoA. The infrastructure connectivity between the two provides valuable lesson by indicating the relevance of the inter-state infrastructure connectivity in enhancing mutual benefit between landlocked countries and others that have sea outlets (Byiers, 2016). Further studies indicated that the connectivity between the two countries has both potential benefits and diverse challenges. A study by Zelalem (2021), for example, illustrated the holistic connectivity between Ethiopia and Djibouti and identified the geopolitical and security implications it pose on Ethiopia.

Regional economic integration in Africa is among the well-researched areas. Different studies have tried to identify key challenges and prospects of regional integration in the HoA, in particular (Tafesse, 2018; Muzeyin, 2015). Few researches have indicated the role of infrastructures in paving a road for inter-state connectivity (Záhořík, 2014; Abdi and Farole, 2022; Knudsen and Mukhopadhyay, 2021). While such piles of researches give insightful background for studying the interplay between infrastructure connectivity and regional economic integration, there is an observable gap in the literature. That is to say, recent researches have not covered the status of infrastructure connectivity in the sub-region. Accordingly, this study attempts to indicate the roles of infrastructure connectivity in enhancing economic integration in the Horn of Africa based on an analysis of the status of infrastructure connectivity, the challenges and opportunities in question.

1.2 Problem Statement

Regional integration and infrastructure connectivity cannot be seen as separate factors of economic development. Backed by efficient infrastructure system, regional integration helps countries enhance their economic gains and alleviate different forms of challenges (Poku, 2017). In this aspect, well-developed infrastructure connections between nations can serve as one of the pillars where strong regional economic interdependence is built (Mastewal, 2015). Above all, the relevance of strong cross-border infrastructure linkage is more noteworthy in regions such as the Horn of Africa where intertwined socio-economic and political problems hinder the development of the countries and the regions as a whole (Mengisteab, 2012, Zelalem, 2021).

Regional integration has become an increasingly important concept in the globalized world, offering numerous potential benefits, including increased trade and investment, economies of scale, and enhanced political stability. In the Horn of Africa, a region characterized by poverty, conflict, and instability, regional integration is a crucial step towards achieving sustainable development and prosperity (Poku, 2017; Zelalem, 2021). Besides, economic integration backed by strong infrastructure link can be a means of ending interrelated problems such as inter-state and intra-state conflict, economic crisis, and environmental degradation in the sub-region (Mengisteab, 2012).

Existing studies have indicated the relevance of infrastructure connectivity as a driving force of creating viable economic interdependence and mutual development in a given region. Alden (2019), for example, underscores the economic and political benefits of strategic partnership among nations. Nevertheless, studies have indicated that the cross-border roads, railways, hydroelectric lines and ICT infrastructure system in Africa to be less reliable due to their poor quality and fragile status (AfDB, 2014). The fragile infrastructure connectivity can be mentioned as one of the reasons for hindering regional integration. However, existing studies focused on different factors other than weak infrastructure connectivity. Reliance on primary commodities is mentioned in some studies (Eshete and Gebre, 2021; Adem, 2023). Equally, transit logistical bottlenecks, namely, inefficient customs procedures, bureaucratic hurdles, and lack of harmonized regulations are identified as challenges (Gebreyesus and Ferede, 2021; Hussen and Abdi, 2022). Similarly, other studies added political instability and insecurity (Markakis, 1997; Senay and Weldemariam, 2020); domestic security problems and regional volatility (Gebrehiwot & Kebede, 2022; Berhanu, 2023) as well as terrorism, piracy and organized crimes (Ayalew, 2023) in the list of challenges.

There is a gap in the literature when it comes to providing sufficient details about the relevance of infrastructure in boosting regional integration in the HoA. Existing studies often focus on macro-level analyses of regional integration or specific case studies of individual infrastructure projects. However, to the best of my knowledge, the literatures have not elaborated how different types of infrastructural linkages (transport, energy, communication) interact with various dimensions of regional integration (economic, political, and social) in the HoA. Furthermore, the influence of contextual factors such as political instability, security concerns, and varying levels of institutional capacity on the effectiveness of infrastructural linkages in promoting integration requires closer examination.

This study tries to investigate existing conditions, extent and connectivity of transportation infrastructure as well as identifying key challenges and opportunities in question. In so doing, the study will contribute new perspectives on understanding the various roles of infrastructure connectivity in boosting regional integration.

1.3 Core Argument

Infrastructural connectivity in the HoA enhances the economic benefits of countries while, at the same time, helps boost regional integration efforts in the sub-region.

1.4 Objectives of the Study

The general objective of this study is gears around examining the role of infrastructural connectivity in boosting regional integration in the HoA. The study tries to meet the following specific objectives:

1. To assess the forms and levels (status) of infrastructural connectivity in the Horn of Africa and its impact on regional integration.
2. To examine how infrastructural linkage is helping to boost regional integration.
3. To identify challenges and opportunities in developing integrated infrastructure networks in the region.

1.5 Research Questions

The main research question is: what roles does infrastructure connectivity play in fostering regional integration in the HoA? The study attempts to answer the following specific questions:

1. What is the forms and levels (status) of infrastructural connectivity among HoA countries?
2. How are different forms of infrastructure connectivity helping to boost regional integration in the HoA?
3. What are the main barriers and prospects to infrastructural integration in the HoA?

1.6 Research Methodology

1.6.1 Methodology

This research has employed qualitative methodology for a couple of reasons. My first reason was that, owing to the merit of qualitative methodology in examining social occurrences, it has enabled me to understand the gist of the topic under investigation. The approach has

given me the opportunity to delve deeply into the experiences, perspectives, and meanings of the individuals and communities involved in the regional integration process (Holliday, 2002; McLeod, 2023). Moreover, the approach has helped me to understand complex existences such as the interplay between infrastructure connectivity and regional economic integration. Even more so, I believe that by using qualitative method, I was able to explore insights and experiences that will help me identify the main challenges and opportunities behind infrastructure connectivity and regional integration (Bryman, 2003).

Qualitative approach has also allowed me to collect data from key informants whom I have selected purposely. The approach gives me a room for conducting in depth interviews with well-informed community members, scholars, diplomats, infrastructure experts and other community members. In so doing, I was able to grasp wide perspectives and insights about the roles infrastructure connectivity plays in fostering regional integration. Equally, the research method helped me to understand the interplay with the data. This would help me to address the research questions through thematic analysis as the method allows me to derive rich and nuanced interpretations of the roles of infrastructural connectivity in boosting regional integration.

1.6.2 Sources of Data

In this research, reliable data was gathered from both primary and secondary data sources. Creswell (2003), categorizes documents into two; namely public documents (newspapers, minutes, official reports) and private (private newspapers, journal articles, letters, e-mails). In this way, my secondary sources of data were books, articles, research papers, newspapers, media reports, internet sources, and electronic publications, English and Amharic newspapers, media reports, conference and working papers. My primary data sources were key informants such as diplomats from FDRE Ministry of Foreign Affairs, policy advisors, researchers from Ethiopian and Kenyan universities, government officials from MoFA, Ministry of Construction and Urban Development and East African Chamber of Commerce. Further, individuals with insightful comments regarding the topic were communicated. These individuals work in NGOs that specialize in regional integration and trade connectivity.

1.6.3 Instruments of Data Collection

In order to answer my research question, I have used three methods of data collection; namely document analysis, interview, and archival sources.

Document Analysis

Both primary and secondary data are employed. I have used various reports from sub-regional organizations such COMESA and IGAD to identify the implication of infrastructure in fostering regional economic integration. In addition, I have substantiated my study using vital data from books, journal articles, research materials, newspapers, and electronic media reports that show the existing conditions, challenges and opportunities of infrastructure connectivity as a driving force of boosting regional integration.

Archives

I used archival sources that show infrastructural ties and inter-state economic interaction between and among countries in the HoA. Among others, I went through agreements and related documents that discuss on the connection between infrastructure development and economic integration. The data were gathered from different publications that focus on infrastructural connectivity in the IGAD sub-region. I have also collected similar data that are accessible online.

Governmental and Intergovernmental Archives were among the main archives I consulted. These include official documents, policy papers, meeting minutes, and project reports related to infrastructure development and regional cooperation. Among them documents from IGAD Secretariat Archives (Djibouti) were critical for understanding regional infrastructure master plans, policy frameworks, project evaluations, and meeting minutes related to connectivity initiatives within IGAD. Further, the African Union Commission Archives (Addis Ababa, Ethiopia) was useful source of documents to understand the broader continental infrastructure initiatives, policy documents on regional integration, and resolutions related to cross-border projects in the Horn. In addition, World Bank Group Archives; African Development Bank (AfDB) Group Archives; United Nations Economic Commission for Africa (UNECA) Archives that accessible online were consulted to strengthen the data.

Interviews

I have conducted interviews with some of well-informed persons on the issues such as regional infrastructural development and economic integration. The informants belong to different institutions, ministerial offices, NGOs and others. Using open-ended interview checklist, I was able to grasp valuable insights from some informants that represent various occupations. In addition, I have interviewed Ethiopian government officials and diplomats from other countries that provided me relevant information on the topic.

1.6.4 Sampling Technique

I have selected key informants using purposive sampling. I purposely selected interviewees depending on their knowledge, status and positions in government offices and other sectors. This helped to me get variety of data among which I have triangulated and came up with certain facts.

1.6.5 Data Analysis

The data was analyzed using thematic analysis techniques to identify patterns, trends, and relationships between infrastructure development, institutional frameworks, and economic integration.

1.7 Significance of the Study

This study has tried to indicate the state of the existing infrastructural connectivity along with the challenges and opportunities they have in boosting regional integration. The findings of the study provide evidence-based insights into how strategic infrastructural investments can genuinely foster economic integration. Accordingly, this research provides insightful background for future academic researches. Equally, the study will contribute to future policymaking as it serves as an input for works of various policy makers. With the overall significance, the findings of this study will contribute its part in advancing the nuance understanding of the HoA dynamics. That is to say, this study will offer a more holistic perspective by exploring the less-examined role of physical connectivity.

1.8 Scope of the Study

This research has tried to examine the role of infrastructure connectivity in boosting regional integration in the HoA. The study has focused on the roles of infrastructures such as transport networks, hydroelectric power and digital connectivity in fostering regional integration in the Horn of Africa.

1.9 Limitation of the Study

This paper deals with the role of infrastructural linkage such as railways, roads, electric power, water pipeline, telecom and others in boosting regional integration in the HoA. As to the nature of the topic and the sample of the study, there might be some limitations to the study. While reviewing some documents for developing this proposal, I have foreseen some limiting factors that may be dubbed as a challenge in conducting this research. One of the limitations is absence of relevant studies that cover the extent and relevance of infrastructure connectivity in the HoA as the majority of the studies center their focus on the experience from Ethiopia and Djibouti. This is limitation has made the empirical overview (chapter 3) of infrastructure connectivity in the HoA to be limited to assessing the experience from Ethiopia and Djibouti. The primary data are obtained from some informants and document analysis as financial bottleneck limited my ability to travel to different locations and interview informants. Accordingly, the analysis of the research is limited to data gathered from interviews and valuable inputs from archival sources.

1.10 Ethical Consideration

In qualitative research, where data collection often involves personal and sensitive topics, ensuring informed consent and addressing power dynamics are crucial ethical considerations. Researchers must carefully consider how they will obtain informed consent from participants, particularly those from vulnerable populations, who may feel pressure to participate due to their social standing or relationship to the researcher (Creswell, 2018). Further, researchers must ensure that the information shared by participants during interviews, focus groups, or other data collection methods is kept confidential and cannot be linked back to individual participants (Liamputtong, 2013). Throughout my research, especially during data collection, I have addressed ethical concerns such as informed consent, anonymity and confidentiality. I have obtained informed consent from key informant. I have also ensured that the information

shared by participants during interviews are confidential and used for the research purpose only.

1.11 Organization of the Study

The research has four main chapters and a conclusion. This proposal is the first chapter of the research setting up the roadmap to the upcoming activities. The second chapter covers conceptual and theoretical discussions focusing on theories of regional integration and perspectives about infrastructural linkage. The third chapter gave historical backgrounds to infrastructural connectivity centering on the bilateral linkage of Ethiopia and Djibouti. The fourth covered analysis around the status of current infrastructure connectivity, the challenges and prospects around the issue and the policy implications are discussed. A separate section closed the research by providing general conclusion.

Chapter Two: Conceptual and Theoretical Perspectives

This chapter presents a review of literature and conceptual/ theoretical frameworks that add insight in understanding the place of infrastructural connectivity in regional integration. At this junction, attempt is made in presenting the persisting academic debates about the issue under focus. Moreover, it is beyond doubt that much cannot be learned by confining oneself at the level of much generality. Thus, to salvage this deficiency, I have brought the geography of the literature review to the more specific economic and infrastructural reality of the Horn of Africa. By doing so, therefore, the chapter provides a conceptual and theoretical frameworks, and empirical evidences that lay ground for understanding the interplay between infrastructure connectivity and regional integration.

2.1. Conceptual Perspectives

2.1.1. Region, Regionalism and Regionalization

Regionalism, regionalization, regional cooperation and regional integration and intertwined economic and political concepts are regarded as similar, and sometimes they are used interchangeably. In the following sub-sections, attempt is made to conceptualize region, regionalism and regionalization.

Region

According to Acharya and Buzan (2010) region is an arrangement through which states located at close geographic areas form connectivity for the shared benefits. As a wider concept, region is commonly defined as a geographically bounded area that shares certain characteristics such as culture, history, politics, or economics (Rodrik, 2004). Such explanation depicts region as a spatial entity that is typically distinguished from other areas due to its intrinsic or perceived coherence. In more comprehensive manner, regions are mostly explained based on major benchmarks that include physical settings and subjective perceptions (Kacowicz, 1998).

In the broader sense, region is a defined area, typically involving multiple countries or subnational units that share common attributes (Baldwin and Venables, 1995). A region can be identified as a formal arrangement when it is recognized by regional institutions or international law and informal when it represents cultural or economic ties between and among the countries (Koch and Honke, 2012). In the context of regional economic

integration, a region often includes neighboring countries with interrelated economies and political systems. With the existing shared historical ties and economic interdependence of the neighboring countries, one can consider the HoA a region (Acharya & Buzan, 2010). Considering the relevance of the sub-region's institutional set up, the HoA is also called "IGAD region" in different documents (Bouchard and Dufour, 2014).

Regionalism

Regionalism and regionalization are intertwined concepts, but they have distinct meanings. As cited in Zelalem (2021), Mansfield and Milner (1999) identified regionalization as regional focused of economic flow and regionalism as a political process featured by policy harmonization and cooperation among member countries to a regional organization. To indicate the distinction between regionalization and regionalism, it will be vital to conceptualize each of them separately. To begin with, regionalism refers to the political and economic practices or ideologies advocating for greater cooperation between countries or regions (Börzel and Risse, 2016). It is an active form of collective engagement, where countries seek mutual benefits in various fields, such as trade, infrastructure, governance, and security (Rodrik, 2004; Koch and Hönke, 2012). Regionalism exists in various forms that are mainly economic, political and cultural in nature. The economic form, namely, economic regionalism primarily focuses on economic cooperation and integration among nations like the European Union (EU) (Kacowicz, 1998). Equally, political regionalism emphasizes political cooperation and integration among nations such as the African Union (AU) (Asongu and Ndikumana, 2016; Chen and Nandan, 2020). The cultural dimension, cultural regionalism, celebrates and promotes the shared cultural heritage of a region (Paasi, 2009).

For comprehensive understanding of the concept itself, it will be vital to state some of the key features of regionalism. For starter, regionalism is strategic and policy-driven compared to the concept of a region, which is geographically bounded (Bach, 2006). It typically results in the formation of formal agreements, institutions, or alliances that aim to promote regional development and integration among nations sharing geography, history, culture, language and economic interests (Kimbugwe et al, 2012). As such, regionalism involves intentional policy-making for cooperation between countries or states (Koch and Hönke, 2012).

Regionalism is often the result of both political decisions and economic interests, with the goal of creating synergies and overcoming the challenges that individual nations face. This particular feature makes the East African Community (EAC) an ideal example. The

community promotes policies for economic integration, trade liberalization, and infrastructural development to foster regional development (Acharya & Buzan, 2010; Rodrik, 2004; Koch and Hönke, 2012).

Regionalization

Regionalization, unlike regionalism, stands for an activity of forming a region based on shared characteristic. It is a process through which countries within a specific region work toward greater integration by establishing institutions, frameworks, and tangible infrastructure (Batch, 2006). It is the operationalization of regionalism, where the ideas and policies of regionalism are put into practice through concrete mechanisms such as trade agreements, cross-border infrastructure projects, and shared economic policies (Koch and Hönke, 2012).

Regionalization is a process that involves economic, political, social and cultural factors. The economic forces that drive regionalization are trade agreements, free trade zones, and increased economic interdependence while the political factors are international cooperation, treaties, and the formation of regional organizations (Mangu, 2020). The social and cultural factors are, among others, shared historical experiences, cultural exchange, and migration patterns (Yu, 2003; Mack and Ravenhill, 1994).

