

Horn of Africa Initiative: Supporting Recovery Through Deepening Economic Integration and Promoting Regional Cooperation

Description of Priority Projects and Readiness

This note comprises short description of priority projects which were agreed by HoA Finance Ministers at their meeting in October 2019 and in subsequent discussions through until February 2021. It is an input into the planned outreach to partners and to provide details about the priority projects under the HoA Initiative.



Djibouti, Eritrea, Ethiopia, Kenya and Somalia

In partnership with



February 2021



Horn of Africa Initiative: Package of Priority Proposals agreed in October 2019¹

Priority Proposals	Likely Countries	Estimated Costs
Pillar 1: Regional Infrastructure Networks		\$12.5bn
Economic Corridors		\$9bn
1. Four priority corridors covering 6,000km of upgradation. a. Kismayo, Lamu and Mogadishu Corridor b. Assab and Djibouti Corridor c. Berbera and Djibouti Corridor d. Mogadishu, Berbera and Bossasso Corridor		\$9bn
Regional Energy Trade		\$1.84bn
2. Power integration connectivity program a. Ethiopia-Djibouti 2nd line b. Somalia Transmission Backbone c. Feasibility Studies for: - Ethiopia – Somalia Interconnection - Ethiopia – Eritrea Interconnection - Kenya – Somalia Interconnection - Djibouti – Somalia Interconnection - 2nd line for Kenya – Ethiopia Interconnection		\$1.57bn
3. Enabling Power Trade (East Africa Power Pool, Somalia, Eritrea, Ethiopia, Djibouti, Kenya)		\$0.15bn
4. Other Energy Supports: Regional Oil Jetty - Damerjog New Oil Jetty (Potential PPP Project)		\$0.12bn
Single Digital Market		\$1.7bn (including private financing)
1. Priority Regional Infrastructure a. Submarine festoon cable along the coast b. Terrestrial links and backbone connections		\$0.9bn
2. Single regional data market a. Data Infrastructure		\$0.3bn5bn

¹This package was agreed at the level of Ministers of Finance of the HoA countries in October 2019. An accompanying communique issued by the Ministers is available at https://www.afdb.org/sites/default/files/documents/hoa_ministers_communique_oct_18.pdf

<ul style="list-style-type: none"> b. Cybersecurity c. Regulatory Harmonization 		
<ul style="list-style-type: none"> 3. Single Data Service Market <ul style="list-style-type: none"> a. E-government b. Cross-border digital payment facilitation 		\$0.5bn3bn
Pillar 2: Trade and Economic Integration		\$0.5bn
<ul style="list-style-type: none"> 1. Regional Trade Facilitation <ul style="list-style-type: none"> a. TA (e.g., corridor approach, tackle NTBs, harmonization of products standards) b. 13 one-stop border posts c. Dry ports 		\$0.45bn
2. Regional Value Chain Development		\$0.03bn + Private Sector Investments
3. Investment Climate		\$0.02bn
Pillar 3: Building Resilience		\$1.3bn
1. Pastoralist Livestock Insurance		\$0.4bn (of concessional, to leverage \$1.6bn from private sector)
2. Strengthening the resilience of pastoral production system to climate change		\$0.9bn
Pillar 4: Strengthening Human Capital		\$1.55bn
1. Strengthening Human Capital Delivery Systems and Networks		\$0.7bn
2. Building Skills for Future Employment and empowering women and youth		\$0.6bn
3. Strengthening Identification for Development (ID4D)		\$0.25bn
Total		\$15.89bn

Introduction

Rationale for the HoA Initiative

During 2019, five countries of the Horn – Djibouti, Ethiopia, Kenya, Somalia and Eritrea² came together to prepare the Horn of Africa (HoA) Initiative. The basis of the Initiative was the positive developments in inter-state relations in the sub-region and the subsequent opportunities for deepening integration and regional collaboration to address the development challenges in the region and stimulate accelerated growth. The Covid19 pandemic and the resulting economic crisis along with the food insecurity risks triggered by the locust invasion are expected to have significant bearing on the prospects for growth and poverty reduction in the sub-region. The HoA Initiative countries have resolved that regional cooperation and economic integration should remain key to the overall recovery efforts of the sub-region from the crisis. What has been truly unique about this Initiative is that it has been led by countries and involved a healthy spirit of political ‘give and take’ and political commitment at the highest level to convert the goodwill into development results. The countries had requested and received technical support from three development partners in preparing the Initiative starting from early-2019 – AfDB, EU and WBG. IGAD is an active partner in the HoA Initiative and is serving as a resource institution, especially for areas of resilience.

Five countries constitute what is sometimes called the ‘small’ Horn - Djibouti, Eritrea, Ethiopia, Kenya and Somalia. With a total area of around 2.5 million square kilometers, it includes some of the largest as well as the smallest countries in Africa. The sub-region has a population of around 180 million and a combined GDP of around \$170bn. Over 70% of the population lives in rural areas, where poverty is concentrated. As per available estimates, the population of the five countries is expected to grow to around 250 million by 2030 – implying the sub-region will have a net addition of about 70 million people between 2017 and 2030. The sub-region has shared social and ethnic kinship, historical trade and cultural affiliations with the rest of the world and has some of the oldest and complex civilizations. The Horn is located in a geo strategically important part of the continent and abut significant global shipping lanes along the Red Sea, Arabian Sea and Indian ocean. All of this makes the Horn a complex and challenging context. Yet, progress in the Horn will likely have an outside influence on overall pace of change in the continent, as it has some of the biggest, dynamic and influential economies. There is considerable potential for the Horn to grow and transform its economy and deliver development results for its people. Electricity, water, agriculture and digital all present unprecedented opportunities to transform the region.

Over the past two years, there have been concerted efforts by the countries to strengthen regional cooperation around shared interests of peace, prosperity and development. These are vital for overcoming the challenges which has been holding back the sub-region. The major regional challenges in the Horn include³: rapid demographic change and youth unemployment; peace and security; resource constraints and weather and other shocks; lack of competitiveness and economic diversification; low human development, chronic poverty and inequality; and conflict and forced displacement.

The unprecedented challenge posed by Covid19 pandemic and the resulting economic and social crisis presents a risk to broaden inequalities but also an opportunity for HoA countries to weave in regional

² Eritrea participated in some of the discussions and was represented by relevant Embassy officials. It was a signatory to the Ministerial communique of October 2019, available at:

https://www.afdb.org/sites/default/files/documents/hoa_ministers_communique_oct_18.pdf

³ IGAD Regional Strategy 2016

solutions as part of their national recovery plans. This makes the role of HoA Initiative quite critical in responding to the current context. The HoA Initiative priority package has been strengthened to include stronger focus on dealing with the ongoing challenges and the possibility of finding regional solutions to complement national efforts. Such enhancements have been done in issues such as trade, epidemic control, and various aspects of strengthening resilience.

Process of Development of HoA Initiative

Through much of 2019 and into 2020, the HoA Initiative countries undertook an intensive process of dialogue to agree priorities under the identified four pillars, which together are expected to address key development challenges and promoting peace and security: 1) Regional Infrastructure Networks; 2) Trade and Economic Integration; 3) Resilience; and 4) Human Capital Development. Early on during the process, each country was supported to undertake in-country consultations across different parts of government to identify the main objectives and priorities from closer integration. These served as inputs for cross-country consultations which eventually led to identification of shared priorities amongst the countries. In the true spirit of regional cooperation, countries saw some but not all of their own priorities reflected in the emerging consensus between countries. The final package thus reflected a healthy compromise and should ensure that the results of these intended efforts would deepen integration. The discussions under the HoA Initiative took place at the technical and Ministerial levels. The Ministers of Finance have met six times under the HoA Initiative during April 2019 to October 2020, apart from ongoing bilateral engagements. The technical groups have met several times outside of the Ministerial engagement and these discussions continue. The Ministers of Finance at their meeting in October 2019 agreed a priority package costing \$15bn.

This investment program is meant to be complemented by a set of policy actions that the countries will take to deepen integration, although the relevant discussions have been affected by the ongoing COVID-19 pandemic crisis, which may force greater selectivity between projects within the package. At their meeting in May and October 2020, the Finance Ministers reinforced the urgency to move forward swiftly with all parts of the package to strengthen the sub-region’s recovery efforts.

Purpose of the Project Profiles and process ahead

This set of Project Profiles reflects a compilation of existing information on the priority projects. It is primarily meant to provide a higher-level picture of the projects to potential partners and importantly serve as a framework for the countries to guide the next phase of the HoA Initiative. In several cases further feasibility studies would be required to examine detailed technical and economic issues for the projects. The following table provides details of the status of the readiness of each project under Pillar 1 - Regional Infrastructure Networks. Details of all pillars are provided in the following sections.

Pillar 1 Priorities	Total Value (\$bn)	Ready for Financing (\$bn)	Expected Costing of Priority Feasibility Studies
Economic Corridors	\$9bn	\$3bn	\$55m
Regional Energy	\$1.8bn	\$0.2bn	\$14m
Regional Digital	\$1.7bn	\$0.3bn	\$5m

Pillar 1: Regional Infrastructure Networks

Economic Corridors

Corridor 1: Kismayo, Lamu and Mogadishu Corridor

Corridor 2: Assab and Djibouti Corridor

Corridor 3: Berbera and Djibouti Corridor

Corridor 4: Mogadishu, Berbera and Bossasso Corridor

Background information

The HoA Initiative gives importance to transforming transport and logistics corridors into economic corridors by easing transport of goods and people and providing incentives to stakeholders to trade and engage in various economic activities along the corridors. The purpose is to increase trade and economic diversification and specialization, which in turn is expected to lead to wealth generation, and better socio-economic opportunities for populations living in the HoA area, thus contributing to poverty reduction and promotion of good governance, peace and security.

Economic corridors connect economic agents along a defined geography and region. For the purpose of this document, they are intended as integrated networks of road infrastructure located within multiple countries which are designed to stimulate economic development by providing connections between economic nodes or hubs that are usually centered in urban centers and with port and international gateways. Economic corridors often feature integrated infrastructure (such as highways, railroads and ports), and may link cities or countries, manufacturing hubs, areas with high supply and demand, and manufacturers of value-added goods. A package of different measures including infrastructure development, visa and transport agreements, and standardization of customs and cross-border procedures are also part of the initiatives under Pillar 2, included for ensuring the full functionality of economic corridors. Experience suggests that acceleration of social development, reduction of poverty and integration of local communities' needs should also be at the core of any corridor development initiative⁴.

The economic corridors under Pillar 1 would need to be closely aligned with trade and economic integration priorities of Pillar 2 in order to optimize economic transformation and creation of jobs.

Ongoing or Planned Complementary Projects

Other donors/government projects in the HoA region need to be mapped in order to avoid overlapping interventions and waste of resources, and the approach to each corridor should shift from exclusivist 'tunnel' visions to more networked corridors embedded in local economies to take advantage of spill over effects, and shaped by the realities of the Horn of Africa. Feasibility and pre-feasibility studies, as well as assessment of potential direct and indirect impact on beneficiaries, are important to give a measure of the priority and the readiness for these projects. Where not already available, detailed corridor-level studies will be required to fully capture the potential economic, social and financial impact and expected returns from investments, analyzing them and their interrelations with the other corridors, both existing and planned, within the HOA and in East Africa in general. In synergy with the digital component, duct and manholes telecom standards will be installed at the same time as the road infrastructure to prepare for an easy deployment of fiber based on business needs. The incremental cost to the transport projects will be minimal and the potential gains substantial.

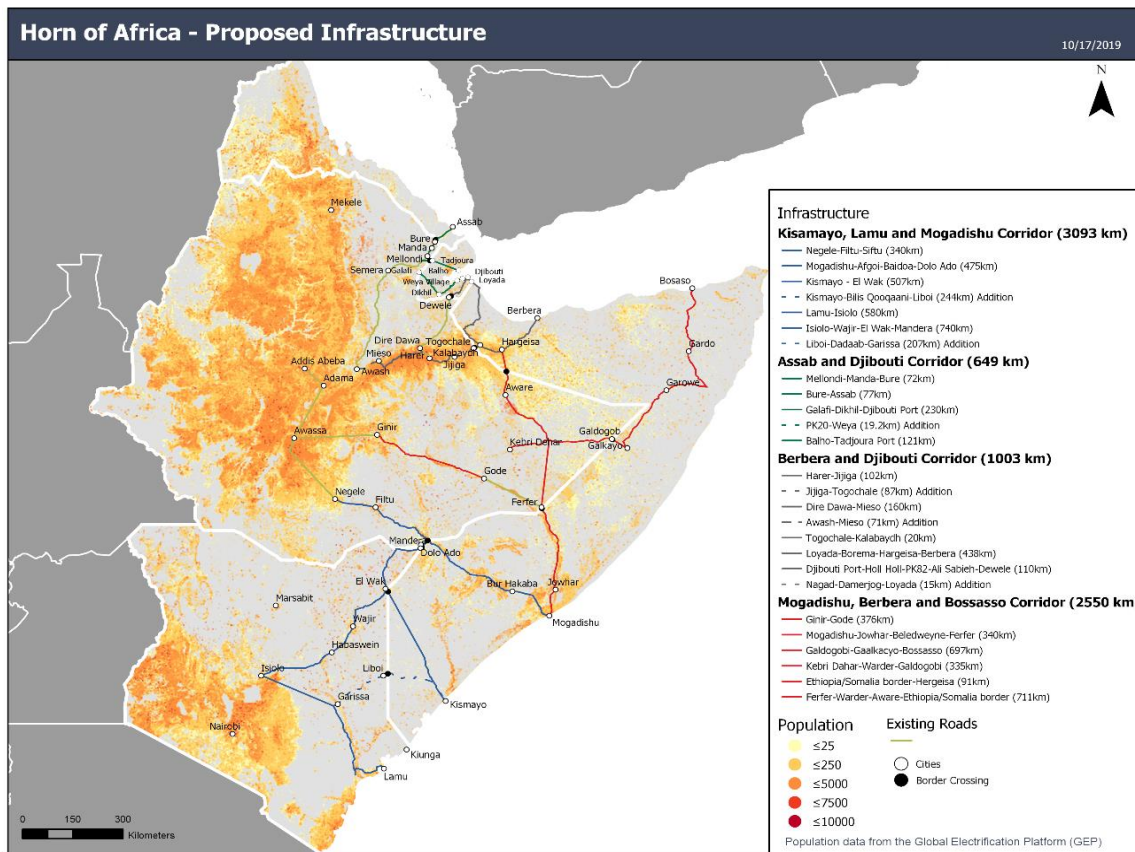
Programme and project description:

During the World Bank Group/IMF Annual Meetings held on 18 October 2019 in Washington DC, the Finance Ministers and representatives of Djibouti, Eritrea, Ethiopia, Kenya and Somalia agreed on a Package of Priority Proposals articulated around 4 Pillars. Pillar 1 is focused on Regional Infrastructure

⁴ Hope, A., Cox, J. "Development Corridors", Coffey International Development, December 2015.

Networks and includes 3 main areas of intervention, to be covered by specific budget allocations: 1) Economic Corridors (US\$9bn), 2) Regional Energy Trade (US\$1.84bn) and 3) Single Digital Market (US\$1.7bn, plus private financing). Within the Economic Corridors component, four priority corridors have been identified in the HoA Region, covering about 6,000km, requiring upgrading, rehabilitation or reconstruction works. These corridors are: 1) Kismayo, Lamu and Mogadishu Corridor; 2) Assab and Djibouti Corridor; 3) Berbera and Djibouti Corridor; 4) Mogadishu, Berbera and Bossasso Corridor (see next figure).

Figure 1: Priority Economic corridors in the HoA



The economic corridor programme in the HoA Initiative is expected to provide the following economic development benefits:

Regional spillover. The connectivity provided by the regional corridors in the HoA are deemed strategic in supporting the integration of the 5 HoA countries covered by this initiative on three different, but complementary levels: (i) in trade, transport and social activities; (ii) of the HoA economies in both the domestic and global markets, (iii); in security matters.

The geographical area that consists of the core of the HoA initiative is characterized by insecurity, extreme climate changes (including drought and floods), and pests, with most of the population depending on pastoralism as a way of life and a source of livelihood. Other factors, such as conflicts, animal health and

access to natural resources, also contribute to the erosion of the coping capacity of the population, especially in the most arid areas. Hence, all these factors need to be addressed by the program in the construction of the transport infrastructure. Security in particular, represents the essential element that will lead to the success of this initiative, as it has a far-reaching impact on economic integration. Roads can be integrative only when they are secured.

From an economic point of view, all the HoA are commodity-dependent⁵ and - except Eritrea, which is mainly dependent on exports of minerals, ores and metals - have an economy largely dominated by subsistence agriculture and small-scale farming, that utilizes less inputs (knowledge, technology, finance, etc.), and ultimately ends up with less productivity and output. Formal university-industry linkages and technology transfers are not sufficiently pursued, while the manufacturing industry is characterized by low productivity levels and competitiveness which are mainly due to the sector's use of obsolete machinery and lack of skilled labor. Accordingly, the benefits of increased intra-regional trade can only be fully realized as countries systematically address their infrastructure and trade barriers.

The improved connectivity of land-locked countries and land-locked regions in coastal countries to the ports will have more immediate benefits in terms of higher export prices, net of transport costs, for exporters in the HoA and lower prices of imported inputs and consumption goods. Regional corridors traverse vast areas in each of the countries in the HoA. An important consideration is to optimally utilize the regional connectivity by improving domestic connectivity to regional corridors. This might mean that as regional projects are being formulated, national transport projects enhancing local connectivity should be prioritized by national governments.

Linkages with global trade. The priority corridors reflect the import/export trade transiting through ports. Organic and foreseeable growth in seaborne trade would in any case require ports to adapt and increase capacity and efficiency, but this would be even more urgent if trade grows as a result of improvements in HoA integration. In this regard, there are two important issues to be considered: (i) under global best-practice models for port management, the public sector retains responsibility for provision of basic port infrastructure investment such as terminals, berths, breakwaters and dredging, as well as all regulatory functions, while port operations are carried out by private companies, which provide and maintain their own superstructure, including buildings and cargo-handling equipment at the terminals, mostly on a long-term concession basis (so called "landlord model"); (ii) the port-city interface and last-mile connectivity⁶ to the road corridors are frequently a challenge that needs to be addressed to augment and ensure efficiency of the trade routes.

Inclusion of complementary, transformative interventions along the corridor. As a result of the reduction of transport costs and reduction of travel times, corridors usually generate a multiplicity of impacts such as agglomeration effects, increased trade and migration, and changes in the local economic

⁵ A country is defined "commodity-dependent" when more than 60 per cent of its total exports consists in primary commodities (UNCTAD), these ones being represented either by: 1) agricultural products (including livestock, crops, forestry, and fishing products), 2) minerals, ores and metals, or 3) crude oil, gas and other hydrocarbons in a natural state (not-refined).

⁶ The last mile connectivity, sometimes also referred to as "first mile connectivity", represents the final stretch of approach or delivery in transport and is usually defined as the distance to be traversed from the nearest transport nodal point to the ultimate destination and is expressed by the ease and speed of commuter transit from point of origin to point of destination.

structure, among others. These long-term impacts ultimately yield wider economic benefits—such as growth of income and consumption, new jobs, and greater equity, accumulation of wealth, etc. There is need to reduce the risk that these corridors will become mere ‘pipelines’ for the movement of persons and goods, with little benefits to the local communities along the corridors and to the socio-economic development of the areas crossed by them. Similarly, it is essential to ensure that a certain number of secure parking and rest areas will be established, including other facilities such as restaurants, shops, comfort facilities, mechanical repair and collateral services, to allow travellers and long-distance drivers to have breaks at appropriate intervals, if possible, by grouping them within specific territorial areas so that they can be offered to the corridor users in a combined manner. An example is the “Road Side Stations” (RSS) program launched by the Northern Corridor Transit Transport Coordination Authority (NCTTCA) along the Northern Corridor, aimed at promoting the socio-economic development and income generation for communities living along this route⁷. The possibility to develop such facilities in partnership with the private sector should also be explored, in order to achieve sustained efficiency gains and minimize public expenditure and fiscal financing requirements. Unleashing wider economic benefits requires complementary interventions to remove economic frictions to leverage the improved connectivity provided by corridors. For example, complementary interventions at borders and ports that reduce trade costs will be key to deliver the benefits of regional and global integration. Similarly, policy interventions that strengthen competition in the markets for transport services help to ensure that all categories of corridors’ users, including trucking companies, motorists, pedestrians and other local road users - enjoy the benefits of improved connectivity.

Role of Private financing and PPP structures. Because of relatively low volumes, it would need to be carefully evaluated whether private financing through – for instance – actual or shadow⁸ tolling is feasible. In some cases – and if acceptable to the authorities – Design Build Transfer (DBT), Design Build Maintain Operate Transfer (DBMOT) or similar Performance Based Contract (PBC) approaches might be considered. In other cases, PPP structures may be viable based on traffic, security, and other factors. Detailing of these possibilities would need to be undertaken between the HoA countries and financiers of parts of the infrastructure on case-by-case basis.

Risks and mitigation measures:

Risk analysis	Mitigation measures
Lack of political will and commitment	Sequencing of the projects according to the political buy-in, facilitating dialogue on issues within and between countries

⁷ <http://www.roadsidestations.org>

⁸ In the "shadow toll" scheme, public authorities finances the construction of a road infrastructure by granting a road concession to a private company whose investment will be remunerated according to the number of vehicles observed on the road within a defined period or some other indicator of the service provided (World Road Association – PIARC, Financing of Road Infrastructures: Guide for New Methods of Financing and Public/Private Partnership, 1999”). Under such a scheme, road users do not pay on the spot for the usage of the infrastructure, therefore eliminating motorist’s resistance to paying tolls and the opportunity to divert to alternative routes. This reduces a considerable element of commercial or traffic risk (so-called “avoidance risk”).

Unclear conditions and priorities for a specific corridor	Elaborate feasibility studies, dialogue with governments Include potential impact and positive externalities through spillover.
Lack of institutional framework for corridor management	Policy dialogue between the HoA countries and establishment of Corridor Management Authorities (CMA) or other options
Corridor sustainability	Design of possible funding schemes for covering the maintenance and operational costs of road infrastructure
Lack of participation of Private Sector in infrastructure development	Design of incentives to encourage private investment in dry ports and logistic clusters. A PPP Trade Facilitator to be recruited
Security Concerns	Selection of design and eventual road construction will need to consider ongoing security concerns, especially in parts of the Horn subject to periodic tensions and conflict. Road projects present a soft target to some forms of violence. The best way to mitigate security risk is to build it in the project during construction phase. As it would be unreasonable to expect that connectivity interventions await a full stabilization of the region, a sectional approach could be considered; where relatively secure sections of a road corridor can be prioritized for development and subsequent sections identified as the security situation becomes more conducive.
Uncertainty due to an absence of detailed designs.	While some designs may exist for part of the corridor, an effort is needed upstream to prepare and contract for feasibility and design studies. Where civil works will be on basis of input contracts detailed designs are needed, while if PBC type of contracts are employed less than detailed designs may be enough. In such cases, detailed specifications and Employer’s Requirements are incorporated with the final Bidding Documents. The absence of such designs contributes to a higher level of uncertainty of costs and impacts for decision makers.
Jurisdictional Control	In some areas, questions may be raised about jurisdictional control of the federal and local administrative organs where such delineations are not fully clear. These need to be considered and navigated case-by-case. In addition, as some borders are not firmly settled, disagreements could arise and resolutions would be needed on responsibility for certain road segments.
Road Safety	Road Safety should be addressed upfront in the HoA Initiative, both at a regional and national level. Road projects resulting from the Initiative would incorporate best practices to address road safety in the projects.
Inherent risk of HIV/AIDS transmission	Transport corridor projects run the risk of facilitating the spread of HIV/AIDS, both during the construction phase, as workers enter and reside within new communities, and as a result of the increased traffic and trade they spur. There is extensive experience to draw on in planning for and mitigating these risks.
COVID-19	similarly poses transmission risks. The lessons learned from how HIV/AIDS is addressed in contracts and fast accumulating experiences on how to address COVID-19 issues in transport context can be drawn on to mitigate the associated risks.

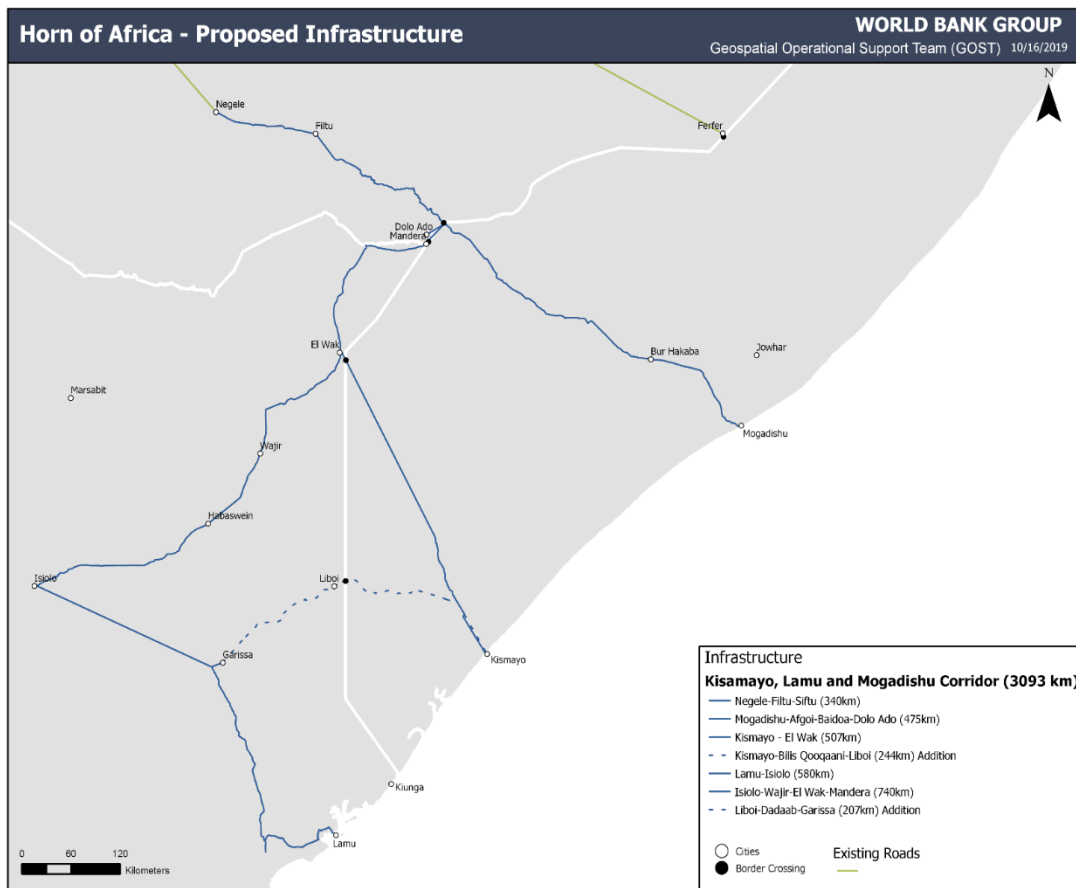
<p>Resilience and vulnerability of populations/sustainability of investments</p>	<p>While addressing the current connectivity and trade bottlenecks in the HoA region will take dramatic investments in the short term, these investments will face uncertain futures if they are not made with resilience and sustainability in mind. Such considerations should include incorporating climate resilience in their designs, maintenance strategies implemented at the national and local levels, mechanisms in place to ensure financial sustainability of sectoral institutions, etc.</p>
<p>Resettlement and compensation of displaced persons</p>	<p>As with any large infrastructure investment, road corridors raise the possibility of disrupting populations living along the roadway. While many of the identified corridors follow already existing infrastructure and will leverage established rights of way, this may not be the case in all situations, and informal settlement and commercial activities within these rights of way may raise challenges to construction and rehabilitation. This may be particularly challenging in areas where pastoralist communities reside, communal ownership of land is prevalent, or land ownership is not clear. Corridors passing through Somalia in particular may require careful consideration due to uncertain ownership and compensation processes.</p>

Corridor 1: Kismayo, Lamu and Mogadishu Corridor

Project Description:

The principal physical intervention is rehabilitation and upgrade of road segments constituting the referred economic corridor, combined with complementary investments and activities aimed at leveraging improved transit to maximize the socio-economic wellbeing of the communities living in the area of economic direct influence of the corridor, by spurring the underutilised economic development potential opportunities within this zone.

Figure 2: Kismayo, Lamu and Mogadishu Corridor



The Kismayo, Lamu and Mogadishu Corridor links population centers in Kenya, Somalia and Ethiopia with the Somali ports of Mogadishu and Kismayo, and the Kenyan port of Lamu, whose construction is currently ongoing⁹. Addressing an important interconnection bottleneck between the three associated countries,

⁹ Lamu port is an ambitious project launched by the Government of Kenya in 2012 under the “Vision 2030” strategy, which is part of the “Lamu Port-Southern Sudan-Ethiopia” (LAPSET) transport corridor, one of Africa’s largest infrastructure projects, aimed at improving transport linkages between Kenya, Ethiopia and South Sudan. Once completed, the Lamu port will have a total of 32 berths, with the first 3 fully financed by the Government of Kenya and the remaining 29 berths to be financed by private Investors under a Public-Private Partnership (PPP) scheme, in order to avoid burdening the country with debts. To date, only f the 1st berth is complete, while the construction of

the corridor serves several purposes. It provides an important bilateral artery between the Kenyan and Ethiopian economies, pillars of the regional market which are currently largely disconnected. It also connects three ports which are currently underutilized for national and regional trade (Lamu, Kismayo, and Mogadishu) with economic centers and hinterland demand. Finally, by establishing connectivity within some of the most remote corners of the associated countries, and Africa in as a whole, the corridor creates an opportunity to spur local development and growth.

Summary of road segments are indicated below. Complementary activities may include facilitation of interlinkages with ports and at border crossings and the introduction of a series of soft reforms aimed at reducing of border crossing time and trucks waiting time; development or expansion of rural connectivity to the corridor for improved local access to economic, trade and social opportunities. The corridor is expected to reduce costs for transport operators and to enhance living conditions of the population living within the corridor's influence area.

Rough-order cost estimation for the corridor (road construction and associated cost only) is US\$4.055 billion.

	Design, Works, Supervision US\$M	Design Status/ Feasibility	kms	for rehab./ upgrading	% poor condition
Kismayo, Lamu and Mogadishu Corridor	4,055		3093	3017	
Ethiopia Negele – Filtu – Siftu	393	Underway	340	292	86%
Somalia Mogadishu - Afgoi – Baidoa – Dolo	600	Mogadishu-Afgoi only	475	447	94%
Kismayo – El Wak, and	681	No	507	507	100%
Kismayo-Bilis Qooqaani – Liboi	328	No	244	244	100%
Kenya Lamu – Isiolo	780	Yes	580	580	100%
Isiolo – Wajir – El Wak - Mander	995	Yes	740	740	100%
Liboi - Dadaab - Garissa	278	Yes	207	207	100%

For ease of presentation, border references are made to closest identified town on either side of borders and does not imply recognition of sovereignty.

Project readiness, practicability and complementarity to other projects:

The table above provides a status of readiness. Feasibility studies for the Kenya portion are available while the rest would need to be prepared/updated. WB has approved \$750mn to finance sections of the Isiolo-Mandera corridor in Kenya¹⁰. For the Ethiopian side the detailed design is planned to commence in 2020. The studies would need to also include social and environmental assessments and making infrastructure from a climate adaptability point of view. Where designs exist, following reviews of technical documents

berths 2 and 3 is ongoing and expected to be complete by the end of the 2020. In October 2016 also dredging operations of the seabed began (still ongoing), so to allow larger ships access to the port.

¹⁰ <https://projects.worldbank.org/en/projects-operations/project-detail/P161305>

and adherence to normal procurement procedures should allow implementation to start 12-18 months after specific project financing is in place; for road segments without design 24-36 months could be envisaged. Such a corridor approach also presents an opportunity for expanding the digital fiber backbone, deferring the costs of fiber optic rollout through aligned network infrastructure deployment. As part of further preparation of the projects, countries would need to agree on policy issues around management arrangements for the corridors, trade facilitation, operations and maintenance, road safety and other issues.

In terms of practicability, the security challenges impacting the corridor vary greatly by location. While the segments in Kenya are in relatively unstable regions, work is already ongoing to design and implement corridor improvements. In southern Somalia, however, the ongoing threat from Al-Shabaab restricts the potential areas for improvement in the short term.

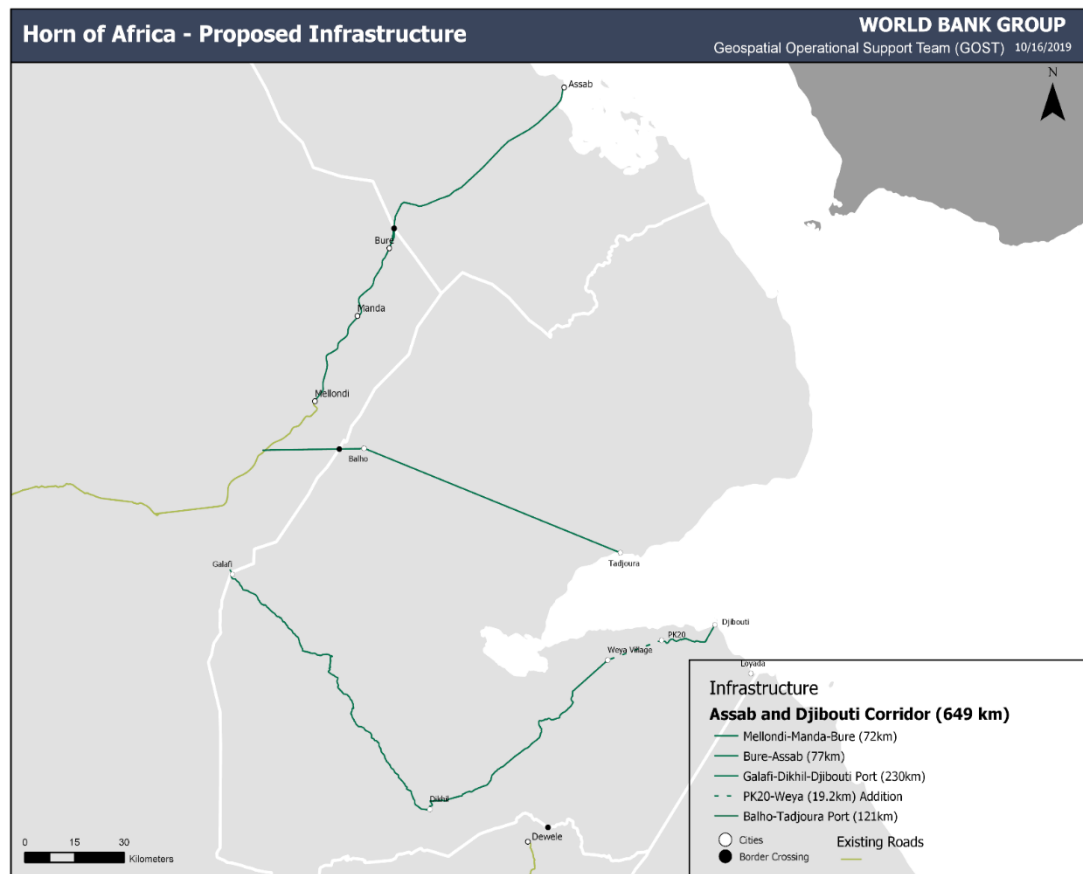
Corridor 2: Assab and Djibouti Corridor

Project Description:

The principal physical intervention is rehabilitation and upgrade of road segments constituting the referred road corridor, combined with complementary investments and activities aimed at leveraging improved transit to maximize socioeconomic wellbeing of the population in the area of influence of the corridor.

The Assab and Djibouti Corridor connect the population centers in Ethiopia with global markets through links with the ports of Djibouti and Assab. The first segment, connecting Djibouti to Addis Ababa, stretches for 877 km, and is the main conduit for Ethiopian trade, with over 95% of Ethiopia's imports and exports currently passing through this road, accounting for about 70% of the cargo handled at the Djibouti port. However, with an import freight which has reached more than 13.5 million metric tons and an export freight of more than 1.7 million metric tons, the port of Djibouti does not have sufficient capacity to accommodate all the Ethiopian import, export and transit trade, which is rapidly expanding. The second segment, connecting Port of Assab to Addis Ababa via Bure-Awash-Adama, for a total length of 884 Km., intersects the Djibouti corridor about 34 Km. north-west from the Galafi border (between Djibouti and Ethiopia), as shown in the figure below.

Figure 3: Assab and Djibouti corridor



Before the war with Eritrea (1998) 75% of Ethiopian trade passed through the port of Assab. After the signature, in July 2018, of the Asmara Declaration that ended the state-of-war with Eritrea, Ethiopia agreed to strengthen diplomatic and economic ties with Eritrea in the transport, trade and telecommunication fields. It is expected that peace negotiations with Eritrea will soon lead to the restoration of the Ethiopia's access to the two Eritrean ports, capitalizing on the existing roads from Massawa to Ethiopia and in particular, on the relative closeness of the Assab port to the capital Addis Ababa. In a communiqué of the Ethiopian government spokesman of Wednesday 11 July 2018, the re-opening of the road connecting Ethiopia to the port of Assab was announced as a priority in the two nations' reconciliation program in order to restore this historically important route.

For what concerns the Djibouti corridor, a project was launched in 2014 by the African Development Bank to extend the Djibouti-Addis Ababa corridor to Kampala (in Uganda) and Juba (in South Sudan) in order to increase the regional connectivity and connecting three IGAD landlocked countries (Ethiopia, South Sudan and Uganda) between them and to the port of Djibouti.

Figure 4: Djibouti-Addis Ababa-Kampala-Juba corridor



The project components included feasibility studies commenced in February 2016 and completed in December 2018, for a total cost of US\$4.1 million: one for upgrading the existing gravel road segment (278 km) joining Kapoeta in South Sudan to Raad at the border between South Sudan and Ethiopia, as well as a study for the construction of a One-Stop Border Posts (OSBPs) at the Ethiopian/South Sudan border (Boma Raad)¹¹, with architectural and detailed engineering designs, and preparation of tender documents. The project also included the provision of technical assistance to IGAD for project coordination and to the Ministry of Transport, Roads and Bridges, in South Sudan.

A summary of the road segments composing the Assab and Djibouti Corridor are indicated below. Complementary activities may include facilitation of interlinkages with ports and at border crossings and improvement of other trade conditions; development or expansion of rural connectivity to the corridor

¹¹ <https://upload.openaid.se/document/ethiopia/consultant-final-report-on---osbp--2016.pdf>

for improved local access to economic, trade and social opportunities. Trade channelled along the corridor is expected to benefit from costs reductions and enhanced living conditions for the population located in proximity of the corridor.

Rough-order cost estimation for the corridor (road construction and associated cost only) is US\$595 million

	Design, Works, Supervision US\$M	Design Status	kms	for rehab./ upgrading	% poor condition
Assab and Djibouti Corridor	595		649	280	
Ethiopia Adama – Awash	72	Yes (2015)	130	34	26%
Mellondi - Manda – Bure	-	Yes	72	0	0%
Eritrea Bure – Assab	164	No	77	77	100%
Djibouti Galafi – Dikhil – Djibouti Port	318	20 km + prefeasibility	230	150	65%
PK20 - Wea (RN1)	41	Underway	19	19	100%
Balho – Tajoura Port	-	No	121	0	0%

* For ease of presentation, border references are made to closest identified town on either side of borders and does not imply recognition of sovereignty.

Project readiness, practicability and complementarity to other projects:

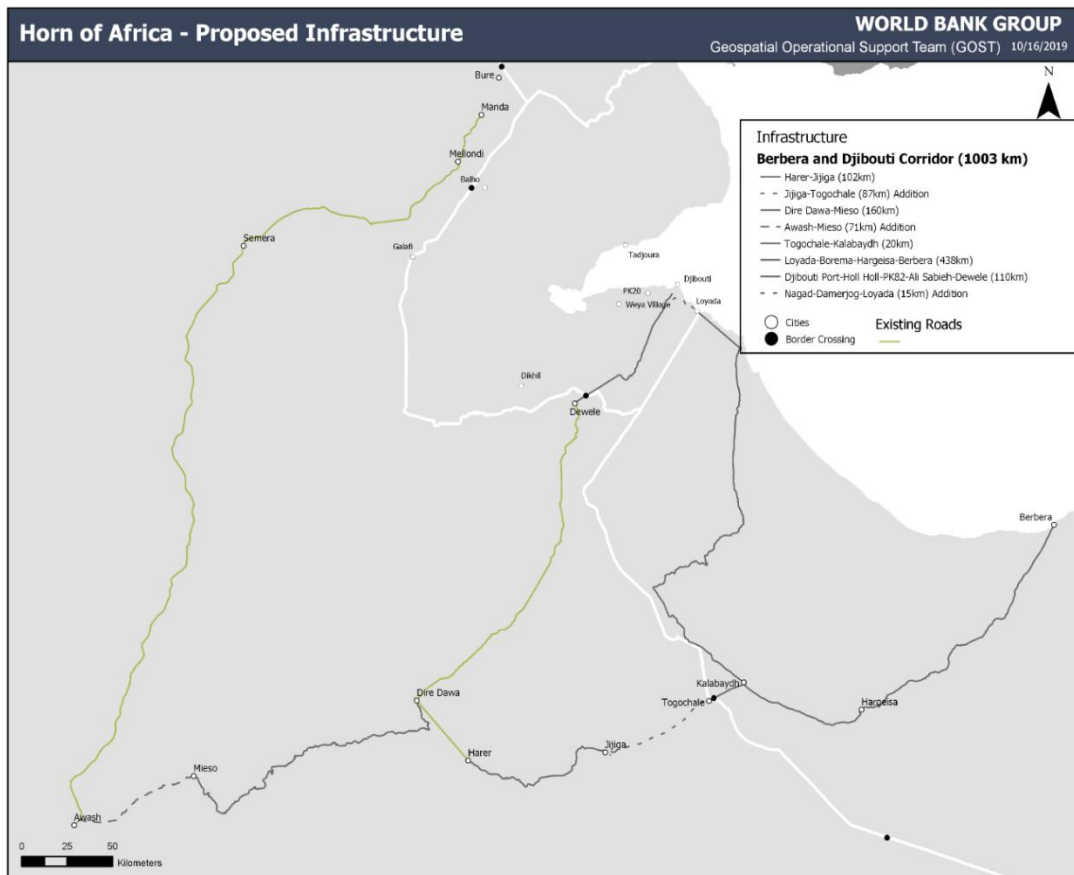
Some of the feasibility studies for sections of the corridors are already available, especially in Ethiopia. Others will need to be prepared/updated. These would need to also include social and environmental assessments and making infrastructure from a climate adaptability point of view. Where designs exist (as may be shown in project description), following reviews of technical documents and adherence to normal procurement procedures, they should allow implementation to start 12-18 month after specific project financing is in place. For road segments without design, implementation should start after 24-36 months. As part of further preparation of the projects, countries would need to agree on policy issues around management arrangements for the corridors, trade facilitation, operations and maintenance, road safety and other issues.