Being the practical process of achieving regional integration, regionalization involves both structural developments (e.g., common markets, transnational infrastructure) and policy alignment (e.g., trade protocols) (Koch and Honke, 2012; Bouchard and Dufour, 2014). The process often includes infrastructural linkages such as roads, ports, and railways that physically and economically connect the countries of the region (Bouchard and Dufour, 2014). The Lamu Port-South Sudan-Ethiopia Transport Corridor (LAPSSET) can be considered as an illustrative example of regionalization in the Horn of Africa (Bouchard and Dufour, 2014). It is evidently viable example owing to the objective of LAPSSET that aims to integrate Kenya, South Sudan, and Ethiopia through shared infrastructure. This cross-border infrastructure project exemplifies how regionalization works to facilitate economic connectivity and enhance trade flows between neighboring countries (ibid).

While the three terms- region, regionalism and regionalization - are interconnected, they exhibit distinct conceptual features in the aspects of their definition, focus, scope and key outcomes. First, in terms of their definitions, regions are “geographically defined areas,” whereas regionalism is “an ideology or practice” advocating for cooperation among countries

in a region; and regionalization is “a process” of implementing regional cooperation through formal structures and infrastructure (Acharya and Buzan, 2010). Second, the focus of region, regionalism and regionalization differs as they focus on geographical coherence and common characteristic; political and economic cooperation; and concrete implementation of regional cooperation through infrastructure and institutions respectively (Koch and Honke, 2012; Bouchard and Dufour, 2014).

Third, in terms of scope, region is “static and geographically bounded,” while regionalism is “dynamic and politically driven” and regionalization is “a dynamic, evolving process involving policy, governance, and infrastructure development (Bouchard and Dufour, 2014). Fourth, the three concepts are different in terms of their outcomes. In this aspect, the outcome region is the formation of “defined area with shared attributes”; while regionalism is depicted with an outcome “institutional frameworks and regional agreements” and the outcome of regionalization is “physical and policy infrastructure that connects and integrates countries” (Bach, 2006; Koch and Honke, 2012; Bouchard and Dufour, 2014).

2.1.2 Regional Integration

As Redie (2014) conceptualized, regional integration as a socio-political life beyond the state’s territorial limit. In such a process, countries bring together their resources and interests with the shared objective of integrating their economy and benefit from their common good. Through such consorted effort, the countries create integrated economic spaces, reach larger global markets and generate production efficiencies that would have been limited if they had remained fenced inside a country’s own economy (Kimbugwe et al, 2012).

While often used interchangeably, regional cooperation and regional integration are distinct concepts. As a transition to the conceptualization of infrastructure led regional integration, it will be vital to define regional cooperation and integration coupled with their distinct features. Regional cooperation is mostly directed to the coordination, collaboration, and investment undertaken by countries within a specific region to address shared challenges and opportunities (Rana, 2003; Kimbugwe et al, 2012). Such a cooperation primarily focuses on economic development and mitigating shared risks, but can also encompass areas like security, infrastructure, and environment (Rana, 2003). Sarker et al, (2020) stated collaborative projects on climate change, disaster management, or cross-border infrastructure development as examples of regional cooperation.

Regional integration, on the other hand, represents a deeper level of cooperation involving the removal of barriers between countries in a specific region (Adetulu, 2004). This often involves common institutions, rules, and policies across various sectors (Kimbugwe et al, 2012). Through the process of regional integration, neighboring states within a region put in place a mechanism through which they harmonize policies, remove trade barriers, and deepen economic cooperation (Nikitin and Antsiferova, 2020). It primarily focuses on economic integration, aiming to create a larger, unified market backed by unhinged movement of goods, services, and factors of production such as labor and capital. Among the examples of such integrations is European Union (EU) with its single market and common currency, or the North American Free Trade Agreement (NAFTA) facilitating economic exchange between the United States, Canada, and Mexico (McCormick, 1999).

Regional integration is explained from the economic and political perspectives. In his book titled “The European Union: Politics and Policies”, John McCormick (1999) explains the economic perspective of regional integration depending on the extent to which countries agree to remove trade barriers between them. Similarly, the author elaborates political integration as a process that after countries become politically integrated and form common political institution (ibid). As such, the cooperating countries will form an integration that extends to sharing policies, unifying armies and finally becoming a single country.

High-level economic and political arrangements and international instructions remark the significance of regional cooperation and integration. According to the Asian Development Bank (ADB), regional cooperation is crucial for tackling transnational issues such as climate change, sustainable development, and security threats in Asia-Pacific (ADB, 2021). Regional integration, as identified by the World Bank, can enhance trade facilitation, boost investment flows, and improve competitiveness within a region, as seen in the case of the European Union's single market (World Bank, 2021).

In general, regional cooperation refers to the collaborative efforts of countries within a specific geographical region to address shared challenges, pursue common goals, and promote mutual benefits through partnerships and agreements while regional integration, on the other hand, goes a step further by deepening economic, political, and social ties among member states. An explanation from the World Bank (2025) summarizes the basic difference between the two concepts as follows:

Regional cooperation refers to a collaborative effort between neighboring countries to address shared challenges and interests by coordinating policies and actions across various sectors like trade, environment, security, or infrastructure, often through established institutions and dialogue. Regional integration, on the other hand, signifies a deeper level of cooperation where countries progressively harmonize their economies, legal frameworks, and policies to create a more unified regional bloc (World Bank, 2025:12).

Using the previously explained concepts as a stepping-stone, now I will try to present the various explanations of regional economic integration – one of the thematic areas of my research. Regional economic integration is linked to the idea and practices of the coming together of countries and their dedication to reducing trade barriers.

The process involves reduction and elimination of various forms of physical and institutional barriers that hinder economic interdependence within the shared geographic region leading to increased economic cooperation, shared infrastructure development, and greater political stability (World Bank, 2023). An author such as Kimbugwe et al (2014) equates economic integration with reliable cooperation between and among countries to reduce barriers to trade and enhance welfare in the region. Others identify it as ending separation between different national economies (Mikić, 1998). By connecting the main points of the two explanations by Kimbugwe et al (2012) and Mikić (1998), one can deduce that regional economic integration is a process by which countries within a specific geographic region form agreements to reduce barrier to trade and investment among themselves, leading to increased economic cooperation and collaboration.

2.1.3 Stages of Regional Integration

Regional economic integration refers to agreements among countries in a geographic region to reduce and ultimately remove tariff and non-tariff barriers to the free flow of goods, services, and factors of production between each other. In support of this, custom union theory identifies six different categories through which economic integration happens: these regional integration arrangements are, Preferential Trade Areas (PTA), Free Trade Area, custom union, Common Market, Economic and Monetary Area and eventually complete economic integration (Ballasa, 1967). These stages, as detailed below, represent a continuum

of increasing integration, with each successive stage building upon the previous one by adding more elements of cooperation and harmonization.

Preferential Trade Area

Preferential Trade Area is an arrangement in which members apply lower tariffs to imports produced by non-members. Members can determine tariffs on imports from non-members (ECA, 2007:10). It is an arrangement in which members apply lower tariffs to imports produced by other members than to imports produced by non-members. Member states of a given sub-organization can determine tariffs on imports from non-members.

Free Trade Area

A free trade area (FTA) is a preferential free-trade area with no tariffs imports from other members but each country decides its own tariffs against non-members (Lee, 2002: 3; ECA, 2007:10). It is important step of market integration as it removes tariffs, import quotas, and partiality on most goods and services traded between member states of regional integration. It opens border for products originating within the region. As preferential trade areas, in free trade area members can determine tariffs of imports on non-members. Free trade area enables member states of the regional integration to increase their production in the region and this, in turn, reducing the costs of import from the rest of the world. It also makes a region in a stronger position to respond effectively to global economic competition and influences. The full- fledge of FTA in regional community of developing countries will be questionable because tariffs are the source of revenue generation for most of states. This fact makes countries reluctant to reduce tariffs quickly and as that may lead to revenue loss of states (ibid).

Customs Union

Customs union is a free trade area in which members impose common tariffs on non-members and members may give up sovereignty to a single customs administration in the region (Lee, 2002:3; ECA, 2007: 10). It is where the member states determine a common trade policy and tariff towards third party or non-member states as region. This means that the member states of a customs union promise to liberalize trade, and eliminate trade obstacle placed against members, as well as, agreeing to impose a common tariff against non-member

states. Customs Union enhances economic development and poverty reduction through promote cross-border investment and attract tourists into the region. This improved investment, which facilitates jobs to the majority of the jobless population. If taxes are low, in the same way, prices of goods and services are also low so that there is a greater demand because of lower prices, which increase availability of goods and services (Ibid).

Common Market

Common market is still another stage of market integration that allows free movement of capital and labor across national borders within the integration area (Lee, 2002: 3 ECA, and 2007: 10). The main aims of common market are eliminating restrictions on technology, capital and labor among member states of a given region and this in turn; member states would develop a common visa policy and a common agreement on the right of residency (Adepoju, 2001: 43).

Economic Union

Economic union consists of a common market that promotes unified monetary and fiscal policies, including a common currency in a given sub-organization (ECA, 2007: 10). Fiscal policy refers to the taxation and expenditure policies, which are normally implemented by regions finance authority (Filho, 2005:2). The main benefit of a single currency has been to facilitate goods and services, and investment among member states of the union.

Political Union

Political union is the ultimate stage of integration, in which members states of any regional integration become one and strong community through when each states surrender their sovereignty to region so as to achieve economic and social cooperation in a given sub-organization (ECA, 2007 : 10). It achieves full economic and political unification to member states of regional integration. Nevertheless, Critics of Custom union theory has been quick to point out that regional custom union only partly maximized national income and that in fact there should have been a greater incentive for a global union, which can avoid all trade diversion (Fanta, 2008).

2.2. Theoretical Perspectives

The study will be backed by an integration of major theories, namely, realism, idealism, inter-governmentalism, liberal internationalism, liberal institutionalism and constructivism. First, I will attempt to discuss how realism and idealism theories of international relations can be used to view the role of infrastructure in boosting regional integration in the HoA. Accordingly, the next two theoretical perspective section will explore how the concepts of realism and idealism can be applied to understand the role of infrastructure connectivity in boosting regional integration in the Horn of Africa. While these two theories often appear to be in opposition, they offer complementary insights into the motivations, challenges, and potential outcomes of such initiatives. Afterwards, I will specifically attempt to justify the rationale behind using the integrated theoretical framework of inter-governmentalism, liberal internationalism, liberal institutionalism and constructivism in relation to the thematic areas of my research.

2.2.1 Realism: State Interests, Power, and Security

From a realist perspective, the focus would be on how states in the Horn of Africa are driven by power dynamics and self-interest in promoting infrastructural projects that enhance their own security and economic interests. States may prioritize building infrastructure such as roads, railways, and ports to strengthen their own strategic positions within the region, viewing regional integration as a means to advance their own national agendas. Realist scholars such as Kenneth Waltz and Hans Morgenthau would argue that states operate in an anarchic international system where the pursuit of power and security are paramount (Waltz, 1979; Morgenthau, 1948).

From a realist perspective, regional integration and infrastructure connectivity are primarily driven by the self-interest and security concerns of individual states. The Horn of Africa is a region historically characterized by interstate rivalries, conflicts, and a pervasive security dilemma (Fantu, 2008). Realism would argue that:

- **National Security and Economic Gain as Primary Drivers:** States in the Horn will invest in or support infrastructure projects only if they perceive a direct benefit to their national security or economic well-being. For example, a landlocked country like Ethiopia might prioritize port access in Djibouti or Kenya to secure its trade routes and

reduce dependence, rather than out of an inherent desire for regional unity (Zelalem, 2021). Similarly, states might seek to improve their own internal infrastructure to strengthen their military logistics or to gain a competitive economic advantage over neighbors.

- **Power Dynamics and Asymmetric Benefits:** Connectivity projects, while seemingly cooperative, can also be viewed through the lens of power politics. More powerful states in the region might leverage their economic or political influence to steer infrastructure development in ways that primarily benefit them, potentially creating dependencies for weaker states. The distribution of benefits from shared infrastructure (e.g., energy grids, transport corridors) will be closely scrutinized for relative gains, where each state focuses on how much it gains *compared* to others, rather than just absolute gains (Daniel, 2019).
- **Security Dilemma and Dual-Use Infrastructure:** Infrastructure, especially transport networks, can have dual-use potential. Roads and railways that facilitate trade can also be used for military mobilization. In a high-trust environment, this is less of a concern, but in the Horn of Africa's context of existing tensions, states might view their neighbors' infrastructure development with suspicion, potentially leading to a security dilemma where one state's efforts to enhance its security (through better logistics) are perceived as a threat by another (Waltz, 1979).
- **Limits of Cooperation:** Realists would be skeptical of grand, idealistic visions of regional unity driven purely by shared values. They would emphasize that cooperation on infrastructure is likely to be ad hoc, issue-specific, and prone to breakdown if national interests diverge or if the costs of cooperation outweigh the benefits (Waltz, 1979). The anarchic nature of the international system means there is no overarching authority to enforce agreements, and states retain the sovereign right to act in their perceived best interest, even if it undermines regional initiatives.
- **External Actor Influence:** Realism would also highlight the role of external powers (e.g., China, Gulf States, Western nations) in funding and influencing infrastructure projects. These external actors often have their own strategic and economic interests, which may or may not align with genuine regional integration, and can exacerbate existing power imbalances or create new dependencies (Waltz, 1979).

2.2.2 Idealism: Shared Values, Cooperation, and Institutions

On the other hand, a liberal, or idealist for say, perspective would emphasize the importance of cooperation and mutual benefit in promoting regional integration through infrastructural connectivity. Liberal theorists like Robert Keohane and Joseph Nye would argue that states in the Horn of Africa could achieve greater economic prosperity and security through cooperation on infrastructure projects that benefit all parties involved (Keohane, 1984; Nye, 1977). This perspective would highlight the potential for infrastructural connectivity to foster economic interdependence, increase trade, and enhance regional stability.

Moreover, an idealist perspective would emphasize the potential for shared interests, cooperation, and the role of international institutions in fostering regional integration through infrastructure connectivity. Idealism posits that:

- **Promoting Common Goods and Mutual Benefits:** Idealists believe that states can recognize mutual benefits and cooperate to achieve common goals, even in an anarchic system.⁶ Infrastructure connectivity, by facilitating trade, reducing transport costs, and enabling the flow of goods, services, and people, presents a clear opportunity for absolute gains for all participating states. This economic interdependence can create a stake in peace and stability (Nye, 1977).
- **Role of International Institutions and Norms:** Idealism stresses the importance of international organizations (like IGAD, the African Union, or even specific regional infrastructure initiatives) in setting norms, facilitating dialogue, mediating disputes, and providing technical and financial assistance for cross-border projects (Keohane, 1984; Nye, 1977). These institutions can help build trust, coordinate efforts, and establish frameworks that reduce the transaction costs of cooperation and make agreements more durable.
- **Democratic Peace and Shared Values:** While perhaps less immediately evident in the diverse political landscape of the Horn, an idealist argument could suggest that as states engage more through economic interdependence facilitated by infrastructure, they might gradually adopt more democratic norms and practices, which in turn could reduce the likelihood of conflict and further enhance integration (Keohane, 1984; Nye, 1977).
- **Soft Power and Interdependence:** Beyond material gains, idealists would point to the “soft power” aspects of connectivity. Increased cross-border movement and interaction

can foster greater understanding, cultural exchange, and a sense of shared regional identity, which can gradually erode historical animosities and build a foundation for deeper integration (Keohane, 1984; Nye, 1977). This includes the harmonization of regulations, customs procedures, and legal frameworks, which are facilitated by increased connectivity.

- **Addressing Transnational Challenges:** Many challenges in the Horn of Africa (e.g., climate change, humanitarian crises, terrorism) are transnational and require regional cooperation (Keohane, 1984; Nye, 1977). Infrastructure connectivity can be seen as a vital tool to address these shared vulnerabilities, allowing for more effective disaster response, resource sharing, and coordinated security efforts.

In the Horn of Africa, infrastructural connectivity reflects a tension between realist pragmatism (e.g., Ethiopia's GERD diplomacy) and idealist aspirations for pan-regional institutions. While realism explains states' cautious engagement, idealism illuminates the transformative potential of infrastructure in fostering lasting integration. More importantly, the realist lens, for one part, helps to understand the underlying power dynamics, the pursuit of national interests, and the potential for conflict or asymmetric benefits that might impede or shape integration efforts. It cautions against overly optimistic assumptions about immediate cooperation. The idealist lens highlights the transformative potential of infrastructure to foster interdependence, build trust through institutional mechanisms, and create a shared vision for a more prosperous and stable region. It emphasizes the possibility of overcoming historical rivalries through functional cooperation.

2.2.3 Inter-governmentalism

Inter-governmentalism emphasizes that national government as the primary actors in regional integration, seek to protect their geopolitical and geographic interest (Moravcsik, 2000). As the theory contends, governments engage in rational calculations and bargaining to advance their national interests, such as economic gains, security benefits, or political influence. Regional integration, in this view, is a tool used by governments to achieve these objectives within a cooperative framework (Garrett and Fritz, 2009). According to Pollack (2000), 'preference formation' and 'international bargaining' are the two main factors of the theory. The former is an articulation of national governments' and local populations' interests into the integration, the latter reflect incarnation of states' interests into the intergovernmental negotiation (ibid).

When it comes to elaborating regional integration, inter-governmentalism puts forward stages through which regional integration emerges. As detailed by Zelalem (2021), the three stages are national preference formation, inter-state bargaining, and institutional choice. The first stage refers to whether economic or geopolitical situation dominate the interests of member countries though economy is the most important aspect. The second stage deals with efficiency and distributional results of international negotiations, which is usually explained as rough ‘interdependence’ among member countries. The third stage regards institutional choice entailing three elements: federalist ideology, centralized technocratic management and credible commitments (ibid).

Inter-governmentalism has both realist and liberalist wings. According to Lemmessa (2021), the realist version concerns the geostrategic motives and power relations interplayed in regionalism while liberalist version implies the economic interdependence as a driving force of regionalism. For liberal inter-governmentalism, state is just a get keeper in regional integration whereas the drive for regionalism primarily comes from domestic interest groups (Börzel, 2016).

Focusing on governments as the prominent actors in regional integration are considered as one of the criticism directed to inter-governmentalism. Nevertheless, some instances can be stated as its merits. For example, the theory provides a realistic account of the role of national interests and bargaining in shaping regional cooperation. In addition, it explains the slow and incremental nature of integration processes, where member states retain significant control (Lemmesa, 2021).

The theory offers valuable insights into understanding the role of infrastructural linkage in fostering regional integration. One of the reasons is that, focusing on the roles of states, inter-governmentalism helps to explain the role of national governments as the primary drivers of regional integration (Byiers, 2016). This theoretical lens is relevant in the HoA, where individual countries like Ethiopia and Djibouti have undertaken bilateral infrastructural projects (e.g., Ethiopia-Djibouti railway) to benefit mutually from increased trade and economic activity.

The second reasons emanates from the relevance of inter-governmentalism in explaining factors that hinder regional integration. The theory helps to highlights how member states, prioritizing their individual interests, might engage in bargaining and struggle to reach consensus on large-scale infrastructure projects. This perspective can help explain why

progress on regional infrastructure development, despite its potential benefits, can be slow and uneven. Third, inter-governmentalism suggests that “regional institutions” play a secondary role compared to national governments. Such a standpoint makes the theory ideal choice for my study to identify the role of IGAD and other initiatives in fostering regional connectivity.

The fourth reason might be explained in terms of the concept of “Bargaining and Collective Action.” Inter-governmentalism acknowledges the existence of “collective action dilemmas” faced by states in a region. These dilemmas arise when individual actions might not yield optimal benefits, necessitating cooperation for mutual gain. In the context of the Horn of Africa, infrastructure projects like cross-border roads or power grids can create such dilemmas, requiring member states to overcome them through ‘bargaining and negotiation’ to achieve regional economic integration (Hurrell, 2005).

Fifth, the theory provides relevant explanation considering “Integration as a Choice.” Inter-governmentalism views regional integration as a “deliberate choice” made by individual governments based on perceived benefits. This perspective is pertinent in the Horn of Africa, where countries might be hesitant to invest heavily in regional infrastructure projects unless they are convinced of the economic and political returns on their investment. Overall, I have found the realist wing of inter-governmentalism to be more preferable for my thesis given the fact that realism highlights the importance of state sovereignty and control in regional integration (Hofman, 1966).

2.2.4 Liberal Internationalism

A liberal thought of political economy centers its explanations on main on the standpoint that asserts the relevance of free trade and economic ties in fostering interdependence, and peace between peoples (MacMillan, 2007). As pointed out by Isioma (2015) liberal internationalism maintains law, morality, and international institutions as basis for interstate relations and broader integration. Moreover, Weber (2005), cited in Zelalem (2021), underscores how liberalism reflects alteration of world politics from conflictual to cooperative social relations among sovereign states.

Evidently, liberal internationalism is not a theory associated with infrastructure connectivity and regional integration. Nevertheless, it offers a compelling framework for understanding the role of infrastructure in regional integration in the Horn of Africa. In support of this, it is worth mentioning how states can achieve mutual gains through cooperation, especially in

areas of shared interest (Doyle, 1983). In the same vein, an explanation by Slaughter (2004) indicates the correlation between shared prosperity and cooperation. Moreover, prominent scholars such as Doyle (1983) and Keohane (2005) highlighted how infrastructure projects serve as tangible manifestations of cooperation, demonstrating the potential for mutual benefits and fostering trust among states.

By improving connectivity and facilitating trade, infrastructure development can increase interdependence among Horn of Africa nations, making conflict less attractive and promoting regional stability. To strengthen this, liberal institutionalism highlights the link between infrastructure and institutional development. Evidently, cross-border infrastructure projects often require the establishment or strengthening of regional institutions to manage and regulate them. These institutions can then serve as platforms for broader cooperation and integration (Keohane, 2005).

In conclusion, one can contend that infrastructure development can contribute to economic growth and social development in the Horn of Africa, aligning with the liberal internationalist emphasis on progress and human well-being. Liberal internationalism can serve as an enhancing the analysis of my research as it helps to conceptualize how infrastructure projects in the Horn of Africa promote cooperation and interdependence among states such as Ethiopia and Djibouti. The theory also helps to explain what roles regional institutions play in facilitating infrastructure development and regional integration as well as how infrastructure development contributes to economic growth and social development in the region.

2.2.5 Liberal Institutionalism

In the broadest sense, liberal institutionalism identifies the significance of institutions in fostering cooperation among states and enhancing regional integration (Nuruzzaman 2008). Furthermore, liberal institutionalism highlights the significance of institutions and rules in facilitating cooperation and coordination among states (Keohane and Nye, 2012). Highlighting the importance of international institutions such as the UN as the main platforms of fostering integration, liberal institutionalists value membership to such institutions very much (Isioma, 2015).

Liberal institutionalists suggest that mutual economic relation and democracy are key factors to enhance regional cooperation, integration, as well as, maintain peace among countries. In line with this, they believe that states can achieve mutual gains through cooperation, even in an anarchic international system. According to them, international institutions, such as

agreements, organizations, and norms, play a crucial role in facilitating cooperation by reducing transaction costs, providing information, making commitments credible, establishing focal points for coordination (Keohane, 2005; Martin and Simmons, 1998). Owing to this merit, liberal institutionalism helps me to examine the roles and impacts of existing regional institutions in the HoA.

2.2.6 Constructivism

Constructivism offers a unique lens for understanding the role of infrastructure in regional integration, particularly in a complex region like the Horn of Africa. Unlike traditional theories that focus on material factors, constructivism emphasizes the importance of ideas, norms, and shared understandings in shaping social and political reality (Hopf, 2002). In this section, attempt will be made to present the core ideas of constructivism thereby showing the relevance the theory in analyzing the nexus between infrastructure and regional integration in the Horn of Africa in general and between Ethiopia and Djibouti in particular.

For starter, the theory clearly casts the social construction of reality. As such, constructivism maintains that the world is not simply “out there” but is actively shaped by social interactions and shared meanings (Wendt, 1999). This means that concepts like “region,” “integration,” and even “infrastructure” are not fixed but are given meaning through social processes. Similarly, by focusing on the importance of ideas and norms, constructivists highlight the role of ideas, beliefs, and norms in influencing actors' behavior (Checkel, 2001). For example, the belief that regional integration is beneficial or that infrastructure development is a key to progress can shape policy choices and actions (ibid). Further, constructivism emphasizes that actors' identities and interests are not predetermined but are socially constructed through interactions and shared experiences. This means that states' interests in regional integration can change over time as they interact and develop shared understandings about their common goals and challenges (Wendt, 1999).

Constructivism suggests that infrastructure projects are not simply neutral tools but carry symbolic meanings. They can represent a commitment to regional cooperation, a vision of shared development, or even a symbol of national pride (Barnett and Duvall, 2005). The way these projects are perceived and interpreted can influence their impact on regional integration.

Constructivism can also help to explain how norms and expectations about infrastructure development and regional cooperation emerge and evolve (Wendt, 1999). For example, the

idea that cross-border infrastructure is essential for economic development can become a shared norm that guides policy decisions and investment priorities. Equally, the theory provides vital explanation on the issues of identity and cooperation. According to the prominent theorists, constructivism can shed light on how infrastructure projects can contribute to the construction of a shared regional identity (Wendt, 1999; Hopf, 2002). By working together on infrastructure initiatives, countries can develop a sense of common purpose and shared destiny, which can foster greater cooperation in other areas (Barnett and Duvall, 2005).

Incorporating constructivism in my research, would help me gain a deeper understanding of the complex ways in which infrastructure shapes regional integration in the Horn of Africa, moving beyond purely material explanations to consider the role of ideas, norms, and shared meanings. The theory helps me to analyze how infrastructure projects are discursively framed and how these framings influence their implementation and impact. Given the significance of identity in the Horn of Africa, the theory provides a roadmap to examine the role of shared norms and expectations in shaping regional cooperation on infrastructure development. Furthermore, constructivism paves a way to investigate how infrastructure projects contribute to the construction of a shared regional identity and how this, in turn, affects integration processes.

2.3. Empirical Review

Regional integration is critical for addressing economic, social, and political challenges in regions such as the HoA (World Bank, 2023). Infrastructure development, encompassing electricity, internet, and roads, plays a pivotal role in fostering economic development and structural change within this region (Urgessa, 2014). This empirical review examines existing literature and evidence concerning the relationship between infrastructural development and regional integration.

2.3.1. Benefits of Regional Economic Integration

There is variety of reasons for nations to coordinate their economic policies and foster regional connectivity with their neighbors. Such coordination has the potential to generate benefits that are not possible otherwise (World Bank, 2023). According to Saku (2006), Reddy (2010) and Mwashia (2011), the success of the EU since the 1950s is frequently stated as a strong testimony or epitome to the merits of regional integration. In this respect,

integrating small-scale economies would present significant benefit for developing countries such as Ethiopia and Djibouti.

As a review of varieties of literatures show, regional economic integration has wider range of benefits. Johnson (2007), for example, stated that the higher stage of integration member countries reach, the more significant benefits will be generated. Other authors argue that regional economic integrations lead to better economic effects for all members, enhancing knowledge, technological development, and other positive externalities (Popović, 2010). Similarly, it can lead to improved well-being and a decline in poverty by reducing border-driven conflicts, facilitating export trade, and encouraging the development of new technologies and products (Balchin, 2009).

Among the wider explanations, scholars argue that regional economic integration fosters growth and convergence in member countries through knowledge spillovers, trade facilitation, and reduced transaction costs, but non-member countries should consider joining the integrated zone to avoid trade and investment diversions (Dion, 2004). In the same vein, another author argues that regional integration can increase competition, investment, political stability, bargaining power, and market size. Accordingly, there will be a significant success in infrastructural development, environmental management, and defense and security (Reddy, 2010).

Widely put the significance of regional economic integration ranges from maintaining peace and stability to fostering commercial gains. An article by El-Affendi, Abdelwahab underscores the role of regional groupings in peacekeeping (El-Affendi, 2009). The author further argues that regional integration helps to maintain peace and avoid conflict. From commercial and trade aspects, regional economic integration provides a wider selection of goods and services (Mwasha, 2011). In relation to this, there are also other advantages. For starter, lower tariff reduces the cost of production and the cost of goods for producers and consumers respectively. It also encourages buying more goods and services. Often capacitated by infrastructure, since the distance between these countries is short, the transportation cost of goods will also be lower (Thompson, 2011).

Successful regional economic integration among underdeveloped countries requires high political cooperation and the ability to negotiate coalitions for policies that contribute to development and ensure an acceptable distribution of benefits within the region (Axline,

1977). Inevitably, economic integration between developing nations such as Ethiopia and Djibouti provides significant opportunity for the mutual development of the two.

To sum up, the ultimate objective of all RECs has been to enhance economic growth through cooperation in many areas of economic activity, such as trade and infrastructure. Most of Eastern African countries have relatively small economy, which is hardly integrated to the global economic system. This makes regional economic integration vital option. As detailed above, it paves a way for getting access to the markets of partner countries is essential to maximize production, generate immense income, and get a wide variety of goods.

2.3.2. Challenges of Regional Integration

The global trend toward regional integration has benefited from intra-regional trade, investment and capital flows in the EU, ASEAN, and North America Free Trade Area (NAFTA) (USAID, 2009: 3). In addition to this, they have been successful, at least partially, because they were not eager to achieving free trade or economic union objectives at the beginning rather than regional political issues. This in the sense that EU, ASEAN, NAFTA prioritized political union and cooperation. In addition to this, they are solving intra-regional conflicts through peaceful means (Ibid: 19).

A range of technical, economic, institutional, and political issues have slowed or curtailed progress towards regional economic integration in Africa. One problem is countries overlapping membership in regional economic communities. A significant problem for all the RECs is lack of implementation of commitments, attributable to, in various instances, lack of political will, and lack of technical capacity. The largest market in each of the three major, REC's Kenya in COMESA, Nigeria in ECOWAS, and South Africa in SADC-has dominated formation of the REC's respective FTAs and has protected local industries. In addition, a plethora of non-tariff barriers remain, and a number of smaller countries have been unwilling to eliminate customs duties, arguing a need to service revenue requirements. Unfortunately, this trend has been reinforced by the global economic downturn (Ibid: 3-4).

The predominance of one country upon others leads member states of a region to mutual distrust and undermines the role and involvement of other members in the region. Source of revenue generation for most of states are custom duties so that states do not willing to enter the products of other countries into their countries without custom duties.

Political instability and conflicts within and among member states of the region are also undermining the objectives of regional development communities. Thus, sustaining peace and security, as well as, enhancing the democratic process are decisive factors for the regional block to be able to attract tourists. In addition to this, overlapping and multi-memberships are also perceived as wasting efforts and resources and in turn, leads to a loss of efficiency and adds burdens to member states (ECA,2007:32). Overlapping of regional development community is not solely faces multiple financial obligations, but also obliges to follow different conference, strategy, decisions, procedures and schedules (ibid: 41). Sometimes these decisions, procedures and schedules are conflict and contradict each other and this, in turn, affects the effectiveness and efficiency of regional sub-organization.

Simms (2006:20) identified that the “political will” to support deepening of economic ties between countries; where “political will” is lacking, integration is unlikely to be successful. Casella acknowledges the role played by successful models of integration, such as MORCOSUR. He also notes that blindly following a model will not bring success, especially if the political will to support deepening of economic ties is absent. Commenting this issue Casella stated that:

“On the one hand, it is not possible to solve every problem before starting implementation, yet on the other hand, integration cannot be implemented without first having defined parameters. The evident variation in models and paths illustrates the vital relevance to the success of integration of factors that go beyond strictly economic and legal ones, notably the key role of political will, its stability and capacity to reflect national inter”(Simms,2006:20).

Political will, must be coupled with the potential for economic gain, in order to provide the impetus for deeper regional integration; one cannot exist without the other (Simms, 2006:20). Lack of complementarities in trade flows is the challenges of regional integration. The potential for economic gain will also be very limited if the countries involved in regional integration agreement have over lapping production and trade flows. Over lapping trade flows refers to the scenario where the Regional Trade Blocking (RTB) members produce similar goods and export these goods to same or similar markets (Simms, 2006:10). This overlap in the kinds of goods produced and /or the markets for the goods may affect the potential economic gain of each country in the RTB in two ways. They are: (a) Firstly, the

prospect for intra-regional trade will be produced if all members are producing the same goods; (b) Secondly, a RTB may result in some members capturing a greater share of the external market at the expense of other smaller/weaker members (Ibid).

Developing countries have similar resources. Thus, they do not complement each other sufficiently and as a result, they compete in the same products in the same markets. This circumstance has impacts on the capacity of the countries to trade internally within the region and with other regions (Keita and Kone, 2010: 14).

Inadequate and poor regional infrastructure network is also the other challenges to deepen regional integration, which limits economic growth and trade expansion (Keita and Kone, 2010: 12). It is a fundamental service, which reducing the costs of doing business among member states of the region. In developing countries, for internal and external investments and tourist attraction, the provision of efficient infrastructure services is very important. However, the potential contribution of infrastructure to economic growth and poverty reduction has not been fully realized in Africa due to even the existing infrastructure services need of a great repair (Kirkpatrick, et al. 2006: 144).

2.3.3 Infrastructure and Regional Integration

Infrastructural connectivity in the context of regional integration refers to the physical connections and networks that are established between different regions to facilitate the movement of goods, services, people, and information. This includes transportation systems, such as roads, railways, airports, and ports, as well as communication networks, like the internet and telecommunications infrastructure. The primary objective of infrastructural linkage is to enhance economic cooperation, trade, and integration by ensuring efficient movement of goods, services, people, and information across borders (Chen et al, 2017).