Corridor 3: Berbera and Djibouti Corridor

Project/program Description:

The principal physical intervention is rehabilitation and upgrade of road segments constituting the referred road corridor, combined with complementary investments and activities aimed at leveraging improved transit to maximize socioeconomic wellbeing of the population in the area of influence of the corridor. The Djibouti – Ethiopia segments included in this corridor are already fundamental links between the population centers of landlocked Ethiopia and global markets. It serves as a vital import route, as well the primary path for Ethiopian exports.

Figure 5: Berbera and Djibouti Corridor



Summary of road segments are indicated below. Complementary activities may include facilitation of interlinkages with ports and at border crossings and improvement of other trade conditions; development or expansion of rural connectivity to the corridor for improved local access to economic, trade and social opportunities; trade using the corridor is expected to reduce costs and enhance living conditions of the population in the regions of the corridors.

Rough-order cost estimation for the corridor (road construction and associated cost only) is US\$1,642 million

	Design, Works, Supervision US\$M	Design Status	kms	for rehab./ upgrading	% poor conditio n
Berbera and Djibouti Corridor	1,642		1003	772	
Ethiopia Harar – Jigjiga	130	No	102	61	60%
Jigjiga – Togochole	-	No	87	0	0%
Diredawa – Mieso	306	Underway	160	144	90%
Awash-Mieso	151	Underway	71	71	100%
Somalia Togochole – Kala Baydh	43	Yes 2013	20	20	100%
Loyada – Borema – Hargessa - Berbera	746	Kala Baydh- Berbera 2013	438	350	80%
Djibouti Djibouti Port – Holl Hargeisa – PK82-Ali Sabieh- Dewele	234	Yes	110	110	100%
Nagad-Damerjog-Loyada	31	Underway	15	15	100%

For ease of presentation, border references are made to closest identified town on either side of borders and does not imply recognition of sovereignty.

Project readiness, practicability and complementarity to other projects:

Feasibility study is available only for a portion of the corridor in Djibouti. The studies for remainder of the sections still need to be undertaken. These would need to also include social and environmental assessments and making infrastructure from a climate adaptability point of view. Where design exists, following reviews of technical documents and adherence to normal procurement procedures should allow implementation to start 12-18 month after specific project financing is in place; for road segments without design 24-36 months. As part of further preparation of the projects, countries would need to agree on policy issues around management arrangements for the corridors, trade facilitation, operations and maintenance, road safety and other issues.

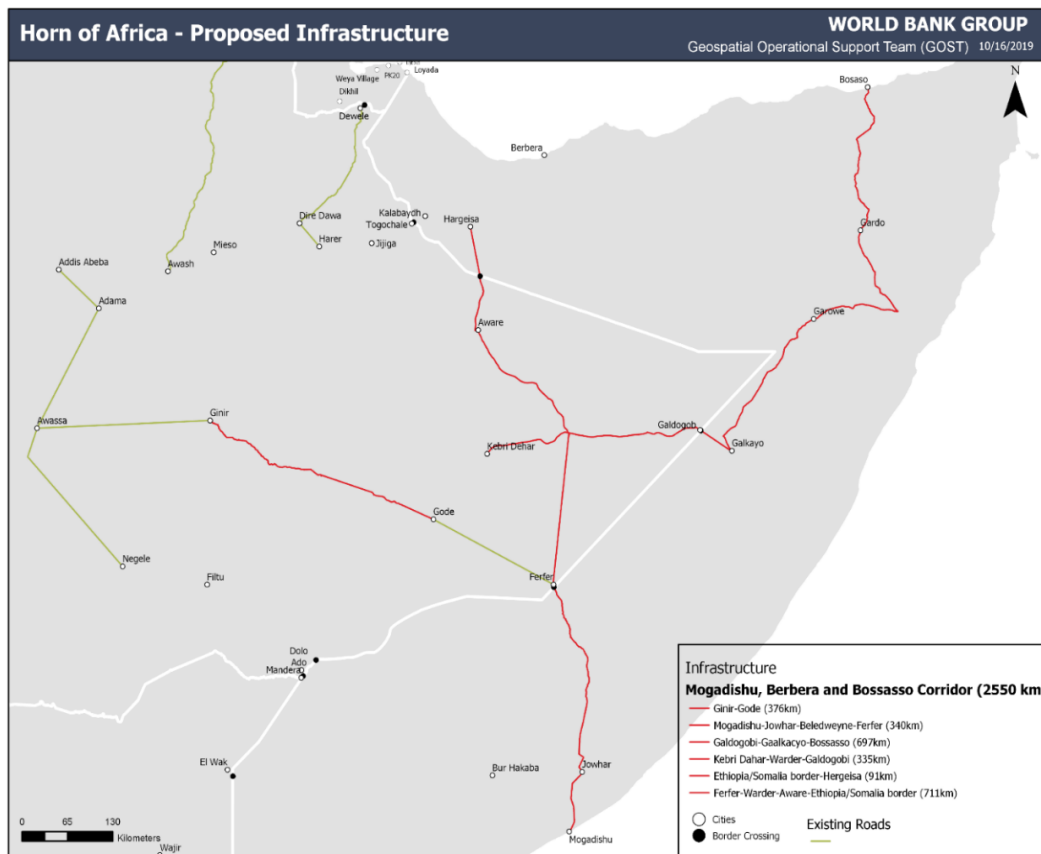
Corridor 4: Mogadishu, Berbera and Bossasso Corridor

Project/program Description:

The principal physical intervention is rehabilitation and upgrade of road segments constituting the referred road corridor, combined with complementary investments and activities aimed at leveraging improved transit to maximize socio-economic wellbeing of the population in the area of influence of the corridor.

This corridor provides access to the Port of Mogadishu in the Southeast, through population centers of the Somali agricultural heartland along the Shabeelle river, the trading center of Beledweyne, and follows the Shabeelle river through Ferfer and towards the more populated Western regions including Addis Ababa. In the North, it connects to the Port of Bossasso, through Garowe and into Ethiopia, connecting the scattered population of Ethiopia's Somali Region, and linking up to Hargeisa and Corridor 3 in the northwest. Providing not only opportunities for trade, the envisioned corridor is intended to improve the connectivity of the residents of the arid regions on the tip of the Horn of Africa. As such, there are expected to be strong synergies for infrastructure sharing, as network infrastructure systems could be implemented concurrently along the corridors.

Figure 6: Mogadishu, Berbera and Bossasso Corridor



Summary of road segments are indicated below. Complementary activities may include facilitation of interlinkages with ports and at border crossings and improvement of other trade conditions; development

or expansion of rural connectivity to the corridor for improved local access to economic, trade and social opportunities; trade using the corridor is expected to reduce costs and enhance living conditions of the population in the regions of the corridors.

Rough-order cost estimation for the corridor (road construction and associated cost only) is US\$2,398 million.

	Design, Works, Supervision US\$M	Design Status	kms	for rehab/upgrading	% poor condition
Mogadishu, Berbera and Bossasso Corridor	2,398		2,550	1,784	
Ethiopia Ginir – Gode	253	Planned for 2020	376	188	50%
Somalia Mogadishu - Jowhar – Beledweyne – Ferfer	338	Mogadishu -Jowhar	340	252	74%
Turdibi/Galdogobi – Gaalkacyo – Bossasso	796	Gaalkacyo-Bossaso	697	592	85%
Ethiopia Kebridahar – Warder – Turdibi	149	No	335	111	33%
Ferfer – Warder – Aware – Ethiopia/Somalia border	764	No	711	569	80%
Somalia Ethiopia/Somalia border-Hargeisa	98	No	91	73	80%

* For ease of presentation, border references are made to closest identified town on either side of borders and does not imply recognition of sovereignty.

Project readiness, practicability and complementarity to other projects:

Much of this corridor requires feasibility studies. These would need to also include social and environmental assessments and making infrastructure from a climate adaptability point of view. Where design exist, following reviews of technical documents and adherence to normal procurement procedures should allow implementation to start 12-18 month after specific project financing is in place; for road segments without design 24-36 months. In addition, due to the ongoing security threats in central Somalia the section from Jowhar to Beledweyne may prove difficult to prepare and implement under the current situation. As part of further preparation of the projects, countries would need to agree on policy issues around management arrangements for the corridors, trade facilitation, operations and maintenance, road safety and other issues. Various segments are already under preparation as part of a joint AfDB/EU project in Somalia, including:

- i) Galkayo to Faratoyo road section along the Galkayo – Garowe link (85 km) to be rehabilitated to surface dressing level and
- ii) Beledwene – Kalabayr (22km) and Dhusamareb – Qaradhi (60km) sections along the Beledwene Galkayo link. To be rehabilitated to SD level
- iii) Luuq – Dolow section (80km) along the Mogadishu- Afgoye- Baidoa -Dolow link. The road is to be upgraded to gravel standard

Pillar 1: Regional Infrastructure Networks

Regional Energy Markets

Second Ethiopia-Djibouti Power System Interconnection Project

Ethiopia-Eritrea Transmission Interconnector

Somalia Power Transmission Backbone

Technical Assistance and Feasibility studies for additional power interconnectors in the HoA region

Second Ethiopia-Djibouti Power System Interconnection Project

Project/program Description:

Regional context: The East Africa Power Pool (EAPP) was established in 2005 with the mandate of ensuring security of supply, optimal use of resources, affordable prices through interconnection, as well as creation of a conducive investment environment and development of a competitive electricity market in the Eastern Africa Region. The EAPP has currently been joined by 12-member states¹². Eritrea is currently discussing with EAPP its possible membership.

Project Rationale: *Increased power trade of clean, reliable and affordable power to Djibouti for power adequacy and improved consumption of electricity services.*

While Djibouti is a small country with 1 million people, electricity access stands at 60 percent, leaving about 400,000 people (about 62,000 households) in the dark. While about 30 percent of urban households is lacking access to electricity services, rural areas are the most affected with 78 percent of the population deprived from the benefits of connectivity. Domestic electricity generation in Djibouti is currently dominated by thermal production, negatively affecting the cost of electricity supply, the country's balance of payments (all petroleum products are imported), and in turn inhibiting economic growth in the country. The electricity tariff currently stands at US\$0.22/kWh (compared to a global average of US\$0.10/kWh).

The available capacity in the country is not sufficient to serve demand: out of 120MW of installed capacity only 67MW are available, and the country now serves about 80 percent of the demand through imports from Ethiopia (available since 2011). A second interconnector would allow to serve increased demand from industrial activity, irrigation, and the Ethiopia-Djibouti railway, as the existing double circuit 230kV tie line between Ethiopia and Djibouti is no longer sufficient to evacuate adequate power.¹³ Djibouti is also developing its domestic generation capacity and diversifying its generation mix with the ongoing 60 MW wind and 30 MW solar PV projects expected to be commissioned by the end of 2021. However, due to increase in demand new sources of supply will need to be additionally secured by 2025.

Outcomes: Increased power trade between Ethiopia and Djibouti from the current 80MW (strained to 95MW) to 220MW (equalling almost to three times increase in power trade) with improved adequacy and reliability of supply, reserve capacity management, and operational efficiency. Power trade would allow to take advantage of Ethiopia's surplus of renewable energy and arbitrage against the high-cost of thermal generation. Ethiopia's export revenues are currently priced at US\$0.07/kWh, about one third of the domestic tariff. Increased power trade and additional imports will also:

(i) Mitigate the congestion risk of the existing "first" interconnection line due to limited transmission capacity and further stabilize power flows in Djibouti. As the second interconnection would connect with the first, the 'end of line' instability that Djibouti is currently experiencing would be resolved;

¹² Burundi, DRC, Djibouti, Egypt, Ethiopia, Kenya, Libya, Rwanda, Sudan, South Sudan, Tanzania, Uganda.

¹³ The starting point of the first interconnection line is the Dire-Dawa III substation, which also serves adjacent towns located in the Eastern part of Ethiopia. As it is an industrial area, power demand is increasing and when all expected future demand materializes, the existing Koka – Dire Dawa III 230 kV single circuit and Koka Hurso 230 kV double circuit transmission lines would no longer suffice to evacuate power, thus calling for additional transmission capacity.

(ii) Reinforce system stability and reliability of supply, including for emergency support through sharing of backup facilities in case of severe default on the existing line or any other technical issue, with operational gains for both countries;

(iii) Provide environmental and climate benefits with reduced reliance of Djibouti from Heavy Fuel Oil (currently 20% of consumption);

(iv) Support and stabilize power discharged from existing and future power plants in Djibouti, including integration of intermittent renewable energy generation and providing firm capacity for Djiboutian load centers; and

(vi) Allow Djibouti to export in the region excess solar and wind power when these sources will be fully implemented and realize power trade in both directions, in turn decreasing the operational costs for both countries.

In synergy with the digital component the provision of optical fiber ground wire (OPGW) in excess of the electricity companies' requirements will be deployed as part of the electricity grid project to allow monetization of the excess fiber based on business needs. The incremental cost to the energy projects will be minimal but the potential gains substantial with the opportunity to operationalize the sharing of fiber optic infrastructure via associated economic and regulatory models with a view to increase broadband networks capacity and quality of digital services in an efficient manner across the HoA.

Project description: Total project cost is **US\$123 million**

Infrastructure Development: High voltage 230kV double circuit transmission overhead line connecting substations of Semera (Ethiopia) and Nagad (Djibouti)

Estimated length: 292 km (102 km in Ethiopia and 190km in Djibouti)

Transfer capacity: 140MW (200MVA)

Investment Cost: US\$123 million (US\$75 for the Ethiopia segment, including substation upgrade and reinforcement to operationalize the line¹⁴; US\$48 million on the Djiboutian segment, including upgrade of Nagad substation)

Financing Gap -Technical Assistance and Capacity Building for regional power trade: To enable power trade, domestic utilities will need to be strengthened for increase capacity to operate within a regional context. Key pre-requisites for the participation of national utilities to power trade entail: (i) adopt and comply with regional interconnection code standards, (ii) plan for and implement national power system upgrades to prevent bottlenecks to regional power flows created by weak domestic networks, (iii) operational readiness in the form of system control, protection and management to maintain operating reliability of the regional network, (iv) commercial readiness set up with trading units and requisite skills to participate in power trade and manage regional power flows.

¹⁴ The reinforcement of the connection of Combolcha to Semera is mandatory to avoid the risk of isolating the new interconnection from Ethiopia.

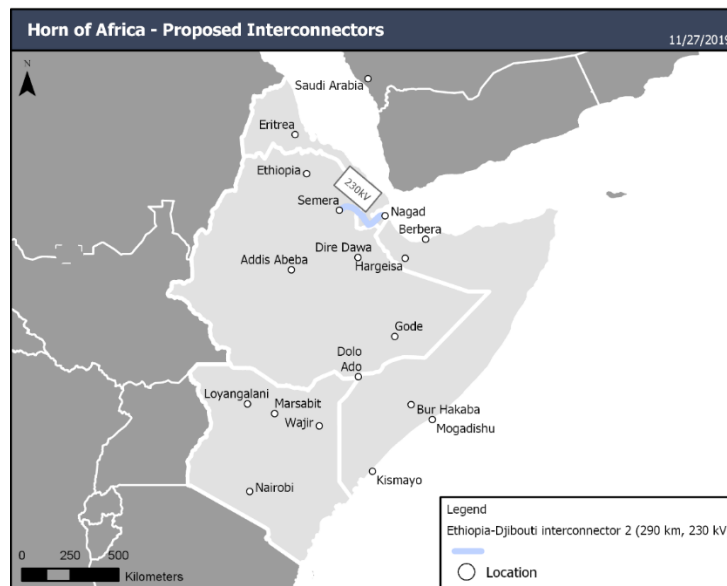
Cost: US\$30 million (US\$20 million Djibouti, US\$10 million EAPP)

Implementation: TA through the EAPP General Secretariat and utility implemented grid and operational investments.

Timeline: 36 months

Status: WB has been actively engaged with EAPP through a Multi-Donor Trust Fund (MDTF) and recently approved IDA grant (US\$10 million). The proposed activities will build on the ongoing engagement.

Figure 1: Second Djibouti-Ethiopia interconnector



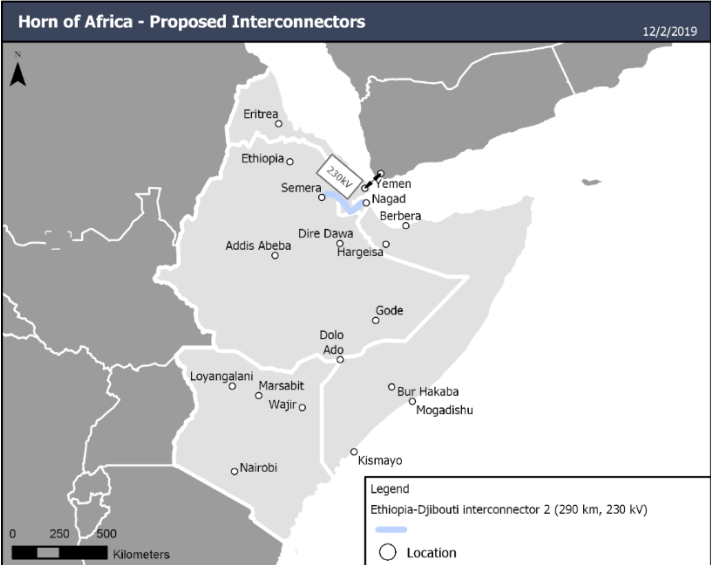
Project Alignment with Key Objectives:

The project is aligned with national, regional, and continental power sector priorities.

Djibouti power sector agenda. The project will support the Government of Djibouti in realizing its Vision 2035, which entails achieving universal access, 100 percent of reliance on renewable energy supply, and the modernization of the economy. The project would also contribute to the commitment of the Government of Djibouti to reduce its emission by 40 percent under the NDC and preventing 1.8 Mt CO₂e of future GHG emissions. In line with this commitment, the country is also launching green economy strategy to also take advantage of climate finance to raise funds nationally and internationally. In addition, the country is in the process of developing a national strategy on climate change. That strategy is also expected to include demand side management and will draw on both the National Adaptation Plan (NAP) and the National Adaptation Programme of Action (NAPA), adopted in 2006. Imports from Ethiopia would allow access to clean energy from hydropower and soon solar. **Djibouti-Ethiopia power integration agenda.** A feasibility study for the second interconnector has been available since 2017 but lack of financing has constrained further developments. The interconnector would almost triple imports from the current 80MW (currently strained to 95MW) to 220MW.

Regional and continental power trade agenda. The interconnector will further develop the power trade infrastructure under the EAPP umbrella and pave the way for potential future infrastructure developments and regional integration across the Horn of Africa coastal line with the possible interconnection of Djibouti with Eritrea and Somalia (Djibouti has already expressed interest for an interconnection with Somalia). Additionally, the interconnector would become part of the continental infrastructure for power trade, increasing power stability across participating countries. High-voltage interconnections have already been established or are in various stages of implementation between Ethiopia, Djibouti, Kenya, Sudan, Tanzania, Uganda, and Rwanda. A high-voltage link between Sudan and Egypt is under construction as well. In the next 5-6 years these developments will set the stage for a transformative power infrastructure embracing the length of the African continent from Cairo to the Cape of Africa and integrating EAPP to the Southern Africa Power Pool (SAPP).

Figure 2: Opportunities for power trade with Gulf Countries



Transformational impact for Djibouti. Thanks to massive, public debt-financed investments in infrastructure, Djibouti has seen rapid, sustained growth in recent years, with per capita GDP growing at more than 3 percent a year. Growth is expected to accelerate to 8 percent in 2020-2023, and the country aims at becoming a trade, logistics and digital hub of East Africa and harvest dividends from its ambitious investment program.

Increased demand has been served by imports from Ethiopia, which has led to strained transfer capacity on the existing interconnector. Adequate and affordable access to electricity services is required in Djibouti to ensure uninterrupted services to industrial and commercial loads (includes ports) and expand electricity services to 30 percent of the urban population and 78 percent of the rural population, currently lacking connectivity as the transmission and distribution grids are circumscribed to the connections between the two main power plants. Djibouti is a small country where more than 23 percent of the population lives in extreme poverty, and in rural areas and power trade is a key enabler to realize the country vision by 2035 to achieve national solidarity through a diversified economy, investing in human capital, and increase regional trade.

Transformational impact for Ethiopia and the region. While Ethiopia is currently seeking to diversify its access to sea options (including with investments in the Berbera port and potential trade through Eritrea), Djibouti currently handles roughly 95 percent of all inbound trade for landlocked Ethiopia, Africa’s second most-populous nation and an economic power in East Africa. In support of increased trade, a railway link between the two countries was established and Ethiopia also expressed interest in acquiring stakes in the Port of Djibouti, and whereby Djibouti, in return, would have the option of taking stakes in state-owned Ethiopian firms, including the Ethiopia Electric Power utility and Ethio Telecom. The establishment of the second interconnector has been part of the broader infrastructure integration between the two countries for a mutually beneficial trade relationship of imports and exports.

Additionally, increased access to the Port of Djibouti and route to the Middle East, has a key strategic value for major powers.

Inclusion of soft interventions. The establishment of the hard infrastructure needs to be accompanied by the development of institutional capacity – at the national and regional levels – for enabling power trade. The project considers capacity building of national utilities and of regional institutions (EAPP) to ensure technical compliance with regional standards, establishment of regional operating protocols, adequate system upgrade, operation and maintenance, and establishment of a regional platform for power trade – for power, commercial, and financial flows. Additionally, the long-lasting power trade relationship between Ethiopia and Djibouti could pave the way for establishing a framework for coordination of national investments with regionally optimized plans, particularly as the updated EAPP Master Plan becomes available for implementation.

Potential to attract private sector financing. While Ethiopia has expressed interest in opening the transmission segment - including interconnectors - to private sector participation (and more specifically to Independent Power Transmission - IPT), Djibouti’s position is less clear, including the possible business model to be adopted. In addition, the project will support the private sector development agenda by stabilizing the grid and increasing transfer capacity to allow IPPs under implementation (Ghoubet Wind) and under development (Grand Bara Solar PV) to optimize their production and competitiveness.

Figure 3: Business models for private investments in transmission

	Indefinite privatization	Whole-of-grid concession	Independent Power Transmission (IPT)	Merchant investment
Term	Indefinite	Long term: often 25 years or more	Long term: often 25 years or more	Indefinite
Coverage	All existing and new lines within a country or region	All existing and new lines within a country or region	Individual line or package of lines. New lines only	Single major line, often HVDC
Revenues	Annual revenues set by the regulator to ensure a reasonable return on and of capital, and subject to periodic regulatory review	Annual revenues set by the regulator to ensure a reasonable return on and of capital, and subject to periodic regulatory review or to arbitration clauses under concession law	Annual revenues largely or entirely set by the winning bid	Revenues dependent on MWh of flow along the line and price differentials between the two ends of the line
Incentives	Related to whole-of-grid performance	Related to whole-of-grid performance	Availability for the line (typically 98%)	Ability to move power from lower-price areas to higher-price areas
Access	Open access to all transmission users on an equal basis	Open access to all transmission users on an equal basis	Open access to all transmission users on an equal basis	Proprietary access. Access rights used by owner or on-sold

Source: Linking up: Public- Private partnerships in Power Transmission in Africa, World Bank, 2018

Project readiness, practicability and complementarity to other projects:

The feasibility study is available and safeguards documents are under development.

Review of the existing PPA. As part of the services to be provided for the project, the review of the existing agreement for the first power interconnection between Djibouti and Ethiopia is foreseen. The review would consider the requirements for the interconnected networks extension and cover all new national regulations, which came into force after signature of the existing agreement.¹⁵

Djibouti has been a member of the EAPP since 2012, and the readiness of EAPP and national utilities for power trade is being supported by the WB and other DPs (Sida, USAID/Power Africa) with a MDTF in line with the EAPP Strategic Plan (2015-2025) and its 3-year action plan. Both guiding documents chart out a roadmap for putting in place the appropriate planning and regulatory framework, and the operational evolution towards a competitive power market.

Private sector participation. There are prospects for PPP. The Government of Djibouti is committed to opening some of its protected sectors to private sector competition and has adopted in 2017 the Law no 2017-186 on Public-Private Partnerships (however the law has seen slow implementation). The Government of Ethiopia has put in place a sound legal and regulatory framework for PPPs in 2018 and has developed of a strong pipeline of PPP transactions in the power sector. Technical assistance and transaction advisory services would be also be part of the development of the soft-infrastructure and investment climate needed for the design of appropriate business models to attract for the first-time private sector participation in the transmission segment. The financing requirements have been captured in the TA for EAPP and client countries.

Risks:

1. Surplus of available generation in Djibouti. Two main generation projects are expected to come online by 2021: the 60 MW Ghoubet Wind Farm and the 30 MW ENGIE Solar PV project, which could pose a risk for the rationale of the interconnector and increased imports. However, preliminary simulations indicate the relevance of the project as a means for adequate least-cost power adequacy in the medium-term (by 2024). In addition, imports are recognized as an important means for peak load management and VRE integration. **Mitigation measures:** the project under preparation would ensure serving the rapidly rising demand and further increase the diversification of the energy mix with lower costs renewables and contribute to the green economy aspirations of the country. Additionally, imports serve the purpose of reinforcing system stability and reliability of supply, reduce reserve margin requirements and provide a baseload for the integration of intermittent renewable energy generation.

2. Countries' power sector performance. The sustainability of the project also rests on the financial sustainability and operational and governance capacity of the national utilities. While Ethiopia has adopted a comprehensive menu for performance improvement, including the adoption of cost-reflective tariffs, operational and commercial efficiency (system losses are currently at 23 percent), and debt

¹⁵ The issue of national energy security would have to be considered by Djibouti when discussing a 2nd power interconnection with Ethiopia. Djibouti would be advised to negotiate the delivery of firm electricity (a "firm power purchase agreement") with Ethiopia for this 2nd interconnection.

sustainability of the sector¹⁶, the reform process is still in a transitional phase. The vertically integrated Electricite de Djibouti (EDD) remains vulnerable to fluctuations in oil prices and system technical losses stand at 20 percent. **Mitigation measures.** Technical assistance and capacity building through the EAPP would supplement and complements domestic support to the power sectors' strengthening and sustainability. Financial viability of utilities and their ability to meet contractual payment obligations is part of readiness for regional power trade and will be supported through adequate technical assistance to the client countries. Financial risk mitigating mechanisms such as various forms of payment guarantee can be considered to ensure timely payments for electricity imports. The experience of other power pools, particularly WAPP, provides useful lessons that can be considered in the design of regional mechanisms. Planning and implementation assistance will also be required to ensure that increased power trade also translates into increased connectivity in Djibouti through additional investments in the distribution segment and expansion of the network infrastructure to fully exploit the additional availability of imports for shared benefits.

3. Capacity of EAPP. Established in 2005, EAPP became committed and engaged to institutional strengthening over the past three years with the support of DPs. While key measures have been undertaken to ensure adequate technical, commercial, and institutional coordination capacity (including staffing, design and adoption of strategic action plans), EAPP remains a young entity with an ambitious mandate. **Mitigation measures.** Steady support of DPs with financial and technical assistance to ensure that EAPP timely delivers on its mandate combined with national programs in support of utilities operational and financial health.

¹⁶ The World Bank is supporting Ethiopia in these efforts through a series of Development Policy Operations (DPOs), the first DPO is currently under implementation for US\$1.2 billion.

Ethiopia-Eritrea Transmission Interconnector

Project/program Description:

Regional context: The East Africa Power Pool (EAPP) was established in 2005 with the mandate of ensuring security of supply, optimal use of resources, affordable prices through interconnection, as well as creation of a conducive investment environment and development of a competitive electricity market in the Eastern Africa Region. The EAPP has currently been joined by 12-member states¹⁷. Eritrea is currently discussing with EAPP its possible membership.

The project entails the establishment of the hard and soft infrastructure required to enable power trade between Ethiopia and Eritrea within the broader EAPP umbrella.

Project Rationale: *Power trade will enable the supply of adequate, clean, reliable and affordable power to Eritrea and support increased consumption of electricity services.*

Between 50 to 60 percent of the population in Eritrea is currently lacking access to electricity services, leaving about 3 million Eritreans in the dark (700,000-800,000 households). Urban access currently stands at 80 percent and rural access has increased from single digits to an estimated 10-12 percent over the past 15 years. Generation facilities are in poor conditions, and only about half of the country's 140 MW of installed capacity is operational, leaving the country with inadequate power supply. Tariffs average at US\$0.15-0.21 kWh (compared to a global average of US\$0.10/kWh) as a result of 98 percent of the generation capacity based on heavy fuel oil, while renewables provide less than 2 percent, severely constraining consumption of electricity and negatively impacting productivity and economic growth. Over the past decade, the estimated per-capita consumption has fallen below 50 kWh per capita, less than half the average in Sub-Saharan Africa.

Outcomes: The interconnection would allow Eritrea to take advantage of Ethiopia's surplus of renewable energy and arbitrage against the high-cost of thermal generation. Ethiopia's export revenues are currently priced at US\$0.07/kWh, less than half the domestic value. The combined access to increased adequacy of supply and at a lower price constitutes a unique opportunity for the future of the country and for an increased focus of investments towards end-user access. Power trade would also improve reliability of supply, reserve capacity management, and provide cost savings through operational efficiency.

Project description: Total Project Cost is ~ **US\$222 million**

1. Feasibility study: A feasibility study is required for the technical, financial, economic analyses for the high voltage interconnector – it will also determine the start end end-point of the line in consultations with Ethiopian and Eritrean counterparts. The study will include the Environmental and Social Impact Assessment, Resettlement Action Plan and Tender Document preparation.

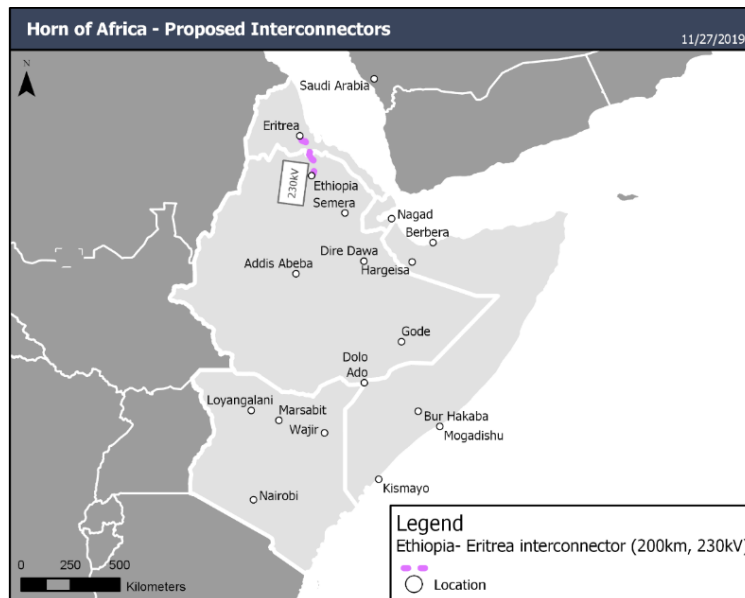
Cost: US\$1.5 million

Timeline: 18 months

Status: Financing for the feasibility study needs to be secured.

¹⁷ Burundi, DRC, Djibouti, Egypt, Ethiopia, Kenya, Libya, Rwanda, Sudan, South Sudan, Tanzania, Uganda.

Figure 1: Preliminary location of the Ethiopia-Eritrea interconnector



2. Infrastructure Development: High voltage 230kV double circuit transmission primary link between Ethiopia and Eritrea.

Estimated length: 200km*

Transfer Capacity: 100MW*

Cost: US\$200 million*

* To be confirmed by the feasibility study

3. Technical Assistance and Capacity Building: To enable power trade, domestic utilities will need to be strengthened for increased capacity to operate within a regional context. Key pre-requisites for the participation of national utilities to power trade entail: (i) adoption and compliance with regional interconnection code standards, (ii) planning for and implementing national power system upgrades to prevent bottlenecks to regional power flows created by weak domestic networks, (v) operational readiness in the form of system control, protection and management to maintain operating reliability of the regional network, (vi) commercial readiness set up with trading units and requisite skills to participate in power trade and manage regional power flows.

Cost: US\$20 million (US\$10 million Eritrea, US\$10 million Ethiopia)

Implementation: TA through the EAPP General Secretariat and utility implemented grid and operational investments

Timeline: 36 months

Status: WB has been actively engaged with EAPP through a Multi-Donor Trust Fund (MDTF) and recently approved IDA grant (US\$10 million). The proposed activities will build on the ongoing engagement.

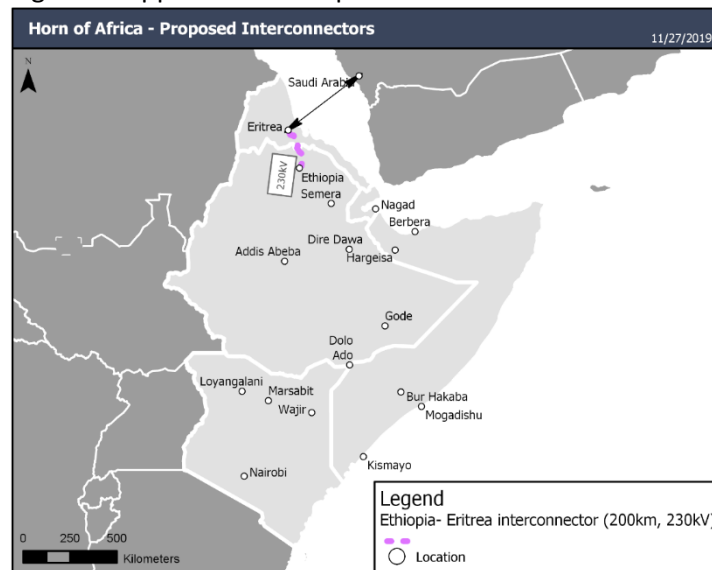
Project Alignment with Key Objectives:

The project is aligned with national, regional, and continental power sector priorities.

Eritrea power sector agenda. The project is aligned with the 2014 Enhancing Energy Access and Energy Security in Eritrea and the 2010 Renewable Energy Policy, which define the long-term objective of the country to improve living standards through power sector development. The vision is to achieve universal access by 2030. Additionally, under the Nationally Determined Contributions to the Paris Agreement the Government of Eritrea affirmed its commitment to decrease CO₂ emissions from fossil fuels by 12 percent by 2030 (to less than 7.2 MtCO₂eq) and increase the integration of renewable energy into the generation energy mix to 70 percent.

Ethiopia-Eritrea power integration agenda. Discussions between the two countries about the development of a regional interconnector started before the 1998 border war, which put the plans on hold. After the rapprochement between the countries in September 2018 and signing of the peace agreement¹⁸, the countries resumed dialogue on infrastructure development. Both acknowledge the mutual strategic relevance of power trade, as a precursor for increased trade of goods and services. Imports from Ethiopia would allow access to clean energy from hydropower and soon solar.

Figure 2: Opportunities for power trade with Gulf Countries



Regional and continental power trade agenda. The interconnector will integrate Eritrea within the larger infrastructure development currently ongoing at the regional and continental levels. High-voltage interconnections have already been established or are in various stages of implementation between Ethiopia, Djibouti, Kenya, Sudan, Tanzania, Uganda, and Rwanda. A high-voltage link between Sudan and

¹⁸ Following Ethiopia's acceptance of the UN's Eritrea-Ethiopia Border Commission findings in July 2018.

Egypt is under construction as well. In the next 5-6 years these developments will set the stage for a transformative power infrastructure embracing the length of the African continent from Cairo to the Cape of Africa and integrating EAPP to the Southern Africa Power Pool (SAPP).

Opportunities for further expansion of power trade. The interconnector with Eritrea offers strategic opportunities for power trading between the EAPP and Gulf Countries through the extension of undersea cables. In January 2019, the Ethiopian Ministry of Water, Irrigation and Electricity signed an MoU with the Gulf Electricity Interconnection Authority and the International Energy Linking Organization (GEIDCO) for a feasibility study of the electricity link between Ethiopia and the GCC countries.

Transformational impact for Eritrea. The interconnector will provide access to additional power supply, from renewable resources, and at a lower cost. It is expected that imports will have a positive impact on the domestic tariff, reducing the cost of consumption of electricity. In turn, increased access to electricity will have positive impact on livelihoods and spur economic growth, for the transformation of the Eritrean economy. The regional energy trade would open up opportunities for countries to ramp-up national-level energy access programs. Rain-fed agriculture is still the predominant economic activity in the country, while its contribution to GDP has been declining due to recurrent droughts and subsistence farming methods. Anecdotal evidence indicates that poverty is still widespread in the country where 65 percent of the population lives in rural areas and 80 percent depend on subsistence agriculture for their livelihoods. In 2012, Eritrea's Human Development Index scored at 0.351, below the average of 0.466 for countries in the Low Human Development group and below the 0.475 average for countries in the Sub-Saharan Africa region.

Transformational impact for Ethiopia and the region. Ethiopia has been lacking access to the sea for almost two decades and is the only landlocked African country dependent on only one significant trade corridor. Ethiopia ranks 126 out of 160 countries in the WB Logistics Performance Index. The Government of Ethiopia has embarked on an ambitious drive to become the light-manufacturing hub and is seeking closer regional integration alongside its ambitious plans for export to global markets and jobs. In 2018, the Government recently launched a Trade and Logistics sector reform supported by the WB through budget financing (DPO)¹⁹.

Inclusion of soft interventions. The establishment of the hard infrastructure needs to be accompanied by the development of institutional capacity – at the national and regional levels – for enabling power trade. The project considers capacity building of national utilities and of regional institutions (EAPP) to ensure technical compliance with regional standards, establishment of regional operating protocols, and establishment of a regional platform for power trade – for both power and commercial flows. These top-down capacity improvements driven by regional trade are expected to strengthen and fasten the overall performance of the utilities engaged, in combination with bottom-up national capacity building and technical assistance.

¹⁹ The Development Policy Operation P168566 is supporting the country with US\$1.2 billion.

Figure 3: Business models for private investments in transmission

	Indefinite privatization	Whole-of-grid concession	Independent Power Transmission (IPT)	Merchant investment
Term	Indefinite	Long term: often 25 years or more	Long term: often 25 years or more	Indefinite
Coverage	All existing and new lines within a country or region	All existing and new lines within a country or region	Individual line or package of lines. New lines only	Single major line, often HVDC
Revenues	Annual revenues set by the regulator to ensure a reasonable return on and of capital, and subject to periodic regulatory review	Annual revenues set by the regulator to ensure a reasonable return on and of capital, and subject to periodic regulatory review or to arbitration clauses under concession law	Annual revenues largely or entirely set by the winning bid	Revenues dependent on MWh of flow along the line and price differentials between the two ends of the line
Incentives	Related to whole-of-grid performance	Related to whole-of-grid performance	Availability for the line (typically 98%)	Ability to move power from lower-price areas to higher-price areas
Access	Open access to all transmission users on an equal basis	Open access to all transmission users on an equal basis	Open access to all transmission users on an equal basis	Proprietary access. Access rights used by owner or on-sold

Source: Linking up: Public- Private partnerships in Power Transmission in Africa, World Bank, 2018

Potential to attract private sector financing. The Government of Ethiopia has already expressed interest in considering opportunities to attract private sector investments for the financing and operation of the transmission line. The business model has not yet been identified (see Figure 3 for available options), although there has been some interest for the establishment of an Independent Power Transmission – IPT). The interconnector would become the first example of private sector participation in the transmission segment in Africa, creating a positive precedent and example for other countries to follow.

Project readiness, practicability and complementarity to other projects:

A feasibility study is required for the design of the transmission interconnector (18 months), which would provide the technical background for launching actual investments within a 3-year timeframe. Recent analysis revealed that the infrastructure systems of the two countries have compatible frequency levels (50 hertz). The Government of Ethiopia has officially requested funding the feasibility study in 2018 and a confirmation from Eritrea is still needed to proceed.

Project readiness is supported by national and regional engagements. The development of the energy sector in Eritrea has stalled during recent years (UN sanctions were also in place) The WB is currently supporting the country with the following activities:

- Assessment of the operational and commercial performance of the Eritrean Electric Corporation (EEC);
- Policy and regulatory gap analysis, in support of the Ministry of Energy and Mines;
- Short- and medium-term financial assessment of the energy sector and development of strategic options to reduce and eventually phase-out fuel subsidies;
- Development of a roadmap for the operational and commercial modernization of energy service delivery in Eritrea.