By understanding the conceptual definition and diverse scopes of infrastructural linkage, one can appreciate its critical role in fostering deeper and more comprehensive regional integration. In the meantime, presenting the conceptual aspects of infrastructural link and indicating its correlation with regional economic integration would help me in the same aspect. Accordingly, in this sub-section I will try to present the conceptual aspects of infrastructural linkage as mechanisms of regional integration.

Infrastructure development is a key driver of economic growth and regional integration, enabling countries to participate more effectively in global markets (Fosu, 2016). Infrastructural connectivity serves as the arteries and nervous system of regional integration, enabling deeper economic, social, and political cooperation between member states (World Bank, 2019).

While explaining the main characteristics of infrastructural linkage, some authors list physical and digital infrastructures. According to Freund and Rocha, (2010), physical infrastructure comprises “tangible infrastructure” such as transportation networks (roads, railways, ports, and airports), energy grids, and telecommunication systems. On the other hand, digital infrastructure involves the development of information and communication technology (ICT) infrastructure such as broadband networks, data centers, and e-government platforms.

Boosting connectivity through infrastructure projects such as roads, railways, ports, and energy networks can help promote trade, investment, and economic cooperation. As elucidated by Elhiraika and Ndikumana (2007), the importance of physical infrastructure in reducing transaction costs and improving market access, which are essential for stimulating regional trade and fostering economic integration. For instance, the construction of cross-border transport corridors can enhance connectivity between countries in the region, facilitating the movement of goods and services and promoting economic cooperation (ibid). Moreover, infrastructure development can also create opportunities for joint investments and public-private partnerships, leading to increased cross-border trade and economic integration.

2.3.3.1 Types of Infrastructure

Different authors classify types of infrastructure in various ways. Some of the classifications identify the types of infrastructure based on their purposes. In line with this Ying (2014) categorizes infrastructure in to three as transportation infrastructure (such as roads, railways, ports, and airports), energy infrastructure (such as power plants, transmission lines, and renewable energy sources), and telecommunications infrastructure (such as internet connectivity and mobile networks). Transport infrastructure is the most crucial category for regional integration, directly influencing the movement of goods, people, and services. Broadly put, transport infrastructure refers to the physical structures and facilities that allow the movement of goods, services, and people within and between regions. It plays a crucial

role in regional integration by promoting connectivity, facilitating trade, and enhancing economic development (ibid).

Some authors widen the classification of transportation infrastructure. According to the explanation given by Baccelli and Toint, (2019) there are several types of transport infrastructure, including roads and highways, rail transport, maritime and port, as well as airports and aviation. Roads and highways are the most common and vital forms of transport infrastructure, enabling the movement of people and goods over land. Road networks include paved and unpaved roads, their quality, connectivity, and cross-border linkages (ibid)

Rail transport infrastructure consists of tracks, stations, and rolling stock used for the transportation of passengers and freight. Railways are one of the most significant means of transport in regions such as the Horn of Africa. The Ethiopian - Djibouti rail transport has enormous impact on trade, efficiency, and regional connectivity. Ports and maritime infrastructures provide connectivity between land and sea transportation modes, facilitating international trade and commerce (Mwangi, 2020).

Air transport and inland waterways are other transport infrastructures that would add their parts for regional integration. Air transport infrastructure includes runways, terminals, and related facilities for the movement of passengers and cargo by air (Mwangi, 2020). While perhaps less central than land and sea transport for this specific context, air connectivity plays a role in business travel and regional integration. Water transport infrastructure such as rivers, canals, and lakes serve as alternative routes for the movement of goods and passengers (Gordon, O'Connor, and Balance, 2017).

Like the diverse types of transportation infrastructure, energy infrastructure is also essential for economic development and regional cooperation. Power generation and transmission coupled with trans-boundary power connectivity play significant role in fostering regional integration. Energy infrastructure encompasses electricity grids, hydropower projects, and potential for cross-border energy trade. In this regard, considering the role of the Grand Ethiopian Renaissance Dam (GERD) in regional energy dynamics stands tall. Fuel pipelines are another infrastructure that will add vital potential in regional integration. Examining existing and planned pipelines for transporting petroleum products, their impact on energy security, and regional integration will be vital input for analyzing infrastructure led regional integration schemes (Baccelli and Toint, 2019).

Communication infrastructure is equally significant to mention. It has become increasingly important for trade, information sharing, and regional integration. Telecommunications, particularly, the development of fiber optic networks, mobile phone penetration, and internet access have become enormously significant force behind regional integration schemes. In this aspect, the role of telecommunications in facilitating cross-border trade and communication is worth mentioning (International Telecommunication Union, 2024). Equally significant is digital connectivity. In efforts of fostering regional integration in areas such as the Horn of Africa, digital platforms add huge potential in facilitating trade, investment, and knowledge sharing within the region (World Bank, 2023).

Water resource infrastructure is another type of infrastructure worth mentioning. With its various sectors, water infrastructure can also be indicated as one of the crucial integrating power in the arid and semi-arid Horn of Africa. Water resource infrastructure includes potable water pipelines, irrigation systems as well as dams and water storage infrastructures. While perhaps less directly linked to cross-border integration in this specific context, the development of irrigation infrastructure within Ethiopia can have implications for regional stability and resource management (FAO, 2022). With regard to the potential of dams and water storage facilities, as mentioned earlier, the GERD has regional implications. Analyze its potential benefits and challenges related to water sharing and regional cooperation.

The aforementioned types of infrastructure are helpful in understanding their interrelated potential in fostering regional integration. While the typologies mentioned are wide and diverse, they are not the only types and variants. Next attempt will be made to explore the two main types of infrastructure - soft and hard.

Soft infrastructure encompasses institutions, regulations, and policies that facilitate cross-border connectivity between and among nations. Soft infrastructure plays a critical role in promoting regional integration by addressing issues such as trade barriers, customs procedures, and regulatory harmonization (AfDB, 2018). For example, the African Union's African Continental Free Trade Area (AfCFTA) agreement aims to enhance trade facilitation, standardize customs procedures, and promote regulatory coherence among member states in the region (ibid). Additionally, initiatives like the East African Community (EAC) and Intergovernmental Authority on Development (IGAD) focus on enhancing coordination and cooperation (IGAD, 2022).

Hard infrastructure includes physical assets such as roads, ports, railways, and energy facilities that are essential for connecting countries and facilitating trade and economic activities (UNECA, 2022). Such types of infrastructures are vital in overcoming geographical barriers and improving connectivity between countries in a given region. The report by United Nations Economic Commission for Africa (2019) indicates the relevance of both soft and hard infrastructures in regional integration. The report summarizes the difference between hard and soft infrastructure as follows:

Hard infrastructure refers to physical structures and facilities necessary for the functioning of a society or economy, such as roads, bridges, airports, and power plants. Soft infrastructure, on the other hand, consists of institutions, policies, and regulations that support economic and social development, including education, healthcare, and governance systems (UNECA, 2019:11).

According to Klaus Schwab (2017), investments in hard infrastructure like transportation networks and energy grids are essential for facilitating trade and movement of goods and people across borders. Additionally, soft infrastructure, including investment in education and healthcare systems, is vital for building human capital and fostering social inclusivity within the region. As stated by the authors Biermann and Vij (2024), improvements in soft infrastructure can lead to increased regional cooperation and economic integration. Moreover, a study by the World Bank emphasizes the need for coordinated efforts in developing both types of infrastructure to enhance connectivity and competitiveness in the region (World Bank, 2023).

2.3.3.2 Scopes of Infrastructural Linkage

The scope of infrastructural linkage is broad and encompasses various sectors and dimensions. It involves the establishment and improvement of transport infrastructure, such as roads, railways, ports, airports, and bridges, to facilitate the movement of goods and people (Asian Development Bank, 2017). Power generation and transmission systems as well as communication infrastructure, including internet connectivity, fiber-optic networks, and satellite systems, also enhance industrial productivity and information exchange (Muzaka, 2013; Chaturvedi, S., et al., 2018). Furthermore, infrastructural linkage includes the development of trade facilitation mechanisms, such as customs and border management systems, logistics and supply chain networks, and trade-related infrastructure (such as warehouses and storage facilities). These mechanisms aim to simplify and streamline cross-

border trade processes, reducing transaction costs and enhancing efficiency (World Bank, 2015).

Infrastructure linkages refer to the interconnection and coordination of different components within a broader infrastructure network, allowing for seamless integration and efficient functioning (AfDB, 2018). As the review of various works under this sub-section tries to indicate, the scopes of infrastructural linkage encompass a diverse range of domains, including transportation, communication, energy, and water supply, among others.

Transportation infrastructure linkage involves the connectivity of roads, railways, ports, and airports to facilitate the movement of goods and people. The relevance of transportation in the bilateral economic interactions between the two study countries – Ethiopia and Djibouti – has always been enormous. In support of this, different studies have demonstrated that well-connected transportation systems lead to increased trade, investment, and economic growth. For instance, research by Smith et al. (2018) highlights the positive correlation between the expansion of road networks and the development of rural economies in emerging markets.

In addition to the transportation infrastructure linkage, communication infrastructure linkage pertains to the integration of telecommunication networks, internet services, and digital technologies to enhance connectivity and information sharing. The linkage of communication infrastructures has been instrumental in promoting e-commerce, digital innovation, and knowledge exchange. A study by Li and Wang (2020) displays how the expansion of broadband networks can bridge the digital divide and promote societal inclusion.

The other scope of infrastructural linkage, namely energy infrastructure linkage, focuses on the interconnection of electricity grids, renewable energy sources, and storage facilities to ensure reliable and sustainable energy supply. Research by Zhang et al. (2019) emphasizes the importance of cross-border energy linkages in promoting energy security and reducing carbon emissions. The integration of energy infrastructures also plays a critical role in achieving climate goals and transitioning to a low-carbon economy.

Water supply infrastructure linkage involves the coordination of water treatment plants, distribution networks, and wastewater management systems to ensure access to clean and safe water. Studies have underscored the significance of integrated water management approaches in enhancing water quality, mitigating water scarcity, and supporting public health. For example, the work of Chen et al. (2017) highlights the benefits of infrastructural linkages in addressing water-related challenges in urban areas.

Given to the recent potable water infrastructure linkage between the Ethiopia and Djibouti, the regional economic integration would seem to be backed by holistic infrastructure. In conclusion, the scopes of infrastructural linkage encompass a wide array of sectors and disciplines, each playing a key role in fostering sustainable development and societal progress.

2.3.3.3 Impact of Infrastructural System on Regional Economic Integration

Infrastructural linkage between countries refers to the network of physical connections that facilitate the flow of goods, services, people, and information between countries. These connections can include various forms transportation infrastructure such as roads, railways, airports, and seaports that enable the movement of goods and people between countries. Similarly, communication infrastructure includes telecommunication networks, such as fiber optic cables and satellites that allow for the exchange of information and data (Asian Development Bank, 2017). Energy infrastructure is another form of linkage that exists between countries. It includes power grids, pipelines, and other infrastructure that facilitates the transmission of energy resources between countries (World Bank, 2019).

Strong infrastructural linkage between countries can have a number of benefits. Studies suggest strong positive correlations between infrastructural linkages and regional economic integration. Improved transportation and communication infrastructure can make it easier and cheaper for businesses to trade goods and services across borders. This can lead to increased economic growth for all countries involved. In this respect, efficient infrastructure lowers transportation and logistics costs, facilitating trade and making regional markets more attractive (Calderón and Cepeda, 2014). Further, it encourages investment flows. In such respect, some authors argue that improved connectivity attracts foreign direct investment (FDI) by facilitating access to regional markets and resources (Freund and Rocha, 2010).

“Knowledge Diffusion” is the other impact of infrastructural linkage on regional integration. Authors such as Glaeser and Kerr (2004) explain how infrastructure enhances knowledge exchange and technology transfer between regions, fostering innovation and economic growth. As part of the knowledge diffusion, the linkage also helps to enhance cultural exchange. This is evident especially as improved infrastructure can make it easier for people to travel and communicate between countries. This can lead to a greater understanding and appreciation of different cultures.

Similarly, infrastructural linkage positively influences the enhancement of “Regional Value Chains” (World Bank. (2019). Strong linkages enable the development of regional value chains, where different stages of production are distributed across regions for cost optimization. Equally, infrastructural linkage adds effort in improving regional security. Strong infrastructure links can help to promote cooperation and stability between countries. This can be beneficial for regional security (Asian Development Bank, 2017).

While the literature convincingly establishes the positive impact of infrastructural linkages, certain aspects require further discussion. More significantly, some potential challenges associated with infrastructural linkage between countries need to be studied as well. The concerns include environmental, social, political and economic challenges that affect the people and their governments. As indicated in some documents, construction of infrastructural projects can have adverse effects on the environment, including deforestation, habitat destruction, and pollution (UNEP, 2020). Some authors supported this claim by contending that the construction and maintenance of infrastructure can have a negative impact on the environment (Glaeser and Kerr, 2004).

Social and economic inequality is the other form of challenge that emanated from infrastructural linkage. The benefits of infrastructure development may not be evenly distributed, and some communities may be left behind. The World Bank contends that “economic disparities” are among the major impacts. While infrastructural linkages can promote economic growth, they can also widen the gap between developed and developing countries, as wealthier nations may benefit more from improved infrastructure (World Bank, 2017).

Security concerns are also among the list of impacts mentioned by various literatures. Infrastructure can be vulnerable to attack, and strong infrastructure links can make it easier for security threats to spread. Similarly, Social disruptions can also be stated as among the impacts related to security. Infrastructure projects may displace communities and disrupt local cultures, leading to social unrest and discontent among affected populations (World Bank Group, 2017). Dependence on external sources might be one of the other consequences related to development of infrastructure. Countries that heavily rely on external infrastructure may become vulnerable to disruptions in the supply chain, influencing their economic stability (World Bank Group, 2017).

Chapter Three: Infrastructural Connectivity and Regional Integration in the Horn of Africa

The Horn of Africa, a region with immense potential, faces several challenges to its economic prosperity. One key factor hindering regional growth is the lack of robust infrastructure and regional integration between countries. As one of the gaps observed in the literature, there are limited studies conducted to show the infrastructure connectivity in the HoA. More particularly, studies have centered their analysis on the role of IGAD in fostering regional economic integration with little emphasis given to infrastructure connectivity. As a result, my review of empirical connectivity centers its focal point on the role of IGAD behind regional integration in the Horn of Africa and existing infrastructure connectivity between Ethiopian and Djibouti.

3.1 Regional Integration in Eastern Africa: An Overview

There are a number of other important integration initiatives in Eastern and Southern Africa, which operate at the sub regional level--the Intergovernmental Authority for Development (IGAD), the East African Community (EAC), the Southern African Customs Union (SACU) and the Indian Ocean Commission (IOC).

IGAD, originally named the Intergovernmental Authority on Drought and Development, was created in 1980 mainly to promote food security and to combat desertification in the Horn of Africa. The founding members were Djibouti, Ethiopia, Kenya, Somalia, the Sudan and Uganda. Apart from functional cooperation in the food security and environmental areas, IGAD has played a useful role as a forum for mediation in internal conflicts within its member states. In the mid-1990s, an agenda oriented towards more general development cooperation was adopted (and the 'D' standing for drought was dropped). Following its separation from Ethiopia in 1993, Eritrea also joined IGAD as an independent state.

The East African Community (EAC), comprising Kenya, Uganda and Tanzania, can trace its origins as far back as the early decades of the 20th century. Britain, as the ruler of the colonies of Kenya and Uganda and the protectorate of Tanganyika, established a customs union comprising the three countries, together with a common currency, and an organ for the management of common services for ports, railways, and air transport. Disparities with

respect to perceived benefits and other differences contributed to a gradual loosening of their common bonds, and these outward pulls grew stronger following independence in the early 1960s. The three countries attempted to address these differences, and the 1967 Treaty establishing the East African Community was meant to be a major step in this respect. However, the clash of ideologies between Tanzania and Kenya, and the irreconcilable political tension between Uganda's Idi Amin (who came to power via a 1971 coup) and Tanzania's Mwalimu Nyerere, created an untenable situation.

These irreconcilable differences were further exacerbated by the serious disparities in the perceived economic benefits. Kenya was seen as the principal beneficiary. The momentum towards break up gathered speed starting in 1971, and the Community Treaty was formally terminated in 1977. Most of the joint organs and common services were dismantled. However, starting in 1993, a process was launched by the three countries that led to the reconstitution of the Secretariat and the signing of a new Treaty establishing the East African Community, which came into force in July 2000. The Treaty provided for the formation of a customs union—which became operational in 2005—to be followed by a common market later.

Although the developmental gap between the three countries has narrowed, the provisions of the customs union allow for some asymmetry in that certain Kenyan exports to the other two countries are subject to the payment of progressively declining tariffs for a period of five years. The deep involvement of the private sector is also expected to solidify cooperation. At the end of 2006 Burundi and Rwanda were accepted as new EAC members. Both countries are scheduled to join EAC during 2007. Overall, the Community appears to have been re-launched on much better footing. It is also considered by some as a pace setter for COMESA—an application of variable geometry or allowing countries to move at different speeds. However, the practicality of this has become questionable, as Tanzania is now a member of SADC only while the other two countries are in COMESA.

3.1 Regional Integration in the Horn of Africa: The IGAD

What comes first? A peaceful society leading to more economic exchange, growth and improved well-being? Or growing economic exchange and interdependence leading raising the costs of conflict and leading to a more peaceful society? That is a fundamental question for many, but is of particular importance in the Horn of Africa, where within and between-

state conflicts underline the importance of a regional approach and the importance of regional bodies such as IGAD - the Intergovernmental Authority for Development.

The environmental and development problems and challenges faced by the Horn countries, in particular the impact on human security, forced up on them the imperative to create a regional system to address these regional problems. Some of the immediate challenge facing the countries in the Horn of Africa and IGAD as well as national and international non-state actors operating in the region have been drought, famine, refugees as well as victims of land mines and war. Conflict remains the major contributing factor with far reaching ramification to disasters because of instability in the region (Adar: 44). This led to the creation of the Inter-governmental authority on Drought and development (IGADD) in 1986 with a narrow mandate focusing on issues of drought, famine and desertification in the region. IGADD also provided a regional platform for dialogue on regional peace and security (Francis, 2006:222) and IGADD comprising Ethiopia, Kenya, Djibouti, Somalia and Uganda. The circumstances giving rise to the formation of IGADD were the rampant drought and desertification that was ravaging the region (IGADD, 1996).

Since the early 1970's the region has been experiencing pervasive and severe droughts such as those of 1974 and 1984. These droughts inevitably generated extreme environmental degradation, desertification and famine, making livelihoods in the region extremely precarious. The famine of 1984/85 which was of a cataclysmic magnitude brought an unimaginable destruction of life in the forms of death of animals and humans, large internal displacement of people (IDPs), migration of others to neighboring countries and immense human suffering (Francis, 2006: 223).

The devastating famine visited the region again in the summer of 2011, afflicting Somalia, Kenya, and Ethiopia, the foundation of regional integration was motivated by the ideas of resolving common problems through collective efforts, and was launched at a summit in Djibouti in January 1986. Driven by the immense hardships, the state of the six countries with the help of the UN and the international donor groups, initiated the creation of an institutionalized action to control desertification, minimize the effects of droughts on life, and induce development. Indeed the states of the region were urged to form an intergovernmental authority to coordinate the fight against drought and famine (Radaie, 2012).

The six founding member of IGADD were joined by Eritrea following its formal independence in 1993. The agreement they signed stated their intention to coordinate and

supplement the effort of member states to combat the effect of drought and other related natural disasters (Art 7(a)). The supra national organizations responsibility was declared to be complementary to national efforts and thus aid national states in their endeavors to achieve national programs. Apparently, the first step in establishing the regional organization was taken by the United Nation General Assembly (UNGA) resolution 38/216 of 20 December 1983 (Ameyo, 2010:5). The assembly of head of states and government in Djibouti in January 1986 and signed an agreement which formally launched IGADD. It is symptomatic of instability in the Horn those five years after its creation, half of IGADD's founding head of states had been driven from office, all by unconstitutional means. In Sudan, Omar El-Basher seized power in 1989 and established an Islamic government. In Ethiopia Mengistu was over thrown in 1991 by a dual rebel's alliance. In Somalia, Said Barre was removed from power by rebel forces in 1991, ushering in a protracted period of state collapse and the emergence of a separatist administration in Somalia (Healy, 2009:3).

The year 1991 constituted a watershed in the history of IGADD when regime change took place in both Ethiopia and Somalia, opening new opportunities to breathe new life in to the activity of the regional organization. The emergent regimes of the Ethiopian people's revolutionary democratic front (EPRDF) and the Eritrean people's liberation front played a crucial role in revitalizing IGADD (El-Affendi, 2001:582).

Djibouti become the permanent headquarters of the regional organization, nevertheless IGADD found itself, beyond fighting drought and desertification, involved in efforts to resolve regional socio-economic and political problems (IGADD, 1996). The expanded mandate of IGAD, in addition to combating drought and desertification, included economic cooperation and integration. Eventually IGADD also moved from environmental agricultural and economic cooperation and integration to political, security and peace concerns. IGADD therefore, pursued a gradual and progressive expansion and elaboration of its mandates and programs (Ibid).

The resurgence of regionalism in world politics in the 1990's caused the political leadership of IGADD to consider the political benefits from regional economic integration and cooperation, on peace and security issues in the Horn (Francis, 2006). The strongest motivation for the revitalization of IGAD was the need to find regional strategies for the resolution of the numerous inter and intra-state conflict (Terlinden, 2004:2).

The consensus amongst the IGAD leadership was that it was imperative to revitalize the regional institution as a serious mechanism to respond to the problems and challenges faced by the region. Therefore, at the 1995 IGADD extra ordinary summit in Addis Ababa, the decision was taken to expand regional cooperation in the Horn, and at the 1996 summit in Nairobi, IGADD adopted the agreement establishing the Intergovernmental Authority on Development (IGAD) (Francis 2006). The four primary areas of focus of IGAD were food security and environmental protection; infrastructure development (transport and communications) and regional conflict prevention, management and resolution and humanitarian affairs (IGAD, MIP, 2010).

The aim of IGAD is to promote regional peace and stability as the foundation for attaining the goal of good security. Environmental protection and sustainable regional development with in this context, regional integration and cooperation in the Horn was to serve as the driving force in achieving the goals of regional peace and security. Art7 (g) states that the aim of IGAD is to promote peace and stability in the sub region for prevention, management and resolution of intra state and interstate conflicts through dialogue.

While IGAD has a strong focus and considerable renown on peace and security issues, economic integration is often seen as lower priority in the region. Nevertheless, rising economic interdependence in the region may be slowly altering the interests and incentives for conflict. By adapting to these changing interests and incentives, IGAD may be able to play a supportive role in promoting regional peace and prosperity with benefits at the national level.

Although IGAD has become best known for its peace and security related activities, not least in Sudan and South Sudan, it is also one of eight Regional Economic Communities (RECs) recognized by the African Union (AU) and a building block of the African Economic Community (AEC) under the AEC Treaty (Woodward,2013). This brings commitments to establishing a free trade area (FTA), macro-economic convergence, industrial development and investment promotion, infrastructure and transport development, information technology, tourism development, and the development of energy, agriculture, environment and natural resources. The recently approved Horn of Africa Initiative (HoAI) by the World Bank, EC, and AfDB among others further supports the linkages between these, with a large pool of external funding targeted at vulnerability and resilience, and economic opportunity and integration.

In contrast to its relative success on conflict mediation, in 2012 IGAD described its own progress on economic integration as ‘dismal’. Nonetheless, market integration and broad regional economic integration remain key stated IGAD objectives to create not only a free trade area, but also a customs union and eventually a common market. Beyond market integration, sometimes referred to as ‘shallow integration’, IGAD’s strategy also reflects aspirations of ‘deep integration’ including the soft and hard infrastructures that facilitate economic exchange and interdependence (World Bank, 2014). Economic integration and market access also underpin IGAD’s approaches to its third pillar of food security and drought and disaster reduction, reflecting the fundamental place economic integration takes in its vision for regional cooperation and integration. But actually implementing the economic integration agenda is subject to wide variations in economic policy approaches and challenges among member states, limited economic complementarity, and the fact that most are also pursuing economic integration through the EAC (East African Community) and COMESA (the Common Market of Eastern and Southern Africa) (Woodward,2013).

The tensions in the region also undermine the investment climate. This then raises questions about the potential role and specific benefit of IGAD’s economic agenda and who is driving it. It also raises a challenge to IGAD to identify how to build on the high levels of informal regional trade and the growing sub-regional and bilateral relations among members as a basis for greater regional economic integration - particularly given the risks of engaging in business in fragile states, characterized by conflict. The challenge is heightened by the scale of informal trade. According to the World Bank (2014), “IGAD has lagged behind other Regional Economic Communities (RECs) in negotiating and interpreting trade agreements, and the institutional framework to resolve associated disputes is weak.” As such, IGAD faces a Catch-22: while it lacks the resources or capabilities to achieve economic integration on its own, its international partners appear unconvinced of IGAD’s abilities in this field (Woodward, 2013).

Despite relatively less remarkable achievements, IGAD is mentioned behind infrastructure connectivity and regional integration in the HoA. The potential for peace cannot be seen in isolation from the growing drivers for economic cooperation in the region, which will raise the bar to finding common interests and priorities. In particular, the centrality of Ethiopia to the region cannot be understated - in both physical and metaphorical terms. Stability in the region is increasingly a primordial concern for Ethiopia, due to the danger of overflows into Ethiopia near Somalia and South Sudan, but also in relation to its investments in the Grand

Ethiopian Renaissance Dam (GERD), energy agreements and its expanding railway networks to overcome its landlockedness (World Bank, 2014).

Ethiopia has already begun supplying neighboring countries with energy from hydroelectric power, gaining the moniker the ‘water tower of East Africa’ with its seven major drainage basins and related potential for hydroelectric power generation, generating over 2000 MW and soon to acquire a 10,000 MW production capacity once the projects under construction are completed in the coming four years. Though not without risks these dynamics then also raise the opportunity cost of tensions and conflict - the potential benefits of the GERD to Sudan have reportedly improved relations and even extended to their role in the South Sudan conflict (Fisher, 2014).

While much of the progress and growing interdependence in the IGAD region relates to bilateral agreements and joint ministerial arrangements outside the IGAD framework, it nonetheless points to the potential opportunities for greater coordination through IGAD and/or other regional organizations. IGAD can facilitate bilateral meetings on a range of topics, representing a pragmatic approach given the challenges of operating regionally and that it may eventually manage to ‘regionalize’ (Fisher, 2014; Healy, 2011). But recent ECDPM analysis (forthcoming in PERIA) suggests that further integration in the Horn of Africa will rely on a combination of support for top-down, state-led processes and building on bilateral, national, informal and *ad hoc* processes.

This is in line with Healy (2011), who argues for a less state-centric approach to regional integration that could capitalize on the strengths of informal cross-border relationships and Fisher (2014), who suggests international actors should fund more regular, high-level summits at the regional level, rather than the everyday activities of the IGAD secretariat and other bureaucratic organs. Regional peacebuilding and economic integration are both long-term gradual processes and both must evolve together. No one regional organization can take full responsibility for this, but by being adaptive and opportunistic, building on bilateral processes and growing economic interdependence while supporting peace resolution, the role for an organization like IGAD will only grow (Fisher, 2014; Healy, 2011).

3.1.1.IGAD: Challenges and Achievements

Since its established in 1986, the IGAD has played institutional role in fostering economic interdependence and peace building efforts among its member states - Djibouti, Eritrea,

Ethiopia, Kenya, Somalia, South Sudan, Sudan, and Uganda. One of IGAD's primary objectives is to enhance economic cooperation among member states to promote sustainable development in the region. Through various initiatives, IGAD has been instrumental in facilitating trade, investment, and infrastructural development among its member states.

Despite its efforts, IGAD faces several challenges in promoting regional economic integration. Inadequate infrastructural connectivity, limited financial resources, political instability in some member states, and differing national priorities pose significant obstacles to IGAD's objectives. In the case of Ethiopia and Djibouti, challenges such as border disputes, regulatory barriers, and inadequate transportation networks have hampered progress in infrastructural linkage.

Nevertheless, IGAD has made notable achievements in enhancing regional economic integration. The development of the Ethio-Djibouti Railway, a key infrastructural project linking Ethiopia's capital Addis Ababa to Djibouti's port, stands as a testament to IGAD's commitment to fostering connectivity and trade facilitation between the two countries. This railway project has significantly boosted trade volumes, reduced transportation costs, and improved logistics efficiency (The infrastructure connectivity between Ethiopia and Djibouti will be discussed in the following section).

3.2 Infrastructural Connectivity: Ethiopia and Djibouti

Ethiopia and Djibouti have shared a long-standing economic relationship based on geographical proximity and historical ties. Djibouti, a small coastal nation located strategically at the entrance to the Red Sea, serves as a key transit point for Ethiopia's imports and exports. Although Ethiopia and Djibouti has multifaceted relations that developed for many years, the port service and the bilateral trade relation between the two is the main one worth mentioning. Ethiopia, being a landlocked nation with a population of more than one hundred million, depends heavily on the port of Djibouti for its imports and exports. Ethiopia's dependency has profoundly increased after it lost its sea access following the independence of Eritrea in 1991 and the border war it endured in 1998 (Belete, 2000; Endalkachew et al., 2002; Erko, 2023). The next sub-sections gives an overview of the socio-economic relations between Ethiopia and Djibouti focusing on the relevance of existing

infrastructure connectivity between Ethiopia and Djibouti in fostering trade and economic interdependence between the two countries and the region as a whole.

The infrastructure connectivity, that includes railway, road, power, water and digital networks, demonstrate the commitment of Ethiopia and Djibouti to enhancing their connectivity and promoting regional integration. This section presents overview of the existing infrastructure link between the two countries to lay the foundation for the analyzing the roles and prospects of infrastructure in fostering regional integration in the sub-region.

3.2.1 The Ethiopia-Djibouti Transport Corridor

For over a century, the expansion of rail and road projects has provided immense benefits for both Ethiopia and Djibouti. Through their longstanding relations and shared initiatives, the two countries have constructed a modern railway and road transport network, significantly reducing transportation times and costs for Ethiopian exports and imports (IGAD, 2024b). This improved connectivity has spurred economic growth in both nations and fostered closer economic ties. The mutual undertaking has a potential of fostering the regional infrastructure network in terms of railway and road networks.

3.2.1.1 Railway Network

Railway connection plays enormous socio-cultural and economic role in the bilateral relations of Ethiopia and Djibouti. Since the time of the French colonial administration, Ethiopia has developed staunch relationships with Djibouti mainly via their linkage in the railway transport (Schraeder, 1993). The railway infrastructure has continued serving economically as well as socio-culturally in the centuries old relations between the two countries. The transport infrastructure has been facilitating the movement of people between the two countries. Its social impact, however limited to the cross-border communities from the two countries, has remained one of the most symbolic and phenomenal (Belete, 2000; Gebeyehu, 2012).

After more than a century in service, the railway has transformed into more modern and cost-effective one. That was materialized by 2018 when the Ethio-Djibouti Railway, a 750-kilometer electrified railway project, was put into operation. Being the first of its kind in Africa, the electrified standard is crucial for reducing transportation costs and transit times for goods moving to and from the sea (FanaBC, 2024). The economic impact of the railway

transportation has increased enormously due to Ethiopia's dependence on the port of the Djibouti. One of the significance emanates from its relevance in reduction in transit times:

The railway has reduced cargo transit times from three days by road to approximately 12 hours by train, significantly improving the efficiency of trade operations. This shift is expected to lower cargo transport costs to one-third of the cost of road transport, making Ethiopian goods more competitive in international markets (Global Infrastructure Hub, 2020:6).

In addition to the reduction of transit time, the transportation link also helps to increase trade volume. The railway, in particular, is designed to handle a substantial volume of freight, with projections indicating that it will facilitate the movement of a significant percentage of Ethiopia's imports and exports, which predominantly pass through the Port of Djibouti. Approximately 80% of the goods imported via Djibouti are destined for Ethiopia's central regions (Global Infrastructure Hub, 2018).

3.2.1.2 Road Network

The road network between Ethiopia and Djibouti has a long historical significance and plays a crucial role in regional integration. Historically, the road network connecting Ethiopia and Djibouti dates back to the early 20th century when the French colonial administration in Djibouti constructed a road to connect Djibouti port with Addis Ababa, the capital city of Ethiopia (Global Infrastructure Hub, 2018). The road network has since been expanded and improved to facilitate trade, transportation, and communication between the two countries.

The primary route, known as the Djibouti Corridor, connects the Ethiopian capital, Addis Ababa, to the Port of Djibouti. This corridor is a crucial artery for Ethiopia, a landlocked country, as it handles approximately 95% of its total imports and exports (IGAD, 2023). To put it in perspective, the road network is of great relevance due to several factors. Firstly, Djibouti serves as Ethiopia's main access point to the sea, as it is a landlocked country with limited access to maritime trade routes. The road network connecting Djibouti port to major cities in Ethiopia, such as Addis Ababa, provides a crucial link for the transportation of goods and commodities, thereby supporting Ethiopia's import and export activities (Ibid). Secondly, by facilitating the movement of people, goods, and services, the road network supports the economic development of both countries (Global Infrastructure Hub, 2018).

In recent years, there have been efforts to further develop and upgrade the road network between Ethiopia and Djibouti to enhance its efficiency and capacity. New road construction projects, such as the Addis Ababa-Djibouti expressway, have been undertaken to improve connectivity and reduce travel time between the two countries (World Bank, 2022). These infrastructure investments are expected to boost trade and investment, spur economic growth, and strengthen regional cooperation in the East African region.