Eritrea is considering joining EAPP as a member, and discussions are ongoing. The country has been added to the scope of the EAPP Master Plan, currently under update from the latest 2014 available analysis. The Master Plan will provide the technical overview of power trade infrastructure investments for the region, including the Horn of Africa and with perspective integration of EAPP with SAPP.

The institutional strengthening of the EAPP and member utilities is also being supported by the WB and other DPs (Sida, USAID/Power Africa) with a MDTF in line with the EAPP Strategic Plan (2015-2025) and its 3-year action plan. Both guiding documents chart out a roadmap for putting in place the appropriate planning and regulatory framework, and the operational evolution towards a competitive power market.

Private sector participation. The Government of Ethiopia has put in place a sound legal and regulatory framework for PPPs in 2018 and has developed of a strong pipeline of PPP transactions in the power sector. Eritrea, while it has expressed willingness to attract private investors, still lacks a PPP framework or a PPP law. Technical assistance and transaction advisory services would be also be part of the development of the soft-infrastructure and investment climate needed for the design of appropriate business models to attract private sector participation in the transmission segment. The financing requirements have been captured in the TA for EAPP and client countries.

Risks:

1. Country commitment and political instability. The recent conflict in the Tigray region, bordering with Eritrea (where the interconnector would also be located). Delays in the development of the feasibility study and the development of the transmission line are foreseen.

2. Countries' power sector performance. The sustainability of the project also rests on the financial sustainability and operational capacity of the national utilities. While Ethiopia has adopted a comprehensive menu for performance improvement, including the adoption of cost-reflective tariffs, operational and commercial efficiency (system losses are currently at 23 percent), and debt sustainability of the sector²⁰, the reform process is still in a transitional phase. In Eritrea system losses seem to stand around 22 percent and the EEC is affected by poor operational and financial performance. **Mitigation measures.** Technical assistance and capacity building through EAPP would supplement and complements domestic support to the power sectors' strengthening and sustainability. Financial viability of utilities and their ability to meet contractual payment obligations is part of readiness for regional power trade and will be supported through adequate technical assistance to the client countries. Financial risk mitigating mechanisms such as various forms of payment guarantee can be considered to ensure timely payments for electricity imports. The ongoing re-engagement in Eritrea of the World Bank and DPs is also expected to provide more reliable information on the power sector performance in the country for the design of a comprehensive technical support strategy. Planning and implementation assistance will also be required to ensure that increased power trade also translates into increased connectivity in Eritrea through additional investments in the distribution segment and expansion of the network infrastructure to fully exploit the additional availability of imports for shared benefits.

3. Capacity of EAPP. Established in 2005, EAPP became committed and engaged to institutional strengthening over the past three years with the support of DPs. While key measures have been

²⁰ The World Bank is supporting Ethiopia in these efforts through a series of Development Policy Operations (DPOs), the first DPO is currently under implementation for US\$1.2 billion.

undertaken to ensure adequate technical, commercial, and institutional coordination capacity (including staffing, design and adoption of strategic action plans), EAPP remains a young entity with an ambitious mandate. **Mitigation measures.** Steady support of DPs with financial and technical assistance to ensure that EAPP timely delivers on its mandate combined with national programs in support of utilities operational and financial health.

Somalia Power Transmission Backbone

Project/program Description:

Regional context: The East Africa Power Pool (EAPP) was established in 2005 with the mandate of ensuring security of supply, optimal use of resources, affordable prices through interconnection, as well as creation of a conducive investment environment and development of a competitive electricity market in the Eastern Africa Region. The EAPP has currently been joined by 12-member states²¹. **Somalia has expressed interest in joining EAPP and participating in power trade with its neighbors.**

The project entails the establishment of the hard and soft infrastructure required to enable power trade between Somalia and neighboring countries within the broader EAPP umbrella.

Project Rationale: *Establishment of the transmission backbone in Somalia to allow for power trade. Power trade will enable adequate supply of clean, reliable and affordable power to Somalia and support increased consumption of electricity services.*

Access to electricity services is constrained to about 33 percent of the population, leaving about 1.7 million households (about 10 million people) in the dark. While about 40 percent of urban households (400,000 households) still lack services, the deficit becomes higher in rural areas, where 90 percent of the population lacks access (about 1.3 million households). The total current installed generation capacity is estimated at about 117 MW with only half capacity available (about 60MW)²². About 90 percent of the generation capacity is high speed diesel generators (HSDG), operated as off-grid mini-grids by over 55 vertically integrated, autonomous and parallel electricity service providers (ESPs), with island radial low voltage (LV) distribution networks. There is significant duplication of infrastructure and without synchronized generation and distribution developments, hence service delivery to consumers is severely limited. As a result of fragmentation and inefficiencies, reported tariffs reach US\$1/kWh, one of the most expensive in the world (compared to a global average of US\$0.10/kWh), further constraining consumption of electricity and negatively impacting productivity and economic growth.²³ The country's balance of payments is also negatively affected as all petroleum products are all imported.

Outcomes: The establishment of the transmission backbone in Somalia constitute a pre-requisite for enabling power trade and distributing electricity to customers. Neighboring countries (notably Ethiopia, Kenya, and more recently Djibouti) have expressed interest in exporting power to Somalia, but in the absence of the transmission backbone this ambition will not be technically possible. The transmission backbone system would allow to: (i) Interconnect distribution facilities from currently fragmented Electricity Service Providers (ESPs) into a national infrastructure, (ii) Integrate in a cohesive way different sources of power supply, and (iii) Rationalize sub-transmission and distribution feeders to provide more efficient supply to customers. Power trade would improve the availability, reliability, and affordability of

²¹ Burundi, DRC, Djibouti, Egypt, Ethiopia, Kenya, Libya, Rwanda, Sudan, South Sudan, Tanzania, Uganda.

²² Estimates based on the Somalia Master Plan and

²³ The World Bank's flagship report on Regulatory Indicators for Sustainable Energy (RISE, 2016) found that Somalia ranks in the upper 5 percent globally for power cost, and in the upper 15 percent globally for power expenditure as a share of gross national income (GNI) per household.

electricity services to meet the suppressed and growing demand and contribute to universal electricity access for Somalis.

Project description: Total project cost is ~ US\$1.33 billion

1. Feasibility Study: A feasibility study is required for the technical, financial, economic analyses of the transmission backbone, including identifying the most viable option between the establishment of an integrated line versus a Northern and Southern one (Figure 1). The study will include the Environmental and Social Impact Assessment, Resettlement Action Plan and Tender Document preparation.

Cost: US\$2 million

Timeline: 18-24 months

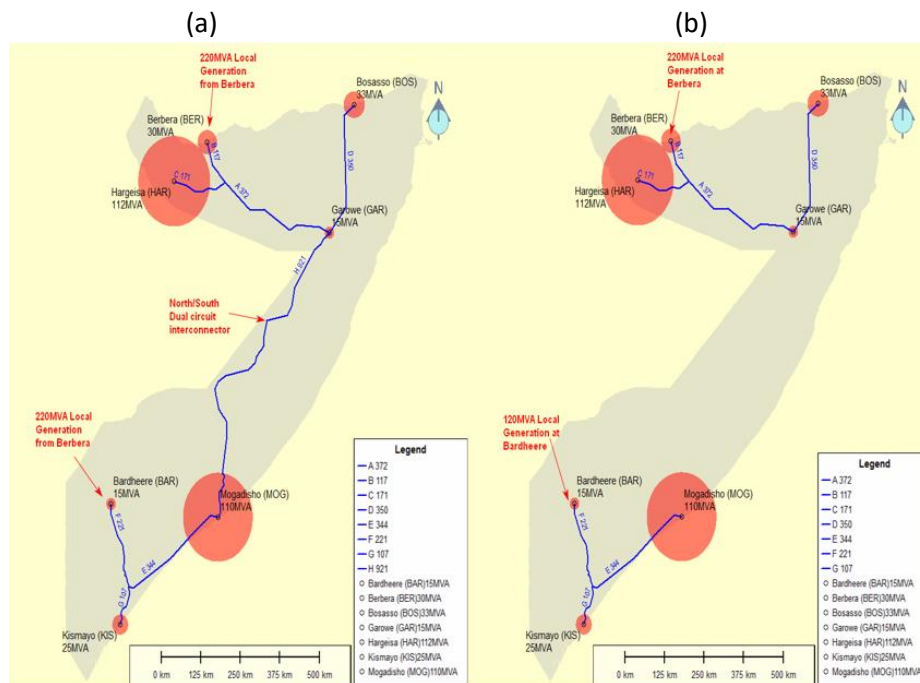
Status: The WB is financing the feasibility studies for Northern interconnection (Berbera) and Southern (Mogadishu) for power trade with Ethiopia. The interconnectors would establish the initial segments of the transmission backbone and would inform the feasibility study for the development of the sub-regional one.

2. Infrastructure development: Establishment of a high voltage 220kV transmission network to connect all major load centers (Kismayo, Mogadishu, Boosaaso, Garoowe, Hargeysa and Berbera) to major generation sources (domestic and imported). The investment will include high voltage sub-stations and sub-transmission rings system around load centers.

Cost: US\$1.3 billion

Timeline: 24 months

Figure 1: Options for the Somali transmission backbone development



Source: Somalia Power Master Plan, 2019

3. Technical Assistance and Capacity Building: The Somali power sector needs to be further developed with adequate capacity to manage the national infrastructure as well as to operate within a regional

integration context. More specifically, assistance will be directed towards: (a) Option analysis for the structuring of the sector institutional setting (currently lacking a utility or a credible off-taker and hence a counterpart for establishment of power trade agreements) and its establishment; (b) Distribution master plan development; (c) Somalia technical and/or political membership to EAPP and; (d) Power sector readiness to participate and comply with power trade requirements, including: i) adoption and compliance with regional interconnection code standards, ii) investments to prevent bottlenecks to regional power flows created by weak domestic networks, iii) operational readiness in the form of system control, protection and management to maintain operating reliability of the regional network, iv) commercial readiness set up with trading units and requisite skills to participate in power trade and manage regional power flows. Support will also be provided to EAPP to ensure the adequate technical and or/political participation of Somalia and readiness for power trade of the country with EAPP members.

Cost: US\$20 million

Timeline: 36 months

Project Alignment with Key Objectives:

The project is aligned with national, regional, and continental power sector priorities.

Somalia power sector agenda. The project is aligned with the Government of Somalia's National Development Plan 9 (2020-24) adopted in October 2019. The National Development Plan identifies access to electricity as a priority area of investment under its infrastructure pillar and a key enabler for poverty reduction and economic development through local entrepreneurship and job creation. A first step in this direction was the completion and adoption in 2019 of the Somalia Power Master Plan. The Plan sets and sequences priority investments in generation, transmission and distribution over a period of 20 years and the establishment of the transmission backbone was identified as an immediate priority. The Plan also recommends regional power integration as an important feature for power adequacy. In addition, the Government is committed to develop a diversified energy mix not only to ensure adequate power for electricity services but also to reduce emissions under the Intended National Determined Contributions.

Regional and continental power trade agenda. The project will establish the pre-requisite infrastructure and institutional capacity for the development of transmission interconnectors and realization of power trade with neighboring countries. Ethiopia, Kenya and Djibouti have already expressed interest in exporting to Somalia. Imports from Ethiopia and Kenya would allow access to clean energy from hydropower, wind, geothermal and solar.

Transformational impact for Somalia. The implementation of the transmission backbone would enable evacuation of power from new generation plants, interconnection of distribution facilities of individual ESPs with their neighbours, and lay the infrastructure foundations for urban and rural electrification. In the absence of the transmission backbone, Somalia would not be able to develop a national power infrastructure for electricity access provision to the population at cheaper and more reliable terms, filling an infrastructure gap existing since the 1990s' war. Additionally, power trade would provide access to clean, reliable, and cheaper sources of energy through imports.

Transformational impact for the region. In the absence of the transmission backbone and establishment of an adequate institutional power sector structure and capacity, Somalia and its neighbors would not be

able to benefit from regional power trade. In addition, Somalia would be isolated from regional integration developments under the EAPP and access to continental power flows.

Inclusion of soft interventions. The establishment of the hard infrastructure needs to be accompanied by the development of the Somali power sector institutional capacity. The project considers the design of the institutional power sector structure and its establishment with adequate capacity as a key component for the management and operation of the hard infrastructure, as well as to enable power trade. Support will also be provided to ensure that Somalia adopts a regional perspective for domestic power sector developments and complies with power trade technical and commercial obligations.

Potential to attract private sector financing: The Government of Somalia has expressed interest in considering opportunities to attract private sector investments for the financing and operation of the transmission backbone. However, discussions should be resumed in light of the prominence that the project recently gained. The country is currently designing the architecture for the power sector institutional infrastructure with clear roles and responsibilities for public and private actors. Currently, service provision is entirely provided by the private sector.

Figure 3: Business models for private investments in transmission

	Indefinite privatization	Whole-of-grid concession	Independent Power Transmission (IPT)	Merchant investment
Term	Indefinite	Long term: often 25 years or more	Long term: often 25 years or more	Indefinite
Coverage	All existing and new lines within a country or region	All existing and new lines within a country or region	Individual line or package of lines. New lines only	Single major line, often HVDC
Revenues	Annual revenues set by the regulator to ensure a reasonable return on and of capital, and subject to periodic regulatory review	Annual revenues set by the regulator to ensure a reasonable return on and of capital, and subject to periodic regulatory review or to arbitration clauses under concession law	Annual revenues largely or entirely set by the winning bid	Revenues dependent on MWh of flow along the line and price differentials between the two ends of the line
Incentives	Related to whole-of-grid performance	Related to whole-of-grid performance	Availability for the line (typically 98%)	Ability to move power from lower-price areas to higher-price areas
Access	Open access to all transmission users on an equal basis	Open access to all transmission users on an equal basis	Open access to all transmission users on an equal basis	Proprietary access. Access rights used by owner or on-sold

Source: Linking up: Public- Private partnerships in Power Transmission in Africa, World Bank, 2018

Project readiness, practicability and complementarity to other projects:

A feasibility study is required for the identification of the most suitable option for the development of the transmission backbone (18-24 months), which would provide the technical background for launching actual investments within a 3-year timeframe. However, the Power Master Plan has already identified important strategic options to be taken into account for its development and the implications for additional generation and distribution investments.

Project readiness is supported by national and regional engagements. The World Bank has been supporting the Government of Somalia both at the power sector planning level and at the implementation one. Support was provided for the development of the Power Master Plan under Somali Electricity Access Project, which also provided technical assistance for generation and distribution least-cost planning for

access expansion. Ongoing discussions foresee the approval of the Somali Energy Sector Recovery Project to increase local capacity in electricity generation, transmission, distribution and connections to households and businesses. More recently, the WB has engaged with the counterparts for the development of the feasibility study of a Northern (Berbera) and Southern interconnector with Ethiopia, which will inform and pave the way for the sub-regional feasibility study for the national backbone.

Somalia is considering joining EAPP as a member, and discussions are ongoing. The country has been added to the scope of the EAPP Master Plan, currently under update from the latest 2014 available analysis. The Master Plan will provide the technical overview of power trade infrastructure investments for the region, including the Horn of Africa and with perspective integration of EAPP with SAPP.

Private sector participation. While the Somali's private sector has impressively stepped up to deliver basic energy services in the aftermath of the protracted conflict of the 1990s, these enterprises lack the capital and technical, financing, and business model insights to scale their businesses. In addition, the country does not have investment climate frameworks in place for attracting private upstream investments in the power sector (IPPs are currently not authorized by law). Technical assistance and transaction advisory services would be also be part of the development of the soft-infrastructure and investment climate needed for the design of appropriate business models to attract private sector participation in the transmission segment. The financing requirements have been captured in the TA for EAPP and client countries.

Risks:

1. Borrowing capacity. The implementation of the project would depend on the availability of concessional resources coupled with grant funding and potential private sector investments. **Mitigation measures:** The World Bank and the International Monetary Fund approved Somalia's eligibility for the Heavily Indebted Poor Countries (HIPC) Initiative on March 25, 2020, removing the constraints on economic growth and poverty reduction and providing access to IDA instruments to mitigate the impact of multiple crises in Somalia. Additionally, power sector development driven by technically sound analyses and implementation programs and institutional capacity building is expected to syndicate grant funding and private investors.

2. Institutional capacity. The power sector has been operating within a policy and regulatory vacuum and implementing agencies have low capacity. **Mitigation measures:** A comprehensive menu of technical assistance and capacity building interventions is foreseen under the HoAI to complement national efforts for the establishment of an adequate institutional structure, including for private sector participation. Building on the momentum, the HoAI could leapfrog advancements in the power sector in Somalia, based on best practice experience acquired worldwide.

3. Capacity of EAPP. Established in 2005, EAPP became committed and engaged to institutional strengthening over the past three years with the support of DPs. While key measures have been undertaken to ensure adequate technical, commercial, and institutional coordination capacity (including staffing, design and adoption of strategic action plans), EAPP remains a young entity with an ambitious mandate. **Mitigation measures.** Steady support of DPs with financial and technical assistance to ensure that EAPP timely delivers on its mandate combined with national programs in support of utility reforms to strengthen their operational and financial health.

Technical assistance and Feasibility studies for additional power interconnectors in the HoA region

Project/program Description:

1. EAPP Technical Assistance and Implementation Support. Established in 2005, EAPP became committed and engaged to institutional strengthening over the past three years with the support of DPs. While key measures have been undertaken to ensure adequate technical, commercial, and institutional coordination capacity (including staffing, design and adoption of strategic action plans), EAPP remains a young entity with an ambitious mandate.

Partnerships and collaboration will be critical for the engagement. Effective coordination between development partners, member countries, and complementary regional and national initiatives are key. This would also support the broader EAPP agenda which prioritizes integration of national into regional planning. EAPP would also need to strengthen its own capacity to manage a growing and more complex system of infrastructure, from a technical, commercial, and financial standpoint and graduate from bilateral to multilateral trade and to more sophisticated contractual arrangements.

In the short to medium-term, critical areas of action to promote the development of robust power trade in the EAPP include: (i) further institutional strengthening of EAPP to coordinate and plan for power trade, (ii) launching pilot trading market on some of the existing interconnections (e.g. Ethiopia-Sudan, Sudan-Egypt, Ethiopia-Djibouti) and expanding to those expected to come online soon (e.g. Ethiopia-Kenya), with subsequent evolution towards a multilateral competitive trading platform (iii) strengthening the regional regulator, (iv) preparatory studies for missing regional transmission links and analytical studies for the expansion of the EAPP network with links to SAPP and possibly Gulf Cooperation Council countries (possible sub-marine link through Egypt, Eritrea or Djibouti).

Project Rationale: *Enable power trade through soft infrastructure development*

Total funding requirements: US\$25 million

The existing MDTF, managed by the World Bank, provides an available platform for resource pooling and coordination focused on technical assistance and execution of the EAPP engagement (as well as SAPP).

2. Additional Feasibility Studies

These feasibility studies were identified as priorities by the HoA countries during consultations and confirmed during the HoA Ministerial Roundtable in October 2019. The timeline for the establishment of the interconnectors would depend on the results of the studies and, where applicable, the establishment of the transmission backbone in Somalia²⁴ (the project is covered by a separate brief).

Studies Rationale: *Establishment of additional hard infrastructure for increased power trade in the HoA region*

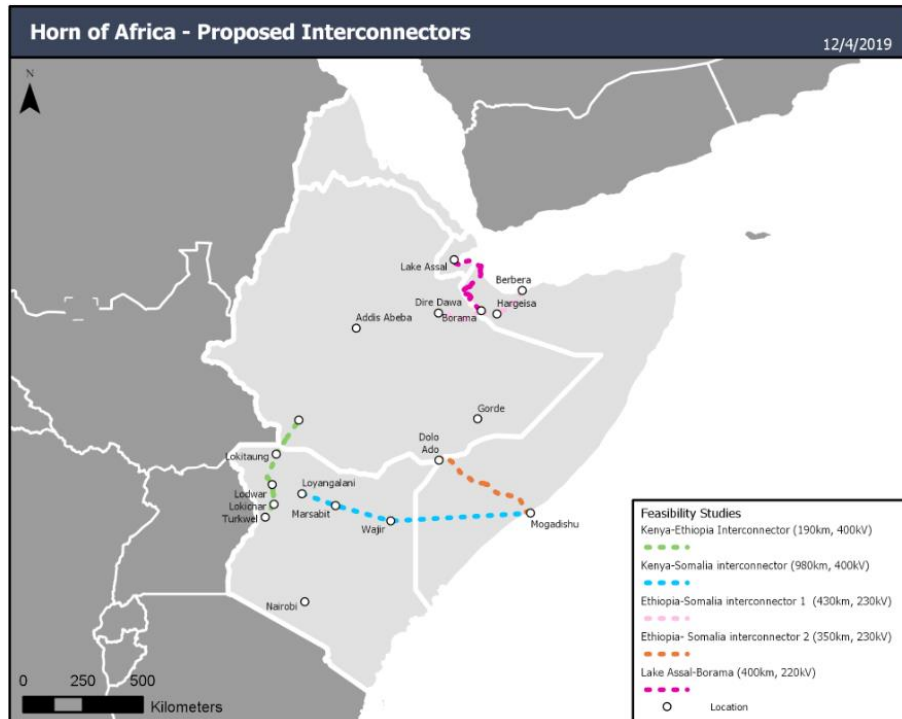
²⁴ Together with the establishment of the transmission backbone, the sub-transmission and distribution infrastructures would need to be in place to evacuate power. For this purpose, technical studies with investment costings are envisaged under the Somalia Transmission Backbone Technical Assistance and Capacity Building component.

Total funding requirements: US\$4.5 million

Table 1: Summary of priority feasibility studies for power interconnectors

Proposed interconnectors	US\$, million	Timeframe
1. Ethiopia – Somalia (Dire Dawa-Berbera), 220kV Length: 350 km Cost: US\$200 million	1.5, WB funded	18 months
2. Ethiopia – Somalia (Dolo or Gode-Mogadishu), 220 kV Length: 430 km Cost: US\$250 million	1.5, WB funded	18 months
3. Kenya- Somalia Power Interconnection, 400kV (Loiyangalani-Marsabit-Wajir- to Kismayo and/or Mogadishu Length: 950 km Cost: US\$500 million	1.5	18 months
4. Djibouti- Somalia (Lake Assal-Borama), 220kV Length: 400 km Cost: US\$200 million	1.5	18 months
5. Kenya-Ethiopia (Lodwar-Lokitaung-Ethiopia), 400kV Length: 190 km Cost: US\$200 million	1.5	18 months
Total	4.5	

Figure 1: Proposed additional power interconnectors in the HoA region



Project Alignment with Key Objectives:

The technical assistance and implementation support scope and feasibility studies were identified by HoA countries as priorities. They stem from the recognition of the benefits of power trade in the region for the provision of adequate, reliable, cheap, and clean power in support to countries' expanded access and consumption of electricity services.

The studies are consistent with the regional and continental power trade agenda. The additional interconnectors will further develop the power trade infrastructure under the EAPP umbrella to maximize power flows, to be assessed also within the context of continental power infrastructure developments. High-voltage interconnections have already been established or are in various stages of implementation between Ethiopia, Djibouti, Kenya, Sudan, Tanzania, Uganda, and Rwanda. A high-voltage link between Sudan and Egypt is under construction as well. In the next 5-6 years these developments will set the stage for a transformative power infrastructure embracing the length of the African continent from Cairo to the Cape of Africa and integrating EAPP to the Southern Africa Power Pool (SAPP). These infrastructure developments would also supplement the excess supply capacity of Ethiopia (and likely Kenya) decreasing fluctuations in exporting capacity.

The requested studies also pinpoint to possible regional infrastructure developments along the HoA coast, with possible spillover into the Gulf countries. Djibouti has expressed interest in establishing an interconnector with Somalia, and the update of the EAPP Master Plan (see also below) will also contribute to the identification of possible additional interconnectors among Eritrea, Djibouti, Somalia, and Kenya.

Project readiness, practicability, risks, and complementarity to other projects:

The EAPP is currently updating the Master Plan for the region from the 2014 latest version of the document. In line with the HoA Initiative, Somalia and Eritrea are within the scope of the Plan. In addition, EAPP is conducting technical studies for integration to the South Africa Power Pool (SAPP) and has already adopted a three-year Action Plan (2018-2020) to support its 10-year Strategic Plan (2016-2026). The additional feasibility studies will be conducted in synergy with the Master Plan update, to avoid duplication of efforts and ensure consistency of infrastructure planning through information sharing.

The possible development of the interconnectors with Somalia, based on the outcomes of the feasibility studies, will inform and provide cost savings for the development of the national backbone (covered by another brief).

1. Ethiopia-Somalia power interconnector to Berbera (WB funded). Discussions between the two countries about the development of this interconnector have been ongoing for several years, with limited progress achieved due to the political and security landscape. A feasibility study from the border towns in Somalia have been prepared in 2015 by the Ethiopia Electric Power (EEP). The study would require update and extension to Berbera from the border towns. The interconnector could also expand to neighboring portal cities, such as Bosaso. The interconnector may be developed in addition to the one to Mogadishu (see below) or as an alternative, based also on the results of the feasibility studies.

2. Ethiopia-Somalia power interconnector to Mogadishu (WB funded). Discussions between the two countries about the development of this interconnector have also been ongoing for several years, with limited progress achieved due to the political and security landscape. While initial plans envisaged the starting point in Dolo Odo at the border (Figure 1), the feasibility study would also consider Gode (Ethiopia) to identify the least-cost routing based on associated network rehabilitation and upgrade investment requirements in Ethiopia. The interconnector may be additional to the one to Berbera or alternative, also pending the results of the feasibility studies.

3. Kenya-Somalia power interconnector. The feasibility study will consider two possible end point load centers for the interconnector - Kismayo and Mogadishu - and provide recommendations. The interconnector would become possible following the development of the transmission infrastructure in Kenya. Additionally, the feasibility study will be developed in close collaboration with other interconnector studies for Somalia, to foster and ensure a comprehensive view of the options, including possible trade-offs and/or gains.

4. Djibouti-Somalia power interconnector. The interconnector is intended to optimize Djibouti's surplus of power from the Lake Assal geothermal project, as well as from the additional power expected to come online by 2024 (60 MW Ghoubet Wind Farm and the 30 MW ENGIE Solar PV project). The study will be developed in close collaboration with the Ethiopia-Somalia interconnector to Mogadishu to avoid any duplication of efforts and optimize routing. It will also take into account the expected delays in the coming online of the geothermal plant.

5. Kenya-Ethiopia second power interconnector. The feasibility study is required only for the extension from Lodwar to Ethiopia, as a study is already available for the Turkwell– Lokichar-Lodwar segment. The analysis would identify short-to-long term opportunities for the establishment of a second interconnector with Ethiopia, that is, within the broader context of regional and continental infrastructure development for power trade flows. The preliminary assessment of the interconnector, in fact, suggest that the investment could be directed more towards improving overall power flows between the two countries and beyond, rather than serve proximate loads. The study would therefore also identify possible end points for integration into the Ethiopian network system and take into account the 400kv HVDC line currently under construction between the two countries to ensure the additionality of a second interconnector. Finally, the border area between the two countries belongs to the Llemi Triangle, a territory currently contested among Kenya, Uganda, and South Sudan. The analysis will therefore also consider the risks associate with ensuring Right of Ways, construction works, and day-to-day operations of the line.

Pillar 1: Regional Infrastructure Networks

Single Digital Market

Regional Digital Infrastructure: Festoon cable and Terrestrial Links and Backbone Connections (US\$0.9bn)

Regional Data Market: Data Infrastructure; Cybersecurity; Regulatory harmonization (US\$0.5 bn)

Regional Data Services Market: E-government; Cross-border Digital Payments (US\$0.3 bn)

Festoon Cable

Project Description:

This project foresees the financing and implementation of a “festoon” submarine cable that would serve cities on the coastline of the HoA region and, via those cities, the broader hinterland of the region. Currently, there are only three cities in the region served by submarine cable:

- Djibouti is connected by eight submarine cables, and serves as the main gateway for international traffic to Ethiopia and northern Somalia (it has terrestrial cables to Addis Ababa and Hargeisa);
- Mogadishu (Somalia) is connected to one submarine cable, a branch from the EASSy (East Africa Submarine System cable). However, while Mogadishu itself has a fiber metro ring, onward connectivity from Mogadishu to the rest of the country and into Kenya is limited to microwave connections;
- Mombasa (Kenya) is served by four submarine cables and is connected to Kenya’s relatively dense domestic backbone. Mombasa also acts as a gateway for traffic to South Sudan and southern Somalia (albeit via microwave), and to Uganda, Malawi, Rwanda and elsewhere (via terrestrial fiber).

As shown in Figure 1, there are large gaps between these three coastal landing stations and many large cities are left unserved, notably Asmara (and the rest of Eritrea), Berbera (which would provide an alternative route to the sea for Ethiopia and Somaliland), Bossasso (which could serve Puntland) and Kismayo (which could serve Jubbaland and South West). A “festoon” cable (i.e., one that hops from city to city along the coast) would therefore serve the three existing landing stations and the four that are currently unserved, providing resilience and redundancy in either direction. For Somalia, which faces difficulties in constructing terrestrial fiber due to security reasons, the festoon cable could effectively serve as a national backbone.

There are a number of projects that have been proposed by different players to meet this connectivity need (see <https://www.submarinecablemap.com/>):

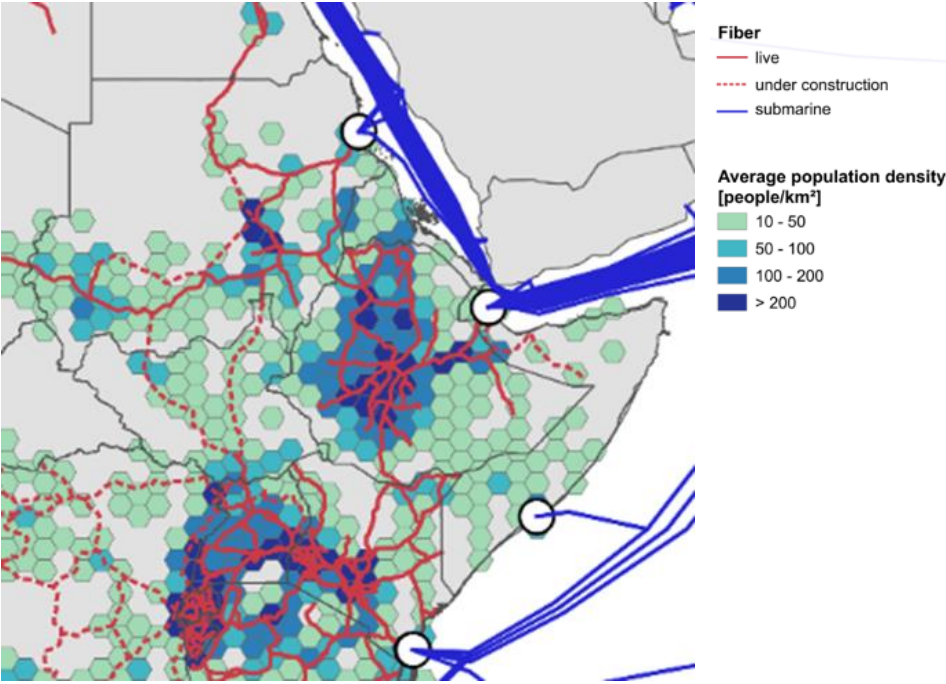
- The 2Africa cable (www.2africable.com), with funding inter alia from Facebook, China Mobile, WIOCC and a number of regional telcos, which plans to complete a 37,000 km loop around Africa, with landing stations in Djibouti, Mogadishu and Mombasa.
- The DARE1 cable (Djibouti Africa Regional Express), that is proposed to serve the three existing stations plus Bossasso, with a possible DARE2 extension to other locations.
- The PEACE cable (Pakistan East Africa Connecting Europe – www.peacecable.net), with financing from PCCW Globla (Hong Kong) and other regional operators, which is proposed to serve the three existing stations, plus Bossasso, Hobyso and Kismayo) as well as other locations in Egypt, Europe (Marseilles) and Asia (Pakistan).
- The Africa-1 cable, with financing from Telecom Egypt, Etisalat and other regional operators, that plans landing points in Djibouti, Berbera and Mombasa

If purely private financing is used for these cables, it is likely that they would “superserve” just the existing three cable landing stations in the region (Djibouti, Mogadishu and Mombasa). But using public financing it would be possible to diversify the routing, serving additional cabling points, to the benefit of the regional as a whole. It is proposed, therefore, to develop a public private partnership (PPP) with neutral financing

from development partners complementing private sector financing from operators serving the region. There are a number of existing business models where the World Bank has already co-invested with the private sector in submarine cable operation:

- One of the first investments was through IFC taking an equity share in the EASSy cable (East African Submarine System), in 2007, which then served as an anchor tenant to attract private operators.
 - Similarly, with the ACE (Africa Coast to Europe) cable in West Africa, IDA financing allowed a whole series of smaller West African countries to join the cable, paying “membership fees” of around US\$25m each.
 - The FLY-LION3 cable serves as another model, connecting Comoros with Mayotte, where concessional IDA financing (to the Government of Comoros) acted as seed money for other private regional operators in the region (Orange and SRR) to invest.
- Finally, negotiations are well advanced for the 2Africa cable to serve Seychelles through an IFC investment in Intelvision, the third operator.

Figure 1: Digital Connectivity in the Horn of Africa



Source: World Bank, based on data from NSRC and TeleGeography Inc.

Project Alignment with Key Objectives:

The festoon cable would align well with key objectives:

- Alignment with national/regional agenda – it would provide enhanced connectivity between all five countries of the region, and in the case of Somalia would also provide connectivity as a national backbone;

- Potential for transformational impact – the highest impact would be felt in those areas of the region that are currently unserved. But it would also benefit the other areas in terms of higher quality services and greater resilience
- Regional spillover benefits/win-win outcomes for participating countries – all countries would benefit – Eritrea by being served by fiber for the first time; Ethiopia by being provided with alternative routes to the sea (through Berbera); Djibouti by reinforcing its positions in the data hub business, and diversity through multiple landing stations; Somalia by building a national backbone, and Kenya by adding potential new markets for its burgeoning software development, BPO and data storage market.
- Inclusion of soft interventions. The technical assistance provided could also ensure that this is an open access cable, not monopolized by one supplier (a danger with the existing DARE and PEACE cables);
- Potential to attract private sector financing – this has a high potential for attracting private sector investment, with concessional donor financing providing around 15-20 per cent of total funding.
- Competitive tendering – with at least four planned cables in the region, competitive tendering can be used to ensure best possible prices for additional landing points.

Project readiness, practicability and complementarity to other projects:

This would be a relatively easy project to start, as feasibility studies have been carried out for both DARE and PEACE, and 2Africa is well advanced, and already in discussions with IFC. It would also benefit the proposed terrestrial fiber projects, as well as the energy and transport interconnectors. Cable fiber laying could be completed within a few years, though construction of additional cable landing stations would need to be undertaken in tandem. Although this is described as a “festoon cable”, it may actually be just a “virtual festoon” in the sense that there may not be direct routes between neighboring cities, but there would be virtual ones (e.g., Berbera may be linked to Bossasso via Djibouti).

Table 1: Potential cable landing points for a festoon cable in the HOA region

Cable landing station	Regional hinterland	Corridors *	Estimated cost (US\$m)	Regional significance
Eritrea				
Asmara	Eritrea, northern Ethiopia	2	US\$25m	Would provide first ever fiber connection to Eritrea
Djibouti				
Djibouti City	Djibouti, Ethiopia, Northern Somalia	2	US\$15m	Potential additional cable landing station; possibility to cable to peer with 8 existing cables
Somalia				
Berbera	Northern Somalia, Ethiopia	3	US\$25m	New cable landing station; providing diversity of routes for northern Somalia and Ethiopia
Bossasso	Northern Somalia, Puntland,	3	US\$25m	New cable landing station; providing diversity of routes for northern Somalia and part of Somalia national backbone

Hoby	Northern Somalia, Puntland,		US\$25m	New cable landing station; providing diversity of routes for northern Somalia and part of Somalia national backbone
Mogadishu	Central and Southern Somalia, Eastern Kenya	3, 4	US\$15m	Potential additional cable landing station (within Mogadishu International Airport); route diversity and possibility to peer with existing EASSy cable
Kismayo	Central and Southern Somalia, Eastern Kenya	4	US\$25m	New cable landing station; providing diversity of routes for Central and Southern Somalia
Kenya				
Mombasa	Kenya, South Sudan, Rwanda, Uganda	4	US\$15m	Potential additional cable landing station; possibility to cable to peer with 4 existing cables

Note: * For reference, the four proposed economic corridors are:

- Corridor 1: Kismayo, Lamu and Mogadishu Corridor
- Corridor 2: Assab and Djibouti Corridor
- Corridor 3: Berbera and Djibouti Corridor
- Corridor 4: Mogadishu, Berbera and Bossaso Corridor

The cost estimate for this activity is ~USD\$ 400,000,000.

Terrestrial links and backbone connections

Project Description:

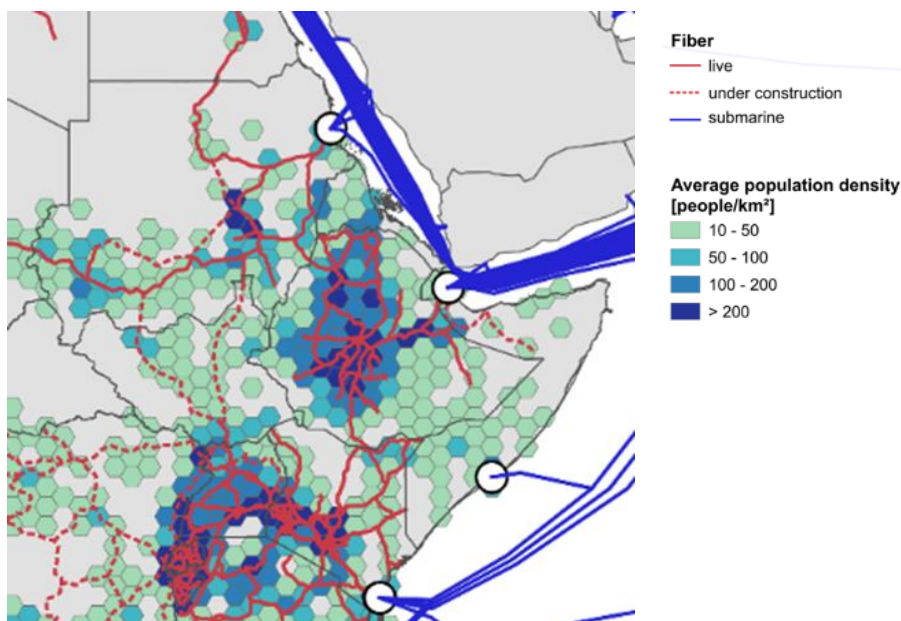
The program would focus on laying fiber optic cable among key existing and planned road corridors that both expand and link national backbone networks, creating a more integrated connectivity market in the Horn.

Table 2: List of routes proposed

Route proposed	Length	Feasibility Study	Estimated budget
Djibouti and Ethiopia			
Samara - Galafi - Dikhil – Djibouti		Yes	\$13m
Dire Dawa - Dewelleh – Ali Sabeh – Djibouti		Yes	\$13m
Djibouti and Somalia			
Djibouti - Loyada – Borama		No	\$5m
Somalia and Kenya			
Kismayo – El wak		No	
Kismayo – Liboi		No	
NETIP: Isiolo – (1) Wajir - Madera – Dadaab (2) Mogadishu – Elwak	744 km	No	\$34m
Kenya and Ethiopia			
LAPSSET: Lamu - Isiolo – Moyale	1,000km	No	\$60m
Ethiopia and Eritrea			
Bure-Assab		No	
Zal ambassa-Asmara-Masawwa		No	
Somalia and Ethiopia			
Mogadishu – Firfir		No	
Mogadishu – Dollo		No	
Bossaso – Goldogob		No	
Berbera-Togo Wajjale		No	

While new links proposed are likely to be able to attract private sector investment, commercial interest may vary. It is thus proposed that additional cable landing stations (detailed in Table 1) and terrestrial routes (Table 2) be financed predominately through PPPs with neutral financing from development partners complementing private sector financing from operators serving the region. The donor community could add value by serving as an anchor tenant for financing, and by supporting feasibility studies as well as providing needed technical assistance related to PPPs and other enabling regulation required for investments and implementation to be viable.

Figure 1: Digital Connectivity in the Horn of Africa



Source: World Bank, based on data from NSRC and TeleGeography Inc.

Project Alignment with Key Objectives:

- Bringing more users online, across the Horn, will be the first step to creating a larger, integrated digital market in the region – able to attract greater investment, offer local firms the opportunity to scale on the back of a growing regional digital consumer-base and provide users wider a growing array of digital and data-driven services.
- Robust middle-mile infrastructure, composed of terrestrial backbone networks, are needed to distribute high-capacity bandwidth across each country, but also to channel international connectivity received through regional and global networks (i.e., first mile infrastructure), including the proposed regional sub-marine festoon cable.
- Related links are also essential to the roll-out of last-mile access networks that allow consumers to get connected. While access to high-speed broadband is growing, millions of people across the Horn currently remain unconnected.
- New terrestrial links will thus help expand backbone networks in underserved areas.
- Moreover, connecting backbone networks will help boost competition and resilience. Linking networks will help introduce redundancy that limits the risk of outages (like the one experienced in Somalia in 2018, which resulted in substantial economic losses). Linking national backbone networks can also help introduce more competition in the wholesale market, with spill-over on price in the retail market, yielding lower cost connectivity services for end-users.

Project readiness, practicability and complementarity to other projects:

- **Currently, national digital infrastructure markets diverge widely in their level of development, competition, and wider market maturity**, with disparities in access, pricing, and capacity. Substantial connectivity divides therefore persist both between and within countries, with widespread inequality

in access. Market maturity (in terms of competition, enabling regulation etc.) is likely to determine both the level of complementary support required and the readiness of operators to invest.

- **Regulatory work will need to be undertaken in tandem**, both in terms of filling gaps at a national level but also related to regional harmonization. Licenses to build infrastructure are typically awarded on a national basis, which means that roll-out of cross-border links will require cross-border collaboration. This intervention should thus ideally be paired with regional cooperation and harmonization on licensing. In the past, regulatory gaps have also deterred investors e.g., related to investor protection, PPPs and right of way.
- **There is ample scope to crowd in the private sector.** Expansion of networks tends to be private sector led, though some government support may be necessary for coverage of areas where deployment would otherwise be unprofitable. At this stage, it is not clear whether all cable landing stations and routes proposed would be commercially viable and further demand studies would be necessary.
- **Pre-feasibility studies of most of the cable landing stations and corridors detailed above are needed** to establish the length, cost, status of existing infrastructure, current and future demand, level of commercial interest etc.
- **Deploying duct and manhole Telecom standards along new transport corridors should be a priority**, in line with “dig once” policies, to prepare for an easy deployment of optical fiber cables.
- The **utilization of the electricity grid optical fiber ground wire (OPGW)** for additional fiber would be a suitable complement to increase broadband networks coverage, capacity, reliability and improve the quality of digital services in an efficient manner across the HoA.

The cost estimate for this activity is ~USD\$ 500,000,000.

Regional Data Center Infrastructure

Project Description:

This project foresees the design, financing and implementation of a regional data center infrastructure to serve the HOA region, In the digital age, economies have become ever more dependent on data as a source of economic growth and competitive advantage.²⁵ However, the supply side for data infrastructure in the HoA region, with the exception of Kenya, is relatively poorly served. There are four main elements that compose the regional data infrastructure:

- Modern, efficient **data centers**, for the storage and recovery of critical data. “Tier 4” data centers should be able to offer 99.95% uptime and offer robust fault tolerance and full redundancy for every component. The region is currently served, at best, with Tier 3 data centers
- Internet Exchange Points (**IXPs**) that permit the peering of internet traffic between different operators and internet service providers (ISPs);
- **Data caches** that store real-time copies of popular content (e.g., Facebook, Wikipedia, Google etc). Having data stored locally reduces the need to constantly draw upon expensive inter-continental links. It should also reduce latency and improve user experience, especially for streaming and gaming applications.
- **Backbone networks**. The fiber links between data centers, IXPs and data caches also form part of the broader regional data infrastructure. In general, domestic backbones have higher capacity than cross-border links. But in the case of Ethiopia, its dependence on access to submarine fiber through Djibouti means that this link, at least, is relatively high capacity.

The trend within the ICT sector is to move towards cloud computing, and this has been dominated globally by companies like Amazon (AWS) and Microsoft (Azure), both of which have set up regional data centers in South Africa. The large social media companies, like Facebook or Google, or eCommerce companies like Alibaba, also tend to self-provide their data networks around regional hubs, and both are investing also in their own networks of submarine cables. Alibaba and other private data center operators have expressed an interest in investing in Ethiopia through the ICT Park located in Addis Ababa.

One implication of this trend towards decentralization of data is that a regional approach is more likely to be successful than a purely national one. The need for resilience also argues in favor of back-up data centers offshore. Counteracting that trend is the desire of some governments to impose data localization requirements (i.e., that national data, especially personal or confidential data, should be stored locally).

Within the region, Djibouti and Mombasa are perhaps best placed to host regional data centers, IXPs and data caches, because of their access to multiple existing undersea fiber cables. The existence of monopolistic nature of the market and high data prices might be deterrent. A more likely outcome is that “Tier 4” data centers would be developed near coastal landing stations while Tier 3 and 2 data centers would be developed nationally (Addis Ababa may be an exception that could also host a Tier 4 data center for its large domestic market). The proposed project would explore the level of demand for a regional approach to data infrastructure, and the extent to which public financing would be required, or if it could be fully financed from private sources.

²⁵ World Bank. 2021: *Information and Communications for Development: Data for Better Lives*.

Project Alignment with Key Objectives:

The regional data would align well with key selection criteria:

- Alignment with national/regional agenda – investment in a regional data infrastructure would fit well with the aspirations of countries within the region, particularly Djibouti, the aspire to be a regional hub;
- Potential for transformational impact – relatively modest potential, but it would help in driving regional trade as well as digital financial services.
- Regional spillover benefits/win-win outcomes for participating countries – the potential benefits of a regional data infrastructure approach are more likely to accrue to Djibouti and Kenya, but in the longer term, users throughout the region would benefit, in particular from a higher quality of service.
- Inclusion of soft interventions – regional harmonization of regulations on cybersecurity, privacy and data protection would be of critical importance;
- Potential to attract private sector financing – this has a high potential for attracting private sector investment, but public intervention may be required to ensure that all countries, including Somalia and Eritrea, benefit from a regional approach.

Project readiness, practicability and complementarity to other projects:

Feasibility studies exist for establishing a regional data center in Djibouti. Kenya has also conducted studies for establishing a data center in Konza City, outside Nairobi, while Ethiopia sees data centers as a business opportunity for the existing ICT Park, close to Bole international airport in Addis Ababa. What is missing, to date, is a demand-side study and an assessment of the different cybersecurity, privacy and data protection regimes, which would be an important factor for potential data center users.

Risks:

The main risk to a regional data infrastructure would come from data localization laws, and from under-developed cybersecurity, privacy and data protection laws. Further risks would arise from risk of flooding in coastal areas and from unreliability of electricity supply, as well as high prices.

The cost estimate for this activity is ~USD\$ 400,000,000.

Cybersecurity

Project Description:

This project aims to develop and improve national and regional data privacy practices and cybersecurity, promoting a single regional market in the five HoA countries. Proposed interventions involve financing cybersecurity threat detection equipment and software, helping to develop a regional CERT (Cybersecurity Emergency Response Team), providing technical assistance to develop national and regional strategy, legal and regulatory framework, and standards and governance for cybersecurity as well as implementing capacity building and training programs.

Digitization, or promotion of digital services in a digital economy, requires mass production of data and massive data transactions. Critical infrastructure and new services are becoming heavily data-driven. While data-driven services involve sensitive data, they are vulnerable to data breach attempts. Data storage and processing require extra attention to good safety and security practices. Privacy concerns can deter the public from making online financial transactions and purchases in the region. Therefore, cyber risk management is key to developing and maintaining consumer confidence in data-driven services. Having a comprehensive approach to data protection and cybersecurity would increase usage of the digital services. The rapidly growing threat of cybercrime further increases the importance of appropriate cybersecurity measures. While there are no tools in place to monitor the exact trends of cybercrimes and data breaches, HoA countries are highly vulnerable to the incidents.²⁶

A digital single market, or a single data market, requires a common approach to data protection and privacy as well as cybersecurity. As more and more digital services evolve, the threat will also intensify. These threats have detrimental effects on regional e-commerce and e-health services, or critical infrastructures such as power grids, financial and customs systems, as well as digital ID schemes that rely on data and digital services. Harmonized data protection and privacy procedures would avoid a “race to the bottom,” in terms of standards, in a bid to attract data-driven services investment at the expense of consumer protection. It is in all countries’ interests to support a coordinated regional response to cybersecurity, especially considering the global nature of cyber threats, and to support neighboring countries where required. Pooling resources is not only cost-effective, but in an integrated data market any one country is only as protected as its weakest link.

The maturity of cybersecurity practice is, therefore, a prerequisite to enter a digital single market, and the countries in HoA need to be equipped with relevant data protection and privacy laws that enable secure exchange, storage, and processing of data across borders. However, legislation to secure the security of data and privacy is almost non-existent except in Kenya²⁷, which developed the National Cybersecurity Strategy (2014) and enacted the Computer and Cybercrimes Act (2018), and in 2019 adopted a new data protection Act²⁸. The country also has a multi-stakeholder local collaboration between the government, the different CERTs, and other key stakeholders, including financial institutions, telecommunication operators, critical information infrastructure providers, etc. None of the five countries have signed or ratified the African Union (AU) Convention on Cyber Security and Personal Data Protection. There is thus

²⁶ See: <https://cybermap.kaspersky.com/stats> and https://go.kaspersky.com/rs/802-IJN-240/images/KSB_statistics_2018_eng_final.pdf

²⁷ See: http://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Legislation/eCom-Data-Protection-Laws.aspx

²⁸ In Ethiopia, the World Bank has provided assistance to the Government in developing a draft Data Protection Proclamation, and has also committed funds to the planned Data Protection Commission through the Digital Ethiopia project (P171034).

scope to improve national policy in this area and develop a coordinated regional approach that is grounded in best practice and adopts common standards.

Priority work to be undertaken under would include:

National-level interventions

- a) Assessment of national cybersecurity gaps across five dimensions: cybersecurity policy and strategy; cyber culture and society; cybersecurity education, training and skills; legal and regulatory frameworks; and standards, organizations, and technologies²⁹;
- b) Regulatory support to develop and modernize national legal and regulatory frameworks for cybersecurity;
- c) Procurement of security tools and hardware, if necessary, and establishment of the required basic security setup;
- d) Workshops and training for government officials and regulatory authorities on cybersecurity policy, strategy, and regulatory development;
- e) Capacity building training to relevant IT-related staff to respond to cybersecurity incidents.

Regional-level interventions

- f) Technical assistance to harmonize data protection, privacy, and data exchange laws and regulations with clear guidelines for cross-border data flows, personal, and sensitive data, including regional workshops;
- g) Technical assistance for the development of a regional CERT and information sharing system for common threats;
- h) Establishment of a regional cybersecurity task force. The task force should include all five countries and aim to:
 - Drive collaboration on the detection and prevention of cybersecurity incidents;
 - Implement a regional IT platform over which to share cybersecurity information; and
 - Coordinate on developing and delivering national cybersecurity awareness-raising and training programs for businesses, government agencies, and citizens.

Project Alignment with Key Objectives:

The cybersecurity programs would align well with key objectives:

- While cybersecurity, and especially cybercrime, is viewed as a growing concern in Africa, it is one of the regional priority areas for its digital agenda. The African Union (AU) established a regional cybersecurity treaty, the Convention on Cybercrime and Personal Data Protection (adopted in 2014) and the AU's Digital Transformation for Africa Strategy reaffirmed its commitment to cybersecurity and data privacy issues.

²⁹ The framework may rely on the Cybersecurity Capacity Maturity Model for Nations (CMM) methodology deployed by the World Bank, the Global Cyber Security Capacity Centre (GCSCC) of the University of Oxford, and the Global Cybersecurity Center for Development of Korea Internet & Security Agency (KISA). A CMM assessment is underway for Somalia and is planned for Ethiopia.

- Increased connectivity, new services leveraging personal and confidential data, along with rapidly growing demand in Africa has posed significant cyber risks to assets, systems, and information as much as it brings value to digital economy. Therefore, it is critical to establish and maintain robust cybersecurity control to meet current and future data protection needs. Concerns over the lack of cybersecurity capabilities, the absence of relevant legislation, including for cybercrime prevention and data protection, nascent cybersecurity governance, and technical controls are detrimental to economic growth and development, missing out on the leapfrogging the opportunity that digital technologies offer. In particular, while e-government and digital financial services are of high priority to the countries, having the capacity dealing with cyber risk and cybersecurity is essential.
- All countries would benefit from having a regional approach to cybersecurity. The harmonized regional standards would eliminate potential barriers to cross-border access to information, allowing the free flow of data. In addition, given the global nature of cyber threats and high level of investments necessary to deter cyberattacks, a regional approach to cybersecurity would be beneficial in terms of both economy of scale and better returns on investment.
- The cybersecurity package proposed will not only improve the national cybersecurity but also enhance the security of private companies' assets and resources. More importantly, weak cybersecurity carries an expensive cost to the firms who wish to unlock its potential through data-driven services and digital trade. Therefore, while companies also try to set their cybersecurity standards, the intervention to develop a mixture of national and regional regulatory tools would attract private sector participation and investment.

Project readiness, practicability, and complementarity to other projects:

The intervention is relatively easy to implement. The World Bank, in collaboration with the University of Oxford and Korea Internet & Security Agency (KISA), has developed the Cyber Security Capacity Maturity Model (CMM) to assess the *status quo* of the national cybersecurity capacity. Over 60 countries worldwide have deployed the CMM. Such an assessment provides a strong starting point for the informed and constructive dialogue with the Governments about the national cybersecurity priorities. By using the standard proven tool to conduct the assessment across the five countries, it will also help the countries identify gaps quickly for cross-border data flows and initiate a regional dialogue.

Risks:

Despite the clear needs, cybersecurity measures are often compromised, and government spending on cybersecurity efforts has often been minimal in developing countries. Therefore, it may pose challenges to build meaningful cooperation among the countries beyond the studies and assessments. Meanwhile, digital economy and cybersecurity are increasingly intertwined, and there are some baseline requirements of cybersecurity the countries need to establish. The initial feasibility would demonstrate the smaller costs of the preventive measures compared to the costs of restoring the data and, more importantly, reduced data or financial transactions and investments.

The cost estimate for this activity is ~USD\$ 50,000,000.

Regulatory Harmonization for the Horn of Africa

Project Description:

This intervention is to develop a harmonized regulatory strategy for the five Horn of Africa countries. An optimum ICT regulatory framework is critical to support the development of digital economies in HoA. The deployment and use of latest technologies, providing affordable digital infrastructure and services to citizen, associated with infrastructure sharing, networks interconnection, quality of service indicators and effective use of scarce resources, in particular spectrum, allows to unlock the full potential of digital services, which is a key driver for inclusion and can have a significant positive impact on consumers, businesses and governments. In adopting best practices policy-makers / regulators can rely on a strong and agile regulatory framework necessary to adapt to the digital transformation of the economy.

There is a large disparity of regulatory readiness in the HoA. The level of ICT regulatory development and readiness is heterogeneous in the HoA sub-region.

The objective of this initiative is to support national authorities identify the needed regulatory reforms in their individual countries and assess the opportunity of a harmonized regulatory framework amongst them in the topics that will enable and facilitate private sector cooperation and partnership in cross national telecommunications and digital projects. The scope of the initiative includes the assessment of existing policies, regulations, protocols and standards with an emphasis on the capabilities of authorities to enable a pro-competition of the electronic communications market that stimulates vigorous investment for infrastructure and network deployment.

The following priority ICT regulatory areas of study are critical for the development of the strategy to support the growth of sustainable digital economies:

- The level of independence of the regulator from other governmental entities and telecom providers;
- The funding mechanism and the availability of enough resources for the regulator to conduct its activities;
- The accountability, transparency, neutrality and forward looking of the policies setting and decisions mechanism, including deliberations and outcomes;
- The existence of barriers to entry for alternate service providers access to essentials infrastructures;
- The status of market liberalization and relevant wholesales obligations to operators with significant market power; powers of the authority to define and impose sanctions;
- The level of infrastructure sharing, network interconnection, access to international capacity;
- The existence of key indicator on market, quality of service, and their publication;
- How transparent and effective is the use of scarce resources, in particular spectrum.

There are significant benefits of transparent regulatory practices³⁰:

Open processes enhance consensus and create confidence in the regulator. Increased public participation promotes diverse ideas in decision-making and increases support for rules and policies, making implementation easier. In addition, transparency can lead to greater efficiency by ensuring that duplication of functions is avoided. Regulatory credibility and legitimacy build stability and is essential for attracting investment. This is particularly important in newly liberalized markets, where potential entrants need to have trust that their investments will be protected from arbitrary action and that further

³⁰ See World Bank / ITU. 2020. Digital Regulation Handbook, www.digitalregulation.org

commercial development will not be jeopardized by sudden changes in rules of the game. Openness promotes accountability and legitimacy, reinforces regulatory independence, and reduces political and industry interference. When regulatory actions are open to public, regulators are more likely to engage in careful and reflective decision-making.

Project Alignment with Key Objectives:

Different states of ICT regulatory development exist amongst the HoA countries and this will require to adapt the analysis as part of this initiative to the specific case in each country. An initial view is provided by the ITU ICT tracker³¹ desk study based on information self-provided by each country. The initiative will measure the quality, the level of implementation and the performance of regulatory frameworks and benchmark them with neighboring countries to identify the gaps but also the synergies in the national and regional regulatory agendas.

ICT is a social and economic enabler as it provides inclusive development to foster the integration of those in need, to keep in contact with family and friends, provide access to affordable digital payments, protect their identity and provide them with job opportunities.

ICT support innovative technologies and services to complete coverage in unserved or remote areas, lower the cost of the services by a better usage of the resources (spectrum, energy, computing power)

This intervention will propose examine the existing legal and regulatory framework of each HoA country and propose the necessary policy changes needed

Project readiness, practicability and complementarity to other projects:

This project is intended to complement feasibility studies and is non-implementation focused.

The objective of this intervention is to assess and understand the existing legal, regulatory, and operational frameworks and what desired actions will be required to achieve an effective national regulatory framework and ultimately a level playing field across the HoA countries.

Risks:

The main risk is associated with limited appetite for regulatory reform agenda and the potential conflict of interest with Governments, such as Djibouti and Eritrea, which maintain responsibilities for both regulation and service provision.

The cost estimate for this activity is ~USD\$ 50,000,000.

³¹ <https://www.itu.int/net4/itu-d/irt/#/tracker-by-country/regulatory-tracker/2018>

E-government Strategy for Horn of Africa

Project Description:

This intervention is to develop an e-government strategy for the five Horn of Africa countries. E-government services are vital for the development of digital economies in Africa. By underpinning digital transactions and connections, these systems, applications, and services have the potential to transform the way governments, people, businesses, and civil society interact in all aspects of life, including healthcare, education, commerce, transportation, and public services.

Objective: This intervention proposes a detailed strategy for e-government services in the HOA countries, as well as a thorough examination of the existing legal and regulatory enabling environment, complemented by a review of the existing stakeholders, focusing especially on the capacity of the current agencies to implement e-government services.

Bringing government services online is still challenging in Africa. Yet, the implementation of strategies to develop digital platforms could potentially enable African governments to leapfrog towards more integrated information systems and service-oriented government platforms. It is estimated that only 12 percent of government departments in Africa are online (McKinsey Institute 2013). Surveys of the use of digital technologies in 12 African countries reveal that only 5 percent of individuals had used the Internet to obtain information from, or interact with, the government (World Bank 2016). Limited Internet access remains a challenge and access to Internet-based e-services is limited among the poorest groups. At the same time, increased access to mobile phones across the continent has the potential to expand digital inclusion and e-government platforms. Availability of mobile e-government portals have doubled between 2012 and 2014 from 25 to 48 countries (World Bank 2016). With a decrease of the cost of mobile subscriptions and increased cellular coverage, mobile e-government platforms can be important tools to increase the reach of service delivery to the most vulnerable populations.

The following priority action areas are critical for building digital public platforms:

- Strong and agile legal, regulatory, and operational frameworks are required, for example, for e-signature, electronic payment, and data protection;
- A “whole-of-government” coordinated approach to digital integration should be adopted, along with the coordination of the five HOA countries;
- E-government services should be designed around the needs of citizens and users; and
- Systems and services should be built using outcome and context-based design and open principles.

Actions are also needed to support the development of commercial digital platforms:

- Regulatory frameworks need to enable the creation, adoption, and expansion of commercial digital platforms and efficient markets, for example, antitrust policy, sector-specific regulations related to standards and quality, e-signature and electronic payment, data policies, and intellectual property rights/copyright protection.
- Proliferation of platform markets can be enabled through proper interoperability frameworks and pro-competition regulations that ensure market contestability.

This intervention proposes strategy to develop an integrated and comprehensive e-government services platform for the HOA countries. This will require a study to examine the feasibility of existing legal and regulatory frameworks and the stakeholders.

Project Alignment with Key Objectives:

E-government is at the core of the digital economy. From parents enrolling their children in school, to social safety net administrators verifying the identity and eligibility of a new beneficiary, to businesses submitting their annual tax filings, the transactions that fill our daily lives have historically required paper forms, in-person visits during business hours, and cash payments. Increasingly, e-government services—in combination with or incorporating digital financial services and powered by digital infrastructure, skills, and entrepreneurship—support transactions and marketplaces that are on-demand, paperless, and cashless, and available through the Internet from anywhere in the world.

E-government can serve people, businesses, and government agencies in all aspects of life and across all sectors. For the people who use these platforms to receive their monthly pensions, securely login to a government e-services portal, pay their utility bills, submit a complaint, access public information, or find a person to rent their car, these platforms can provide a seamless service delivery experience that increases user convenience, savings, and agency. For governments, e-government platforms can increase the efficiency and effectiveness of core functions and services; reduce unnecessary duplication of systems; combat fraud and corruption by increasing the security and traceability of transactions; and improve civic engagement and accountability.

The following **priority action areas are critical for building digital public platforms** that can transform the experience of users—and ultimately the economy—while overcoming the identified risks and challenges:

- Ensure coordination and a whole-of-government and regional HOA approach to digital integration.
- Design platforms around the needs of users.
- Build systems and services using outcome and context-based design and open principles.

Project readiness, practicability and complementarity to other projects:

This project is intended to complement feasibility studies and is non-implementation focused.

The cost estimate for this activity is ~USD\$ 200,000,000.

Cross Border Digital Payments for the Horn of Africa

Project Description:

This intervention is to develop a cross border digital payment for the five Horn of Africa countries. The possibility to perform digital payment within and between countries will have tremendous benefits for the HoA citizens, governments, and businesses, increasing the region's competitiveness, growth, job creation and enabling it to excel in the economy of the future as more deeply integrated and dynamic digital investment, innovation, and growth hub.

Until recently, HoA has predominantly been a cash economy. The region has seen low penetration of credit cards and bank accounts, associated with traditional banking. Digital payment is a revolution now offered by many mobile money providers across the region, that is enabling a new wave of financial inclusion. Mobile money is also seen as having a positive impact in helping close the gender gap in both access to finance and supporting access to economic opportunities. Yet most countries have significantly more mobile money accounts users than account holders with other financial institutions.

While mobile money is popular, few online services provide direct online mobile money payment capability.

The objective of this initiative is to identify the steps towards a cross border digital payment and how to address at national level the underlying challenges³².

The following priority work should be conducted on potential barriers to making cross-border payments:

Network interoperability between mobile money networks (domestically and regionally): Mobile payment systems in HoA are mainly domestic and limited to a single operator's network. The systems typically have limited interoperability with other domestic operators, let alone other regional and international operators. As an exception Kenya's Safaricom is one of the few operators to have enabled international money transfers to Vodacom Tanzania, MTN Uganda and MTN Rwanda subscribers.

High transaction costs: Transfers are received in local currency, with conversion rates and fees advertised in a text message before money is transferred. High transaction fees, both between domestic platforms and across borders platforms, reduce the usage and are not used for micro transactions, even where they are technically available. Solution can include a glidepath toward lower fees for cross-platform and cross-border transactions and initiatives to reduce currency exchange fees in the absence of a single currency union.

Greater interoperability as well as lower cross-platform and cross-border transaction fees could foster a regional digital payment ecosystem. Policy makers can support the process for example by mandating interoperability which in turn open the development of regional online services and the growth of e-commerce for which they are a prerequisite.

Project Alignment with Key Selection Criteria:

The initiative supports inclusion in providing a scalable and affordable mean for digital payment i.e., mobile money, that is likely to benefit low-income households, which are particularly price sensitive and only able to gain access in significant numbers of low-cost mobile broadband services become available on the market.

³² WBG "A Single Digital Market for East Africa".

The initiative accelerates sustainable economic growth in creating economies of scale and capitalizing on the network effects across the HoA, an opportunity for the region to disrupt its growth trajectory by providing its businesses a more solid footing to compete and empowering its citizens to thrive in the global digital economy.

The initiative support gender equality, Mobile money is also seen as having a positive impact in helping close the gender gap in both access to finance and supporting access to economic opportunities.

Project readiness, practicability and complementarity to other projects:

This project is intended to complement feasibility studies and is non-implementation focused.

The cost estimate for this activity is ~USD\$ 100,000,000.

Pillar 2: Trade Facilitation and Regional Value Chains

Priority 1: De-Risking, Inclusion and Value Enhancement for Pastoral Economies in the Horn of Africa

Priority 2: Trade Facilitation

Priority 3: Regional value chains

Project DRIVE: De-Risking, Inclusion and Value Enhancement for Pastoral Economies in the Horn of Africa (HoA)

Rationale and Objective

Development Objective: The proposed regional program will enhance de-risking, financial inclusion and value addition of pastoral economies in the HoA. It will support the provision of financial de-risking in anticipation of drought (i.e., insurance and financial services) for the main asset of pastoralists -livestock- to allow them to invest in their herds. It will better connect pastoral production groups with markets, support trade infrastructure for cross-border and small-scale trade, and strengthen capacity to meet international standards requirements. This will enable pastoral production groups to extract greater value addition from livestock-rearing activities. The main beneficiaries will be pastoral production groups in the HoA that have the capacity to undertake commercial activities and move up the value chain.

Rationale: Countries that form the wider Horn of Africa (Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda) are highly vulnerable to drought, with an estimated 22.5 million people currently severely food insecure.³³ Their pastoral population is estimated at 22 million people, with an incidence of extreme poverty of 41 percent. Between 33 and 65 percent of people depend on livestock for their livelihoods. One contributor to extreme poverty is the recurrence of droughts, which are increasing in frequency. Drought shocks deplete livestock assets and lead to underinvestment, perpetuating a cycle of low investment-low productivity in pastoral economies. They play a significant role in exacerbating the impacts of conflict in the region.³⁴ To lift pastoralists out of poverty it is proposed to de-risk them with drought insurance (also called “index-based livestock insurance- IBLI”), and connect them to markets through value chains and trade interventions. Currently, in the rural areas of the HoA, there is limited transformation of livestock products or linkages to formal export markets; trade is mostly informal, which limits the value extracted by pastoral production groups from their livestock; and entrepreneurship skills and financial inclusion are scarce. In addition, overgrazing practices have led to a degradation of rangelands, which is exacerbated by drought and one challenge is to focus on the quality of the livestock as opposed to the quantity.

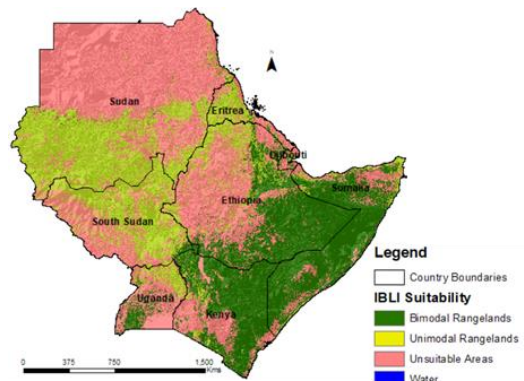
De-risking with drought insurance and financial services: The World Bank, alongside development partners, has over the last five years demonstrated the proof of concept of index-based drought insurance for pastoral households. The product uses a remote sensed pasture index to monitor the conditions on the ground, and when the level of pasture falls below a certain level, an insurance payout is triggered automatically. A substantial body of evidence demonstrates that rapid intervention saves money.³⁵ Impact studies have demonstrated that when pastoralists receive insurance payouts directly, they invest in their herds by buying fodder, water, and medicines to keep their animals alive. It is far less costly to maintain animals alive than replace them after they have died. This insurance has been implemented in Ethiopia and Kenya both at the commercial micro-level and government macro-level, and in the Sahel as a sovereign coverage. All use the same underlying satellite technology and index design principles. Various studies on agriculture insurance shows that insurance leads to substantial increases in on-farm investment, usually in the range of 15-30 percent compared to uninsured control households. Insurance can crowd-in credit, as households with asset or income insurance pose less risk to creditors.

³³ https://reliefweb.int/sites/reliefweb.int/files/resources/ROSEA_20200424_HOA_COVID-19_Snapshot_April2020.pdf

³⁴ Earth-Science Reviews (2018) - Environmental impacts and causes of conflict in the Horn of Africa: A review.

³⁵ The cost of drought to households can increase from \$0 to \$50 if the support is delayed by 4 months, and to \$1,300 if it is delayed by 6-9 months (Hill, Clarke, 2013). In Ethiopia, every US\$1 invested in building rapid assistance leads to US\$2.9 in reduced humanitarian spending and avoided losses (USAID 2017).

A regional feasibility study for the 8 wider HoA countries shows that 53 percent of the territory is suitable for the implementation of drought insurance (rangelands areas in light and dark green on the map), and about 60 percent of the livestock in the region could be covered (source: DIRISHA project, forthcoming, 2021). Separate feasibility studies carried out in Somalia and Uganda also show that these countries have the right conditions to implement drought insurance.



Livestock Trade and Value Chains challenges: The livestock trade between the HoA countries is mostly unrecorded. For instance, during 1993-2000, the total value of Ethiopia’s unofficial cross-border trade in livestock in the region is estimated to have averaged US\$105 million, 100 times greater than the average annual official livestock export trade (Halderman, 2005). Somali livestock traders took their business to Kenya when the Somali state collapsed in 1991, and contributed to boosting Kenyan meat exports to the Gulf; however Somali livestock never features on records as being imported, and the animals move in and out of formal controls and certifications on their way to terminal markets and abattoirs in central and coastal Kenya (Ng’asike and all, 2020). Livestock move from Ethiopia to Djibouti – the main export gateway to the Middle East- and Somalia; from Somalia to Kenya; and from Kenya to Ethiopia. There is often two-way trade in animals across HoA borders (e.g., camels between Kenya and Ethiopia). The livestock trade is primarily on live animals with low value addition and is affected by low quality infrastructure to test and trace the animals.³⁶ Each country faces specific challenges in their livestock value chains as illustrated by the Figure 1 below.

Figure 1: Constraints on Livestock Value Chains, country highlights



Ethiopia faces major constraints affecting the 3 sub-sectors:

- Meat and live animals – **livestock kept as a source of wealth for lean times and mainly sold into informal markets. Also not bred to produce top quality meat/leather.** Local market has lowest consumption of red meat in Africa.
- Hides, skins and leather – this subsegment is **hobbled by supply of meat, quality, market, skilled labor and finance constraints.**
- Dairy products – **lack of economies of scale** with collection, chilling, and transporting of milk; inefficient logistics to link producers and processors.

Somalia having a nascent livestock sector suffers from the following constraints:

- Meat and live animals – **lack of commercial meat processing facilities, weak state capacity in developing and enforcing health standards and disease prevention, information gaps on export opportunities**

Kenya is beset by the following constraints:

- Meat and live animals – **disconnect between pastoralists and end markets; livestock marketing information being poor; lack of proper infrastructure (i.e. holding grounds near meat markets, proper logistics to transport animals to markets); lack of investment in cattle fattening through feedlots.**

Sudan faces the following challenges:

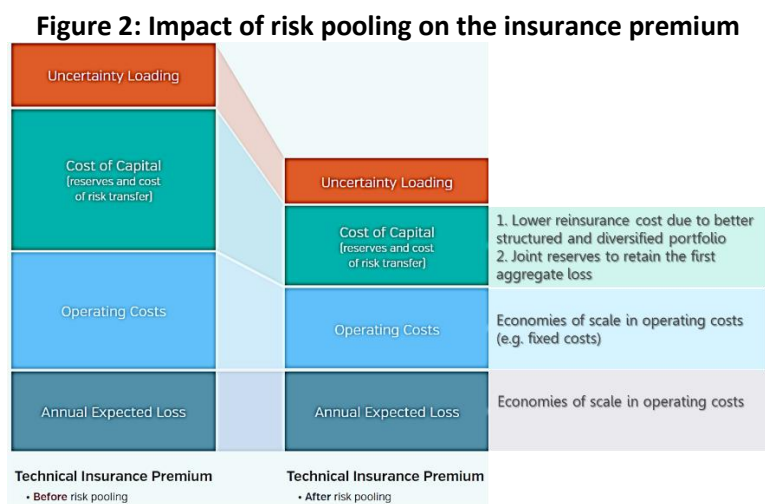
- Meat and live animals – **An underdeveloped and fragmented value chain with little integration/coordination among industry players; lack of quality forages for livestock; livestock production dominated by subsistence rather than commercial production; inadequate policies by government; limited veterinary services.**

Source: IFC, *Horn of Africa Livestock Sector Approach Paper, January 2021*

³⁶ Quality infrastructure includes standardization, accreditation, metrology and conformity assessment (testing, inspection, product certification), all which provide a common technical language for trading partners. Adherence to international product standards and certification regimes is critical to access regional and global markets and extract more value from livestock rearing.

Rationale for regional intervention: There are several benefits for a regional intervention.

- i. **Peace building:** During drought, pastoralists cross borders, placing increased pressure on scarce resources which in turn can increase the risk of conflict. Financial resilience supports peace as pastoralists can access resources for their livestock using insurance payout, reducing the need for movement and tensions between pastoral communities.
- ii. **Scaling up drought insurance:** Risk market infrastructure for drought insurance can be developed by a regional entity and shared, creating economies of scale and reducing operational costs and premium. When countries pool their risk together to approach the market, they are likely to lower their operating, reinsurance and brokerage costs and improve the financial sustainability of an insurance solution (see figure 2 below). By reaching critical scale, a pooled insurance program is more likely to attract the private insurance market than countries engaging insurance companies individually. A higher volume of premium would raise interest from a larger number of markets, for a more competitive placement. The regional entity could ensure a more efficient and transparent management of premiums and payouts.



Source: Cost Benefit Analysis of African Risk Capacity (Hill, Clarke, 2013)

- iii. **Quality and Trade Infrastructure:** Modern quality infrastructure can be quite costly (e.g., testing laboratories, quarantine facilities etc.), and for live animals that cross borders, it may make sense to develop such infrastructure and capacity in specific border posts and market centers in which pastoral production groups around the border can get basic supplies and also sell their animals, rather than each country developing its own capacity. Similarly, due to non-tariff barriers, small scale traders try to circumnavigate regulatory controls and use unofficial border crossing points. Trade infrastructure (such as quarantine facilities, cold chains storage), trade information (market prices, border posts situation) and trade finance can be better provided at a regional level or in a concerted manner between the border countries.

Complementary interventions: In recent years, there have been multiple interventions designed to strengthen pastoral resilience in the HoA by providing veterinary services, water, fodder and livestock extension services. The World Bank Agriculture Global Practice has several projects ongoing in the HoA, as well as the African Development Bank (AfDB), Food and Agriculture Organization (FAO), World Food Program (WFP) and several donor partners. Under the Intergovernmental Authority on Development (IGAD)'s drought resilience and sustainability initiative, the AfDB is working on a project to build resilience

for food and nutrition security (refer to the project profile under Pillar 3). Most of the above projects focus their intervention in the IGAD cross-border clusters which share resources, services, and cultural values, often bound by clan and/or ethnic networks that can provide an entry point for concrete action. The cooperative movement is vibrant in the HoA and offers an opportunity to provide de-risking services to cooperatives rather than individuals, and scale up their production capacity and linkages to markets. For instance, anecdotal evidence points to successes in Northern Kenya in structuring women groups to increase the quality and yield of camel milk and export it to Kazakhstan. These interventions designed to empowering women provide a fertile ground for a package of de-risking, finance and value chain interventions, and the same cooperatives that have been receiving production support could be targeted for maximum impact. In addition, the connectivity investments contemplated under Pillar 1 would go a long way to reducing the time to key markets and increase the value of trade; for instance the trucking of live animals over poor road infrastructure causes stress and damage and reduce the value of the animals (and can cause rejections at the export port).

Participating countries: Ethiopia, Kenya and Somalia are expected to participate in the program at inception, and Uganda has expressed interest in a drought insurance scheme. An analysis on Sudan livestock value chains was undertaken by the World Bank and the IFC, a follow-up value chain deep-dive study is underway, and an advisory program is being designed so Sudan could also join the program once ready. Djibouti is a key export gateway to the Middle East and may be interested in value chain interventions.

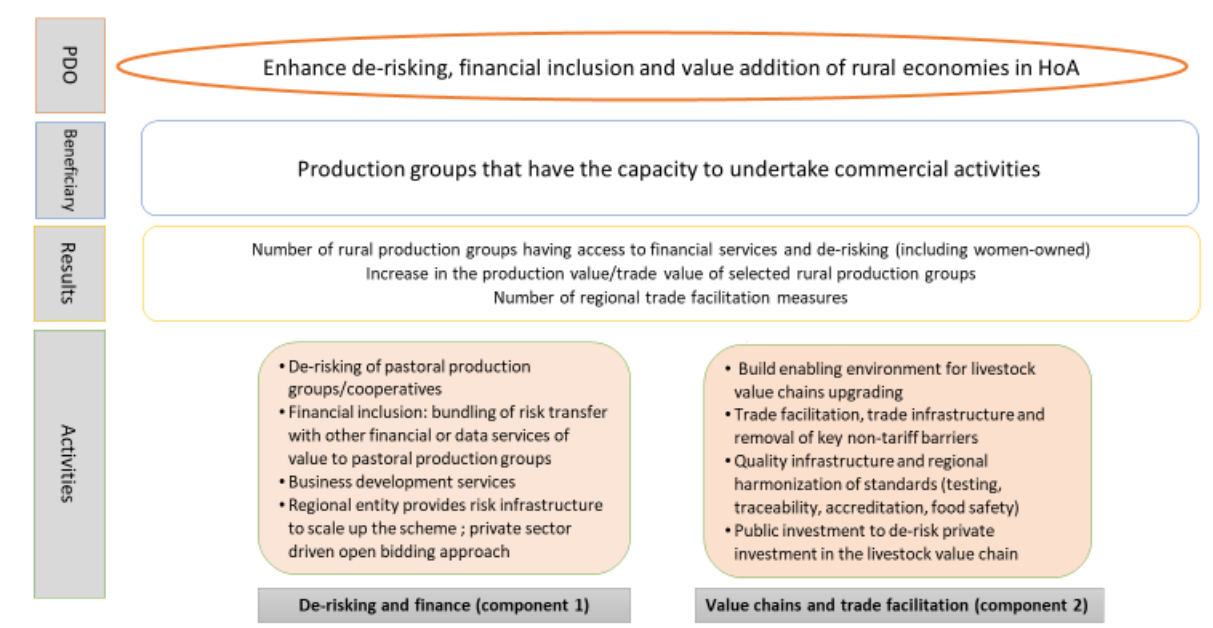
Main Program Elements and Implementation

The conceptual framework is presented below. The project is currently estimated with five countries and a notional amount of US\$50 million each. The final amount will depend on the discussion with each country on the extent of the de-risking coverage and detailed value chain and trade facilitation activities.

Figure 3: Conceptual framework

HoA DRIVE (\$250m proposed)

De-Risking, Inclusion and Value Enhancement of Rural Economies Project



Components: Two components are being proposed:

- i. **De-risking and Finance:** This component would finance a package of premium support, credit, business development services and institutional strengthening to targeted production groups/cooperatives to strengthen their financial resilience to drought risk, deepen financial inclusion and prepare them to participate in livestock value chains. The bundling of de-risking with other financial and business development services would increase the value for the beneficiaries, and the sustainability and ownership of the scheme. De-risking instruments for local financial institutions will also be explored. The services could be provided through an open bidding approach where private sector consortia bid for the financial support according to certain eligibility criteria (e.g., number of people covered; reduction of overgrazing and increase in size of herds; linkages to markets; private sector contribution; plan to ensure sustainability over time). The component will also support the provision of risk market infrastructure at the regional level to facilitate the development of financial products and services by local financial institutions.
- ii. **Value Chains and Trade Facilitation:** This component aims to enhance the competitiveness of the livestock value chains and support access to local and international markets. It would include three main interventions: upgrading quality infrastructure, trade infrastructure and facilitation, and public investment to de-risk private investment into the value chains. This component aims to crowd-in private investment; for instance, in Laikipia (Kenya) with the support of the IFC, a detailed feasibility study has been completed to establish a public-private feedlot scheme and process red meat for local and international markets. The proposal aims to scale private ranches' capacity and link them with pastoral production groups to supply livestock. However, for the proposal to work, public sector investment is required to improve quarantine infrastructure and guarantee sanitary and phytosanitary conditions. Similarly, the project will finance core trade and commercial infrastructure, implementation of policy and procedural reforms, and capacity building to eliminate non-tariff trade barriers or other impediments to cross-border trade. Investments along the value chains in market and quality infrastructure, combined with trade facilitation activities, will increase the value derived by pastoral production groups from their livestock.

Since public interventions would be designed to mobilize private investment into value chains, private sector participation will be critical to determine which interventions are best to unlock value chains in each country.

The design of both components is driven by the need to ensure the sustainability of interventions. Accordingly, interventions should provide incentives to reduce unsustainable practices (such as overgrazing), facilitate trade and should only go ahead if they mobilize private investment.

Implementation arrangements: For component 1, a regional implementation approach (through a regional entity) is proposed to allow countries to benefit from economies of scale. This implementing agency would work closely with local private financial institutions to ensure that a package of relevant services is provided to the targeted production groups/cooperatives. For component 2, the implementation is expected to be mostly national with each country designating an implementation agency, which will vary depending on the focus on the activities and country specifics (e.g., Ministry of Commerce, Ministry of Cooperatives, Private sector development agency, financial institutions, etc.).

Expected results:

- Increase in the number of rural production groups having access to financial services, de-risking and capacity building (access to markets, skills, technology), disaggregated by gender.
- Increase in the production value and trade value of selected rural production groups.
- Number of regional trade facilitation measures successfully implemented.
- Every \$1 of public sector investment leverages at least \$2 of private sector capital directly.