The Addis-Djibouti corridor being the vital trade route for Ethiopia, it has become one of the top priorities of the country infrastructural development. Ethiopia has been implementing the RSDP since 1997, which has significantly increased the road network from 26,550 km in 1997 to 120,171 km in 2017. This expansion has improved road density and the condition of the road network, facilitating better connectivity between Ethiopia and Djibouti (UNDP, 2020). The project aims to improve the road from Addis Ababa to Djibouti, including the Mieso-Dire Dawa section. This upgrade is crucial for enhancing trade efficiency and reducing transport time between the two countries (World Bank, 2023).

Overall, the road network between Ethiopia and Djibouti plays a crucial role in promoting regional integration and economic cooperation. As a key link in the transportation network connecting the landlocked country of Ethiopia to the maritime gateway of Djibouti, the road network facilitates trade, enhances connectivity, and fosters closer ties between countries in the region. Continued investment in infrastructure development and coordination between stakeholders will be essential to further advantage the potential of the road network for regional integration and sustainable development.

3.2.3 Water and Energy Integration

Transboundary water and energy integration between Ethiopia and Djibouti is a crucial aspect of their bilateral relationship, given the shared water resources and the potential for mutually beneficial energy cooperation. The two countries have recognized the importance of collaborating on water and energy projects to enhance their economic development and regional stability. One key initiative is the construction of the Ethiopia-Djibouti Water and Energy Pipeline, which aims to transport water and electricity from Ethiopia to Djibouti. This project not only addresses Djibouti's water scarcity issues but also provides Ethiopia with a reliable market for its energy export (Zelalem, 2021).

According to an information from African Development Bank Group (2013), Ethio-Djibouti power interconnection comprises various significances. Through the power interconnection,

Ethiopia has continued acquiring foreign currency through which has supported domestic economic activities. Equally, Djibouti has secured reliable electric service at reasonable price. What is more profound is that the power connection has helped to boost the interconnection between the two countries and served as an exemplary undertaking for the rest of the HoA. In line with this, Zelalel (2021) twelve border towns are electrified to give access to the remotely located rural population of the two nations.

While hydroelectric imports accentuate Djibouti's economic and political dependency on its neighbor, it appears to consider it a price worth paying. In conclusion, transboundary water and energy integration between Ethiopia and Djibouti is not only relevant but also essential for the sustainable development of both countries and the broader East African region. Collaboration in these sectors can lead to mutual benefits, increased resilience to climate change, and enhanced regional prosperity.

3.2.4 Telecommunication and Digital infrastructure

As a study by Zelalem (2021) indicated, telecommunication and digital connectivity between Ethiopia and Djibouti play a crucial role in fostering economic development and growth in both countries. The two nations are strategically located in the Horn of Africa, sharing a border and sharing a vital trade route through the port of Djibouti. The seamless connectivity between the two countries creates opportunities for enhanced communication, data exchange, and trade facilitation (ibid).

One of the key advantages of strong telecommunication and digital connectivity between Ethiopia and Djibouti is the improvement in cross-border trade and business operations. With efficient communication channels and reliable internet connectivity, businesses in both countries can easily collaborate, share information, and conduct transactions, leading to increased trade volumes and investments (Zelalem, 2021). Furthermore, reliable telecommunication infrastructure allows for the efficient operation of industries such as banking, logistics, and e-commerce, contributing to the growth of the digital economy in both countries. This, in turn, creates job opportunities, enhances productivity, and fosters innovation and entrepreneurship.

Additionally, improved connectivity can attract foreign investments and partnerships, as multinational companies seek to leverage the opportunities presented by a connected market

in the region. The alignment of telecommunication and digital infrastructure between Ethiopia and Djibouti also drives the development of smart cities, digital services, and government initiatives that contribute to the overall economic growth and competitiveness of both countries.

A number of initiatives have helped to improve the digital connectivity between the two countries. The Eastern Africa Regional Digital Integration Project Series of Projects-II (EARDIP-SOP-2), funded by the World Bank, aims to increase cross-border broadband connectivity, data flows, and digital trade in the region. The project will utilize \$130 million in IDA financing to advance digital market integration in Eastern Africa, including Djibouti and Ethiopia. It will increase affordable access to regional broadband connectivity, strengthen the enabling environment for cross-border digital trade and data flows, and develop digital skills (World Bank, 2023).

In conclusion, the infrastructure system between Ethiopia and Djibouti serves as a prominent example in many ways. The main significance is best explained by the role of the infrastructure connectivity in boosting economic and political interdependence between themselves. The various forms of infrastructural connectivity between the two countries have enhanced the economic interdependence and regional aspirations of regional integration in the Horn of Africa as well.

Chapter Four: The Role of Infrastructural Connectivity and Regional Integration in the Horn of Africa

This chapter addresses the central research question of this thesis: How does infrastructural connectivity foster regional integration? The analysis will delve into how transport networks, energy infrastructure, and digital connectivity contribute to economic, social, and political integration in this strategically important yet often volatile region. The chapter will begin by providing an overview of the current state of infrastructure in the region. Following this, the chapter presents analysis of key findings regarding the roles of various forms of infrastructural linkage in fostering regional integration. Subsequent sections will analyze the impact of infrastructural connectivity on economic, social, and political integration, highlighting both the enabling factors and the existing challenges. The chapter will also explore the constraints hindering infrastructure development and regional integration, including issues of financing, conflict and political instability, economic disparities among nations, lack of commitment and poor governance of shared infrastructures. Finally, it will discuss the opportunities and potential future directions for leveraging infrastructure to achieve deeper and more sustainable regional integration.

4.1. Current Status of Infrastructural Connectivity in the HoA

Neighboring nations in the sub-region are connected with different forms of transport infrastructures, trans-boundary energy lines and water pipes. Nevertheless, the current state of infrastructure connectivity in the region is characterized by uneven development and critical missing links. In spite of the economic relevance of the regional infrastructure connectivity, the existing conditions and qualities of the physical infrastructure hardly meets the demands. Data collected from the IGAD Infrastructure Database shows that while some countries like Kenya have relatively well-developed transport networks, others, such as Somalia and South Sudan, lag significantly behind. For instance, Somalia's road density is approximately 3.5 per 100 square kilometers, which is lower than most benchmarks in Africa and the world (IFC, 2024).

Broadly put, the cross-border infrastructure linkage between and among countries of the HoA is less developed. Ethiopia, being connected to most of the Horn countries with roads, railways and other vital routes, it stands tall in infrastructure led integration effort.

Nevertheless, Ethiopia's connectivity with its neighbors still suffers from the uneven development of intra-state infrastructure in the HoA. In line with this, Tefera (2025, interview)² argues that the uneven development of road connectivity between neighboring countries has affected the movement of goods and peoples, thereby, hindering the economic interdependence efforts. According to Moges (2025, interview)³ the road connectivity between Ethiopia and Somalia, for example, is limited to a few key routes, and generally in a poor condition. Equally, the roads that connect Ethiopia with Kenya and South Sudan are impoverished and less reliable.

In the broadest sense, the current state of infrastructural linkage in the regions, which is depicted by uneven development, hampers trade and the movement of people, limiting the potential for regional economic integration. As one of my key informant illustrated, this disparity in infrastructure development creates bottlenecks in regional connectivity (Moges, 2025: interview).⁴ The poor condition of roads, especially in post-conflict areas, increases transport costs, extends travel times, and limits the efficient flow of goods and services across borders. The example from one key informant illustrates this point, stating that only 31.2% of Somalia's rural population is within 2 kilometers of an all-season road compared to 56% in Kenya (Chimeli, 2024, interview).⁵ As Chimeli (2024, interview)⁶ noted, the poor conditions of inter-state transportations infrastructures has limited cross-border communities of the Horn of Africa from accessing market and various services. Such limitations have hindered the mutual gains of neighboring communities and downsized the economic integration efforts of their respective countries.

States alone cannot be blamed for the uneven infrastructural development and the resulting challenges. According to Girum (2025, interview)⁷, the problem can also be attributed to the less involvement of non-state actors in fostering infrastructure – led integration in the region. This unevenness is consistent with the explanations of regional integration by neo-functionalism theory, which emphasize on the role of non-state actors such as interest groups

² Tefera Gebeyehu is a senior researcher currently working in the FDRE Ministry of Urban and Infrastructure. The interview was held in Addis Ababa on 20th March, 2025.

³ Moges Bekele is a researcher and marketing advisor working at Ethiopian Chamber of Commerce. The interview was conducted in Addis Ababa on 12th April, 2025.

⁴ Ibid, 2025

⁵ Pamela Chimeli is a Kenyan Ph.D. Student of Political Science and International Relations in University of Pecs, Hungary. This interview was conducted in October, 2024 in Pecs during my exchange program period.

⁶ Ibid, 2024

⁷ Girum Ashenafi is a Ph.D. candidate in Political Science and International Relations from Addis Ababa University. The interview was conducted in Addis Ababa on April 7, 2025

and technocrats in driving regional integration (Haas, 1958). Equally, this limitation is attributable to the weak and non-existent roles of regional organizations such as IGAD. Accordingly, the finding aligns with the theoretical explanation forwarded by liberal institutionalism, which highlights the significance of institutions and regional organizations in facilitating regional integration among countries (Keohane and Nye, 2012).

Generally, it will be worth noting how the uneven and fragmented cross-border transportation infrastructure in the Horn of Africa has hindered regional integration in the region. In line with this, the finding aligns with previous studies by (Zelalem, 2020; Daniel, 2019; Byiers, 2016) that highlighted, among others, the challenges of infrastructure development in the conflict-ridden Horn of Africa.

The lack of reliable infrastructure disproportionately affects landlocked countries like Ethiopia, hindering their access to global markets and constraining their economic growth. In line with this, Melese (2025, Interview)⁸ attributes the challenge of regional integration to fragmented and less functional cross-border transport infrastructures. The uneven development of transportation connectivity has limited community's access to both local and international markets. Equally, these limitations hinder the region's ability to realize the benefits of regional integration. Among key informants, Moges (2025, interview)⁹ contends that reduced flow of goods and services, higher transportation costs and related factors have negatively affected trade, investments, and economic growth.

4.2. Infrastructural Connectivity and Regional Integration in the HoA

In recent years, there have been significant developments in the transportation, energy and other forms of infrastructure across the nations in the HoA. As such, the following sub-sections provide a comprehensive analysis of the roles of infrastructure connectivity in fostering regional integration in the region. The first sub-section presents the role of transport infrastructure in fostering regional integration. After wards, other vital forms of connectivity such as energy and digital connection and their critical role for regional integration will be discussed.

⁸ Melese Teshome is a researcher and an instructor from Arba Minch University. His research areas include cross-border community interaction and regional integration. The interview was conducted during his visit to Addis Ababa on April 22, 2025.

⁹ Moges Bekele is a researcher and marketing advisor working at Ethiopian Chamber of Commerce. The interview was conducted in Addis Ababa on 12 April 2025.

4.2.1. Transport Connectivity as a Means of Regional Integration

Efficient transportation infrastructure is a fundamental pillar of regional integration. Roads, railways, ports, and air transport systems determine the movement of goods and people across borders, affecting economic interdependence. The existing transportation infrastructures in the Horn of Africa present a mixed picture of development and significant deficits.¹⁰ Road networks vary considerably across the region. Key infrastructures such as the ports of Djibouti are crucial for regional trade, particularly for landlocked Ethiopia, which relies heavily on it for import-export activities. Airports also play a vital role in providing fast and direct access, although this type of connectivity currently serves a smaller portion of the population.

4.2.1.1. Road Connectivity

Inter-state highway roads play significant role in fostering economic integration between countries. The road infrastructure across the HoA is marked by stark contrasts in quality, extent, and connectivity. Key infrastructure corridors have been identified for regional cooperation, aiming to link major cities and ports. Major corridors between economic centers and ports have seen improvements, but large portions remain in poor condition, especially in peripheral and conflict-affected areas. Countries like Ethiopia have been investing heavily in road infrastructure, with major highways connecting key cities and regions. In contrast, countries like Somalia may have more limited road networks due to ongoing conflicts and lack of investment. This severely hampers movement of goods and people, especially for farmers and rural communities.¹¹ The condition of roads in the region can also vary, with some paved highways and many unpaved roads that are prone to damage during the rainy season.

According to informants from both Ethiopian and Kenyan Ministry of Foreign Affairs, underscore the significance of road connectivity in fostering economic integration. Negeyo (2025, interview)¹² argues that Ethiopia's road connection with countries such as Kenya, Sudan, South Sudan, Somaliland and Djibouti has significantly eased movement of people,

¹⁰ Melese Teshome is a researcher and an instructor from Arba Minch University. His research areas include cross-border community interaction and regional integration. The interview was conducted during his visit to Addis Ababa on April 22, 2025.

¹¹ <https://sominvest.gov.so/key-sectors/transport-infrastructure/>

¹² Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA,FDRE . The interview was conducted through email on April 30, 2025.

goods and services among states of the region. Road connections between South Sudan and Uganda, Djibouti and Somalia as well as the LAPSSET project have enormous role in facilitating trade, tourism, investment and free movement of people. In so doing, the road connectivity in the sub-region is paving the way for regional integration (Negeyo, 2025, interview).¹³

The Horn of Africa is undergoing significant infrastructure development aimed at strengthening strategic economic corridors that link inland populations to ports and markets. This includes the upgradation of approximately 6,000 km of roads across four priority transport corridors, with investments totaling around \$9 billion to enhance trade, productivity, and regional spillover benefits.¹⁴ In this aspect, Walter Muhia (2024, interview)¹⁵ contends that road connectivity has continued playing its role in boosting economic interdependencies which are precursors for regional integration. Muhia argues, “Increased economic interdependencies among neighboring states can gradually lead to political cooperation between and among nations.”¹⁶

The road connectivity has wider significance for landlocked countries such as Ethiopia, South Sudan and Uganda. Nevertheless, the challenges persisted. While some countries like Ethiopia have made progress in expanding their road infrastructure, others, such as Somalia and South Sudan, have highly dilapidated or non-existent road and railway systems. Muhia (2024, interview)¹⁷ comments how observable problems of inter-state and inter-city road connectivity exemplify the impact of lacking inter-city transport infrastructure on connectivity. The absence of well-developed transport corridors can result in long and arduous journeys, hindering meaningful interactions between urban economies while at the same time profoundly affecting the economies of landlocked nations.

Despite the relevance of road connectivity in enhancing the regional integration efforts, there are still unmet demands and gaps. Several major transportation projects are underway or planned to address these gaps. The LAPSSET corridor which aims to link Kenya with

¹³ Ibid, 2025

¹⁴ <https://www.hoainitiative.org/pillar/infrastructure-connectivity>

¹⁵ Walter Muhia is a Kenyan diplomat currently attending his doctoral study in political economy at the University of Pecs, Hungary. The interview was conducted on October 2024 in Pecs, Hungary during my time as an exchange student.

¹⁶ Ibid, 2025

¹⁷ Ibid,2025

Ethiopia, Uganda, and South Sudan through a railway, highway, oil pipeline, and fiber-optic cable, along with airports and ports is worth mentioning (Muhia, 2024, interview)¹⁸.

According to Negeyo (2025, interview),¹⁹ there are some regional initiatives that try to address the gaps observed in intra-regional connectivity. Among these, the Horn of Africa Initiative places the development of regional corridors at the center of its regional integration agenda, focusing on upgrading roads and transforming transport corridors into economic corridors to stimulate trade and economic diversification. These efforts recognize that well-developed transport infrastructure is fundamental to reducing costs and enhancing economic efficiency in the region.²⁰

4.2.1.2. Railway Connectivity

Railway infrastructure in the HoA is relatively underdeveloped compared to other regions. Ethiopia stands out as a leader in this regard, with modern electric railways connecting major cities like Addis Ababa and Djibouti. However, other countries in the region have limited or no operational railways, which hinders cross-border trade and connectivity. According to a recent study by Zelalem (2021), the Ethiopia- Djibouti railway has enormous economic significance for both nations. For Ethiopia, in particular, the railway connectivity has remained one of the prominent transit infrastructure through which it imports and exports vital items.

Railway connectivity between Ethiopia and Djibouti serves as an example of workable infrastructural linkage in the Horn of Africa. The 752 km electrified standard gauge railway connects Addis Ababa to Djibouti's ports. Since its completion, it has transformed regional trade, carrying 680,000 passengers and 9.5 million metric tons of cargo by May 2024, and has significantly increased transportation efficiency and economic integration between Ethiopia and Djibouti.²¹

¹⁸ Walter Muhia is a Kenyan diplomat currently attending his doctoral study in political economy at the University of Pecs, Hungary. The interview was conducted on October 2024 in Pecs, Hungary during my time as an exchange student.

¹⁹ Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA,FDRE . The interview was conducted through email on April 30, 2025.