Lessons learnt: Lessons learnt from 10 years of implementing drought insurance programs show that: (i) humanitarian help and budget reallocations are not an efficient way to address drought risk because help often arrives too late after animals have died or been sold; (ii) pre-arranged financing (e.g. through insurance) is more efficient but requires long-term government commitment; (iii) sustainable programs should be based on a partnership between the public and private sectors; (iv) insurance should be offered where other services are provided (veterinary products, fodder, water) (v) trust can be undermined by poor execution. The programs that have successfully scaled up are backed by a long-term government commitment, involve the private sector and bundle insurance with other services. As an example, the crop insurance program in Kenya scaled up from 500 beneficiaries in 2015 to close to 500,000 in 2019 and led to the creation of private sector intermediaries which aggregate farmers and bundle insurance with other services.

On trade infrastructure, lessons learned from the World Bank supported Great Lake Trade Facilitation Project show that investments in border facilities and cross-border markets can go a long way in improving the welfare of small-scale and women traders, especially when there is effective coordination between the border countries.³⁷ In addition, the public investments in the value chain upgrading, standards and quality infrastructure and trade facilitation could support broader market opportunities for rural production groups resulting in improved livelihoods and job creation opportunities.

Project Alignment with Key Objectives

The proposed project cuts across the Trade and Economic Integration and Resilience Pillars and supports the objectives of the HoA Initiative as follows:

- i. **Trade and connecting to markets:** The project would increase the value derived from rearing livestock in pastoral areas by connecting them better to markets. It would also promote more efficient trade between livestock buyers and sellers. It would enhance the competitiveness of the livestock value chains, addressing one of the key development challenges identified in the 2016 IGAD regional strategy (refer to the rationale for the HoA Initiative introducing the projects).
- ii. **Resilience:** Pastoral resilience to drought is a priority in all HoA countries. Kenya has a Disaster Risk Financing Strategy in place that recognizes index insurance as important tool for ending drought emergencies; 20,000 households are enrolled in the Kenya Livestock insurance Program. Ethiopia has a detailed livestock master plan to develop pastoral areas and is in process of developing a policy framework for drought insurance; about 8,000 households are enrolled in the Satellite Index Insurance for Pastoralists in Ethiopia. The Government of Somalia recognizes the critical importance of livestock to the country's economy and its exposure to drought, and drought insurance fits well in its livestock sector strategy. Uganda recognizes the importance of de-risking

³⁷ A modern livestock border market at Nyamasheke on Lake Kivu, financed by the project, provides for better management and care of animals, especially during the rainy season, supporting larger trade volumes. The growth of cross-border livestock trade is also being accompanied by the increasing exchange of a broader range of goods.

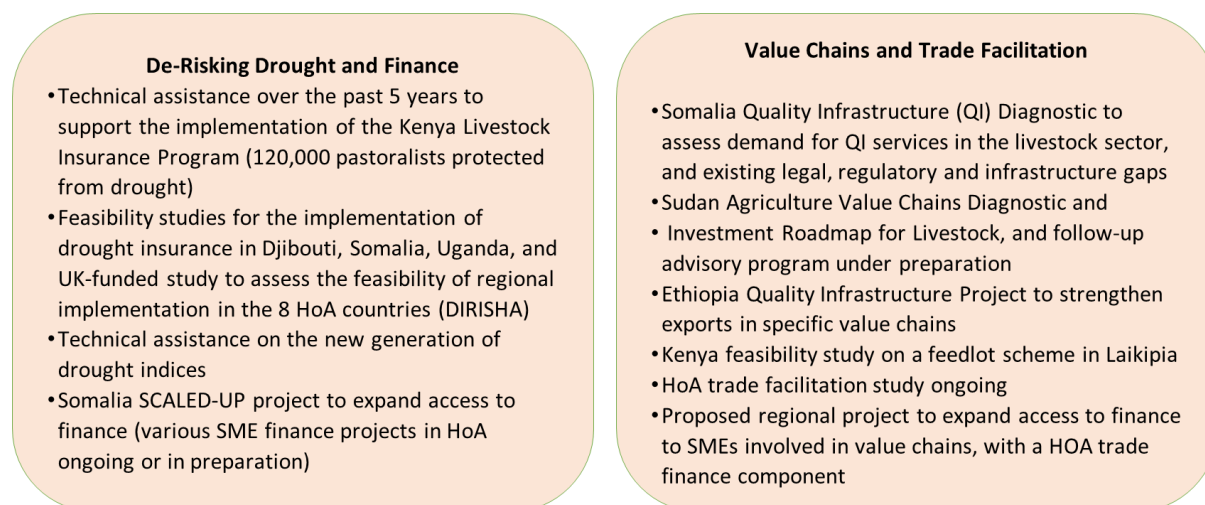
the agriculture sector and is currently supporting an agriculture insurance scheme under a private public partnership arrangement.

- iii. **Potential to attract private investment:** Crowding-in private investment is a key criterion to define the interventions under this project. Public investments will go ahead in so far as they de-risk and unlock private investment. Accordingly, the project will be closely coordinated with interested private sector financiers / DFIs and will benefit from active consultations with private stakeholders.
- iv. **Climate adaptation and gender focus:** The project will increase the resilience and adaptation of pastoral production groups to climate change and will aim to empower women in rural areas (for instance by supporting milk processing activities).

Project readiness

The proposed project benefits from extensive research, technical assistance, and ongoing lending projects on value chains and finance (Figure 4). It also benefits from deep engagement with donor partners currently implementing projects in the HoA pastoral areas.³⁸

Figure 4: Feasibility studies and ongoing activities



A UK-funded study “*Drought Index-insurance for Resilience in the Sahel and Horn of Africa (DIRISHA)*” is expected to be finalized in May 2021. The study will detail operational mechanisms to implement drought insurance at the regional level considering the various schemes under implementation and inform the implementation arrangements under component 1.

A detailed study on cross-border trade in the HoA is currently ongoing, with surveys at border crossings between Ethiopia and Somalia, and Ethiopia and Kenya. The findings are expected to be available in March 2021 and will inform trade facilitation and trade infrastructure interventions.

The program complements ongoing and planned interventions under Pillar 1 and Pillar 3 of the HoA Initiative, and from other development partners as indicated earlier.

³⁸ Donor partners consulted include AfDB, Danish Refugee Council, FAO, FCDO, IGAD, ICPALD, KfW, SomReP (consortium of several humanitarian agencies), Veterinaires Sans Frontieres (Germany and Switzerland), WFP.

Risks

- i. **Prolonged economic crisis.** If the pandemic is not controlled and if the impacts on the financial sector and macroeconomic situation is severe, there will not be any country capacity to invest in pre-arranged financing instruments to address disasters.
- ii. **Regional cooperation failures.** The risk that domestic considerations could overshadow wider regional cooperation is a key risk during the COVID-19 period. A regional implementing entity with strong convening power to implement component 1 would mitigate this risk; for component 2 the project would seek to set up a technical coordination mechanism between the various implementing entities, and specifically for trade facilitation and infrastructure at border posts. In addition, the implementation of the African Continental Free Trade Association provides further incentive to increase regional cooperation.
- iii. **Sustainability.** Drought insurance schemes require long-term government support to scale up and become sustainable. The project is designed to provide drought insurance together with other services of value for pastoral production groups, and with value chains interventions so that the protection from drought shocks is directly linked with the ability to invest. The systemic approach of crowding-in private investment for both components will also support the sustainability of interventions.
- iv. **Behavioral change.** Ultimately the program will be successful if it changes behaviors (e.g., pre-arranged risk transfer mechanisms; reduce overgrazing; focus on livestock quality instead of quantity). The program is designed to plug into existing resilience initiatives to target production groups that have a desire to engage in commercialization. A strong donor and country coordination mechanism will be key.

Regional Trade Facilitation Program and Project

Background and Issues:

Current Situation

To-date, trade integration and intra-regional trade in the Horn of Africa (HoA) region remain very low, mostly because of the existence of many administrative hurdles, non-tariff barriers (NTBs), lengthy border crossing processes, and restrictions to the movement of vehicles and persons, due to the lack of harmonization of policies and regulatory frameworks.³⁹

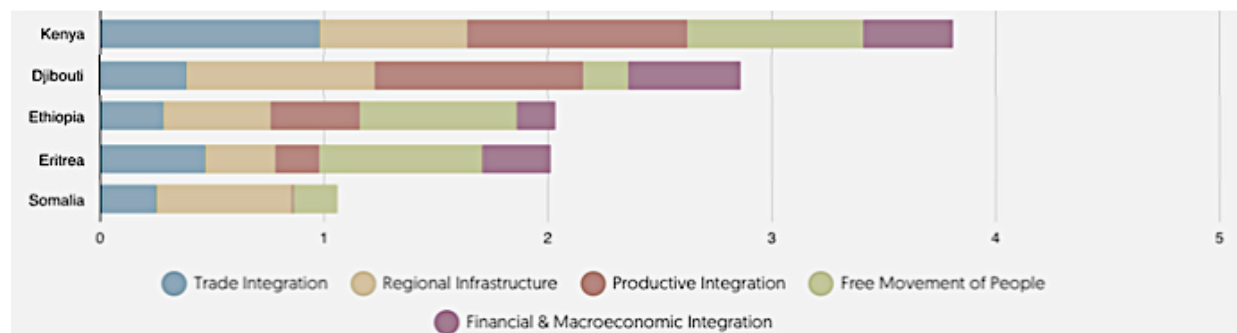
The African Development Bank (AfDB), the African Union Commission (AUC) and the Economic Commission for Africa (ECA), jointly developed the Africa Regional Integration Index⁴⁰ (ARII), a composite index tracking performance towards deeper regional integration by analysing trade integration, regional infrastructure, productive integration, free movement of people and financial and macroeconomic integration in African countries. In the HoA, the top performer on regional integration is Kenya, while Somalia is the country with the worst performances (see figure 1). However, since 2012, the Federal Government of Somalia has embarked on a series of institutional and economic reforms to rebuild Somalia's economy and reach stability, including on revenue, public financial management, anti-corruption and strengthening of institutions (IMF, Somalia Economic Update, August 2019). In March 2020, a National Trade Facilitation Committee (NTFC) was also established to oversee reforms aimed at facilitating trade, streamlining controls and procedures related to the import, export and transit of goods, and expediting the accession process to the World Trade Organization (WTO). Eritrea, on the other hand, has recently emerged from a long period of conflict and international sanctions, which together deprived the country of vital investment, trading opportunities and external support, and left the economy in a difficult situation (source: IMF)⁴¹. On 9 July 2018, the leaders of Eritrea and Ethiopia signed a historical joint declaration where they decided to put an end to their hostilities and to start a process aimed at strengthening and enhancing their diplomatic and economic ties in particular in the transport, trade and telecommunication fields. This was followed by a Joint Declaration on the Comprehensive Cooperation between Ethiopia, Eritrea and Somalia signed in Asmara on 5 September 2018, that marked a significant step toward the normalization of relations between Djibouti and Eritrea, while the UN Security Council, on 14 November 2018 adopted the Resolution n. 1907 that lifted the arms embargoes, travel bans and asset freezes for some of the country's political and military officials imposed on Eritrea with the Resolutions 1907/2009, 2023/2011, 2060/2012 and 2111/2013.

³⁹ Currently the HoA countries regulate the free movement of persons mainly on a bilateral basis. Ethiopia, for instance, has bilateral visa abolition agreements in place with Kenya and Djibouti. A Protocol on Free Movement of Persons was endorsed on 26 February 2020 by the Member States of the Intergovernmental Authority on Development (IGAD), but it is still far from being implemented.

⁴⁰ The Index is made up of five dimensions, which are the key socio-economic categories that are fundamental to Africa's integration: 1) Trade Integration, 2) Regional Infrastructure, 3) Productive Integration 4) Free Movement of People, 5) Financial & Macroeconomic Integration.

⁴¹ <https://imf-fmi.africa-newsroom.com/press/international-monetary-fund-imf-executive-board-concludes-2019-article-iv-consultation-with-the-state-of-eritrea>

Figure 5: HoA countries performances in regional integration



Source: Africa Regional Integration Index

On average, the ARII indicates that Kenya outperforms all the other HoA countries, with the only exception of regional infrastructure, where Djibouti benefits from a higher ranking, mainly because of the large volumes of traffic on the Djibouti corridor, connecting the port of Djibouti to Ethiopia (with over 95 percent of Ethiopia’s imports and exports currently passing through this route)⁴². Nonetheless, the poor road infrastructure and long transport times along this corridor raise considerably import consumer prices in Ethiopia and decrease competitiveness of its exports. This situation is further exacerbated by the current imbalance between the import/transit and export flows along the corridor, which compels carriers to travel empty to Djibouti, allocating the full cost of the transport trip to the Ethiopian importer.

The impact of the inefficiency and challenges in trade facilitation in the HoA is reflected in the World Bank Doing Business 2020 trading across borders doing business indicator, displayed in the table below.

Table 1: Trade facilitation Indicators in the HoA countries

Country	Djibouti	Eritrea	Ethiopia	Kenya	Somalia
Rank trading across Border (out of 190)	147	186	156	117	164

Source: World Bank Doing Business 2020

The Trade Facilitation Indicators (TFIs) developed by the Organization for Economic Co-operation and Development (OECD) are another useful tool to identify those areas in the HoA where regulatory reforms are estimated to have the greatest impact on increasing trade flows and lowering trade costs, although for Eritrea and Somalia there are no available data. In terms of trade facilitation, the country that performs best in the Region is Kenya, followed by Ethiopia. Djibouti performs relatively well in the area of streamlining of procedures, harmonisation of trade documents/simplification of documentary requirements, and availability of information on applicable fees and charges, while in the all other areas the country is under the average when compared with other lower- and middle-income nations.

Constraints

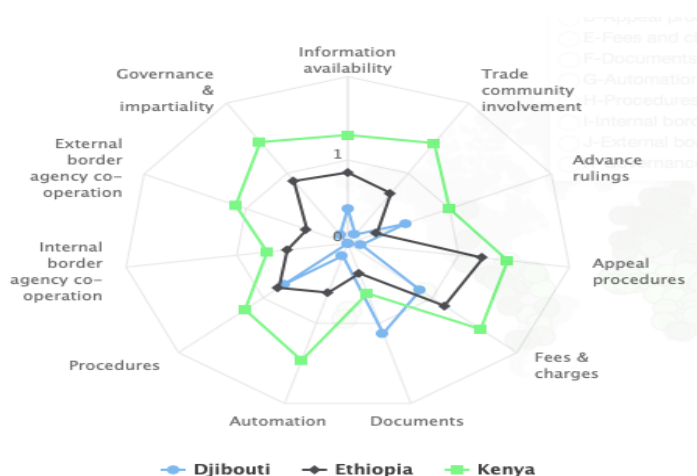
The TFIs reflect a low level of cooperation both **intra-agency** (between the various national administrations present at the border) and **inter-agency** (with border agencies of other countries)

⁴² A recently concluded AfDB-funded project analysed the possibility to extend the Addis Ababa-Djibouti Transport Corridor to Kampala, in Uganda, and Juba, in South Sudan, to enhance regional connectivity: <https://projectsportal.afdb.org/dataportal/VProject/show/P-Z1-DB0-108>

especially in Djibouti and Ethiopia, where border agencies suffer from less autonomy and more bureaucratic decision-making processes because of a more hierarchical organisation of the public administration. Differently from Kenya, in these countries a structure at national level responsible for developing a cohesive national integrated border management strategy, setting out the overarching high-level strategic direction for effective border management, is also lacking.⁴³ Other areas that in Djibouti are indicated by the OECD as particularly weak are:

- a) **Trade community involvement:** i.e., the extent of the involvement of the trade community to the design and everyday operation of border-related policies and procedures;
- b) **Governance and impartiality:** this indicator refers to an array of good governance characteristics, including clearly established and transparent structures and functions, the existence of a Code of Conduct and an ethics policy, internal audits and transparent provisions for financing and for internal sanctions in the Customs administrations;
- c) **Information availability:** it refers both to web-based and to other forms of publication about Customs and border-related rules and procedures, as well as to transparency mechanisms such as enquiry points (see next figure).

Figure 6: Performance comparison in trade facilitation between Djibouti, Ethiopia and Kenya (Source: OECD)



Impact and Consequences

The areas where improvements are estimated, according to the OECD, to have the greatest impact on increasing trade flows and lowering trade costs are indicated in table below. Some of them are common to two or all the three concerned countries:

⁴³ In Kenya, a Border Control and Operations Coordination Committee (BCOCC) was established with Act No. 19 of 2014 to ensure effective inter-agency cooperation. The BCOCC is led by the Principal Secretary to the Ministry responsible for national security, and includes the heads of key institutions operating at borders. BCOCC main tasks include the formulation of policies and programmes for the management and control of designated entry and exit points; the co-ordination of the exchange of information between the respective agencies responsible for the security and management of borders and the supervision of the operations of border agencies at the different border posts.

Table 2: Areas of intervention estimated to have the greatest impact on trade

Djibouti:	Kenya	Ethiopia
Formalities: need to expand the acceptance of copies of documents, reduce the number of documents required to import and export and the time for preparing such documents. Availability of full-time automated processing for Customs.		
information availability: there is a need to further increase traders' accessibility to information on import and export procedures, rate of duties, forms and documents required for border procedures, rules and examples of customs classification, agreements with third countries; need to improve the operation of enquiry points providing traders with information on Customs-related issues. To date, only Kenya has developed a trade portal ⁴⁴ describing rules, procedures and documents required for import and export formalities of products that are most commonly traded at its borders, while Ethiopia and Djibouti have launched similar initiatives, respectively, in January ⁴⁵ and March 2020 ⁴⁶ .		
Governance and impartiality: need to introduce mechanisms able to ensure more impartial and transparent structures/functions of border agencies, particularly Customs.		

With regard to the regional infrastructure integration, most of corridors⁴⁷ in the HoA are characterized by significant delays, a significant portion of them being attributable to the inefficiencies and complexities of procedures at border posts, that have a negative impact particularly for landlocked countries, like Ethiopia, reducing the trade competitiveness of the region. Along such corridors, truck traffic volumes are modest, with the exception of the Djibouti corridor (that counts an average of 2,500 trucks per day either direction) and the Northern Corridor. The Djibouti corridor is the main conduit for Ethiopian trade, with about 95% of Ethiopia's imports and exports currently passing through this gateway, accounting for about 70% of the total activity of the port, while the Northern Corridor is the busiest and most important transport route in East and Central Africa, linking the port of Mombasa in Kenya to the country's interior and landlocked neighbours Burundi, DRC, Rwanda, South Sudan and Uganda. With a letter sent in December 2015 to the Northern Corridor Transit and Transport Council of Ministers, Ethiopian authorities declared their interest to become a member of the Northern Corridor. The formal adhesion process, however, has never been started by Ethiopia.

Policy and Institutional Responses

One of the most popular initiatives for improving the performance of transport corridors in Africa is the establishment of **One Stop Border Posts** (OSBPs). An OSBP is a border facility that combines two stops for national border control processing into one and consolidates border control functions in a shared space for exiting one country and entering another. Merging two stops into one and consolidating functions in a single public facility for exiting one country and entering another reduces travel time for freight vehicles, facilitate the mobility of persons and cargo, thereby reducing the cost of transport for shippers and ultimately the cost of goods to consumers.

A Regional Time Release Study (TRS) conducted by COMESA in 2017 with the World Bank's support, compared average clearance time of goods and main causes of delays and bottlenecks in 34 border sites

⁴⁴ <https://infotradekenya.go.ke>

⁴⁵ <https://newbusinessethiopia.com/trade/ethiopia-launches-electronic-customs-processing-platform-for-traders/>

⁴⁶ <https://lanation.dj/vers-la-mise-en-place-dun-guichet-unique-pour-le-commerce-exterieur/>

⁴⁷ The term "corridor" is referred to indicate transport routes allowing the efficient movement of goods and people that evolve to facilitate an increasing range of social and economic development activities, contributing toward economic development (so-called "development corridors"). Development corridors, in turn, may further evolve to an extent that supports trade ("trade corridors"), or the development of a particular sector of the economy ("agricultural" or "industrial" corridors). When they support wider social development and economic growth of a subnational region or a cross-border region they are defined "economic" corridors.

(land borders, international airports, seaports and inland dry ports) in 10 member countries. The study concluded that the main causes of delays at these sites were a lack of harmonization and simplification of customs procedures, reduced customs automation and interconnectivity, weak national and cross border agencies coordination and cooperation practices, absence of integrated border management, and low capacity and know-how of customs staffs and stakeholders. The study also demonstrates that in those countries that largely rely on OSBPs for channelling their trade flows with neighbouring countries (such as Kenya), clearance times are significantly lower. Average clearance times with regard to Djibouti, Eritrea and Kenya,⁴⁸ are shown in the table below. Somalia was not covered by the study, while for Ethiopia TRSs were not completed.

Table 3: Average clearance times in Djibouti, Eritrea and Kenya

Country	Imports - Average clearing time	Exports - Average clearing time
Eritrea	16d 6h 10m	2.d 1h 29m
Djibouti	14h 27m	10h 41m
Kenya	4h 29m	39m

Ongoing or Planned Related Projects

Other donors/government projects in the HoA region should be mapped to avoid overlapping interventions by donors and waste of resources, and the establishment of the individual OSBPs, as well as dry ports, should be coordinated with such projects within a specific corridor approach. Feasibility and pre-feasibility studies are important to give a measure of the priority and the readiness for the projects. Such studies have already been elaborated for some corridors (e.g. Berbera, Djibouti), while for Moyale, two AfDB-funded studies have been elaborated on the procedural, legal and Institutional aspects related to the establishment and operation of the Moyale OSBP, the IT systems and procedures to be implemented to increase effectiveness of activities of border agencies, with proposals for the establishment of a corridor management institution for coordinating and facilitating trade and transport along the Mombasa-Nairobi-Moyale-Addis Ababa corridor⁴⁹.

A list of the most relevant ongoing and planned projects in the Trade and Transport Facilitation/customs reforms areas or with a component in these sectors has been integrated into the analysis and is available upon request. A more comprehensive mapping of national activities will be included in final project documents.

Programme and Project description:

Strategic Relevance

Trade facilitation represents a priority for HoA countries and development partners currently supporting the initiative (EU, World Bank, and AfDB). During the World Bank Group/IMF annual meetings held on 18 October 2019 in Washington DC, the Finance Ministers and representatives of Djibouti, Eritrea, Ethiopia,

⁴⁸ The study covered the Doraleh Container Terminal and the Point Kilometre (PK13) in Djibouti, the Massawa and Asmara International Airport in Eritrea; the Galafi border post, Bole International Airport, and the Modjo and Kaliti dry ports in Ethiopia; the Busia, Malaba, and the Moyale OSBP in Kenya.

⁴⁹ Mombasa-Nairobi-Addis Ababa Road Corridor Development Project Phase III: Upgrading of Turbi-Moyale (A2) Road, Consultancy Services for Trade and Transport Facilitation, Contract No: KeNHA/ D&C/1966/2016, September 2017; Consulting Services for the Trade and Transport Facilitation Service between Kenya and Ethiopia, RFP No: S/51/ICB/RP/ADB/2007/EFY, March 2019.

Kenya and Somalia agreed on a Package of Priority Proposals for each one of the 4 Pillars in which the Initiative is articulated. With regard to the Pillar 2, which complements infrastructure investments under Pillar 1, three main areas have been identified and will be put forward for financing: (1) Regional Trade Facilitation (\$0.45bn); (2) Regional Value Chain Development (\$0.03bn + Private Sector Investments); and (3) Investment Climate (\$0.02bn). This project profile covers the first area.

Rationale: Leveraging Trade Facilitation to Emerge Stronger

Regional implementation of trade facilitation reforms can bring more significant benefits to the HoA region and its member states, rather than uncoordinated measures applied by each country autonomously. One of the most vital elements of the integration process is harmonization of policies. The HoA region is composed of different nations that have diversified interest, but they still rely on each other. Ethiopia and Djibouti, for instance, heavily rely on each other for survival. Most of food items from Djibouti comes from Ethiopia and some commodities imported by Ethiopia are from Djibouti. There are also many Somalia traders who engage in business in Kenya, while there are Ethiopian business persons in Djibouti.

A Regional approach to trade facilitation can ensure that traders in the same region are not burdened by differing customs formalities and cross-border requirements that hinder cross-border trade in the region. Importantly, uniform formalities and procedures conceived and coordinated at the regional level can remove bottlenecks, increase the participation of Small and Medium-sized Enterprises (SMEs) and enhance the competitiveness of regional value chains, thus deepening regional integration.

To overcome these problems, HoA countries have to coordinate reforms for trade facilitation⁵⁰ and harmonise procedures and documents. By tackling border administration challenges and addressing procedural obstacles to trade, the World Trade Organization (WTO) Trade Facilitation Agreement (TFA) can be instrumental in deepening regional integration in the HoA. Entered into force in February 2017, the agreement created binding obligations for WTO Members to implement reforms to expedite the movement, release and clearance of goods, including goods in transit. Even if Eritrea is not a WTO member and Ethiopia and Somalia still have the observer status in the Organization, the TFA provides a unique opportunity for HoA countries to include trade facilitation as a priority agenda item in their regional integration processes or to deepen initiatives already in place. In this regard, the TFA provides an approved legal framework within which HoA nations can coordinate and adjust reform programmes according to their specific priorities. There are many examples of measures with potential regional implementation capacity in the agreement, such as Article 1.1 and Article 1.2 on publication and availability of information through the Internet, which can be implemented in a coordinated manner to provide traders with a common regional platform where to retrieve information. Another measure is contained at Article 7.7 on trade facilitation measures for authorized operators. If HoA countries agree on a common set of qualifying criteria, it will support business participation in each national scheme within such a region and create a basis for mutual recognition agreements.

⁵⁰ A notable example is Association of Southeast Asian Nations (ASEAN) Single Window initiative, which connects and integrates the national single windows of its member states, allowing border documents to be exchanged electronically among countries and expediting the time required for clearance.

Trade facilitation also represents an important part of the integration process within the African Free Trade Area (AfCFTA)⁵¹. To date, all the HoA countries are signatories of the Agreement establishing the African Continental Free Trade Area, except Eritrea. Somalia signed the AfCFTA Agreement on 21 March 2018, although the ratification process at national level has not yet been completed. The AfCFTA is expected to provide a new stimulus to regional integration in the HoA, and in Africa in general, by bringing down economic barriers and contributing to the economic growth and industrialization of the region and the entire continent. In this regard, the establishment of linkages and synergies with the African Union and the recently created Accra AfCFTA Secretariat in Ghana⁵² can be advantageous for implementing the objectives planned under the Pillar 2 of the HoAI. In particular, Annex 4 of the AfCFTA Agreement is modelled upon the WTO Trade Facilitation Agreement (TFA). It encourages State Parties to simplify and harmonise international trade procedures and logistics in order to expedite the processes of importation, exportation and transit, as well as to expedite the movement, clearance and release of goods including goods in transit across borders⁵³. Specific measures concern, among others, the publication of trade-related laws, regulations, and procedures; pre-arrival processing of information; post-clearance audit; the establishment of electronic payment options for duties, taxes, fees, and charges collected by Customs; and the adoption of risk management systems by Customs. Moreover, Annex 3 (on Customs co-operation and mutual administrative assistance), urges State Parties to cooperate in all areas of Customs administration in order to improve the regulation of trade flows and the enforcement of applicable laws within the State Parties, in particular by promoting exchange (manual or electronic) of information in advance of the arrival of persons, goods and means of transport in their respective territories. Other Annexes to the AfCFTA Agreement containing provisions on trade facilitation, transparency and simplification of trade-related regulations are: Annex 6 on Technical Barriers to Trade (cooperation in the areas of standards, technical regulation, conformity assessment, accreditation and metrology); Annex 7 on Sanitary and Phytosanitary (SPS) measures (enhancement of cooperation and transparency in the development and implementation of SPS measures); and Annex 8 on Transit (recognizing the freedom of transit through the territory of each State Party without restrictions on the means of transport).

Objective

The overall objective of the trade facilitation program is to increase trade and reduce transport costs, especially along key HoA corridors. The specific objectives are to: (i) undertake the necessary additional analytical work; (ii) contribute to harmonisation of procedures, rules and regulations between HoAI countries; and (iii) provide critical regional infrastructure at ports, borders, and inland facilities including dry ports, logistic clusters and other similar infrastructures allowing the consolidation of goods volumes to reduce unit costs of logistics. Project outcomes under the specific objective (iii) should try to fill gaps in necessary trade-related infrastructure, such as trading workspaces for informal traders and warehousing that support cross-border trade, as well as facilities related to cross-border movement of livestock, for instance. To this end, it is necessary to carefully assess the nature of actual and potential trade flows at

⁵¹ The AfCFTA was launched on 7 July 2019 at the 12th Extraordinary Summit of the African Union in Niamey, Niger. Supposed to come into operation on 1st July 2020, this date has been subsequently postponed to 1 January 2021 by the AU Commission, due to the current Covid-19 situation.

⁵² The Accra AfCFTA Secretariat was opened in March 2020. However, its operationalization has been delayed due to disruptions to recruitment and staffing of the secretariat teams because of the Covid-19 crisis.

⁵³ Most of such provisions are also reflected in the Treaties and Agreements establishing the Regional Economic Communities to which the HoA countries are members (IGAD, COMESA and EAC) and their complementary Protocols/Regulations.

specific border crossings (included informal trade, as it constitutes a significant portion of trade in the HoA and an important source of livelihoods for many people, especially women and the youth) and the trade potentials of the HoA region.

Components

Based on a needs analysis and review of issues highlighted above, regional trade facilitation would consist of: (A) Technical Assistance; (B) construction and operationalization of new OSBPs; and (C) development of dry ports.

A. Technical Assistance (TA)

To achieve efficient results related to reductions in cost and time along corridors in the HoA, it is important to focus on a **soft agenda of trade facilitation**, including reforms related to institutions, legal, policy, procedure and management issues. Ineffective trade facilitation factors, such as undue customs delays and poor administration; inefficient transport systems and reduced border agency automation and interconnectivity; excessive document requirements and bureaucratic procedural activities; inadequate coordination between government agencies and corruption are major causes of the HoA inability to fully reap the trade opportunities that globalization presents, making this region a very high cost trading zone.

Border delays and poor facilitation along corridors raise logistics cost of transport companies and can lead to additional inventory costs because of the lack of predictability of delivery. Hence, trade facilitation and reduction of non-tariff barriers (NTBs) are essential for regional integration in the HoA, as they can lead to stronger political cooperation between countries, which in turn is essential for dealing with common problems affecting this area, including armed conflicts and displacement, natural disasters and urban poverty.

Lack of training with regard to the OSBP concept, as well as lack of a clear understanding of the role to be played by each agency at OSBPs and of the specific responsibilities of their staff are other problems that need to be addressed. Border agencies’ staff and private operators operating at OSBPs need to gain a better understanding of the nature, mission and features of such border management model in order to increase their operational efficiency. Therefore, the implementation of capacity building exercises and other initiatives aimed at disseminating awareness on the changes in border operations as a consequence of the establishment of an OSBP environment, are further elements that require attention.

TA and capacity building will cover the following subcomponents:

Subcomponent	Description
Priority analytical work	There is a need for a clear understanding of NTBs in the HoA , especially along the identified priority economic corridors, which in most cases are hidden and therefore hard to assess. ⁵⁴ This assessment should also leverage on the experience of National Transport and Trade Facilitation Committees (NTTFCs) and National Monitoring Committee (NMC) on Non-Tariff Barriers to Trade ⁵⁵ , in those HoA countries where

⁵⁴ For the purpose of this document, NTBs refer to all restrictions, other than traditional customs duties, that result from prohibitions, conditions, or specific market requirements that make importation or exportation of products difficult and/or costly.

⁵⁵ A National Monitoring Committees (NMC) has been established for instance in Kenya, as well as in all EAC countries, in order to enhance the smooth movement of goods and services and reduce import and export time across the region. NMCs have the responsibility of identifying, monitoring and facilitating the elimination of NTBs, in particular, through the development of web and SMS platforms where economic operators can report NTBs.

	<p>they have been established, and should go beyond their purely economic impact, to include geographical⁵⁶, social or environmental impacts in the region. A cost-benefit analysis can provide a basis to identify them and prioritize programmes of investments in infrastructure, trade facilitation, regulatory improvements and economic development to improve the competitiveness of corridors and guide policy decisions. The analysis should also focus on sanitary, phytosanitary, products standards and other technical regulations that can have an impact on trade in view of their harmonization, as this would significantly facilitate movement of goods in the HoA. Examples include the adoption of mutual recognition agreements or equivalence agreements of quality certificates/quality marks issued by the Bureaus of Standards of the HoA countries (to allow products that have been tested in the exporting country to be accepted by the importing country with minimal testing or certification)⁵⁷; or of bilateral quarantine agreements/protocols to facilitate the access of regulated plants and plant products (with particular regard to the goods most commonly traded at their borders) to the destination country's market in order to reduce costs of compliance with regard to quarantine procedures and phytosanitary controls at the border. There is also a need to understand the challenges of intra-HoA trade (compared to trade with countries from outside the Region). As most of the trade among the HoA economies occurs on a small scale, being largely carried out among border communities, and not captured in official statistics, it will be equally important to develop a better understanding of small-scale trade, including the nature of flows, products, as well as requirements and other problems faced by such operators.</p>
<p>Harmonization of Standards and Procedures</p>	<p>Harmonization of border procedures and transport, commercial and customs documents, as well as synchronization of working hours between border agencies on both sides of the border are priority areas in terms of trade facilitation. The harmonization work should include the rules for control of dimensions, weight and axle load of goods vehicles, as this can also offer important benefits for facilitating trade. In particular, the overloading of heavy goods vehicles resulting from different axle load regimes in the HoA countries makes their enforcement particularly hard. The multiplicity of agencies and the corresponding multiple checks made on travellers and goods at borders is another major obstacle to the free flow of goods and people and efficient transport logistics along corridors. In this regard, significant improvements can be obtained by sharing information on characteristics of vehicles (size, weight, axle load) to check conformity with technical standards, for temporary admission, for checking insurance cover, and for checking criminal information with respect to stolen vehicles, among others. There is also a need to understand how different regional and bilateral integration arrangements on trade facilitation initiatives, including single customs territory and customs union agendas, are having impact on the ground. Existing trade agreements will need to be reviewed to determine the incorporation of relevant elements to remove non-physical barriers</p>

⁵⁶ The HoA region is mostly comprised of coastal countries that, ideally, should be competing with each other in order to provide the most cost-efficient transit service to the landlocked Ethiopia, that together with Kenya is the biggest economy in the Region. Constraints and opportunities for such competition need to be explored.

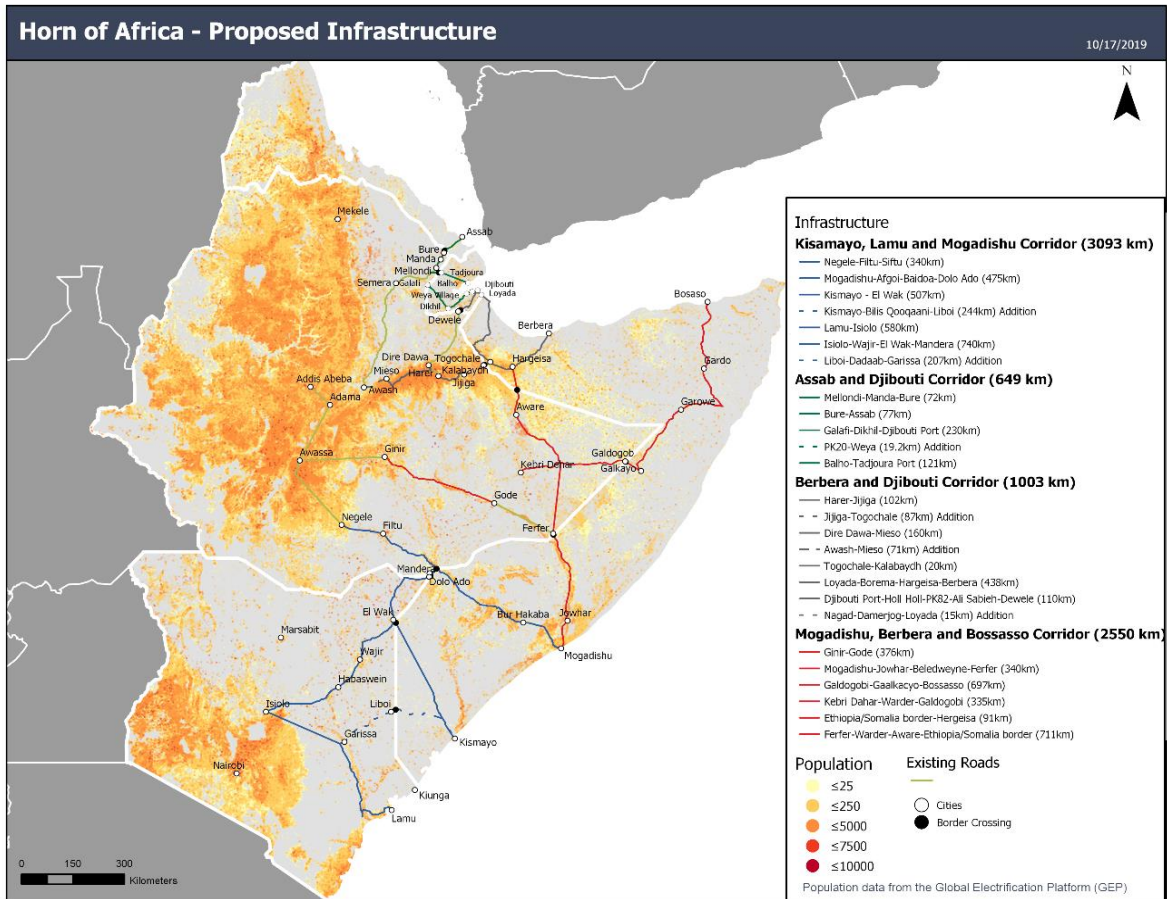
⁵⁷ Some countries do not recognize test certifications from other countries, and require a laboratory test to be conducted in their territory (with samples to be taken at the border) which can keep trucks waiting for hours or days pending the transmission of the test results to the competent border agencies.

	to trade. A review on the impact of regional trade initiatives (from COMESA, IGAD, EAC and AU) is also necessary to understand trade integration in the wider regional context.
Complementary Health measures	Each programme of establishment of OSBPs and promoting the development of road corridors should be accompanied by the implementation of specific HIV/AIDS awareness campaigns, by identifying areas where truck drivers can be freely tested and receive information about safety issues. Border towns and transport corridors are areas of high HIV prevalence and a primary risk environment for the populations living in their proximity. Due to the migratory nature of their occupation, transport workers are particularly vulnerable to HIV/AIDS, as they tend to have multiple sexual partners, fuelling the spread of the epidemic and serving as bridge populations linking with the general population. To address the risk of natural disasters, pandemics, and similar catastrophes, it is also important to design border infrastructure in a way to ensure resilience and continued operation during such events, including measures aimed at facilitating clearance of essential and relief consignments (e.g. adoption of simplified clearance procedures, simplified goods declaration or provisional or incomplete goods declaration subject to completion of the declaration within a specified period, etc.).
Implementation and institutional support with related capacity building	This subcomponent will be developed further once the institutional arrangements become clearer and will also support the implementation of the next component, as long as the project remains a single operation, and not split into two.
Other areas	Additional assistance will include improvement of the competitiveness of the logistics sector; spatial planning around port areas, and design and implementation of ICT systems for more effective inter-modal integration.

B. OSBPs development

Within the HoA Initiative, 13 potential OSBPs have been identified for funding (investments, as well as TA), distributed between the four main corridor groups shown in the diagram below.

A priority list of such OSBPs should be decided by DPs in coordination with the national government of HoA nations, possibly by privileging those border posts with the highest commercial traffic volumes; those that are located along strategic corridors connecting the main ports in the HoA with high-density trade, main urbanised areas and logistics hubs (ex. dry ports): and border posts where existing good-standard facilities already exist requiring minimal upgrading and adaptation works in order to be converted into OSBPs.



The cost for construction works of each of the OSBP ranges from 8 to 28 Million USD, depending on the existing situation of the site and the access road (in instances where the construction of border facilities is a green field project, the costs for infrastructure can be even higher), while costs of design and construction of OSBPs in the region are in the range of US\$3 to US\$12 million each. EU has already allocated 32 M EUR for the development of the Djibouti corridor, including the establishment of an OSBP at Galafi for more efficient border crossing operations. Feasibility studies (except for the Moyale OSBP which has already been constructed), are also needed. The establishment of an OSBP involves the following sets of subcomponents and activities:

Subcomponent	Description
Preparatory work <i>(ideally much of this will be done prior to project launch):</i>	Undertaking Baseline Surveys and Border Performance Monitoring Activities: prior to the commencement of activities to convert a two-stop border post into a one-stop border, a strong case for supporting the project should be established. This is important for justifying the level financial investment that may be required for infrastructural development and acquisition of the relevant equipment. It is also critical for supporting the necessary legislative changes that may be required for extra-territorial application of national laws. The collection of baseline information on such aspects as traffic volumes and processing times for both cargo and travellers can facilitate the measurement of costs against benefits. Baseline data provides the platform for measuring the impact of OSBPs and other trade facilitation and mobility enhancing measures

necessary for political buy-in. Baseline data and trend analysis also informs the design and capacity requirements for OSBP facilities. This also related to M&E discussed below.

Development of the appropriate legal framework: Under international law, it is generally agreed that the application of national laws is limited to the territory of a State. The OSBP concept is an exception to this principle, as it relies on the notion of extraterritoriality, which allows a State to extend the application of specific national laws to a place located outside its own territory. Under the OSBP concept, it is essential to clearly describe which national laws apply extraterritorially and to specify the locations where such laws would be applicable. The conduct of official duties and application of the national laws in the territory of another State has to be agreed upon between the two States, consolidated into appropriate bilateral or multilateral tools, and endorsed by such other State with regards to its own national laws. As a result, good practice demands that a detailed analysis of legislation governing the operations of border agencies is undertaken in readiness for the establishment of an OSBP.

Infrastructure and Equipment: changing a traditional two stop border post to an OSBP demands a certain level of infrastructural development to suit OSBP operations and traffic flow patterns. The design and layout of border facilities should facilitate seamless flow of traffic while encouraging inter-agency cooperation, and the design of OSBP facilities should be aligned to the border process flows. With the growing number of volumes of cargo and travellers passing through borders, the use of technical solutions for faster clearance and enhanced transparency is crucial. Such technology includes the use of scanners and weighbridges. Cargo and baggage scanners reduce inspection times, improve border protection against smuggling practices, drug trafficking and terrorist activities, minimise the occurrence of corrupt activities and increase turnaround time for trucks, which leads, in turn, to less congestion within OSBPs. It is also a good practice to consider adopting modern truck weighting technology for weighbridges, particularly high-speed weighing-in-motion (HS/WIM) systems, as they greatly contribute to cutting down on dwell time at borders and ports. HS/WIM systems have more accuracy, flexibility and adaptability with other computer-based technologies used in border management. The use of Closed-Circuit Television (CCTV) at border crossing points is another solution that can heighten transparency and security in border operations. Combined with effective risk management systems, CCTV is an effective non-intrusive way of policing border posts.

National Automation and Transit Reforms: national automation reforms enabling border agencies in each HoA country to electronically share data within other agencies both at national and bilateral or regional level are essential and for being successful, they must include private-sector views in their design, formulation, implementation and monitoring. Automation allows such agencies to increase their efficiency, avoid redundancies and improve domestic resource mobilization, improve governance and reduce corruption, like in the case Customs. IT systems of each border agency will also need to be linked with those ones of the corresponding agencies located on the other side of the border.

Procedures and Processes: To the greatest extent possible, the design and layout of an OSBP should be modelled upon traffic flow patterns and clearance procedures within such a facility, to be designed in a way that encourages forward movement of cargo and persons. A border business re-engineering exercise should be undertaken with a view to simplifying inter and intra agency processes. In addition, the border processes for each couple of adjoining States should be aligned and harmonised to eliminate duplications and redundancies, as differences in regulatory requirements and redundant provisions that repeat what other authorities in the adjoining state have already done, increase international trade costs. Furthermore, it is widely believed that contemporary border management is anchored on receiving, analysing, processing and sharing information. For this reason, appropriate ICT systems and connectivity are fundamental to enhancing efficiency and effectiveness, both at a domestic and bi-national level, among the different agencies at the border, and between border agencies and their headquarters. Preferably, the ICT requirements for OSBPs should be considered from the beginning of the project and the adoption and implementation of systems should deliberately mirror and support the modified border procedures. The development of fast track procedures

	for local residents, pre-identified vehicles, small-scale traders and regular commuters, trusted traders (e.g. Authorized Economic Operators/AEOs) or for trucks transporting perishable products, is another aspect that should be covered by the business re-engineering exercise.
Hard infrastructure	New facilities need to be built and/or adapted with the special purpose of enhancing trade facilitation, thereby improving the collection of trade taxes, and maintaining security by mitigating the risk of terrorism, preventing human trafficking and the transmission of communicable diseases, among others. Administrative offices and accommodation facilities need to be constructed for Customs, immigration and staff of other border agencies. The entire OSBP area needs to be fenced and internal security fencing for different control areas must be provided. Functional areas must be designed in a way that no person, goods or vehicle crossing the border can evade checks. Inside the facilities, designated lanes for circulation of both vehicles and pedestrians need to be established, with processing space for both public and private sector service providers (e.g. banks, insurances, customs clearing agents and forwarding agents, etc.) and areas equipped with weighbridges, cargo and baggage scanners, automatic number plate readers (ANPR) ⁵⁸ and other operational equipment for loading and off-loading of cargo (e.g. forklifts). Armories, detention cells for researched persons and fugitives, storage for seized goods, animal holdings and vaccination centers can also be part of the OSBP design, as well as Border Information Centres or Resource Centres disseminating information, brochures and other reference materials on the OSBP, because they normally improve the usability of such facilities and disseminate awareness on the changes in border operations which are a consequence of the implementation of a joint approach in border management. In particular, investments in hard infrastructure need to be adapted to the situation prevailing at each corridor and to the level and type of traffic flows, keeping in mind that not all border posts in Africa need be converted into OSBPs. By simply streamlining procedures, organizing traffic circulation systems and re-enforcing already proven border management practices such as pre-clearance and the use of effective early warning systems in monitoring conflicts, substantial results can be obtained in terms of enhancement of trade and improvement of the mobility of people and vehicles at borders, as well as along corridors linked to such facilities.
Soft-infrastructure perspective	OSBPs require a simplification and harmonization of procedures between the adjoining country pairs and sharing and exchanging data between all the border agencies (both at national and at bi-national level), in particular through the use of ICT. As there is usually a great deal of duplicated and overlapping data entry to be submitted by traders at the various agencies operating at borders, for OSBP operations to be successful, such agencies must be able to communicate and exchange data with each other, by adopting a coordinated approach for what concerns receiving, analysing, processing and sharing information. Many OSBPs today adopt a border management information system to manage in an integrated manner the flow of electronic information and conventional documentation and interventions involved in the clearance process. The Real Time Monitoring System / Cargo Control System (RTMS) piloted in the East African Community (EAC) is an example. Lastly, the exchange of operational data and implementation of sound risk management systems promoting exchange of operational data and sharing of intelligence information between the border agencies of the adjoining countries needs to be promoted, as it can improve security and foster peace and economic growth in the Region. Other trade facilitation tools – such as single window systems, trusted trader schemes, simplified trade regimes for informal and small-scale traders ⁵⁹ , e-payment, electronic cargo tracking systems for

⁵⁸ ANPR scan registration numbers of vehicles moving through OSBPs to determine if the vehicle has a “history” i.e., is it on a Police, Ministry of Transport or Anti-Narcotic or other agency databases. The result of the scan determines if the vehicle is allowed entry or is detained for further investigation.

⁵⁹ In this regard, the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures (Transitional Standard 4.13) allows Customs to exonerate from payment of customs duties and taxes for transactions under a minimum value and/or when the amount of duties and taxes is under a minimum threshold to be specified

	monitoring the movement of transit cargo, and modern traffic management systems – are also key components of efficient OSBP operations.
Capacity building/change management program	Lack of training with regard to the OSBP concept, as well as lack of a clear understanding of the role to be played by each agency at OSBPs and of the specific responsibilities of their staff is another challenge that needs to be addressed through TA, necessary for effective OSBP implementation. Border agencies staff and private operators operating at OSBPs need to gain a full understanding on the working methods, procedures and practices required for the efficient functioning of the OSBP operational environment. The implementation of capacity building exercises such as on-site training sessions, workshops, seminars, and other initiatives aimed at disseminating awareness on the changes in border operations as a consequence of the establishment of an OSBP are therefore elements that require attention. Such initiatives should be planned within a comprehensive change management program aimed at developing continuous skills training program to ensure that all border staff and managers contribute to reducing border crossing times and improving security.

C. Dry ports development

Dry ports are inland intermodal terminals directly connected by road or rail to a seaport and operating as centres for transshipment of sea cargo to inland destinations. In addition to their role in cargo transshipment, they may also include facilities for storage and consolidation of goods, maintenance for road or rail cargo carriers, and customs clearance services. Dry ports contribute most to trade when they provide an integrated offer of logistics services by allowing traders to shift logistics services and cargo handling activities (e.g. storage, consolidation, stripping and stuffing of containers), as well as other value adding logistics activities (such as packaging, warehousing, cold storage facilities) from the congested seaport where cargo is entered to these facilities. A dry port also relieves competition for storage and customs space at the seaport itself, speeding the flow of cargo between ships and major land transportation networks, creating a more central distribution point. When located close to production areas, dry ports can attract trade from the surrounding territory, stimulating the creation of new commercial flows.

In the Horn of Africa, there are currently eleven (11) dry ports already in place, seven of them located in Ethiopia (Modjio, Semera, Gelan, Dire Dawa, Komolcha, Mekele, and Kaliti)⁶⁰ and four in Kenya (in Nairobi/Embakasi, Naivasha, Kisumu and Eldoret). The necessity and appropriateness of establishment of further dry ports needs to be evaluated in view of their integration into the plans for development of the four groups of HoAI corridors. This exercise should be based on a series of criteria which include: a) current and potential traffic flows, b) their proximity to industrial or manufacturing clusters/main areas of production c) number of landlocked countries served, as there may not be a need for a dry port at every corridor. Reforms of goods clearance procedures may also lead to large reductions in their usage, which has been the case in Rwanda. Generally, forward looking trade facilitation policy and implementation often leads to little need or requirement for dry ports unless they provide a value-added activity.

The establishment of additional dry ports and/or logistics centres in the HoA is needed to ease congestion of sea ports and to improve efficiency in transporting goods. Such facilities also offer an opportunity to

by the national legislation. The WCO Guidelines to the Revised Kyoto Convention also recommends that the collection and payment of duties and taxes should not be required for negligible amounts of revenue that incur costly paperwork, both for the Customs administration and the importer/exporter.

⁶⁰ Most recently, a new dry port in Wereta, in south Gondar, Amhara state, was inaugurated on 15 February 2020 in Ethiopia. The new dry port is expected to facilitate Ethiopia's trade with Sudan.

attract private sector investment in logistics, reducing the demand for public investment and also support private sector growth and/or provide opportunities for private sector involvement. It is a general shared belief that a Public Private Partnership (PPP) is the most optimal model of management and operation of dry ports. In East Africa, the most popular dry port management style is the landlord model. Under this scheme, central governments provide land and invest in rail and roads, while private companies develop, operate, and manage dry ports. As a first priority, the need for dry ports along the corridors must be established. Secondly, an environment needs to be created that encourages private investment in dry ports and logistic clusters strategically located along the corridors so that they can benefit from prudent and professional dry port management practices of the private sector that may be lacking in government or public management. The private sector can be reluctant to invest in dry port development because of doubt about short-term profit. It is also possible for national governments to take the lead and grant concessions to private companies under a Build-Operate-Transfer (BOT) contract, to finance, build and operate the projects in question. The HoAI is expected to contribute through its financing to the establishment of one dry port.

Financing Plan

The proposed cost estimate for this project will be clarified as part of the appraisal process.

Monitoring and Evaluation (M&E)

The TA component will be monitored in terms of intermediate outcomes, such as outputs delivered in terms of studies, training, etc., as well as impact, especially legal, regulatory and institutional actions implemented. These activities as far as possible will have a gender sensitive component, aimed at encouraging participation of women in all, but especially training, activities – which will be monitored.

After completion and operationalization of an OSBP and dry ports, end line/impact assessment surveys for project evaluation should be conducted, as the comparison of end line data with baseline data will make it possible to determine the benefits from implementing the project. As part of the M&E, specific **Key Performance Indicators** (KPIs) should be developed to measure the overall project performance and its progress in terms of achieved vs. planned results. KPIs are also useful to communicate progress to both the OSBP and dry ports users, as well as to other categories of stakeholders (to ensure buy-in and commitment to the project, attracting traffic to such facilities) and for offering support to the OSBPs and dry ports' management authorities in their decision-making processes, helping to stimulate and guide their actions. Major categories of KPIs include indicators of traffic,⁶¹ time, facilitation/procedures, and administration. Border crossing processing time should also be assessed periodically using Time Release Studies (TRSs), a World Customs Organization method that can be developed also at bilateral or regional level for measuring the time from arrival of cargo until its physical release for each point of entry or exit, aimed at identifying bottlenecks in the clearance process so that corrective actions can be implemented, specifically through the redesign of procedures in view of further simplifying or improving operations at borders.

These details will be spelled out at project design and the actual approach will depend on the financing institution and context at the project preparation or appraisal stages.

⁶¹ E.g. number of truck examinations, number of trucks cleared within a certain time-frame (ex. 15 minutes), irregularities/number of reported irregularities, average entry and exit time, reported cases of corruption, etc.

Institutional Arrangements

The **TA** component will need to be managed by a single structure covering the multi-country and varied aspects of tasks to be undertaken, including ensuring sound fiduciary procedures. Given the temporary nature of the work, which should be largely completed within about two to three years if the work program is sufficiently detailed, a specific temporary Project Implementation Unit (PIU) might provide the necessary capabilities. If not, consideration may be given to using a regional institution, suitable reinforced. The implementation unit would need to be overseen by a steering committee composed of Government representatives, as well as private operators. With respect to **OSBPs**, the following oversight and implementation arrangements need to be considered and developed during project preparation:

Implementation structures	Adequate implementation structures need to be created, such as specialised committees or task groups responsible for the general administration of the OSBP and for the adoption of deliberations on all legal, administrative, operational and budgetary issues related to the OSBP operations. There is also need to establish a body to oversee the implementation and operation of the OSBP, providing policy guidance, political support and lobby for financial support where required. Such a body is typically made up of senior government officials at the level of Ministers or their equivalent from the participating countries.
Lead agency at borders	The role of a lead agency at borders is vital for arranging efficient cross-border operations and for synchronizing them in order to ensure their efficient coordination. Usually, officers stationed at border posts are accountable only to their supervisors from the line Ministries or the government agencies for which they work, and are largely disconnected from joint border-level operations. A segmented approach by border agencies significantly contributes to uncoordinated activities, hence delays in border operations, creating an environment favourable to rent-seeking behaviours and corruption. Ordinarily, Customs is best placed to cover the role of lead agency, due to its extensive presence at borders, its central role in the flow of trade across borders and responsibility in implementing various national laws and procedures. Additionally, the initiatives on promoting and managing trade facilitation that are frequently undertaken by Customs, make this administration the favourite entity for this role, although cases where agencies different from Customs are appointed as lead agency at OSBPs are not infrequent, like Immigration (e.g. in Rwanda) or the Ministry responsible for Trade (e.g., in Zimbabwe). Accordingly, this role needs to be assessed based on context. Typical functions of a lead agency are the organization of joint verifications and patrols; the arrangement and chairing of all joint coordination meetings; the administration and maintenance of all joint-use and public use facilities and equipment (to ensure that they are properly maintained and kept in good condition for use); the coordination and liaison with and on behalf of other border agencies on matters related to border operations and trade facilitation; the organization of joint social and cultural activities; the coordination of official visits and study visits by any institutions and stakeholders to the OSBP. A good practice is to clearly articulate roles and responsibilities of the lead agency in the legal framework governing the OSBP operations, in order to minimize conflicts among border agencies during operationalization of the OSBP and maximize their coordination.

Integrated Border Management (IBM)	The responsibility to protect national interests at the border is vested in various border agencies including immigration, police, state security, Customs and the agencies responsible for sanitary, phyto-sanitary and technical standards. Experience has shown that the results of individual border agencies significantly improve when their level of cooperation is enhanced. To this effect, most OSBP projects rely on the adoption of IBM principles. IBM entails coordination and cooperation among all the relevant authorities and agencies involved in border security and regulatory requirements applicable to passengers, goods and vehicles moved across borders, in order to minimize duplications and redundancies. There are two main levels of cooperation that form the key pillars of IBM: a) intra-agency cooperation and b) inter-agency cooperation. Strong inter-agency cooperation at bilateral level on border management issues is a useful way for enhancing trade and for dealing with cross-border crime and irregular migration. Inter-agency and intra-agency communication mechanisms should preferably be formalised in mutual assistance/cooperation agreements, MoUs, Protocols, joint coordinated border management plans or other similar tools detailing cooperation practices in the areas of: information and intelligence sharing relating to people or vehicles; investigations and prosecutions of persons involved in the smuggling and movement of illicit goods across borders, environmental crime, organized crime, trade terrorism, money laundering, tax fraud, tax evasion and other revenue-related crimes, as well as any other unlawful activities.
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Environment, Social and other Safeguards

Borders and the Rights of Vulnerable Groups: a significant number of people in the HoA periodically migrate in search of protection and new pastures for their livestock. In this regard, being borders points of entry/exit to/from other States, they are inextricably involved in ensuring that such States uphold the rights of vulnerable people while at the same time securing the borders. Border officials have a responsibility to observe the internationally guaranteed rights of all persons, to protect those rights against abuses, and to guarantee their security as they cross borders. On the other hand, observing and applying the principles of good governance that are anchored on transparency, democracy, accountability, integrity and tolerance of diversity in the management of national affairs has a positive effect on the incidence of forced migration. Robust early warning systems and preventive diplomacy at local, regional and international levels are also critical practices that enhance sound border management. While there is not a single solution to human trafficking due to the complex nature of factors that usually work in combinations, border control measures cannot solely eliminate trafficking and smuggling of human beings. Similarly, a legal mechanism that depends entirely on one type of legislation would equally be insufficient. Therefore, an effective mechanism must use a fine balance of punitive measures with protection of human rights, effective border controls and address the genesis of irregular movements. In the realm of international cooperation, these measures must ordinarily be agreed and coordinated between origin, transit and destination countries.

HIV/AIDS, and possibly preparation for other pandemics such as Covid-19: As noted earlier, the project would include a subcomponent to deal with this issue.

Other: The construction works, other than Dry Ports, are not expected to cause significant environmental or other safeguards issues. In the case of Dry Ports, an assessment will be needed to evaluate whether mitigations related to environment or resettlement are needed.

Sustainability

The project design assumes that once policy and regulatory actions are taken and implemented, they will be mostly irreversible and thus sustainable. However, appropriate **funding scheme** need to be agreed by the adjoining States for covering the maintenance costs of facilities and equipment to be used within the OSBPs, as well as the other expenses for the operation of such facility (e.g. electricity, water, costs of internet network exploitation, cleaning services, etc.). Usually, the main options are: 1) transfers from the budgets of both countries; 2) establishment of joint (bilateral) funds; 2) usage-fees (which includes the possibility to introduce additional charges to user fees that are already paid by traders, transporters, freight forwarders or customs clearing agents, such as terminal handling charges, fees for the issuance of certificates, permits, for registrations, etc.). These models can be also combined with each other.

Lessons learnt from support to Trade Facilitation:

Trade facilitation has been supported as a priority by development partners and recent evaluations of the experience in Africa and worldwide provide insights that are need to be taken into account⁶² in the final design of the proposed project. A 2019 thematic evaluation⁶³ of the World Bank Group support has made a number of observations and recommendations, highlighting lessons which can help prioritise the HoAI activities given the rich agenda highlighted above:

<i>Costs and Trade Flows</i>	Expansion of trade flows and associated broader economic benefits can be best captured by simplifying border procedures, modernising border operations, and improving border infrastructure.
<i>Public Policy Objectives</i>	Some trade regulations can be unnecessary, excessively burdensome, or protectionist. Nonetheless social, security, health, safety, and environmental objectives, have to be considered, and this is often not done adequately.
<i>Indicators</i>	Both Doing Business and Logistics Performance Indicators are useful in setting objectives and measuring progress. However, they are imperfect (and may need to be complemented by project specific measures collected as part of M&E).

⁶² The summary of experience presented here is not necessarily comprehensive but reflects recent experience based on publicly available studies.

⁶³ World Bank Group Support to Facilitating Trade:

<http://documents.worldbank.org/curated/en/257631555373518905/Grow-With-the-Flow-An-Independent-Evaluation-of-World-Bank-Group-Support-to-Facilitating-Trade-2006-17>

<p>Other factors that can strongly influence the success (or failure) of trade facilitation reforms</p>	<ul style="list-style-type: none"> ○ Managing the political economy relates to incentives and collective action at the government or at the intergovernmental levels. When there is a strong government commitment (and associated leadership), even uncooperative agencies can be led to the path of coordination and reform. Notably, single-window projects attempting to introduce one-stop ease to traders impose heavy demands on interagency cooperation and coordination. The resultant reduction in agency “sovereignty” and prerogatives pose constraints that could be overcome only with strong political leadership and pressure. Without such support, the single window languishes. Analysis of political economy is thus critical. Furthermore, diagnostic tools and indicators can motivate action mainly through benchmarking and peer comparisons. ○ Even when political will is present, weak institutional capacity can be a constraint. Building institutional capacity can be a long-term, arduous process, which cannot be substituted by technology and automation – i.e. projects should include a significant TA component. ○ Adopting a systematic approach involving multiple, complementary, and sequential interventions promotes effectiveness, except in border infrastructure interventions, where stand-alone projects work well. ○ Complementary development of physical infrastructure (such as roads) and transport policy and regulations governing competition, pricing, and multimodal connectivity are important. For instance, dry ports can reduce logistics cost by 30 percent. ○ Success of trade facilitation reforms also depends on the involvement of the business community. To this end, the private sector must be put in condition to engage constructively with policymakers in their design, formulation, implementation and monitoring.
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In shaping the initiatives to be developed under the HoAI, it is also important to draw on experiences and lessons learnt from past projects. In summary, success appears to be associated with persistence over time, effective capacity building, adequate diagnostic, political and technical ownership by stakeholders at all levels, unbundling complex programmes into manageable activities, and setting-up clear and realistic goals.

Risks:

The main risks related to the implementation of the measures described above are detailed in below.

Risk	Mitigation measures
Regional instability	Improving policy dialogue between the countries, establishing appropriate security standards
Insecurity/Resurgence of terrorist attacks in certain areas of the HoA	Establishing appropriate security standards, ensuring well-functioning intelligence gathering and sharing practices between security agencies of adjoining country pairs in the HoA
Lack of political will and commitment, non-agreement between adjoining countries on OSBP development	Sequencing of the projects according to the political buy-in, working on dialogue issues within and between countries
Coinciding membership and lack of coordination among different RECs	Policy and regulatory harmonization initiatives must be pursued by HoA countries in coordination with the sectoral policies of the RECs to which they are members (IGAD, COMESA, EAC)
Unclear conditions and priorities for a specific corridor	Elaborate feasibility studies, dialogue with governments

Lack of institutional framework for managing the OSBPs	Policy dialogue between the two countries and establishment of a Corridor Management Institution (CMI)
Resistance from vested interest and border officials in implementing the OSBP environment	Development of operational manuals or detailed standard operating procedures for joint operations. Training of officers to apply the new operating schemes of OSBPs to be integrated within a meaningful change management program to help staff from the border agencies to understand the changes deriving from the introduction of the OSBP concept, with the new working methods, procedures and practices required for the efficient functioning of the new operational environment.
OSBP and dry ports sustainability	Design of possible funding schemes for covering the maintenance and operational costs of facilities and equipment within the OSBPs and dry ports
Lack or reduced inter-agency cooperation at OSBP because of language barriers	Redeployment of bilingual officers into border agencies active at OSBPs
Lack of participation of the private sector in infrastructure development	Design of incentives to encourage private investment in dry ports and logistic clusters. Recruitment of a PPP Facilitator.

HoA Initiative: Project Profile – Pillar 2

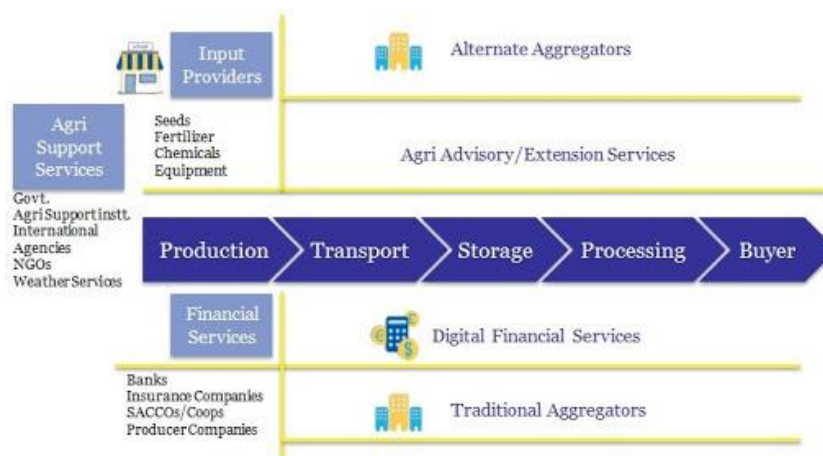
Name of the Project/program: Development of Regional Value Chains

This profile has been prepared on the basis of a desk study. It has been developed based on published public reports, as well as additional information provided by development partners. It provides a broad framework and concept that will need to be finetuned and activities therein prioritised during project preparation, and therefore lacks specificity expected say in an appraisal report.

HoAI Context

The proposed project falls within the second pillar of the Horn of Africa Initiative (HoAI): Trade and Economic Integration in the Horn of Africa - More Trade, More Growth, More Jobs. The intervention logic has to be seen in the context of its interlinkages within the four pillars: first through the availability of economic corridors (i.e.; road corridors, energy and digital) that would allow regions thus served to open-up to markets – as also asserted in the project fiche for road corridors. The second through improved trade facilitation, regional value chains development through **demand-side actions** from producer to market, and job creation. The third through some of its focused to strengthen resilience through interventions to develop local markets for feed, water and medicines; strengthen sustainable pastoral land management; use of climate-smart technologies to improve livestock production (thus **supply-side actions** helpful to value chains); and livestock insurance. The fourth through improved human capital.

Figure 1: Agribusiness Value Chain



Value Chain Concept

For the purposes of this project profile, the term **regional “value chain”** describes the full range of value adding activities required **within two or more countries** to bring a product or service to the market that are implemented through the different phases of production. This includes activities such as production, intermediate value added, transport and trade, and marketing, distribution and support to the final consumer⁶⁴. In the case of HoAI, a regional integration element is also sought – for instance through the clustering of regional resources to conduct the activity, and/or provisions of goods and services to the

⁶⁴ University of Cambridge, Institute for Sustainability Leadership, “What is a value chain? Definitions and characteristics”, 2019.

regional markets. As an example, Figure 1 above depicts an agribusiness value chain that is a focus area of the proposed project. As explained later-on, important contributing factors to the successful development of value chain include financial services and a supportive enabling environment, as well as access to land and water/irrigation for some activities.

The Basis for the Approach

The notion behind developing value-chains in areas also to be covered by parallel HoAI road corridors (which when linked to value chains will develop further into economic corridors), electricity transmission and trade facilitation projects, is to take advantage of economic opportunities that have thus been created by opening-up geographic areas. This approach is also essential to turn transit corridors into economic corridors and address the the current imbalance between the import/transit and export flows along the corridors. Supporting value chains is also critical to promote intra-African trade and make the African Continental Free Trade Area (AfCFTA) work. This is to be achieved by supporting transformative projects whereby private investments complemented by public investments and/or other forms of support establish forward and backward linkages with local communities and markets, and thus sustainably contribute to growth and poverty reduction (and probably greater stability) in hitherto underdeveloped areas. However, experience has shown that such an approach can fail if key preconditions, including insufficient qualified private sector (anchor investor) interest or the minimum infrastructure platform to support planned activities does not materialize⁶⁵. According to recent reports the latter risk has materialised in the case of agri-business in Ethiopia,⁶⁶ highlighting the importance of selecting qualified investors and ensuring adequate infrastructure and access to supplies (in that case petroleum products).

Potential Value Chains – Summary of Recent Analytical Work

Based on an initial review of publicly available studies, the most promising *regional value chains* in the HoA appear to be multi-destination/country tourism, livestock and agri-business – the latter in turn is likely to encourage off-farm activities not discussed here. Transport and trade facilitation are excluded from the analysis here as specific Project Profiles have been developed under the pillars I and II. Otherwise, it is well understood that the transport sector is a critically important input, without which the development of other value chains will be constrained or not viable. Another implication is that the development of some value chains will need to be sequenced with the required infrastructure. – and may be affected by aftermath of the Covid-19 crisis. The presentation below of subsectors, issues and opportunities is based on existing public research and analytical work, much of which has been overseen by IGAD and funded by donors, and disseminated and discussed with stakeholders.

Tourism

There is a fairly well-developed tourism sector in both Kenya and Ethiopia, which according to published reports is expected to grow, especially in Ethiopia.⁶⁷ The expansion of this sector is further facilitated by relatively good air transport close to key destinations, and progressively improving road corridors and borders crossings. Furthermore, private sector involvement is already substantial in the sector, and additional regional destination linkages may be possible with other HoA countries as security concerns

⁶⁵ For instance, with regard to the agri-business in Ethiopia, see: <https://www.economist.com/middle-east-and-africa/2020/04/08/why-big-farms-flopped-in-ethiopia>

⁶⁶ <https://www.economist.com/middle-east-and-africa/2020/04/08/why-big-farms-flopped-in-ethiopia>

⁶⁷ The assumption here is that the impact of the Coronavirus on air transport, lodgings etc. will not be permanent.

abate and infrastructure improves. Finally, the relative proximity of some sites with others makes multi-country tourism feasible.

So far HoA countries have been pursuing their respective national tourism development agendas with limited degree of regional integration – which would need to be spearheaded by tour operators who should be consulted. The creation of a regional framework for tourism would help overcome its development challenges, and enhance the competitiveness of member states and of the region as a whole. In summary, tourism could be developed further as a **limited regional value chain** mainly through improved legal, regulatory and institutional measures – such as eliminating visas or issuing a single multi-country visa. While it is recognised that Covid-19 will impact the sector,⁶⁸ any support to operators and service providers would be through national programmes and not as part of the regional approach.

Livestock

Livestock constitute an important/dominant economic activity in HoA. It constitutes the main source of livelihood for a significant part of its population. There has been adequate analytical work on livestock supply chains in the HoA, the main conclusions of which are summarised below.

The sector is very significant for all the HoA economies except Djibouti, which however can indirectly benefit from the creation of a regional value chain in this sector, being a major livestock trade route in the HoA. For Somalia the sector accounts for about 40 percent of GDP, while for the other countries, it ranges between 12 and 17 percent. The sector is also important for the Sub-Saharan Africa as a whole.

The livestock value chain is fundamentally regional. Not only are some of the herds located at and cross borders, but trade routes go through HoA countries and use their transport infrastructure and can be further helped through effective trade facilitation – see other projects under Pillars and 1 and 2. Furthermore, the sector is characterized by a significant participation of women, notably in the camel milk production. These factors justify consideration of the sector as part of the value chains project of HoA.

The main issues and opportunities facing the sector, which may be tackled through the proposed project, are summarised below.

- The pastoral economy and livestock trade form a critical platform for economic interdependence.
- Ethiopia's Somali Region provides a major share of livestock exports.
- Saudi animal health regulations and the involvement of large-scale traders from there create additional layers of economic unpredictability.
- The livestock trade plays a significant role in determining government revenue.

Furthermore, the sector makes significant contributions to livelihoods through food security, jobs and the environment. Improved organization of the sector through support in ensuring health and safety standards are met and better lobbying and negotiating capacity in the key export market would be beneficial. However, supply side activities should be covered under pillar 3 which already covers livestock, including: (i) community-led, sustainable pasture management approaches; (ii) open transhumant migration routes; and (iii) coordinated animal health and vaccination programs.

⁶⁸ <https://www.policycenter.ma/opinion/impact-covid-19-tourism#.XwTiWSgzZPZ>

Other important activities in the livestock value chains are:(and include some IGAD countries not currently part of HoA):

- Dairy - Ethiopia, Kenya and Sudan.
- Beef - Ethiopia, Kenya, Sudan and Uganda.
- Small ruminant - Ethiopia, Kenya and Somalia.
- Poultry value - Ethiopia, Kenya, Sudan and Uganda.
- Apiculture - Ethiopia, Kenya and Uganda.
- Leather⁶⁹ – Ethiopia and Kenya, with upstream activities such as regional collection of hides and skins.

Available studies indicate that constraints faced by these value chains vary across space and scale; they are most severe at local producer level with pastoral systems facing more constraints than the mixed systems. Overall, appreciation of the role and contribution of livestock in raising agricultural productivity and achieving agricultural growth target is minimal. The participation of women and other marginal groups in livestock value-chain activities is constrained by a number of factors, including unequal sharing of unpaid work, limited opportunity to develop capabilities (e.g. literacy skills, education), mobility constrained by cultural practices and social norms, differential poor access to and control over productive resources, and limited access to markets. Significant efforts are still required to promote gender responsiveness of livestock value-chain initiatives.

In order for the livestock value chains to fully develop, there is need to address the overarching institutional, policy and regulatory constraints that hinder their growth:

- Support policies aimed at improving production and productivity; inputs; livestock diversification and animal health issues.
- Livestock marketing policies.
- Investment climate and institutional issues including land tenure and livestock mobility, access to credit, and institutional capacity.
- Regional policy approaches need to be intensified for surveillance, control and treatment of animal diseases, and establishment of a common livestock trade policy for the IGAD (or HoA) region – Other policy interventions required include increasing access to financial services among pastoralists; improving the livestock marketing infrastructure, such as roads to the export port and other livestock markets.
- Improve institutional setup: (i) Provide support to strengthen existing value-chain coordination platforms; and (ii) increase awareness on the need to adopt value-chain approaches among key stakeholders in the region, as opposed to more segmented approaches.

Other more specific value chains were found to potentially provide employment opportunities, product expansion, market and linkage opportunities and quality improvement. However, challenges that need to be addressed include insecurity, closure of the international border points, unfavourable government policies and infrastructural challenges, and sector organisation and capability. These value chains include: (i) Camel milk (and derivatives); (ii) Hides and skins (paving the way for further development of leather

⁶⁹ See 2017 UNCTAD study on regional value chains in Africa:
https://unctad.org/en/PublicationsLibrary/gdsecidc2017d6_en.pdf

products currently produced in Kenya and Ethiopia); Honey; and (iv) Live Animal/Meat. There are common issues identified for each that may be addressed through the proposed regional value chain project. These include know-how transfer and skills enhancement, consolidation of activities, improved marketing and market information (in which technology may play an important role), enhanced dialogue intra private sector and with the public sector, and better animal health.

Agri-business

The sustainable development of agriculture supply chains sustainably may be based on the following observations and principles:

- Current levels of investment in agricultural value chains are insufficient.
- Crowding-in private investment will be needed.
- Identifying and understanding market failures currently leading to the sub-optimal private provision of goods and services needed to achieve key development goals.
- Improving the enabling environment for the private sector.
- There is need for public resources to finance essential public goods and services such as human capital, agricultural research, and complementary public infrastructure.
- Prioritizing country level actions can be informed by private-sector-oriented diagnostics as well as by active and effective public-private dialogue mechanisms. And, the performance of agricultural value chains is also dependent on other sectors such as water, energy (including existing or planned solar farms in HoA countries, as well as and the delivery and uptake of off-grid solutions for agriculture), and infrastructure, engagement and co-ordination will be needed.

It should be noted that **supply-oriented approaches** (for instance extension and research) **are excluded** from the value-chain development described here. The reason for this is to one the one hand to focus on operators within the chain, and on the other hand because the agriculture sector already receives this type of support and any missing elements may be picked-up under the resilience pillar of HoAI.

There are relatively few publicly available studies of potential agriculture value chains in the HoA, other than sorghum and sesame. Sorghum faces the following set of constraints faced by the sector: (i) Affordability of inputs, low productivity and supply-side constraints; (ii) Marketing challenges; (iii) Tariff and non-tariff barriers, and other stringent quality standards; (iv) Lack of business skills, high cost of transportation, lack of product quality control and quality standards. Priorities to be addressed include: rebalancing economic power between traders and producers and ensuring effective implementation of trade liberalization policies (grain) already on the books.

Sesame is produced predominantly by small scale farmers in the region. The system of production employed is simple and have not changed over many generations. Three member countries of the IGAD region - Sudan, Ethiopia and Uganda are listed among the major producing countries of the world. The production and marketing system of sesame has remained largely underdeveloped and inefficient. Production and marketing activities are characterized by small holder, resource-poor farmers, assemblers, processors and retailers. The following set of constraints faced by the sector: (i) The information gap among key actors; (ii) Lack of consistent quality in production; (iii) Too many intermediaries; (iv) Uneven quality standards; and (v) Dependency on rain-fed cultivation. Facilitating factors include: (a) growing demand for sesame; (b) credit facilities for traders in some of the countries; (c) apparent profitability; (d)

improving trade facilitation and transport situation; and (vi) new institutional arrangements such as Ethiopian Commodity Exchange.

The above summary reflects *gaps in knowledge* that should be filled during project preparation and implementation. For instance, the development of the cassava value chain, which is highly developed in countries such as Thailand (largest exporter in the world), is seen by the FAO as an opportunity.

Complementary measures in support of regional value chains

There are also cross-cutting measures that, once implemented, would help support the development of value change. Once such, concerns Warehouse Receipt Systems. The overall enabling environment is also critical. Land tenure is important for the development of agri-business value chains. For farmers, it can be seen as a way to empower the poor and ensure they own real assets. Foreign “anchor” agri-business investors will also need to have security in this area, for instance through a long-term lease. Access to water is also a key for the development of agri-business value chains. The approach for the project would be to focus on (preferably border) locations where irrigation already exists or there is a potential to develop it. Appropriate geographical areas should be identified by studies launched during project preparation.

Relevance and Lessons from past experience:

Strategic Relevance

The strategic relevance of regional value chains comes out clearly through the analytical work summarised in the previous section. It is shown there that the value chains described have a significant regional dimension that justifies their inclusion under HoAI. This priority was further confirmed by Governments and Development Partners during a series of High-Level meetings, the most recent of which occurred in February and May 2020. Further evidence of this being a high priority at country level and for Development Partners is as follows:

- **Djibouti:** The 2009-2019 primary sector strategy⁷⁰ implicitly cites the development of the livestock value chain (export stage) as a priority.
- **Ethiopia:** The development of various value chains is highlighted as a priority within the Agriculture Sector Strategy⁷¹ 2015-19. The stated goal consists of: “improving the value chains and increasing the value-added for products of plant and animal origin;
- **Kenya:** Value chain development appears as a priority within the nine flagships listed under the 2019-29 Agriculture Transformation and Growth Strategy.⁷² This document also underscores the need for regional approaches.
- **Somalia:** A joint report⁷³ has been prepared in 2018 by the World Bank and the Food and Agriculture Organization (FAO) conducted by development agencies to assist Somalia in its further

⁷⁰ <http://www.tralac.org/files/2012/12/MasterPlan.pdf>. In particular, p.33: “En ce qui concerne le commerce de bétail, La République de Djibouti joue, a nouveau depuis 2004, le rôle de centre de transit pour les commerces régionaux d’animaux avec la reprise des exportations de bétail, notamment vers les pays de la péninsule arabique.”

⁷¹ <https://www.innovasjon Norge.no/globalassets/afrika/mirafe-g-marcos---ata---pdf.pdf>

⁷² <http://www.kilimo.go.ke/wp-content/uploads/2019/01/AGRICULTURAL-SECTOR-TRANSFORMATION-and-GROWTH-STRATEGY.pdf>

⁷³ <http://documents.worldbank.org/curated/en/781281522164647812/pdf/124651-REVISED-Somalia-CEM-Agriculture-Report-Main-Report-Revised-July-2018.pdf>

elaboration (through sector strategies and programs) and implementation of the current National Development Plan and its preparation of the next one. This report highlights developing livestock value chains as a strategic priority.

- **EU:** The latest (March 2020) Joint Communication⁷⁴ to the European Parliament and the Council entitled “Towards a comprehensive Strategy with Africa” cites as a priority “A clean circular economy with sustainable and fair value chains will be key for the transition to a sustainable economic model”.
- **World Bank:** The 2018-23 Regional Strategy⁷⁵ in line with HoAI goals gives emphasis to both value chain and regional integration (pp.20 and 31): “regional integration as a stepping stone to global value chains.... and Africa could find a place [in the interconnected world] by boosting its domestic and regional value chains and closing the infrastructure deficit.”
- **AfDB:** The 2018-22 Regional Strategy for East Africa⁷⁶ has “Strengthening the policy and institutional frameworks for market integration, investment and value chains development” constituting the second of two pillars.

Lessons Learnt Worldwide

A **2013 study** by GIZ focuses on the role of the **private sector** in the development of value chains, lessons learnt and guidance notes, with special emphasis on public, private, NGO, and donor partnerships and including the “bottom billion”, i.e.; poor and marginalised people also referred to as base of the pyramid (BoP), which seems especially relevant in the HoAI context. The study covers various approaches and also includes a case study of Kenya, the most relevant aspects of which is summarised below.

- Leaving behind those who are not benefiting from Africa’s upward trajectory today, will erode the very foundations of this growth and will seed social instability.
- Inclusive businesses can reach their full potential through integrating the poor as consumers, suppliers and intermediaries, by building on the capabilities of actors within their ecosystem, such as the public sector and civil society:
- The success of inclusive business thus rests on a solid tripartite partnership comprising the private sector, governments and communities (including producers organisations).
- The emphasis on how to shift from aid-led value chain development to business-led inclusive agri-food markets has significant implications for stakeholder relations and the nature of public-private investments.

A further **2016 evaluation** by the German Cooperation concludes that promoting agricultural value chains represents an appropriate strategy for integrating smallholders and other target groups in rural regions into value chains, and thereby helping them to improve their living conditions. These impacts are subject to certain constraints, notably from the barriers to entry for a subset of the groups targeted by development policy. Furthermore, the impacts on gender equality are likewise affected by constraints: often the promotion does not reach women effectively because they have poorer access to land, to other

⁷⁴ https://ec.europa.eu/international-partnerships/system/files/communication-eu-africa-strategy-join-2020-4-final_en.pdf

⁷⁵ <http://documents.worldbank.org/curated/en/700111528428661825/pdf/REGIONAL-INTEGRATION-CAS-AFRICA-05112018.pdf>

⁷⁶ <https://www.afdb.org/en/documents/document/eastern-africa-regional-integration-strategy-paper-2018-2022-106393>

resources, and to decision-making processes. Environmental aspects are not systematically incorporated into the conception and intervention logic of most projects and programmes. Finally, complexity of implementing value-chain promotion requires a well-considered approach.