²⁰ Ibid, 2025

²¹ <https://english.news.cn/africa/20240911/f8e1a6274ff44ef0b8b130e164604a86/c.html>

While explaining the relevance of the railway connectivity, Negeyo (2025, interview)²² underscores that the connectivity has helped both countries in many ways. Even more so, the railway linkage has enhanced Ethiopia's dedication in boosting its economic development through trade by smoothing export-import flow of landlocked states. Negeyo further depicts that the railway connectivity has created ideal option as connection to the coasts/ports by easing supply chain for landlocked countries. Equally, it plays significant role in improving economic stability by reducing inflation related to cost of transportation.

Among the HoA countries, the landlocked Ethiopia would seem to identify the relevance of railway connectivity. Ethiopia plans to extend railway lines to Kenya (Mojjo–Shashemene–Hawassa–Moyale), South Sudan (Sebeta–Ambo–Jimma), and Sudan (Woldia–Bahir Dar–Worota), aiming to further integrate the region and facilitate trade.²³ According to Muhia (, 2024, interview)²⁴, Ethiopia's observable dedication in enhancing its infrastructural connectivity with its neighbors has served as an example in many ways. On the one hand, it has diversified Ethiopia's access to port services. On the other hand, the connectivity has paved the way for the countries of the region to come together and move to the higher level of regional integration.

4.2.1.3. Ports

The Horn of Africa is strategically located along the Red Sea, making ports a vital part of the region's transportation infrastructure. Djibouti's port is one of the busiest in the region, serving as a gateway for landlocked countries like Ethiopia. Eritrea also has ports like Massawa and Assab, although they have faced challenges due to political disputes and sanctions. Somalia has potential for port development, with ports in Mogadishu and Berbera being upgraded in recent years.²⁵

Ports are critical gateways for the landlocked and coastal nations of the HoA, serving as hubs for regional and international trade. In so doing, some of the ports of HoA has undeniable role in fostering regional integration. While illustrating the economic relevance of ports in the

²² Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA,FDRE . The interview was conducted through email on April 30, 2025.

²³ <https://www.trademarkafrica.com/news/railway-for-regional-integration-of-the-horn/>

²⁴ Walter Muhia is a Kenyan diplomat currently attending his doctoral study in political economy at the University of Pecs, Hungary. The interview was conducted on October 2024 in Pecs, Hungary during my time as an exchange student.

²⁵ Ibid

HoA, Moges (2025, interview) ²⁶ states that Djibouti Port, being the most strategically important port, has been serving as Ethiopia's principal maritime outlet. It handles large volumes of containers, bulk goods, and oil, and is equipped with modern facilities that support high trade throughput and regional economic activity. Berbera Port of Somaliland is another key maritime gateway on the Gulf of Aden, handling containers, bulk goods, and livestock. In this view, Moges explains that the port supports trade for Somaliland and neighboring regions, and is being upgraded to handle increasing traffic and serve as an alternative to Djibouti for Ethiopian trade.

Ethiopia, being the biggest landlocked nation in the HoA, has become a focal point in the discussions of access to port. After losing its access to sea following the separation of Eritrea, the country has been working to expand its options of gaining sustainable port access. As Negeyo (2025, interview) ²⁷ pointed out Ethiopia has continued to enhance its connectivity with neighboring countries. Owing to its quest for port access, Ethiopia has linked its central and peripheral areas with the neighboring countries through roads, railways and energy. As such, the demand for port access has remained to be one of the driving event for accelerated infrastructural development and regional integration in the HoA.

Evidently, ports play vital role in creating an opportunity for fostering regional economic integration. Owing to this, the region's port infrastructure is expanding, but remains vulnerable to political instability and conflict, which can disrupt operations and damage facilities. Chimeli (2024, interview) ²⁸ stressed that the ongoing internal conflict and instability in Somalia has put Somalia behind others in both economical rewards and multilateral integration. The conflict has made Somalia the less feasible choice in the eye of the neighbors that seek to use ports. Similarly, due to Eritrea's unpredicted approach towards its neighbors, significant ports such as Massawa and Asseb have remained idle for decades.

4.2.1.4. Airport Hubs

Air transportation plays a crucial role in connecting countries among themselves and to the rest of the world. Major airports like Bole International Airport in Addis Ababa, Jomo

²⁶ Moges Bekele is a researcher and marketing advisor working at Ethiopian Chamber of Commerce. The interview was conducted in Addis Ababa on 12th April, 2025.

²⁷ Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA, FDRE . The interview was conducted through email on April 30, 2025.

²⁸ Pamela Chimeli is a Kenyan Ph.D. Student of Political Science and International Relations in University of Pecs, Hungary. This interview was conducted in October, 2024 in Pecs during my exchange program period.

Kenyatta International Airport in Nairobi, Djibouti–Ambouli International Airport in Djibouti, and Aden Adde International Airport in Mogadishu serve as important hubs for both passenger and cargo flights in the sub-region. Investments in airport infrastructure have been made to improve efficiency and safety, but some airports still face challenges such as overcrowding and outdated facilities (Abel, 2025, interview).²⁹

As pointed out by Abel (2025, interview)³⁰, in regions such as the HoA, where diverse economic and political challenges stand tall, air transportation is less significant means of regional connectivity. One of the reasons is that air connectivity is concentrated in major cities, with significant disparities in access and quality. Among the major air transportation hubs in the HoA, Ethiopia’s Bole International Airport is a leading aviation hub, with modern airport facilities and extensive international connections. Other countries in the region are investing in airport upgrades and new constructions to improve connectivity and support economic growth.

As compared to other types of transportation infrastructures, airports play relatively less role in fostering regional integration in regions such as the HoA. Less feasible availability of the service coupled with the economic bottlenecks of the nations in the region has further limited the potential of airports as an integration mechanism. As Negeyo (2025, interview)³¹ elucidated, peripheral access to air transportation is challenging in less developed areas such as the HoA. He argues that smaller and more remote cities often lack regular air service, limiting their integration into regional and global markets.

So far, the previous sub-sections have detailed condition, extent, and connectivity of transportation infrastructure in the HoA. As the finding illustrates, major cities and economic centers are relatively well connected by road, rail, and air, while peripheral areas remain marginalized due to poor infrastructure and indirect routes. This has created significant disparities in access to markets, services, and opportunities. Regional initiatives are focusing on developing integrated transport corridors that link cities, ports, and borders, aiming to create a more efficient and cohesive regional network. While the prospects are promising, there are observable challenges as well. Persistent issues include poor road and bridge conditions, limited rail coverage, vulnerability of ports to conflict, and uneven air

²⁹ Abel Netsanet is regional marketing analyst of Bole International Airport. The interview was conducted in Addis Ababa, on May 1st, 2025.

³⁰ *ibid*

³¹ Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA,FDRE . The interview was conducted through email on April 30, 2025.

connectivity. Investment and cooperation are needed to address these gaps and realize the region's economic potential. In summary, while the Horn of Africa has made notable progress in developing transportation links-especially in rail and port sectors-major challenges remain in achieving balanced, reliable, and inclusive connectivity across the region.

4.2.2. Energy Connectivity as a Means of Integration

Energy infrastructure plays a crucial role in the regional integration by fostering economic cooperation, enhancing energy security, and promoting sustainable development across member countries. In terms of energy connectivity, the region is advancing the development of regional energy markets through various initiatives (Tefera, 2025, interview).³² These initiatives focus on improving electricity access and reliability, supporting cross-border power trade, and integrating renewable energy sources at lower costs. Notable projects include the Ethiopia-Djibouti power system interconnection, Ethiopia-Eritrea transmission lines, and power transmission developments in Somalia and Sudan, which collectively aim to create a more interconnected and efficient regional power network.

Energy cooperation acts as a catalyst for peaceful and cooperative relations, accelerating economic integration by linking energy markets and enabling cross-border power trade. Ethiopia plays vital role in energy led integration in the HoA. Negeyo (2025, interview)³³ remarks Ethiopia's energy/grid connection with Kenya, Djibouti and Sudan as unparalleled undertaking in the region. He asserts that Ethiopia has continued to expand its energy connectivity with South Sudan and has continued discussion with Tanzania leading the way energy connection. Similarly, Tefera (2025, interview)³⁴ noted that Ethiopia, with its vast hydropower potential, is central to this process, positioning itself as a potential regional energy superpower that can supply electricity to neighboring countries such as Kenya, Djibouti, and Sudan, thus strengthening interdependence and collaboration in the region.

³² Tefera Gebeyehu is a senior researcher currently working in the FDRE Ministry of Urban and Infrastructure. The interview was held in Addis Ababa on 20th March, 2025.

³³ Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA,FDRE . The interview was conducted through email on April 30, 2025.

³⁴ Tefera Gebeyehu is a senior researcher currently working in the FDRE Ministry of Urban and Infrastructure. The interview was held in Addis Ababa on 20th March, 2025.

Above all, the GERD is expected to increase Ethiopia's electricity generation capacity, potentially enabling exports to other energy-challenged countries.³⁵

Regional energy interconnections, including power system linkages between Ethiopia, Sudan, Djibouti, and Kenya, exemplify ongoing efforts to create a more integrated and reliable energy network. As noted by Muhia (2024, interview)³⁶, these initiatives not only improve electricity access and affordability but also stimulate other infrastructure developments like transport and port linkages, thereby reinforcing broader regional integration. Furthermore, energy integration supports economic growth by reducing costs, attracting investment, and enabling economies of scale, which are critical for the Horn's development goals amid rapid population growth and energy deficits.

Energy led regional integration benefits countries in the HoA in so many ways. Apart from its economic advantages, energy connectivity also adds efforts in fostering regional integration (Zelalem, 2021). However, challenges such as political instability, lack of trust among countries, and infrastructural weaknesses persist, influencing the pace and effectiveness of energy-led integration. In line with this, Negeyo (2025, interview)³⁷ contends that despite this potential, energy infrastructure struggles to keep pace with the region's growth, with grids remaining unreliable and many countries dependent on costly fuel imports. Notwithstanding these hurdles, the prospects for energy cooperation remain promising, with regional energy integration seen as a strategic pathway to achieving sustainable development, peace, and prosperity in the HoA.

4.2.3. Digital Connectivity as a Means of Integration

Information and Communication Technology (ICT) infrastructure strengthens regional cooperation through digital trade and governance. While remarking recent developments, Abel (2025, interview)³⁸ underscores that investment in fiber optic cables linking Ethiopia, Kenya, and Djibouti has improved digital connectivity. With the improved digital

³⁵ Ibid

³⁶ Walter Muhia is a Kenyan diplomat currently attending his doctoral study in political economy at the University of Pecs, Hungary. The interview was conducted on October 2024 in Pecs, Hungary during my time as an exchange student.

³⁷ Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA,FDRE . The interview was conducted through email on April 30, 2025.

³⁸ Abel Netsanet is regional marketing analyst of Bole International Airport. The interview was conducted in Addis Ababa, on May 1st, 2025.

connectivity comes the market and economic integration results. In line with this, Moges (2025, interview)³⁹ indicated that there is an observable improvement in digital connectivity in the HoA. He asserted that local markets and cross-border trade exchanges are being supported by digital infrastructure. As such, the potential of digital connectivity in fostering regional integration has grown significantly.

The development of ICT infrastructure is also seen as crucial for attracting foreign investment and fostering economic growth in the region. Chimeli (2024, interview)⁴⁰ observed similar economic importance of digital connectivity in the HoA. As she puts it, digital platforms have emerged as significant players in the region's economy, particularly in Somalia, where they control logistics and facilitate the circulation of people, goods, and value. These platforms have thrived in a formal regulatory void, capitalizing on the need for connectivity and financial services.

As compared to other regions of the world, digital connectivity in the HoA faces various forms and levels of challenges. Muhia (2024, interview)⁴¹ pointed out that cybersecurity concerns and uneven digital accessibility pose risks to full integration. While cybersecurity is perceived barrier, there are also other challenges that hinder digital connectivity in the HoA. Among others, the ICT sector in Africa is characterized by huge differences across specific services. Internet density in Africa is still low compared to other developing countries. Within the Horn of Africa, there are notable disparities in digital connectivity. In 2019, the number of internet users ranged from 56% of the population in Djibouti to just 1.3% in Eritrea.⁴²

While the challenges related to digital infrastructure connectivity in the HoA are profound and bottleneck to the development of the region as a whole, there are also observable prospects. The Horn of Africa Initiative aims to develop a single regional and interconnected digital market, focusing on priority regional digital infrastructure like submarine festoon

³⁹ Moges Bekele is a researcher and marketing advisor working at Ethiopian Chamber of Commerce. The interview was conducted in Addis Ababa on 12th April, 2025.

⁴⁰ Chimeli is a Kenyan Ph.D. Student of Political Science and International Relations in University of Pecs, Hungary. This interview was conducted in October, 2024 in Pecs during my exchange program period.

⁴¹ Walter Muhia is a Kenyan diplomat currently attending his doctoral study in political economy at the University of Pecs, Hungary. The interview was conducted on October 2024 in Pecs, Hungary during my time as an exchange student.

⁴² <https://thenationonline.net/eight-african-countries-with-outstanding-railway-systems/>

cables and terrestrial links, as well as regulatory harmonization.⁴³ Initiatives are underway to strengthen national coordination mechanisms and regional consultative processes to support member states' policy commitments in the area of migration data and digitalization, which can further promote regional integration. Furthermore, projects like the Eastern Africa Regional Digital Integration Project indicate ongoing efforts to enhance digital connectivity across the IGAD region.⁴⁴

4.3. Challenges and Opportunities

The development of roads, railways, ports, and telecommunications networks has the potential to facilitate cross-border trade, enhance economic cooperation, and promote social and cultural exchanges among countries in the region. For instance, the Djibouti-Ethiopia Railway project has significantly reduced transportation costs and transit times between the two countries, boosting trade and economic growth. Similarly, the LAPSSET initiative, which aims to connect Kenya, South Sudan, and Ethiopia through a network of ports, railways, and pipelines, has the potential to transform the economic landscape of the region and promote regional cooperation. However, challenges such as inadequate funding, political tensions, and security concerns remain significant obstacles to realizing the full potential of infrastructural connectivity.

4.3.1. Challenges

Despite the strategic importance and ongoing projects, several challenges hinder the full realization of the benefits of infrastructural linkage in the HoA. The historical context of the Horn of Africa (HOA) significantly influences current integration efforts through various interrelated factors, including conflicts and political instability, economic disparities and structural problems, lack of commitment and implementation and socio-economic dynamics.

4.3.1.1. Financial Challenges

A significant challenge hindering infrastructural connectivity and regional integration in the sub-region is the substantial financing gap for infrastructure development. The African Development Bank (AfDB) estimates that the continent requires between \$130 billion and \$170 billion annually for infrastructure financing, with a considerable portion of this need

⁴³ <https://futures.issafrica.org/special-reports/guide.pdf?report=region%2Fhorn-of-africa&topic=09-basic-infrastructure>

⁴⁴ *ibid*

unmet in the Horn. In support of this, Negeyo (2025, interview) ⁴⁵ noted, high capital requirements, the perception of Africa as a high-risk investment destination due to political instability and economic volatility, and limited domestic funding contribute to this gap. Many African countries also face high public debt levels, further restricting their ability to finance large-scale infrastructure projects through public borrowing.

Walter Muhia (2024, interview) ⁴⁶ argues that innovative financing models, including public-private partnerships (PPPs), infrastructure bonds, and blended finance, are increasingly being explored to leverage private capital and expertise. Development finance institutions (DFIs) and geopolitical funds also play a crucial role in providing concessional financing and de-risking projects to attract private investors. However, challenges such as restrictive contract terms associated with some funding sources and limited awareness and accessibility of these funds for local private sector actors persist.

4.3.1.2. Conflicts and Political Instability

The HoA has experienced numerous conflicts, both inter-state and intra-state wars, which have shaped the political landscape. Recent and ongoing examples include the Ethiopia-Eritrea border war and ongoing civil wars in Somalia, Sudan and South Sudan. These conflicts not only create a climate of insecurity but also foster a reluctance to engage in regional cooperation, as nations focus on national security and territorial disputes rather than integration efforts. The historical context of these conflicts continues to influence diplomatic relations and trust among states, making collaborative efforts challenging.

Broadly put, security and political instability are directly related to the both economic development of a given country and the region it operates. The HoA region is characterized by conflict and political instability in several countries, which disrupts infrastructure development and maintenance, discourages investment, and complicates cross-border cooperation. Moges (2025, interview) ⁴⁷ contends that the existing political instability in many

⁴⁵ Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA,FDRE . The interview was conducted through email on April 30, 2025.

⁴⁶ Walter Muhia is a Kenyan diplomat currently attending his doctoral study in political economy at the University of Pecs, Hungary. The interview was conducted on October 2024 in Pecs, Hungary during my time as an exchange student.

⁴⁷ Moges Bekele is a researcher and marketing advisor working at Ethiopian Chamber of Commerce. The interview was conducted in Addis Ababa on 12th April, 2025.

of the countries of the HoA has forced them to shift their focus from regional integration efforts towards their local problems. Accordingly, states of the HoA have always given less priority for cross-border infrastructure than their ongoing local problems.