The 2017 evaluation of the World Bank contributions to the nonfarm economy, entitled “Growing the Rural Nonfarm Economy to Alleviate Poverty” concludes that: (i) projects with a growth aim—mainly value chain approaches—achieved increased revenues, but mostly without evidence of benefits for the poor; (ii) spillover effects are likely, but are not measured; (iii) the risks imposed by market structure, its impact on the poor, and related mitigants are rarely treated explicitly in project design; and (iv) although many value chain projects include a skills component, impact is not assessed. In addition, evaluative evidence validated the benefits to farmers from this approach of working through value chain anchor firms.

A 2018 assessment of support to agricultural value chains undertaken by IDEV, AfDB’s evaluation arm, presents the following recommendations:

- Successful interventions are based on analytical works as part of their preparatory activities, including the identification of the support required for the enabling environment and where interventions are required; it is important to include adequate resourcing in program and project budgets early in implementation to carry out the necessary analysis.
- Focus interventions on adding value and achieving sustainable impact.
- Work with partners, especially the private sector, to strengthen strategic and operational approaches.
- Take affirmative actions to ensure inclusiveness.
- Strengthen policy dialogue to enhance a conducive environment. This includes developing improved sectoral policies encompassing land tenure, support services, knowledge systems, capacity building, strengthening of Farmers’ Organizations, coordination of actors along the value chain, establishment of a framework to support producers in meeting quality standards, or support to establishing fair conditions for contract farming to develop.

A thematic evaluation of World Bank support to competitiveness and jobs issued in 2016 underscores the importance of supporting a combination of complementary factors to successfully promote competitiveness in an industry. Properly identifying and supporting the key elements of the industry’s ecosystem is crucial for success, as there may be more than one binding constraint to performance. Engagements that are broader, longer term, and more strategic have a higher probability of success. Recent evaluations from other sources were reviewed as part of preparation of this project profile.

Complementarity, Additionality and Mapping of Related Interventions

The cross-country aspect of this programme is a factor that makes it different and complementary from national initiatives, from which it will nevertheless benefit from being reinforced by them. A few recent regional initiatives are pertinent to the proposed programme:

1. Regional Pastoral Livelihoods Resilience Project⁷⁷ funded by the World Bank (closing 2021). The funding is for Ethiopia, Kenya and Uganda, and IGAD. The project entails: (a) a regional approach to address issues of pastoralist mobility, market linkages, natural resource management including

⁷⁷ Appraisal report: <http://documents.worldbank.org/curated/en/672711468002404897/Africa-Regional-Pastoral-Livelihoods-Resilience-Project>

conflict, livestock disease surveillance and vaccination campaigns; and (b) use of innovations including the use of mapping to identify regionally significant gaps in investments and services that limit pastoralist mobility, access to natural resources in times of drought, and disaster response. But also use of ICT technologies and mobile phones for instance in the Early Warning or Livestock Marketing Information Systems. Sub-component 2.2 (Livestock Value-Chain Support and Improving Livestock Mobility and Trade) is of particular relevance, if it can be scaled-up elsewhere (i.e.; the Kenya, Ethiopia and Somalia border regions).

2. The Eastern Africa Agricultural Productivity regional project⁷⁸ funded by the World Bank included Kenya and Ethiopia. It was intended to be the first phase of a multi-phase programme. Even though the project was implemented satisfactorily is broadly reached its goals, the second phase was not pursued. The project supported capacity building and consolidation of research centres, support technology training and dissemination, and improved availability of Seeds and Livestock Germplasm and thus contribute to agriculture productivity and growth. The Association for Strengthening Agricultural Research in Eastern and Central Africa⁷⁹ (ASARECA) was one of the main implementation agencies.
3. A multi-donor Africa-wide project⁸⁰ was implemented by IFAD between 2012 and 2018. The programme aimed to further strengthen and consolidate the institutional capacities of farmers' organizations and give them more say in agricultural policies and programmes. It also supports the development of economic services provided by these organizations to facilitate the integration of smallholder farmers in value chains, and aimed at strengthening producer's organisations. Lessons from this experience would be quite relevant to the present programme.

A number of ongoing or recently completed projects have a bearing on the proposed programme and lessons learnt have been integrated. It should be noted that no relevant EU-funded specific operation was identified in the course of this work. The mapping suggests that while donors support the development of some value chains in HoA, there appears to be room for a complementary regional project. Such a project may build upon past interventions, notably at institutional level, to minimise the start-up challenges. The review, focused on AfDB and World Bank loans, and while capturing some relevant donor projects (USAIS) may have excluded others. Furthermore, operations under preparation are not presented due to lack of information. **The final project documentation should validate and complete this preliminary mapping.**

Project/program Description:

Objectives

The *overall objective* of the programme is to improve links between agricultural producers and markets, reduce market transaction costs, align production decisions with business and market opportunities, and link smallholder farms to international market supply chains. The *specific objective* of the project is to improve the investment and institutional climate for value chains, and to implement the approach for two

⁷⁸ See completion review: <http://documents.worldbank.org/curated/en/849981486421902831/pdf/ICRR-Disclosable-P112688-02-06-2017-1486421893661.pdf>

⁷⁹ <https://www.asareca.org/page/our-work>

⁸⁰ It is unclear whether the project closed on schedule and evaluated: https://www.ifad.org/documents/38714170/40324794/SFOAP_Results.pdf/c863b76b-7939-4899-91a8-2971c30fb185

or three regional value chains (to be determined in the course of project preparation), while preparing the groundwork for others. The approach will give specific attention to regional constraints preventing value chain development across borders as explained in various in other parts of the documents, notably:

- Application of uniform standards.
- Legislation for facilitating value addition across borders (multi-country processing providing value addition in stages)
- Logistic chains including cold chains (which requires coordination with separate trade facilitation activities under a different HoAI project to avoid duplication and benefit from complementarity).
- Cross border animal disease control, quarantine and animal movement certificate
- Ensuring adequate competition and market access throughout a given chain.

Components

The project will have three mutually reinforcing components, detailed below. Cost estimates are preliminary and cover primarily donor financing. It is assumed that Governments will make minimal direct contributions, as would beneficiary institutions and communities/producers. The mount of formal (anchor) private sector investment is also a very preliminary estimated and will be further defined during project appraisal. It should be noted that the design here assumes implementation would be directly by agencies/countries. This would need to be adjusted at appraisal if there is at least partial management by the Development Partner (e.g.; in EU's case).

The project may intervene at the level of each broad regional value chains described earlier: Tourism (in a limited way), livestock⁸¹ and agribusiness. Given the preliminary assessment of opportunities, this will mainly concern three countries (Ethiopia, Kenya and Somalia). However, Eritrea will be included if interest is expressed in developing the sorghum value chain. Djibouti will be an indirect beneficiary through trade, as well as a participant in the livestock value chain. In some cases, it may necessary to include other IGAD countries under specific activities (e.g.; Sudan) while key institutions located outside HoA – which can be crowded-in through a service contract. This will be dealt with on a case-by-case basis. The selection of geographical location (at least at farm level) will be driven by consideration of availability now or in the future of infrastructure, location close to a border that can benefit nomadic communities (herders), and where potential, interest and other condition (e.g.; adequate security) for expanding production exists.

The specific detailed value chains to be supported and how many within each category will be determined during project appraisal, but based on analytical work described elsewhere, are likely to be amongst the following: (a) livestock: hides and skin, meat, dairy; and (b) agri-business: sorghum, sesame and cassava. In the case of tourism, project support is expected to be limited to improving various aspects of the business environment related to facilitation of multi-destination tourism (visas, norms, opening the sector to regional competition, regional accreditation of operators, and standards etc.). It should be noted that the financing amounts are only indicative and detailed costing would be part of project preparation.

Component 1: Support to the development regional value chains (US\$10 million)

⁸¹ The following article provides an interesting long-term perspective for the value chain: <https://africanbusinessmagazine.com/sectors/agriculture/raising-the-steaks-africas-booming-meat-industry/>

This support will be through reinforcing three subcomponents. It will also promote intra-sectoral dialogue, as well as action-oriented stakeholder workshops.

Subcomponent 1: Complementary diagnostic and preparation of action-plans for follow-up by stakeholders	The purpose of this subcomponent will be to fill gaps in specific knowledge through focused expert studies and the development of related operational action-plans. This activity may require to be taken throughout the project, as the need arises. It will include proposing a long list of specific value chains and tentatively addressing market failures that exists, and preparing the necessary legal instrument for facilitating cross-border collaboration (trade, water, regulatory harmonisation, etc.). Another task will be to identify all priority needs and prepare feasibility studies for small infrastructure to be built under component 2 around project areas.
Subcomponent 2: Institutional Support and Capacity Building	This mainly will cover linkages with producer organisations, private sector operators and, key government agencies research institutions. Support to supply side activities (e.g.; extension and research) will be outside the scope of this project (and may be provided under a the resilience pillar of HoAI).
Subcomponent 3: Access to inputs and compliance with norms and standards.	This will include ensuring adequate inputs are availed through private sector operators, herders have access to veterinary support for their herds, and quality of output is enhanced through compliance with norms and standards.

Component 2: Investment (US\$50 million + US\$10-30 million from private sector)

The investment component will be through three complementary subcomponents aimed at ensuring fully meeting financing of each value chain.

Subcomponent 1: Small infrastructure	This will help link producers to markets through secondary roads, bring energy (including from solar farms) as needed through short electric transmission and distribution lines or direct off-grid solutions to power activities (irrigation, cold storage and processing), irrigation and other such investments. These may be purely public, or in cases such as irrigation or electricity through PPPs. The investments will be based on the needs identified during project appraisal and through the development plans for targeted areas identified under component 1. Abatement of any environmental impact or other social costs will be part of this subcomponent.
Subcomponent 2: Private Investment Promotion	This subcomponent will aim to attract anchor investors (typically international) into the livestock and agri-business value chains. Investor conferences will be organised as part of project preparation and project approval and implementation will be subject to the short-listing of such investors having been completed.
Subcomponent 3: Upgrading means of production at producer level	This subcomponent will provide small grants to producers (about US\$100-1,000) as part of upgrading their means of production and activity-specific related capacity building. Eligibility criteria would need to be specified during appraisal. The alternative of providing small loans through microfinance institutions would be an option too, but not suggested here due to the probable one-time nature of the support and cost of administering such loans, which at any rate would go to the poor – a targeting mechanism would need to be developed.

Components 3: Implementation Support (US\$7-12 million)

This component would have three subcomponents, with M&E functions separated as a distinct activity under different/independent oversight from project management.

<i>Subcomponent 1: M&E</i>	A lesson from past experience is that M&E needs to be a priority and measure direct and indirect project impact. This function requires collection and monitoring of indicators, as well as impact surveys and beneficiary feedback. This function will be outsourcing to a team of experts.
<i>Subcomponent 2: Fiduciary Compliance</i>	Financial management, procurement, annual audits, periodic reporting, visibility activities and other administrative activities will be covered under this subcomponent. The financing envelope will also cover a detailed mid-term review as well as a final evaluation.
<i>Subcomponent 3: Implementation experts</i>	A team of national and international experts with detailed knowledge of each value chain will help oversee and steer project implementation.

Expected results

Detailed results and indicators will be developed in due course. However, the following general results can be envisaged from the operations:

- Farm-level. Expanded employment and production, reduced poverty.
- Value chains. Growth and expanded value-added.
- Institutions. Greater capacity, responsiveness and sustainability.
- Policies. Critical policy and regulatory actions taken and implemented,
- Overall: Level of new private investment; wage job created; and other employment.

Duration

Based on experience, the project will require adequate time for implementation, currently estimated over 6 years. In order to avoid implementation delay, project appraisal will involve a degree of preparation sufficient for a rapid start.

Institutional Arrangements

The project will be implemented under the oversight of the Governments involved through a high-level Steering Committee, including representatives of key Ministries concerned. This Committee also will be responsible for advocating in favour of legal and regulatory actions identified at the country or regional level to facilitate project implementation. Specific working groups with the representatives of all stakeholder will be established to oversee specific activities at the level of value chains.

IGAD will be responsible for M&E and overseeing the work of experts hired under component 1 to conduct studies, and organising dissemination workshops.

Others: NGOs, some UN agencies? Others - to be determined.

Environment and Social Aspects

Table 2 below presents an initial triage of potential environmental and social safeguards that may be triggered by the project. The World Bank framework has been utilized below. It would need to be adapted and made consistent with the EU’s or any other donor’s financing the project.

Table 2: Preliminary identification of Safeguards triggered

Policies	Triggered	Comment
Environmental Assessment	Yes	Environmental impact is expected to have both positive and negative aspects, but be moderate overall, except for specific activities.
Performance Standards for Private Sector Activities	Yes	A framework would be developed and detailed if triggered on case-by-case basis.
Natural Habitats	No	
Indigenous Peoples,	?	Unclear. Will depend on whether herders are classified indigenous.
Physical Cultural Resources	No	
Involuntary Resettlement	No	
Forests	No	
Safety of Dams	No	
Projects in Disputed Areas	?	To be determined. However, unresolved disputes over borders seem to exist between the three main target countries where project activities may take place.
Projects on International Waterways	Yes	Irrigation schemes may draw upon shared water resources.

Social impact of interventions is expected to be positive. It will be seen mainly through the creation of permanent wage jobs and other forms of employment and help raise the income of poor households. Spillover benefits will be though increased growth, as well as possible improvements in security as communities see material benefits from increased stability and opportunities.

The project will also ensure there is adequate gender focus from the outset, which as pointed out in analytical work and lessons is often neither prioritised nor measured.

Risks:

The following risk and mitigation matrix takes into account lessons learnt – see table 3.

Table 3: Risks

Risk	Mitigation	Residual risk rating
External factors; Security, lack of political coordination etc,	IGAD, Dialogue with Donors	Substantial
Delays in provision of trunk infrastructure (roads etc.)	Coordination with other HoAI and relevant national projects.	Moderate
Lack of private sector interest	Investors conferences launched prior to project launch. Sectors where there is less private interest given lower priority.	Moderate
Policy actions delayed or not properly implemented	Detailed proposals for policy actions will be prepared based on diagnostic. Stakeholder workshop organised to build consensus.	Substantial
Project overly complex	Experience shows that complexity is unavoidable. Unbundling activities and ensuring the presence of strong implementation team of experts will reduce the risk.	Substantial
Resistance from: <ul style="list-style-type: none"> Stakeholders 	Unwillingness to adopt new procedures and approaches will be progressively overcome through technical support and demonstration effect. Producers' organisations will be set-up in a	Substantial

	way they retain credibility and are not seen as an arm of Government.	
• Traders	Reduction in the number of intermediaries may be resisted. Expanded volume of business should partly compensate.	Substantial
• Vested interest	Government officials may resist change and rebalancing of responsibility of the role between public and private sectors. Dialogue on the importance of Government as facilitator and impact in terms of increased revenue etc, should progressively improve implementation of reforms.	Substantial
• Institutions		Low
Fiduciary risk	Adherence to good practice.	Low
Sustainability undermined	Capacity may be built but not retained. Preference will be given to working with existing institution. Profitability of value chain should promote its sustainability.	Moderate
Project impact unclear	M&E	Moderate

Note: Ratings based on 3 scales: Substantial, Moderate or Low.

Project Alignment with Key Selection Criteria:

The projects included in the HoA package were prioritized based on a clear justification and consensus by participating countries. This section highlights, for each project, the key criteria for selection, including:

- Alignment with national/regional agenda: Yes, explained in text.
- Potential for transformational impact: Yes, explained in text.
- Regional spillover benefits/win-win outcomes for participating countries: The projects will be located in areas where multi-country coverage will be possible and value chains will cover a multitude of activities at HoA level.
- Inclusion of soft interventions: Initial indications provided in text. To be developed further.
- Potential to attract private sector financing: See Component 2.

Project readiness, practicability and complementarity to other projects:

It should be feasible to start project implementation within two years or so. Considerable knowledge already exists, but the detailed policy, regulatory and institutional agenda needs to be detailed, small public investments identified, private investors interest needs to be tested, value chains selected, and baseline surveys conducted. On this basis alone, project approval should be feasible within 18 months or so, if adequate resources are devoted to its preparation. External factors may also affect project readiness, such as trade facilitation through one-stop border post being in place and confirmation that planned transport corridors, which will be connect to by secondary roads from the location of production, will go ahead.

In terms of other considerations:

- Is it practical to implement this intervention in the current country/regional context? If anything, the regional context makes revenue generating activities, especially for herders, more important than ever.
- Is this project complementary to other on-going projects? Mapping provided.

- Are feasibility studies available and do they need to be updated? The analytical work lacks detailed operational action-plan that need to be developed as part of project implementation plan.

Pillar 3: Building Resilience

Priority 1: Locust (and other cross-border) pest outbreak control

Priority 2: Groundwater management

Priority 3: Borderlands management

Priority 4: Agropastoralism

Responding to the Ongoing Crises

1. **Countries of the Horn are taking strong measures to deal with the impacts of COVID, locust, floods and economic downturn, and more will be needed in the months ahead.** For COVID, social distancing measures have brought difficult trade-offs between protecting health and sustaining livelihoods. Governments will face a painful cocktail of dropping revenues and rising expenditures. The impacts on the livelihoods of millions of low wage earners, informal economy workers, and cross-border traders will be considerable, along with rising levels of food insecurity - risking an increase in poverty numbers. Businesses, small and large, are faced with dwindling finances amidst the global capital 'flight to safety', while the adoption of stringent border measures are negatively impacting businesses, especially in landlocked countries. Remittances from the region's substantial diaspora population have also taken a major hit, eroding the sustainability of local livelihoods and increasing security risks. Furthermore, development partner support is also coming under increasing pressure from rapidly rising demands.

2. **Coordinated actions are vital for recovery efforts, and for paving the way to medium and long-term growth.** There is some degree of prevailing confusion about allowing trade flows between countries, harmonizing the need for testing at borders, strengthening surveillance, and sharing of information and testing facilities across countries. Addressing current and emerging challenges requires close regional coordination. There are efforts currently underway in that direction. Various Regional Economic Communities (RECs), including the Intergovernmental Authority on Development (IGAD), are playing an important coordination and convening role. In response to looming food insecurity amid a triple threat (i.e., the compounding impacts of the pandemic, the desert locust invasion and ongoing climatic shocks) IGAD launched its *Food Security and Nutrition Response Strategy*, calling upon Member States and partners to work together to provide political, technical and financial support to in order to curb the 50.6 Million people projected to be food insecure by the end of 2020. IGAD is also working on the formulation of a Regional Response Strategy to pandemic diseases.

3. **From a medium-term perspective, realizing the plans of economic integration would allow countries of the Horn to collectively address the resilience and human capital challenges that lie ahead.** This section serves as an input for the HoA countries to consider how the Horn of Africa Initiative (HoAI) platform could better allow countries to deal with the short and medium-term recovery agenda.

Proposals for Strengthening the Resilience Pillar

4. **Building resilience in the HoA requires the adoption of encompassing, system-wide approaches.** Countries in the region can seize the opportunity to amplify the 'resilience dividend' of their efforts by ensuring that recovery actions go beyond the short-term reduction of vulnerability, and benefit multiple groups in the form of economic, social, and infrastructure gains. In practice, this can be achieved through interventions that spur economic development, job creation, environmental sustainability, and social cohesion, regardless of the sectoral entry point. In the current context, the HoA can address its immediate recovery needs from the impending impacts of the crisis, without losing sight of the broader, long-term pathway towards a resilient future.

5. **There are four priority areas to strengthen the Resilience Pillar – these are key resilience building areas that were highlighted during the March 2020 technical workshop, and since then, their importance has only increased.** These initiatives would need to be developed giving close attention to other ongoing and planned efforts in the sub-region, while ensuring effective coordination. **First**, it is proposed to include a coordinated response to tackle the locust outbreak in the HoA package as it has been playing out alongside the COVID-19 pandemic and has affected all HoA countries. The threat requires close regional coordination with institutions that can translate early warning into early action to prevent future upsurges, and these approaches can be applied to other transboundary pests. **Second**, given the recurrent droughts facing the Horn and the increasing impacts of climate change and variability, improved groundwater management and use is proposed as another priority area to be included in the Resilience Pillar of the HoA Initiative. Strengthening the region’s capacity to manage and use groundwater resources can play a key role in the ability of vulnerable communities, national and regional entities to cope with and adapt to the effects of climatic shocks. **Third**, it is proposed to focus on strengthening resilience in the borderlands of the HoA, through a cross-border program to address vulnerability. With these proposed additions, it would be possible for the HoA Initiative to deal more effectively with the current crisis and to help countries to be better prepared for dealing with future crises. There is a need to distinguish between the capacity deficiencies which render HoA countries vulnerable to such shocks (i.e., systemic and long-term), and addressing the immediate impacts of the crises (i.e., emergency responses). **Fourth**, it is proposed to focus on agropastoralism. Pastoralism remains important for the Horn, and the management of livestock movement and pasture/rangeland resources is even more important in the light of COVID-19 and the locust upsurge. There is a need to strengthen the resource base that supports pastoral production systems and innovate ways of managing risk. The proposed initiatives will contribute to the region’s capacity to better prepare for and cope with emergencies, while ensuring its ability to adapt and transform, that is, to foster system-wide change across the local, the sub-national, the national and the regional levels.

Pillar 3: Building Resilience

Desert Locust Upsurge

Desert Locust Upsurge: Supporting regional coordination for increased resilience to transboundary threats

Project Objective:

The ongoing locust upsurge has directed widespread attention to the way transboundary pests and diseases impact the resilience of the Horn of Africa nations. While desert locust is the worst transboundary pest, it is not the only one or even the most consistently destructive one. For example, even as the international community, led by FAO, has responded to the desert locust threat, the risk of Rift Valley Fever also increased, Fall Armyworm has continued to inflict high losses on crops, and African Migratory Locusts began to swarm in Southern Africa. According to CABI, the agriculture and livestock sectors see about one new threat each year. The losses to crops in the field compound the challenge of food loss and waste, which undermine food security goals. These and other transboundary threats need to be monitored and controlled so they do not continually undermine the Horn of Africa's resilience.

By their very nature, locust and other transboundary pest need a coordinated international response to ensure their threat is minimized quickly because the actions in one country will affect the situation in other countries. A desert locust information system, operated by FAO, already exists to scan the environment and provide early warning for threats, and it is quite effective, but there is room for improvement in the larger system of warning and response. The progression of this upsurge began in mid-2018 with 2 cyclones striking in the Empty Quarter of the Arabian Peninsula. Weaker ground level surveillance due to, inter alia, the conflict situation in Yemen, contributed to swarms growing out of control. Despite this setback, the early warning system was triggering during 2019. However, translating early warning into effective early action lagged, and by early 2020, the region was in crisis.

The objective of this activity is ***to support the creation and capacity development of a knowledge and coordination platform for transboundary pest and disease threats to improve early warning, early action, and preparedness in the Horn of Africa.*** This profile builds on investment priorities and initial concepts developed by the Intergovernmental Authority for Development (IGAD) and its member countries. It also reflects the findings from the team that developed and is implementing the World Bank-financed Emergency Locust Response Program (ELRP), and the initial findings of an assessment of the desert locust system under the Strengthening Resilience in the Horn of Africa program in the World Bank.

Background and Rationale:

The worst desert locust upsurge in decades is not over. The current desert locust upsurge started emerging in East Africa in 2019 and continues to threaten the food supply and livelihoods of tens of millions. By mid-April 2020, 23 countries had been affected. In East Africa, the swarms ranged from Djibouti to as far south as Tanzania and as far west as the Democratic Republic of the Congo (DRC). The locust swarms receded somewhat, following the wind patterns during the summer breeding season, where they have had a greater effect on Southwest Asia and parts of the Arabian Peninsula for the past few months. However, FAO indicates that breeding has started earlier than normal around the Red Sea, and swarms are already forming in Ethiopia and Somalia. Moreover, some of the swarms have remained

in 3 counties in Kenya, with off-shoot swarms flying into Uganda and South Sudan over the summer. The situation remains concerning.

Desert locusts directly impact regional food security. Desert locust is the most dangerous migratory pest in the world. It is a voracious eater, the population increases by 20-fold with each generation, and it can travel up to 150 km in a day when swarming—so a swarm in Jigjiga could be in Marsabit in less than two weeks—much faster than funds could flow to combat it. A small swarm (1 km²) can comprise as many as 80 million locusts and can consume the same amount of food in one day as 35,000 people. Larger swarms, like the one covering 2400 km² spotted in Kenya in late January 2020, can consume as much as 1.8 million metric tons of green vegetation every day, according to the United Nations (UN). That’s equivalent to the amount of food required to feed 81 million people.

The potential damages and losses are significant. Modelling by the World Bank based on damage assessments by FAO, shows that the potential damage and losses to crops, livestock and related assets for the region could range between US\$2.5 billion and US\$8.5 billion by the end of 2020. Fortunately, the international response has prevented the region from reaching the high estimate, but the conflation of floods and COVID have only served to exacerbate the impact of the desert locust, and it is estimated that close to 50 million people in the Horn and Yemen face severe food insecurity. The models note that for the ten countries of the Horn and Yemen, the largest potential losses are to livestock production and assets.

Stakeholders in the Desert Locust System of East Africa

The playing field of stakeholders is large. There are several organizations with some role in the desert location system. Some core organizations that are perennial and critical actors in the desert locust system:

- The **FAO Locusts and Transboundary Plant Pests and Diseases Group (Rome) helps members around the world manage** migratory pests, mainly locusts, and diseases through early warning and early reaction. FAO also operates the Desert Locust Information Service (DLIS), which serves as the focal point for all locust and locust-related information necessary for early warning. FAO’s system has been operating for over five decades through its Rome office and three regional commissions: (a) CLCPRO in Northwest and West Africa (CLCPRO); (b) **CRC** in the Central Region or Near-East, including the Horn of Africa; and (c) SWAC in Southwest Asia. The current upsurge has involved CRC and SWAC, with CLCPRO increasing surveillance in its territory.

In its territory, CRC works with member countries “to manage and prevent desert locust, and to prepare for and respond to emergencies caused by it” primary by developing, sharing, and adapting preventive control strategies; and creating enabling frameworks economically and environmentally sound control products.

- The **Desert Locust Control Organization for Eastern Africa (DLCO-EA)** is "a regional pest and vector management organization established by an International Convention signed in Addis Ababa, Ethiopia in 1962". Most but not all DLCO-EA members states are members of CRC, and its mandate expanded since its formation to cover other migratory pests—e.g., African Armyworm moth, fall armyworm, quelea quelea birds, and tsetse flies. DLCO-EA has been providing control

services to member countries during this upsurge; however, some needed to cover back membership dues (sometimes for more than one decade) before services could be rendered.

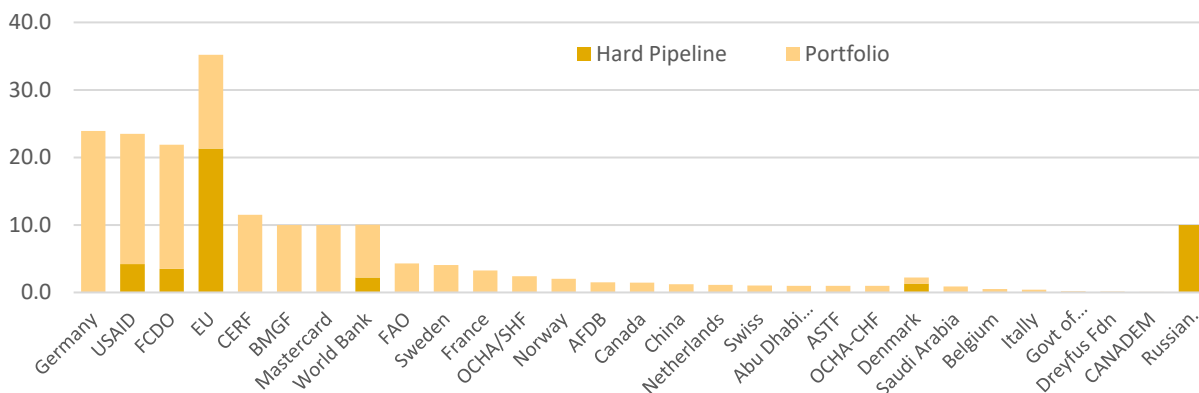
- **Intergovernmental Authority on Development (IGAD)** is a regional economic community (REC) promoting sustainable development in the Horn. At the extraordinary Ministerial meeting in February 2020, IGAD was tasked by its member states to help them act collectively to control Desert Locust and address the broader aspects of climate change in the region; provide a platform for to proactively share information and build capacity to combat desert locust; and coordinate requests for assistance from the international community.
- **International financial institutions**—World Bank (WB), African Development Bank (AfDB), and the International Fund for Agriculture Development (IFAD)—are providing investment support to member countries as well as technical assistance and knowledge sharing regarding new technologies—e.g., earth observation satellite technology.
- **Bilateral donors**—including EU, FCDO, USAID—and **private foundations**—e.g., Bill & Melinda Gates Foundation, Mastercard Foundation, etc. are providing financial support to the response and funding pilots of innovative technology—e.g., drones, biopesticides, etc.
- **Research agencies** and the **private sector** are providing much needed biopesticides, surveillance technology, control technology, and more.

The challenge is to surface all the activities that are happening and coordinate them to maximize the benefit to all affected countries.

The International Response

The international response has been significant. Building on lessons from previous upsurges and plagues, the FAO has developed a rapid response program under its humanitarian operations for which it has issued appeals for funding—now amounting to \$230.1 million. Countries, multilateral agencies, and foundations have responded to the FAO appeal with just over \$185.9 million (figure 1). The funds are managed by FAO in collaboration with the countries to: (a) curb the spread of desert locust through surveillance and control; (b) safeguard livelihoods and promote early recovery; and (c) support coordination and preparedness. This number reflects the funds flowing to FAO—and in the case of the World Bank the funds flowing from a client government to the FAO via an output agreement—but it does not reflect other contributions directly to countries or to other organizations such as DLCO-EA.

Figure 7 Overview of donor funding to FAO appeal for desert locust response



Note: World Bank funds enter FAO through output agreements with World Bank client governments.

Source: FAO Desert Locust Hub. Accessed 10/3/2020.

The World Bank has created a funding program and associated studies to help its member countries.

The Emergency Locust Response Program is a regional integration project that can invest up to \$500 million in eligible countries for activities across three components that align very closely to the FAO program. ELRP seeks to address the vulnerability to climate-induced locust upsurge by strengthening capacity for ex ante surveillance and control operations. It will support investments in monitoring and control of locust population, as well as build resilience by rehabilitating the livelihoods of locust-affected communities. The program objectives will be achieved by supporting investments across three pillars that form the technical components (figure 2).

Figure 8 Emergency Locust Response Program Pillars



In addition, the World Bank is funding a study of the national and regional systems comprising the early warning and response system for the Horn. The goal is to understand what information flows into the system, who receives it, what they do with it, and how the information is translated into action. The study also includes an assessment of the regional actors in the system, namely FAO, CRC, DLCO-EA, IGAD, and ICPAC. A participatory stakeholder engagement was done with the regional actors via a virtual desert locust café, which revealed interesting challenges to the current system:

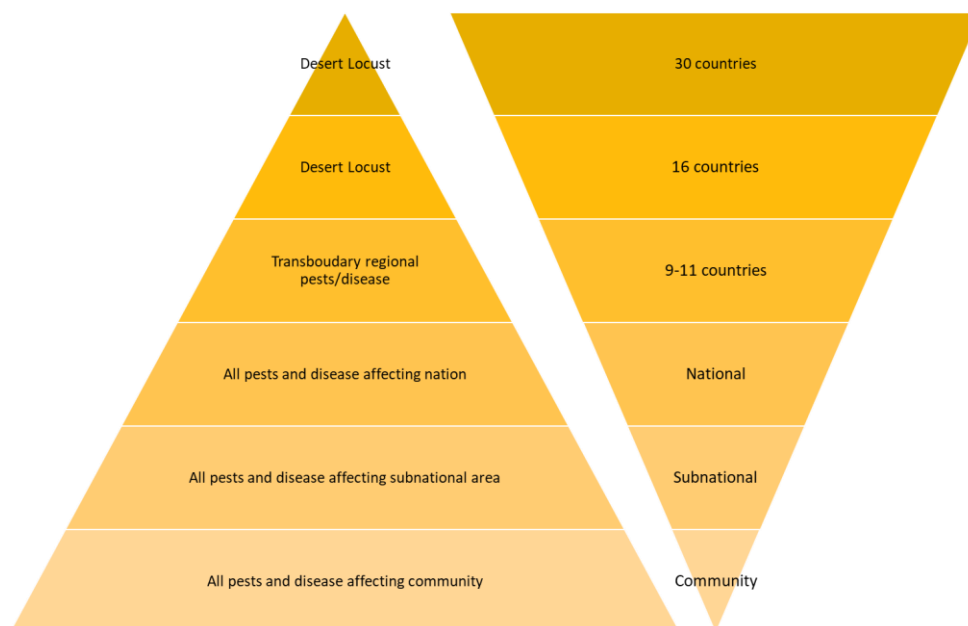
Participation by member states in the surveillance system is not consistent. This is evident from the numbers of dues not paid to regional organizations like DLCO-EA and the declining number of data points from eLocust3 surveillance, which impacts the accuracy of the early warning. It is surmised that the infrequency of desert locust invasions has contributed to a false sense of security.

The flow of early warning information may need to be expanded. If the flow of information emanates from the FAO DLIS, through the CRC to member countries, then there would be a gap in the established communication channels. Desert locust has a smaller recession territory, where the locusts are always found, and a larger invasion territory. CRC members fall within the recession territory.

Non-technical stakeholders need to be included in the system. The technical information generated by the early warning system needs to be analyzed and communicated to non-technical stakeholders who are critical members of the system. Quite a bit of the information in the DLIS is very technical in nature and does not immediately resonate with non-technical audiences. However, it is exactly those non-technical audiences who comprise the decision-makers in terms of programs to be supported by the government and the funding levels for those programs. A bridge between the technical and non-technical is needed. In East Africa, IGAD is filling that role as designated by the extraordinary ministerial meeting in February 2020.

Different tiers of the system have different needs. A system that facilitates early warning and early action for pests and disease needs active participation at all levels from the user community to the top experts and analyst. The challenge is to establish a system that is broad enough to be economically feasible—e.g., surveys for several threats to justify the investment in technology and human resources (staff, trained volunteers) while being able to filter the data so that experts in the system do not receive “noisy data” that limits the ability to predict risk. As the figure below shows, the system needs to be able to provide information on a range of risks that different tiers will either act on or pass upward for assistance. The larger the area, the narrower the topical coverage. For example, FAO Rome oversees the three regional desert locust commissions that cover 30 countries combined; DLCO-EA, covers four key pests across 9 countries; ICPAC provides weather and climate analysis and prediction for 9 countries; a national plant protection department would cover all threats for one country.

Figure 9 Early warning: moving from broad pest coverage over a small area to specialized pest coverage over a broad area



Agence Française de Développement (AFD) is also undertaking an in-depth study of the regional organizations and their role in early warning and control. This will be a deeper analysis of the missions and capacities of each stakeholder with the goal of bringing in lessons from CLCPRO in West Africa, which underwent significant capacity building after the 2003-05 desert locust upsurge. The World Bank and AFD teams are collaborating and will share findings through a series of technical workshops.

FAO is also running continuous impact assessments and risk monitoring, while IGAD is engaging its members to identify priority investments to build up resilience to transboundary pests/disease and other shocks threatening food security.

A series of strategic workshops on desert locust is planned. A core group comprising IGAD, FAO, DLCO-EA, AFD, and WB are now planning a series of technical workshops to review the findings of these studies with stakeholder countries and the donor community. This will culminate in a regional workshop on desert locust that would outline the medium-to-long-term strategy for combating desert locust and other transboundary threats.

This project will support the creation of a Horn of Africa Transboundary Threat Coordination Platform that will manage the regional agenda for member states to advance the desert locust response, and to serve member states needs for management all transboundary pests and diseases that threaten the resilience of the agriculture and livestock sectors in the Horn. Given the role it has been mandated by its member states, it is proposed that the Platform would be housed and managed by IGAD with leadership roles shared among members states and key stakeholders, such as DLCO-EA.

Project Activities:

The project will consist of three components:

Component 1: Assessing the national and regional institutions for desert locust and other transboundary response. This component will leverage the activities already underway in terms of assessment what works and what does not in the current desert locust management system. It would take the findings of those studies and do an analysis with key partners and member states to outline the initial coverage of the Horn of Africa Transboundary Threat Coordination Platform—e.g., fall armyworm, African migratory locust, thrips, tse the fly, Rift Valley Fever, etc.

Component 2: Creating a coordination platform for Desert Locusts and other transboundary pests in HOA. This activity would design the mission and activities of the Horn of Africa Transboundary Threat Coordination Platform—including: establishing membership criteria on the platform; roles and responsibilities of members; secretariat definition, terms of reference; defining leadership roles (e.g., platform chairperson), defining human resource (skill set of staff and how many) and technology requirements for the platform (e.g. server space, website and social media maintenance, preparation of print and other media materials as well). Building on the technical workshops and conferences in component 1, the new secretariat would establish the priorities for data gathering and communication, establishing communication channels with member states and other stakeholders identify the short-and-medium-term goals for the platform.

Building on lessons from the World Bank’s Assessment of Food Security Early Warning Systems for East and Southern Africa, the platform will be codified by the member states of IGAD so that it is a recognized body within the IGAD structure.

Component 3: Scoping studies for investments to increase resilience to transboundary shocks. The Platform, with the agreement of member states will undertake the following studies as a first tranche of research to underpin a well-functioning platform, such as:

- Assessment of policy priorities and reform requirements to ensure that Horn of Africa countries are aligned in key areas—e.g., registration and control of chemical pesticides and biopesticides, biosafety and quarantine regimes, etc.
- Analysis of technology for surveillance and aligning adoption and use protocols. The study would outline the roles of human surveillance, aerial surveillance (including drones), satellite technology, etc. and raise awareness among member states of the role each technology/approach can play in surveillance and the most efficient way for member states to use the technology—e.g., building in-house capacity, buying data, buying analysis, etc.
- Facilitating collaborative learning and exchange between private actors, research institutions, and public entities for the potential development of supply chains for plant protection products (chemical/biopesticides, drones, etc.) through strategic partnerships and entrepreneurships that offer job creation opportunities.

Project Alignment with Key Objectives:

Building resilience against climate-induced transboundary pests and disease outbreak. The agricultural and food systems of HoA are highly vulnerable to the impacts of climate change and weather variability. The World Bank estimates that global warming will lead to higher-than-average rainfall in eastern Africa, stimulating higher vegetation growth and generating the conducive breeding ground for locusts and other

transboundary pest and diseases. There is a need to develop a strong and coordinated response to the threat that links the technical and non-technical stakeholders and the stakeholders at different levels.

Risks:

The main risk is the not uncommon challenge of sustainability for knowledge platforms, especially ones created to support a crisis response. Once the crisis is over interest wanes and funding follows.

The project will overcome that by supporting the creation of a management system for transboundary pest response that involves active engagement of all stakeholders, that is tied to the regular ministerial meetings among the Horn of Africa/East African countries, and will be driven by data accumulating from communities themselves, who have a stronger stake in keeping the system going.

Pillar 3: Building Resilience

Groundwater for Resilience

Project Title: Horn of Africa - Groundwater for Resilience

Project Description

Regional context

1. The Horn of Africa⁸² (HoA) is located in an ‘economic water scarcity zone’⁸³, which despite the availability of water in nature to meet human needs is characterized by human, institutional, and financial constraints to water access (Figure 1). The lack of investment in water infrastructure and institutional capacity exacerbates vulnerability in areas where the population cannot afford to use an adequate source of water to meet their productive and/or household needs. Developing water infrastructure and investing in water retention and irrigation infrastructure can play a key role in the region’s poverty reduction.

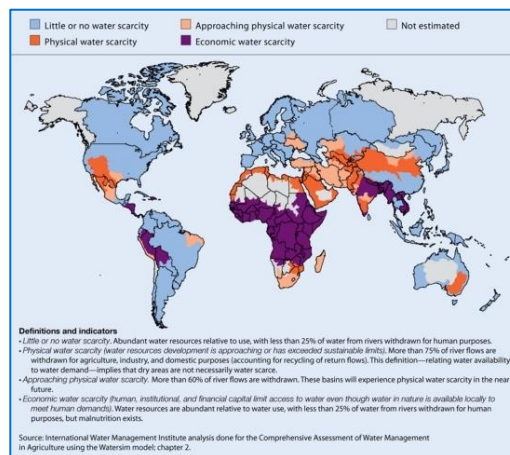


Figure 1. Areas of physical and economic water scarcity.
Source: International Water Management Institute.

2. Water security is crucial to ensure resilient rural livelihoods and urban economies in the HoA. While most countries in the region rely largely on low yield rainfed agriculture to sustain local livelihoods, water is a primary channel through which the impacts of climate change are experienced. Increased water availability that is adequate for consumption would have positive effects on food production and on people’s health, and it would contribute to mitigate the potential for conflict, migration and insecurity in the region.

3. Groundwater is a largely decentralized resource which is widely available and often at shallow depth (<100m). It constitutes an important source for rural and small town (piped) water supply and is the largest freshwater reservoir which is annually recharged and not affected by evaporation. It provides a medium to store water to bridge dry periods and adapt to climate change impacts and is often of good quality and protected against man-made pollution. Deeper aquifers (>300m) are in reach but still untapped, suggesting the enormous potential that groundwater holds for the region’s resilience⁸⁴ - including the region’s ability to combat and recover from the impacts of COVID-19. Groundwater holds an enormous potential in the ability of countries to prepare for, mitigate and adapt to shocks such as pandemics. Water provision and effective water management are at the core of country strategies aimed at securing public health, sanitation and food security during COVID-19. Ensuring robust water systems, including bolstering the role of groundwater resources, can contribute to the Horn of Africa’s socio-economic recovery from the impacts of the pandemic.