Chimeli (2024, interview)⁴⁸ identified that ongoing conflicts, political tensions, and border disputes between countries create an uncertain environment that deters investment and disrupts the construction and operation of infrastructure. The region's political dynamics are often characterized by subversion, where states may sponsor destabilizing activities against their neighbors, further undermining regional cooperation. The recent history of conflicts and instability in countries like Ethiopia, Sudan, and Somalia highlights the fragility of the region and the significant impact of security challenges on development efforts. Without sustained peace and security, realizing the full potential of infrastructure for regional integration remains a formidable task.

4.3.1.3. Socio-Economic Problems

Melese (2025, interview)⁴⁹ noted that the region's socio-economic conditions, characterized by poverty, underdevelopment, and economic disparities, are rooted in its historical context. Most countries in the HoA rank among the least developed globally, with limited infrastructure and economic integration. This economic backdrop affects the feasibility of regional integration, as states struggle to prioritize collective economic goals over immediate national interests. The uneven distribution of resources, such as oil and agricultural land, further complicates integration efforts, as countries may compete for access rather than collaborate.

Fragmented and incomplete infrastructure networks are partly the result of the socio-economic challenges of the region. Muhia (2024, interview)⁵⁰ noted that the existing transport infrastructure is often fragmented, with significant gaps in connectivity between countries. Many roads and corridors are in poor condition or incomplete, limiting the efficiency of

⁴⁸ Pamela Chimeli is a Kenyan Ph.D. Student of Political Science and International Relations in University of Pecs, Hungary. This interview was conducted in October, 2024 in Pecs during my exchange program period.

⁴⁹ Melese Teshome is a researcher and an instructor from Arba Minch University. His research areas include cross-border community interaction and regional integration. The interview was conducted during his visit to Addis Ababa on April 22, 2025.

⁵⁰ Walter Muhia is a Kenyan diplomat currently attending his doctoral study in political economy at the University of Pecs, Hungary. The interview was conducted on October 2024 in Pecs, Hungary during my time as an exchange student.

cross-border transport and trade. As such, impoverished socio-economic condition of the region can be regarded as one of the main causes of fragmentation and unevenness of infrastructure connectivity.

The HoA countries face significant economic disparities, with Kenya being the strongest regional economy and most other countries ranking among the least developed. The region also suffers from serious structural problems, such as an underdeveloped private sector and reliance on primary commodity exports. Moges (2025, interview)⁵¹ argues that these economic challenges make it difficult for countries to engage in meaningful regional integration based on market forces. Similarly, as Negeyo (2024, interview)⁵² indicated economic disparities among the countries of the region has affected the development of intra-regional infrastructures and hindered regional integration at the same time.

4.3.1.4. Governance and Institutional Challenges

The establishment of regional organizations, such as the Intergovernmental Authority on Development (IGAD), reflects historical attempts to foster cooperation. However, these institutions often face challenges due to the historical context of mistrust and competition among member states (Zelalem, 2021). While IGAD aims to address regional issues, its effectiveness is often undermined by the historical political dynamics and the dominance of specific countries, particularly Ethiopia, which can skew integration efforts to serve national interests rather than collective goals (ibid).

Tefera (2024, interview)⁵³ illustrated that weak governance and institutional capacities at both national and regional levels pose significant constraints on infrastructure development. Issues such as poor governance, corruption, and a lack of transparency in project tendering and implementation can deter potential investors and hinder effective planning and execution of infrastructure projects. Similarly, Muhia (2024, interview)⁵⁴ adds that the multiplicity of

⁵¹ Moges Bekele is a researcher and marketing advisor working at Ethiopian Chamber of Commerce. The interview was conducted in Addis Ababa on 12th April, 2025.

⁵² Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA,FDRE . The interview was conducted through email on April 30, 2025.

⁵³ Tefera Gebeyehu is a senior researcher currently working in the FDRE Ministry of Urban and Infrastructure. The interview was held in Addis Ababa on 20th March, 2025.

⁵⁴ Walter Muhia is a Kenyan diplomat currently attending his doctoral study in political economy at the University of Pecs, Hungary. The interview was conducted on October 2024 in Pecs, Hungary during my time as an exchange student.

regional economic communities (RECs) in Africa, with overlapping membership, also leads to coordination challenges and can dilute the commitment of member states to any single regional integration agenda, including IGAD. Furthermore, the slow implementation of regional laws and protocols, often due to cumbersome legislative approval processes within member states, impedes the progress of integration. The lack of strong regional institutions with adequate human and financial capacity further exacerbates these challenges.

On the same vein, Negeyo (2025, interview)⁵⁵ attributes the problem of weak institutional frameworks to an overlapping membership of Horn countries in to different regional arrangements. All countries of the HoA are members to IGAD, COMESA, and other multilateral arrangements. Accordingly, their focus and priorities shift owing to their policy orientation as well as national interests. Similarly, Muhia (2024, interview)⁵⁶ argues that institutional weaknesses, including limited capacity of national agencies and lack of harmonized policies, impede coordinated regional infrastructure development. Somalia, for example, faces challenges due to weak institutions and nascent national agencies, affecting its ability to plan and implement infrastructure projects effectively.

4.3.2. Opportunities

In the previous sub-section, attempt was made to identify key challenges that hindered infrastructure development in the HoA and regional integration by extension. In this sub-section, discussion about opportunities for overcoming the challenges will be covered.

4.3.2.1. Strategic Infrastructure Corridors

The development of strategic infrastructure corridors presents a significant opportunity to foster deeper regional integration. Muhia (2024, interview)⁵⁷ contends that strengthening these economic corridors will connect inland populations to ports and markets, increasing access to economic opportunities and improving regional spillover benefits. He asserts that by linking ports to economic centers and global markets, these corridors can significantly

⁵⁵ Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA,FDRE . The interview was conducted through email on April 30, 2025.

⁵⁶ Walter Muhia is a Kenyan diplomat currently attending his doctoral study in political economy at the University of Pecs, Hungary. The interview was conducted on October 2024 in Pecs, Hungary during my time as an exchange student.

⁵⁷ Ibid,2024

boost national and regional trade. Similarly, Negeyo (2025, interview)⁵⁸ stated that the focus should be on creating integrated networks of road, rail, and port infrastructure designed to stimulate economic development and facilitate the movement of goods and people. Transforming existing transport corridors into comprehensive economic corridors, with incentives for trade and economic activities along their routes, holds immense potential for wealth generation and socio-economic advancement.

4.3.2.2. Regional Energy Markets and Interconnections

Establishing and expanding regional energy markets and power interconnections offer a crucial pathway towards enhanced integration in the HoA. According to Tefera (2024, interview)⁵⁹, improving electricity services and increasing access for both populations and businesses will have a transformative impact on economic development and quality of life. Supporting regional power trade and improving the reliability and efficiency of power supply are key objectives. The region's significant potential for renewable energy resources, such as hydropower, solar, and wind, can be leveraged to provide access to additional power supply at lower costs and promote environmental sustainability. Moges (2025, interview)⁶⁰ underscored that encouraging private sector participation in regional power trade can further drive investment and innovation in this critical sector.

4.3.2.3. Digital Connectivity and the Digital Economy

As Abel (2025, interview) noted, expanding digital infrastructure and fostering a vibrant digital economy represent a major opportunity. Developing digital infrastructure, including submarine cables and terrestrial links, is essential for improving connectivity. Creating a single regional data market with harmonized regulations and a focus on cybersecurity will facilitate cross-border digital services, including e-government and digital payments. Tewodros (2024, interview)⁶¹ posits that ICTs play a vital role in enabling trade,

⁵⁸ Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA, FDRE. The interview was conducted through email on April 30, 2025.

⁵⁹ Tefera Gebeyehu is a senior researcher currently working in the FDRE Ministry of Urban and Infrastructure. The interview was held in Addis Ababa on 20th March, 2025.

⁶⁰ Moges Bekele is a researcher and marketing advisor working at Ethiopian Chamber of Commerce. The interview was conducted in Addis Ababa on 12th April, 2025.

⁶¹ Tewodros Belete is an economist currently working as trade consultant for the firm named East African Consultants. The interview was conducted in Addis Ababa on March 22, 2025.

communication, and innovation, and their expansion will have a profound impact on economic and social integration. Leveraging the power of digital platforms for e-commerce and other economic activities, as seen in Somalia, can drive growth and create new opportunities across the region.

4.3.2.4. Policy and Regulatory Harmonization

Harmonizing policies and regulations across various sectors enhances holistic connectivity. This includes aligning trade policies, customs procedures, energy regulations, and digital standards to reduce barriers to cross-border exchange and investment. In support of this, Moges (2025, interview)⁶² underlines that removing non-physical barriers to trade, such as cumbersome administrative procedures and differing standards, is particularly important for boosting intra-regional trade. The Horn of Africa Initiative recognizes the need for policy and regulatory harmonization to address the diseconomies of small markets in trade, energy, and digital sectors.

4.3.2.5. Strengthening Regional Institutions

Robust regional institutions, particularly IGAD, are essential for coordinating and driving economic interdependence among nations in a given area. Addressing the challenges faced by these institutions, such as limited funding, inadequate human capacity, and at times, a lack of strong enforcement mechanisms, is crucial for enhancing their effectiveness. While summarizing the relevance of regional institutions, Negeyo (2025, interview)⁶³ adds that strengthening their mandate and ensuring consistent support from member states will enable them to play a more proactive role in facilitating infrastructure development, policy harmonization, and overall regional integration.

In summary, the analysis presented in this chapter underscores the crucial and multifaceted role of infrastructural connectivity in fostering regional integration in the Horn of Africa. The interconnectedness of transport, energy, and digital infrastructure is demonstrably vital for driving economic growth by facilitating trade, attracting investment, and enabling the development of regional value chains. Furthermore, improved connectivity has profound

⁶² Moges Bekele is a researcher and marketing advisor working at Ethiopian Chamber of Commerce. The interview was conducted in Addis Ababa on 12th April, 2025.

⁶³ Negeyo Mamo is Counsellor II, International Organizations Affairs Directorate General, MFA,FDRE . The interview was conducted through email on April 30, 2025.

social dimensions, enhancing the movement of people, broadening access to essential services, and fostering social cohesion and cultural exchange across the diverse populations of the region. Politically, infrastructural connectivity can contribute to greater regional stability by promoting economic interdependence and creating avenues for cooperation, although navigating complex geopolitical dynamics remains a significant consideration.

Despite the considerable opportunities, the Horn of Africa continues to face substantial challenges in financing, governing, securing, and ensuring the environmental sustainability of infrastructure development. Overcoming these constraints requires concerted efforts from national governments, regional institutions, international partners, and the private sector. However, the potential for leveraging infrastructure to achieve deeper and more sustainable regional integration is immense. Strategic investments in infrastructure corridors, regional energy markets, and digital connectivity, coupled with policy and regulatory harmonization and the strengthening of regional institutions, hold the key to unlocking the Horn of Africa's full potential. Continued commitment to these areas, drawing lessons from successful case studies and fostering a collaborative regional approach, will be essential for transforming the Horn of Africa into a more interconnected, prosperous, and stable region. Future research could focus on quantifying the specific impacts of ongoing infrastructure projects on cross-border trade and economic growth, as well as exploring innovative financing mechanisms and the role of local communities in ensuring the inclusivity and sustainability of infrastructure initiatives.

Conclusions

Enhanced infrastructure connectivity is critical to unlocking economic opportunities, improving productivity, and facilitating trade integration both within the region and with external markets. So far, this thesis has examined the multifaceted role of infrastructure in fostering regional integration within the sub-region. This chapter will synthesize the key findings of the research, draw conclusions about the role of infrastructural linkage in boosting regional integration in the Horn of Africa, and provide policy recommendations to enhance regional connectivity and integration.

This research has demonstrated that while infrastructure development holds significant potential for boosting regional integration; nevertheless, the status of the region's infrastructure linkage faces several key challenges, including uneven development, critical missing links, and institutional weaknesses. The poor state of road infrastructure, limited cross-border connectivity, and uneven development levels among member states hinder the region's ability to maximize the benefits of regional integration. As the data yielded by this study indicated, some countries of the HoA have invested enormously in infrastructural connectivity. In the same vein, some countries of the region lag behind when it comes to fostering connectivity. These challenges are particularly acute in post-conflict states like Somalia and South Sudan, where decades of instability have severely damaged essential infrastructure.

The findings underscore that while infrastructure development holds immense potential to catalyze integration; its realization is contingent upon surmounting a complex web of challenges. The finding revealed that one of the main challenges is the inadequate funding and investment in infrastructure projects, leading to delays in implementation and completion. Equally, the finding revealed that conflict and political instability have profoundly hampered the regional infrastructure connectivity. Additionally, the lack of political will and coordination among countries in the region poses a significant obstacle to achieving seamless regional integration through infrastructure development. The socio-economic dynamics of the regional, which is often characterized by fragile economy and uneven distribution of resources, stands tall among the challenges identified by this research. Moreover, issues such as corruption, conflict, and insufficient technical capacity also hinder progress in this area.

The challenges in infrastructural connectivity directly affect the pace and depth of regional integration. Without addressing the constraints, the prospects of fostering regional integration would be questionable. As countries of the HoA failed to address the challenges, economic corridors cannot fully function as engines of trade and growth. Equally, cross-border trade remains costly and inefficient. With the persistence of the challenges, the potential for regional value chains and economic spillovers remains limited. More importantly, the broader goals of peace, stability, and shared prosperity are harder to achieve.

To address these challenges, the research recommends a multi-faceted approach, focusing on improving cross-border connectivity, harmonizing standards, strengthening regional institutions, promoting private sector participation, and enhancing regional coordination. Prioritizing investments in critical missing links, such as the road network, and creating a conducive environment for private sector engagement will be crucial for achieving sustainable infrastructure development and fostering deeper regional integration.

The finding of the study has helped to identify significant opportunities for overcoming the aforementioned challenges. Given the ongoing and proposed cross-border projects between and among the countries of the region, there is an observable potential of developing strategic infrastructural corridors. This would foster the economic integration of the region as the transportation corridors link various economic zones of landlocked countries to the seaports. Equally, establishing and expanding regional energy markets and power interconnections offer a crucial pathway towards economic interdependence. The finding of the study has also indicated the relevance of digital infrastructure connectivity in fostering regional economic integration as it backs the financial transaction of fragmented sections of the region. The establishment of organizations such as the IGAD and AU shows a commitment to regional cooperation and integration, which can pave the way for more effective infrastructure development initiatives in the future. As such, by strengthening the mandates of regional institutions, it will be possible to bring around countries of the region to downsize their strong sovereignty stands and work towards shared regional gains.

In light of these challenges and prospects, it is essential for policymakers, stakeholders, and government authorities in the Horn of Africa to prioritize infrastructure development as a means to foster regional integration. Collaborative efforts, increased investment, and improved governance structures are crucial for overcoming the obstacles hindering progress in this area. By addressing these challenges and building on the existing prospects, the Horn

of Africa can realize its full potential in terms of regional integration and sustainable development through infrastructure.

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Appendixes

Appendix 1: Interview Guidelines

The following interview questions will be used to conduct key informant interview with potential informants from different ministerial offices and institutions in Ethiopia.

Preliminaries:

1. Could you please tell me a little about your occupation?
2. How long have you been serving in this position?

Main Areas:

1. What are your professional comments on the infrastructural linkage between and among countries in the HoA? And the extent to which the linkage affects the integration in the Horn of Africa?
2. What are the benefits of existing infrastructure linkage in fostering regional integration in the HoA?
3. What are the main challenges that affect infrastructure led integration in the HoA?
4. How important are existing infrastructure developments in the HoA in fostering regional integration?
5. What is your comment on the commitment of the governments in fostering infrastructure led integration in the region?
6. What is your comment on the existing trade arrangements and economic relations between nations of the HoA?
7. What are the main challenges and prospects so far in the nexus of infrastructural connectivity and regional integration in the HoA?

Appendix 2: Key informant Interviewees

No.	Name	Organization	Position	Date	Remark
1	Abel Netsanet	Ethiopian Airlines	Marketing Expert	May 1, 2025	
2	Girum Ashenafi	Addis Ababa University	Ph.D. Researcher	April 7, 2025	
3	Moges Bekele	Ethiopian, Chamber of Commerce	Marketing Advisor	April 12, 2025	
4	Melese Teshome	Arba Minch University	Lecturer and Researcher	April 22, 2025	
5	Negeyo Mamo	FDRE, MoFA	Councilor II	April 30, 2025	
6	Pamela Chimeli	University of Pecs	Ph.D. researcher	October, 2024,	Interviewed in Pecs, Hungary
7	Tefera Gebeyehu	FDRE Ministry of construction and urban development	Research team leader	March 20, 2025	
8	Tewodros Beletew	East African Consultants	Economist and Marketing expert	March 22, 2025	
9	Walter Muhia	University of Pecs	Ph.D candidate	October, 2024	Interviewed in Pecs, Hungary