⁸² For the purpose of this project, the Horn of Africa (HoA) includes only 5 countries Djibouti, Eritrea, Ethiopia, Kenya and Somalia.

⁸³ The term was first defined in a wide-ranging 2007 study on the use of water in agriculture over the previous 50 years of practitioners, researchers and policymakers, overseen by the International Water Management Institute in Sri Lanka, with the aim of finding out if the world had sufficient water resources to produce food for the growing population in the future.

⁸⁴ Groundwater Management presentation – WBG an CIWA, Tuinhof, A. et.al. 2020.

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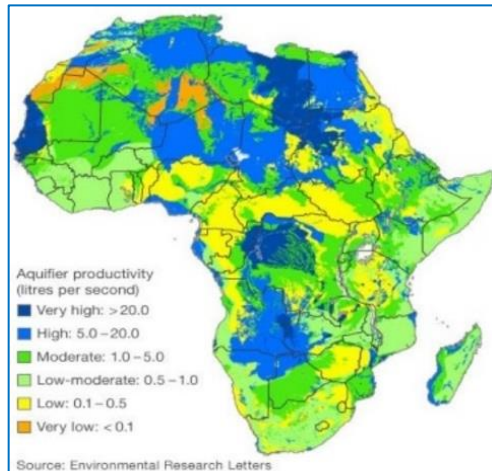


Figure 2. Aquifer Productivity. Source: Environmental Research Letters

4. The majority of the region has moderate groundwater availability (with aquifer productivity of liter/second) and some pocket areas with high productivity (5-20 liter/second) (Figure 2). The high yielding productive aquifers are located along cross-country border lines, including the area between Uganda and Kenya, Somalia and Kenya, Eritrea and Ethiopia, and Djibouti and Ethiopia. The region has 11 known Transboundary Aquifers (TBA). Recent studies that most of the TBA's are in sparsely populated dry of the HoA, with a population density of less than 20 people/km² and an annual rainfall below 700 mm/year.

5. Transboundary aquifers in the HoA vary in size from 10.000 to 50.000 km² and cover in total more than 200,000 km², with a population of over 5 million people. If developed, these aquifers have the potential to benefit a substantial part of this population. It is likely that additional aquifers (big and small) confined within boundaries of each country could be identified through a comprehensive inventory of potential aquifers.

6. The Horn of Africa represents one of the most marginal regions of the world in terms of rainfall available for natural vegetation growth and crop production. The Intergovernmental Authority on Development (IGAD) estimates that about 60% of the sub-region is arid and semi-arid, with low level of water use. The HoA is not homogeneous in terms of its hydro-climatology. Rainfall is concentrated in the Ethiopian highlands, while the climate in the northern, eastern and south-eastern parts of the region is characterized by low rainfall and high potential evapotranspiration.

7. Hydrological systems are highly vulnerable to the escalating impacts of climate change and high climate variability. The HoA has been affected by longer and more acute dry periods since the second half of the 20th century. Episodes of catastrophic and intense drought are exacerbated by increasing inter-annual variation, affecting the rainy season. Projections indicate that average temperatures in the region will rise by up to 1.5°C in the next 20 years, and up to 4.3°C by the 2080s⁸⁵. Large parts of the HoA are also vulnerable to massive flooding, as evidenced by the unusually heavy rainfalls in 2019-20 that caused damage in Somalia, Kenya, South Sudan, Ethiopia and Djibouti.

8. The region's development trajectory is closely linked to water security, placing water access at the forefront of the HoA's strategy towards a resilient future. Demographic pressures and urbanization increase the risk of over extraction from lakes and rivers, groundwater depletion, increased sedimentation and pollution of water bodies and degradation of coastal areas⁸⁶, which impact the region's pastoral and agro-pastoral livelihoods, economies, and even human security. IGAD estimates that by 1995, only 7 % of the population in the region was living under conditions of water stress. That

⁸⁵ Assessment of Resilience Frameworks in the HoA, prepared in 2015 by the Global Water Partnership Eastern Africa and the IPCC Report on "Climate Change 2014: Impacts, Adaptation and Vulnerability",

⁸⁶ IPCC AR5

percentage is projected to rise to 21% by 2025, with a 62 % of the region’s population experiencing water scarcity conditions⁸⁷.

9. In the Horn of Africa, the water supply coverage is below the sub-Saharan average. In Djibouti (Urban 97.4 % and Rural 64.7%), Ethiopia (Urban 93.1 % and Rural 64.7%), Kenya (Urban 86.7 % and Rural 61.8%⁸⁸), and Somalia (Urban 83% and Rural 28%⁸⁹) services are largely biased towards urban coverage, away from the rural areas where the majority of the population resides. None of these countries met their SDG goals on sanitation, which are related to water availability and has serious health impacts. Similarly, compared to the total annually rechargeable groundwater potential and the suitable irrigable land that these countries have, the level of groundwater use is very negligible. On average, 1.5% of the cultivated land in the HoA is equipped for irrigated agriculture, and out of this, only 3.4% is equipped for irrigation using groundwater⁹⁰.

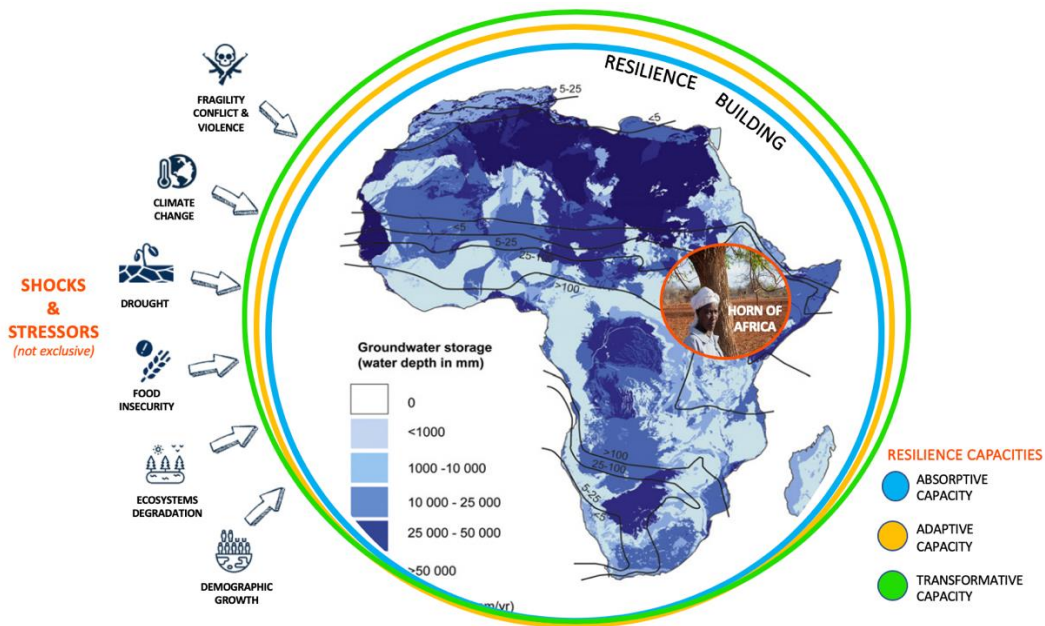


Figure 3. Groundwater and Resilience Building in the HoA.
Map source: A. M. MacDonald et al. 2012 Environ. Res. Lett. 7 024009.

10. HoA governments and regional entities are increasingly recognizing the role and potential of the region’s abundant groundwater resources in the resilience of rural communities to recurrent shocks and stressors (e.g., related to climate change and variability, conflict and fragility, drought and food insecurity, among others) (Figure 3). Access and rational use of groundwater resources in the HoA can be pivotal to strengthen the capacity of vulnerable populations to absorb the impact of shocks and

⁸⁷ Gardner-Outlaw & Engelman 1997

⁸⁸ Kenya Integrated Household Budget Survey, 2018

⁸⁹ JMP survey 2017

⁹⁰ Siebert et al., 2010.

stresses, to adapt to those impacts and potentially transform, ultimately improving their ability to achieve development goals⁹¹.

11. The current level of groundwater related *information, institutions, and infrastructure*⁹² (the 3I's) differs between the 4 countries. In Kenya and Ethiopia these are reasonably well developed but need to be further strengthened in order to cope with growing challenges of an increasing water demand, and to improve the resilience against drought. One of the main challenges in the region is the lack of targeted groundwater monitoring to support the management and regulation of water allocation and use. In the case of Somalia and Djibouti the groundwater situation is weakened by higher aridity, while Somalia faces challenges related to lower and more sparse population density and insecurity. Despite these challenges, there is still a large potential for groundwater development in the four countries that can be achieved through increased, targeted support to the sector.

12. Country disparities evidence the need for context-appropriate solutions that, over time, could be aligned and complement each other to maximize the transboundary benefits of groundwater resources in the HoA. They also evidence the need to couple efforts related to groundwater *information, institutions and infrastructure* with the effective *implementation* of solutions across scales (regional, national, sub-national and local), including the engagement of a broad range of stakeholders; as well as the need to foster *inclusive innovation*- defined as novel (groundwater) solutions that address the specific needs and priorities of men, women, boys and girls, among other vulnerable groups. It is by considering implementation and inclusive innovation that improvements on groundwater information, institutions and infrastructure can have a long-lasting impact in the region's resilience.

13. Groundwater constitutes an area of unprecedented opportunity for the Horn of Africa. However, despite its potential to strengthen the capacity of rural communities to cope with and adapt to the impacts of shocks and stressors, the current level of knowledge and use of groundwater in the region remains low, and ongoing efforts are not enough. The reasons for that situation include the following:

- a. Most of the large, big potential groundwater aquifers are transboundary in nature. However, the region lacks functioning platforms (in the form of transboundary commissions, basin authorities or others) to facilitate dialogue, information exchange, joint governance and monitoring. Despite ongoing efforts by IGAD, there is limited country capacity and a lack of commitment to cooperate towards commons goals in this area.
- b. While countries are endowed with huge potential aquifers confined within national boundaries, the status of the five I's (*information, institutions, infrastructure, implementation and innovation*) in these countries remains weak. Although there is good will to advance regional dialogue on transboundary resources, the slow progress on groundwater knowledge, institutional mechanisms and confidence on national aquifers, continue to challenge progress in that front.
- c. The uneven capacity among countries in the region requires both tailored and coordinated solutions. The sub-region comprises two set of countries -Eritrea and Somalia are post conflict

⁹¹ WB (2017) "[Operational Guidance for Monitoring and Evaluation \(M&E\) in Climate and Disaster Resilience-Building Operations](#)", [Resilience M&E \(ReM&E\) initiative](#).

⁹² Three 'I's' Framework for Groundwater Development Strategy.

settings with weaker capacity, while Djibouti, Ethiopia and Kenya are better off, in relative terms, with more robust institutions and higher capacity. These asymmetries need to be addressed as part of groundwater strategies, while seeking to strengthen synergies and build trust towards future regional cooperation.

- d. The skills and the knowledge needed to explore and understand groundwater resources, as well as the technology to exploit it and ensure its rational use, are expanding globally. However, the HoA region is not benefiting from that progress. Advancements in hydro geophysics, new smarter, smaller and cheaper sensors for continuous-timed monitoring and real-time application, advancements in solar pumps, among others, are not penetrating the sub region to the desired level. Groundwater mapping using high resolution satellite data and remote sensing/GIS analysis provide a quick and solid basis for borehole siting in shallow and deep aquifer and for selection and design of appropriate Managed Aquifer Recharge (MAR) structures, however, follow up is often delayed due to the lack of implementation capacity by responsible entities.

14. As per the World Bank Group FY21 List of Fragile and Conflict-Affected Situations, one out of these five countries is experiencing a high intensity conflict (Somalia); one suffers high institutional and social fragility (Eritrea); and the remaining three countries (Ethiopia, Kenya and Djibouti) are heavily affected by FCV-associated stresses. The civil war in Yemen and the volatile security situation in the African Great Lakes region, add additional FCV-linked challenges to the development path of this region. The Horn of Africa is also home to many forcibly displaced people. In 2020, the population of concern to the UNHCR in these five countries reached 7,025,025. This figure includes refugees, asylum-seekers, internally displaced people (IDPs), and stateless persons.

Project Rationale:

15. The set of challenges identified above call for an enhanced mechanism to support countries in the region to explore and rationally develop groundwater resources to build the resilience of rural communities to shocks and stressors. Such mechanism can complement ongoing efforts both at the regional as well as at the country level, and boost resilience efforts in the region. The specific objective of the proposed project is *“to strengthen the resilience of targeted entities and selected communities in the Horn of Africa to cope with and adapt to climate change shocks through an enhanced management and use of groundwater resources”*.

Anticipated Outcomes:

16. **Country priorities:** Aside from country-specific variations, the project’s priorities as related to groundwater broadly converge on interest. Almost all the countries need to develop and strengthen their institutional capacity to explore, develop and use groundwater resources. There is interest and demand for expanding and using groundwater for small and medium level irrigation to augment rainfed agriculture, as well as a significant need to use groundwater to meet the needs of a growing urban population, internally displaced persons (IDPs) and refugees. As most of the potential aquifers are transboundary in nature, there is also a need to develop the capabilities for joint monitoring and regulation, including a groundwater governance system on shared aquifers.

17. If developed rationally, the benefit from the combined use of groundwater resources can significantly augment agriculture and food production, reducing the region's dependence on rainfall. At the same time, the sub-region is characterized by a high urbanization rate (due to demographic growth, internal displacement, conflict, among other), exacerbated by climate change. With the current estimates of 77.8%, 21%, 26% and 46% of the population living in urban areas for Djibouti, Ethiopia, Kenya and Somalia, respectively⁹³, rural-urban migration poses considerable pressure on the already strained service levels in urban areas- including water supply and sanitation. Developing and managing the region's groundwater aquifers rationally, with reliable information, enhanced institutional capacity, state of the art infrastructure, and innovative solutions implemented across levels, could have far reaching impacts on the region's growth and development.

18. **Cost:** Depending on the status of the five I's outlined in Figure 4 (*information, institutions, infrastructure, implementation, and inclusive innovation*) there could be differences in the project's focus among countries. Further consultation with the countries will indicate the detailed activities to be conducted under each of the four project components presented below. Initial observations based on absorption capacity, available information, and level of readiness, suggests that the first phase of the project would require approximately US\$300 million. This assumption considers about US\$75 million for Kenya, US\$150 million for Ethiopia, US\$40 million for Somalia, US\$30 million for Djibouti, and US\$5 million for IGAD in the form of a grant for Technical Assistance and analytical work to prepare a groundwater governance model on shared aquifers and to promote and facilitate information sharing for joint monitoring of shared resources. These are tentative figures that need to be discussed with the countries.

19. **Timeline:** An extensive consultative process with the countries is required to capture the extent of the demand in the region, including the status of readiness on *information, institutions and infrastructure*, as well as the needs and priorities related to *implementation and inclusive innovation*. A parallel track approach will be needed to articulate country level consultations and analysis with the project's preparation.

Proposed Approach

20. In order to build a solid foundation of trust and collaboration on transboundary groundwater resources in the HoA, the project proposes a two-pronged approach focused on establishing a meaningful dialogue among countries in the region, coupled with support to regional and national entities to strengthen the 'five I's' of groundwater for resilience (Figure 4).

21. This approach recognizes that strengthening resilience at the national level is a foundation to achieve collaborative/transboundary solutions at the regional level. It also recognizes that building resilience through improved groundwater access and use is a long-term process that requires champions and sustained engagement, a focus on the needs and priorities of the most vulnerable population, as well as strong feedbacks and interactions across levels (regional, national, sub-national and local). Extensive consultation, transparency, political will to achieve regional goals, as well as continuous trust building are needed to ensure that dialogue translates into effective actions on the ground.

⁹³ United Nations Population Division. *World Urbanization Prospects: 2018 Revision*.

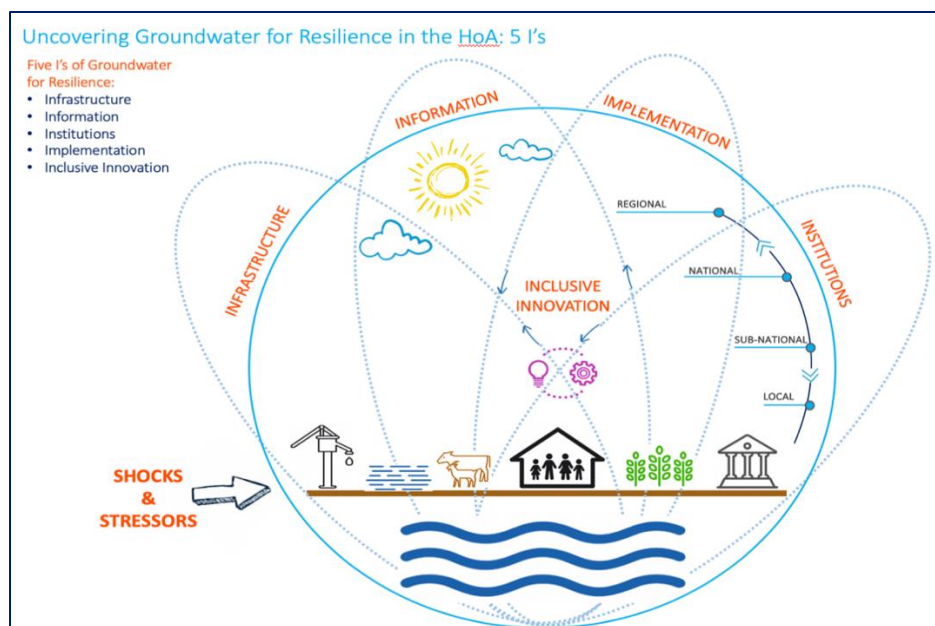


Figure 4. Uncovering Groundwater for Resilience: Five I's Approach.

22. In line with the five I's (*infrastructure, information, institutions, implementation and inclusive innovation*) for a sound groundwater development strategy for resilience, the project proposes four components. Together, these components seek to maximize the potential of groundwater for resilience in the HoA by addressing the 'Five I's' depicted in the framework above, in order to strengthen the capacity of targeted water resources management entities to plan, develop, monitor and manage groundwater resources in selected aquifers. The exact focus and implementation arrangements of the components will be decided based on the ongoing dialogue and the forthcoming identification of national and regional demands.

23. **Component one:** This component plans to **strengthen groundwater institutions and information**, through activities aimed at national and regional entities that play a key role enabling the role of groundwater in the HoA's resilience. It involves technical assistance, capacity building and *institutional strengthening*, including supporting national water resources management entities. The focus on Groundwater information under this component will include novel mechanisms for knowledge sharing on groundwater among countries of the region and across levels, including exchange visits of country experts, youth training/internships programs, collaborative programs with local universities, and documentation and dissemination of lessons learned. It can also involve IGAD in the development of an analytical piece to address and provide recommendations on a groundwater development and governance model for transboundary aquifers in the HoA. This can help in setting the foundations for a regional dialogue on shared/transboundary groundwater.

24. **Component two** will support **infrastructure development and community-level use of groundwater as a source**. This component will focus on groundwater infrastructure and use with an emphasis on strengthening resilience at the community level. It will support infrastructure and implementation through groundwater development investment operations such as small-scale irrigation investments, peri-urban solar pumped groundwater supply schemes, sand dam pilots for community gardens, among others. This component will adopt a community-driven development approach, which

involves both a) *community participation in infrastructure development* (i.e. identification and prioritization of investments, paid or unpaid support to low-scale infrastructure development etc), as well as b) *community participation in the management and maintenance of investments* (i.e. definition of norms/guidelines for operation, consolidation of committees/groups for maintenance/sustainability, accountability, women’s roles etc). These aspects are closely connected, and together they enable community-level resilience building.

25. **Component three** will focus **inclusive innovation of groundwater solutions in cross-border areas**. This component will focus on novel uses of groundwater resources at the household level, as a contribution to strengthen resilience in vulnerable cross-border areas. It will involve technical assistance to identify innovative and inclusive bottom-up solutions that ensure local impact at a more granular/HH level, including training opportunities for job creation and entrepreneurship, technology use and youth involvement in groundwater, as well as tailored gender-inclusive groundwater solutions. The identification of inclusive innovation in groundwater could also include private sector engagement opportunities.

26. **Component four:** This component will complement the other components financing the operational costs of the Project Management Units in participating countries as well as project coordination and fiduciary support. The component would also be responsible for M&E, knowledge management and learning, and evidence-based policy input.

27. The proposed approach is in line with the transboundary nature of groundwater resources, as it is strongly rooted in cross-scale solutions that complement each other and that cut across the local, sub-national, national, and the regional levels, ultimately contributing to the region’s core resilience capacities (Figure 5).

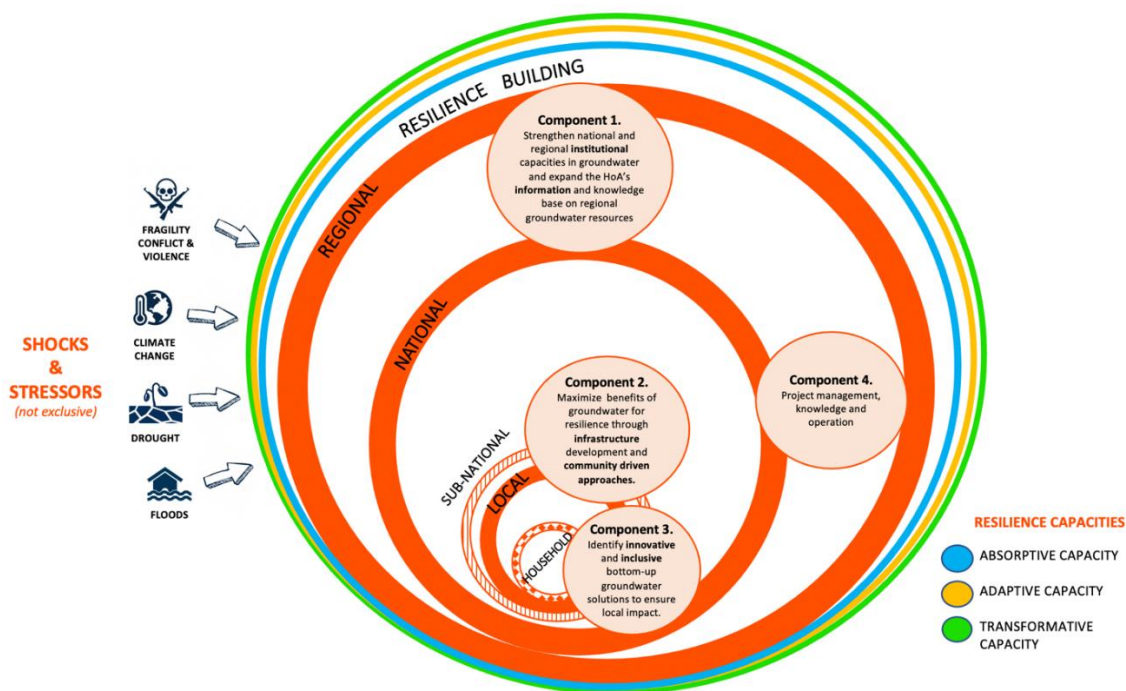


Figure 5. Groundwater project components: Building resilience across scales

Project Alignment with Key Objectives

28. The proposed project is aligned with the national development plans and aspirations of the countries. Water Security (including the need to explore and use ground water resources) is addressed in Somalia's National Development Plan (NDP). Water scarcity is a significant cause of conflict in Somalia's nomadic pastoralist societies. With annual mean rainfall of less than 100 millimeters in most of the country (some exception of 600–800 millimeters at higher elevations) and 95% of the population using groundwater for drinking water source, the development and use of its ground water resources is critical for Somalia. The project is also aligned with Djibouti government's long-term strategy (Vision 2035) to build the country's future. With a high dependence on groundwater to meet the demand for domestic, livestock, agriculture, commercial and industrial purposes, along with the emerging recognition of over-abstraction, the project will be a timely contribution to meeting Djibouti's long-term development plan.

29. The Growth and Transformation Plan (GTP) of Ethiopia presents an ambitious strategy to develop over 4 million hectares of land by strengthening irrigation works (small and big). With ninety percent of domestic water supply sourced from groundwater, there is significant interest in developing this resource further. As livestock constitutes the major component of the country's livelihoods, developing groundwater is also a priority for this sector. The Kenya Vision 2030 goal on water and sanitation under the social pillar is focused on achieving access to water and sanitation for all by 2030. Considering that Kenya is a water scarce country, the achievement of this goal requires deliberate effort geared towards the development and expansion of the sector, including its groundwater resources. With about 17 percent of renewable groundwater resources being used, there is considerable potential to support Kenya's development vision.

30. A number of development partners, notably the African Development Bank, the European Union, the World Bank, bilateral donors (e.g., DFID, GIZ, JICA, SIDA, USAID) and United Nations Specialized Agencies (e.g., UNICEF), among others, have provided groundwater focused support for one or more countries in the region. Such support takes different forms, ranging from full-fledged groundwater development operations to technical assistance and capacity building. Some of the support is also channelled through trust funds (e.g., Cooperation in International Waters in Africa, CIWA), bringing combined efforts in support of the subsector. The proposed project will foster synergies, learning and knowledge sharing among these initiatives, building on their experience and lessons learned.

31. At the broader, regional level, there is alignment between the proposed project and the strategy of IGAD's Drought Disaster Resilience and Sustainability Initiative (IDDRSI), including the goals reflected in the Country Programming Papers (CPP) and Regional Programming Paper. The Strategy, now in its second phase of implementation, provides a holistic and comprehensive plan aimed at building the resilience of vulnerable communities to the effects of recurrent droughts and achieving simultaneous growth and sustainable development in the IGAD region. Water Resources Development and Management constitutes one of eight priority intervention areas (PIA) identified by IGAD member states to enhance drought-prone communities' access to and use of sustainable managed natural resources and environmental services.

Potential to attract private sector financing

32. Entrepreneurial flare is characteristic of the people in the Horn of Africa, and significant potential exists for attracting private sector financing. Innovators in the fields of solar energy, irrigation, and drinking water are constantly developing more affordable technologies and mechanisms for broadening

water access in the region. In Somalia, NGO's have installed solar powered systems and worked with private companies to sell water to displaced families at low prices thus achieving accessible, sustainable and affordable water for people who otherwise might not have access. Solar water pumping systems are helping communities in Western Kenya to overcome prohibitive energy costs and improve water supply. Solar powered micro irrigation systems are being used for farmer-led irrigation in Uganda, and in Southern Kenya solar powered mini desalination systems are providing clean water to less privileged communities whose shallow wells produce brackish water. In Ethiopia there are plans to replace all diesel generators with solar pumps with much reduced cost and more than enough room for private sector participation. Ground water access can promote green energy opportunities that can be identified and explored as part of project component 3 on inclusive innovation.

33. There are also many labor-intensive activities that are groundwater related. The project will identify and analyze opportunities for responsibly exploiting groundwater in terms of job creation and entrepreneurship. In areas which are suitable for large scale agriculture, options will be assessed for pumping into bulk reservoirs where ground water exists, but surface water is scarce. This will consider both water balance and governance issues in order to ensure that the rates of replenishment are understood, and that the risk of over exploitation is mitigated.

34. In order to maximize financing for development, the project will assess the feasibility of attracting private sector financing in such a way that geographic areas suffering from severe poverty may leverage use of groundwater. Access to water may be appealing for business in terms of both water use in the business, and for the associated micro industries created around this. There are many examples in Africa where public water provision has been used to bring small scale industry into areas that are underdeveloped and/or suffering from socio economic problems.

Project readiness, practicability and complementarity to other projects

35. Countries are expected to have some level of readiness for the project, although with varying degrees. Country differences make it imperative to undertake an objective assessment to determine the level of readiness for project implementation. As the engagement with the countries and the consultation at regional level with IGAD progresses, the level of preparation regarding demand, status of institutions and capacity (to conceptualize, identify, prioritize and prepare bankable projects) can be assessed easily to design remedial measures to address gaps.

36. This project will be well aligned with the current engagement frameworks of the Horn of Africa countries under the Horn of Africa Initiative (HoAI). In line with that, in addition to the Regional Groundwater Initiative, development partners including the World Bank are preparing and implementing many other projects on water resources management, land protection and climate smart agriculture where groundwater protection, development and management are addressed, and will be complemented by this proposed project. Examples include the series of Sustainable Land Management Projects in Ethiopia, the Kenya Water Security and Climate Resilience Project, The Somalia - Water for Agro-pastoral Productivity and Resilience Project "Biyoole" and the Rural CDD and Water Mobilization project in Djibouti.

Risks

37. Overall, the project will have high level of risk due to the aggregation of project risks in each participating country, which will necessarily vary. The project will be implemented in one of the most

fragile sub-regions in the world, which has high levels of poverty, 22.5 million people facing severe food insecurity, 10.8 million experiencing forced displacement, and conflict. Given the pre-existing fragile and conflict conditions, and the addition of the health and economic shocks presented by the COVID-19 pandemic, the initial overall project risk is high. In order to manage these risks, the project will, inter alia: (a) provide standard technical outlines for feasibility studies and project preparation with quality assurance elements such as review meetings and peer reviewer support; (b) use direct contracting or direct payments for some of the contracts (c) manage a learning agenda to raise the quality of implementation across all participating countries.

38. Some of the more commonly manifested risks in the region (e.g., political and governance; macroeconomic, sector strategies and policy risks, fiduciary, and institutional) are also expected to be high. These risks can be mitigated by proactive efforts to build capacity, assisting clients technically by availing information, experience and on-demand technical assistance. Putting in place a regional project Technical Steering Committee could facilitate information exchange and the gradual joint governance and development of shared resources.

39. The project spans 4 countries -Djibouti, Ethiopia, Kenya and Somalia, each at a different stage of development between fragile and conflict affected state, low and middle income. This translated into different risk levels. In the fragile states and low-income countries, investments will be channelled through Ministries of Water at a significant scale for the first time, which poses serious risks and possible implementation delays. Further risks relate to the challenging operational environment, continued insecurity, and inadequate institutional capacity.

40. Insecurity risk is substantial, and particularly high in Somalia. There are areas across all countries that remain in conflict or that suddenly experience conflict situations, affecting access to project locations and the security of project staff, making monitoring difficult. The project will need to develop clear guidelines for addressing insecurity. Institutional capacity for implementation is dependent on the individual countries. Fiduciary risks are high in the fragile states as are environmental and social risks due to the lack of project implementation experience. It is expected that Kenya, Ethiopia and Djibouti will develop processes and frameworks that can be modified for Somalia.

41. Across the Horn, GBV risks are high. The WB Good Practice Note on Addressing GBV will be used to assess each context, and the project will adopt a robust and comprehensive approach to address potential GBV risks. Stakeholder risk is medium and whilst in some countries it is higher, in general there is a trust between societal groups. The project's grievance redress mechanism (GRM) would help manage grievances from communities and the private sector.

Pillar 3: Building Resilience

Promoting Resilience in the Borderlands

Project Title: Promoting Resilience in the Borderlands of the Horn of Africa

Project Description

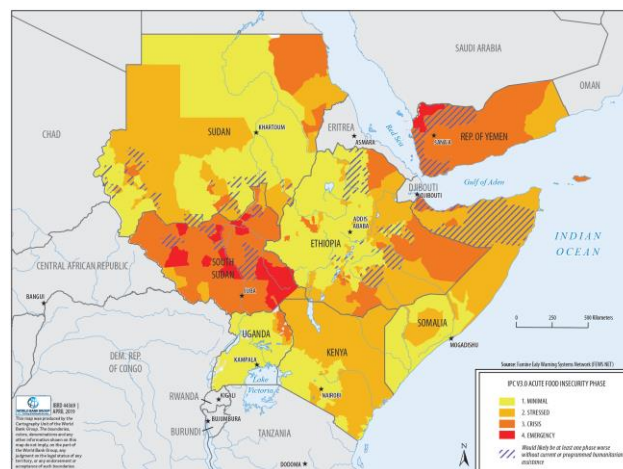
Background and Regional Context

1. **The borderlands of the Horn of Africa (HoA)⁹⁴ have long been synonymous with economic, social and political marginalization.** In these regions, state presence is either weak, or characterized primarily by a focus on security. Despite significant challenges however, the borderlands are also resilient areas with real economic potential. The region's international borders serve as conduits for pastoralism and trade, while local institutions play a key role in regulating and facilitating economic activity and managing conflict. Even at the periphery of state control, the borderlands remain connected to circuits of global commerce.

2. **Extreme poverty and vulnerability in the Horn of Africa are concentrated in the borderlands.⁹⁵** The borderlands are also characterized by a series of inter-related and overlapping risks including pervasive food insecurity (see Fig. 1), environmental and land degradation, widespread un- and under-employment, conflict and violence (including sexual and gender-based violence) and forced displacement. Each of these challenges transcend national boundaries and require coordinated regional action in response. The challenges are also deeply gendered. Women are excluded from decision-making processes and positions of authority, lack control over property or incomes, and struggle to access services such as health and education. In sum, they are unable to fully exercise their agency. Gender remains a crucial determinant of livelihoods.

3. **Constrained livelihoods and a lack of economic opportunities, including for a large and growing number of young people, are a significant driver of migration and distressed urbanization across the region.** Livelihood options are limited in the HoA's borderlands, with most people earning a living through pastoralism, agro-pastoralism, and trade (mostly informal). The HoA is also experiencing a 'youth bulge'. Nearly three quarters of the population of Kenya,

Figure 10: Food insecurity in the HoA is widespread, but concentrated in the borderlands

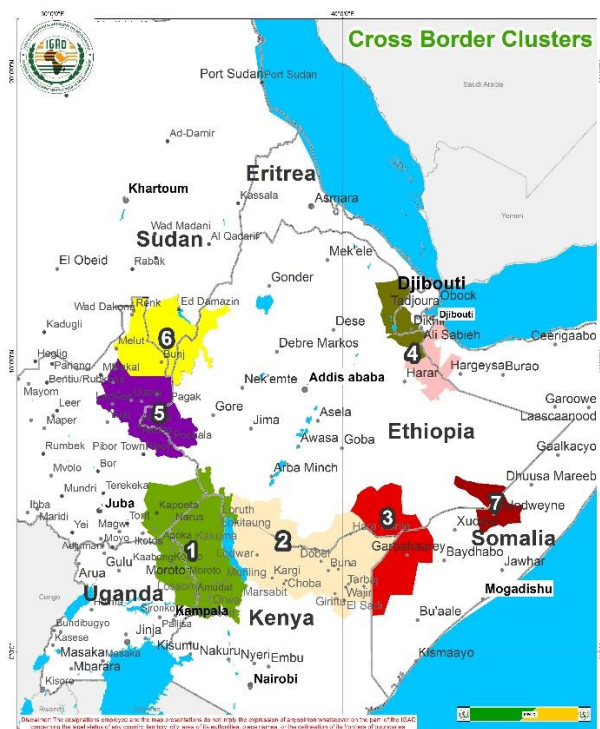


⁹⁴ The HoA Initiative includes only 5 countries Djibouti, Eritrea, Ethiopia, Kenya and Somalia, but the broader Horn of Africa (using IGAD membership as a proxy) also includes Sudan, South Sudan and Uganda.

⁹⁵ Varalakshmi Vemuru, Matthew Stephens, Aditya Sarkar, Andrew Roberts, and Anton Karel George Baare, 2020, *From Isolation to Integration : The Borderlands of the Horn of Africa (English)*. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/167291585597407280/The-Borderlands-of-the-Horn-of-Africa>. Although data is scarce on precise rates of poverty in the HoA's borderlands, food security can act as a relatively good proxy.

Somalia, and Ethiopia is under the age of 30,⁹⁶ and face high rates of underemployment and precarious employment.⁹⁷ Young women tend to be particularly disadvantaged in the region’s labor markets. In a context where the overall population in the region is expected to double over the next 23 years, the lack of economic opportunities for individuals (and especially youth) has been a significant driver of mixed-migration flows, as well as distressed intra-regional and rural-urban migration. Lack of decent employment opportunities also increases young people’s susceptibility to illicit activities and high-risk behavior, especially in contexts marked by political grievances and perceptions of exclusion from political and economic development.⁹⁸

Figure 11: Existing and proposed IGAD Cross-border clusters⁹⁹



1. IGAD Cluster 1 (Karamoja cluster)
2. IGAD Cluster 2 (Somali cluster)
3. Proposed new areas in Somalia
4. IGAD Cluster 4 (Dikhil cluster) plus proposed new areas in Somaliland.
5. Proposed cross-border cluster: Ethiopia and South Sudan
6. Proposed cross-border cluster: Ethiopia, Sudan, and South Sudan
7. Proposed cross-border cluster: Ethiopia and Somalia

Source: IGAD Geonode (2018)

4. The borderlands face significant climate change risks including erratic and decreasing rainfall (leading to both droughts and floods), land degradation and changes to flood seasons. These events affect soil quality, and reduce agricultural productivity, contributing to food insecurity and further

⁹⁶ See UNFPA, 2016, *Population Composition and Demographic Characteristics of the Somali People*, Vol. 2, UNFPA: Nairobi; Federal Democratic Republic of Ethiopia, 2016, *Ethiopia Demographic and Health Survey 2016*, Central Statistical Agency: Addis Ababa; Kenya National Bureau of Statistics, 2017, *Women and Men in Kenya: Facts and Figures*, KNBS: Nairobi. Fertility rates are particularly high in some border regions.

⁹⁷ The region actually has relatively low rates of unemployment. This is because most people cannot afford to be unemployed, and usually use multiple methods to earn a livelihood. The key issues in the region are underemployment (that is when a person works less than they would like, or in positions that they are overqualified for) or precarious/vulnerable employment which is characterized by inadequate earnings, low productivity and difficult conditions of work. A lack of decent livelihood opportunities has resulted in a profusion of ‘maladaptive’ livelihood choices which include (increases in) cattle raiding, trading in firewood and charcoal, engaging in banditry, and joining armed groups. Vemuru *et al.*, *From Isolation to Integration*.

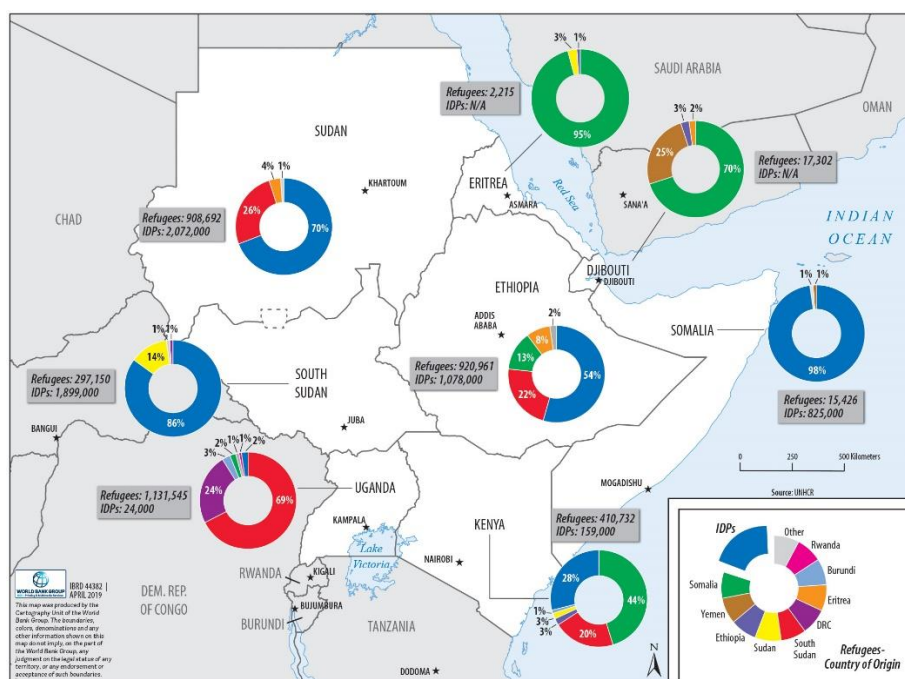
⁹⁸ United Nations and World Bank, 2018, *Pathways to Peace: Inclusive Approaches to Preventing Violent Conflict*, World Bank: Washington D.C.

⁹⁹ IGAD cross-border clusters are zones that share resources, services, and cultural values, often bound by clan and/or ethnic networks that can provide an entry point for concrete action.

affecting the resilience of communities. Changes in weather patterns have (along with conflict and limited state capacity in some countries) also contributed to the outbreak of desert locusts in 2019-2020, with severe consequences for food security and livelihoods.

5. **Insecurity is a significant constraint on socio-economic development.** Bandits and armed groups are active in several of these regions, and some areas are also characterized by communal conflict (including over resources such as water and rangeland), and by high levels of gender-based violence.¹⁰⁰ The proliferation of small arms and light weapons has made conflict deadly, regularly triggering mass displacement. Heavily securitized responses can also contribute to instability and a feeling of marginalization among borderland communities. Conflict and climate crises are significant drivers of forced displacement across the region – both inside and across national borders. At the end of 2019, the broader region hosted almost 4 million refugees, and 8.95 million people were internally displaced.

Figure 12: Displacement in the HoA



6. **The economic, social, and political marginalization of the HoA’s borderlands means that communities and individuals in these areas are less resilient in the face of recurrent shocks and stresses.** This is exacerbated by the fact that formal institutions in these regions are usually constrained, and public and private investments are minimal. This is especially true of social services, law and order, and access to justice. Customary and traditional institutions continue to play a significant role in the organization and regulation of livelihoods and conflict resolution, however, they have seen their authority eroded over time (usually as part of broader socio-political changes). Traditional institutions

¹⁰⁰ GBV is not always a result of insecurity; its causes are much broader – including for instance, gender norms and maladaptive livelihood strategies. In the HoA, however, GBV can be closely connected to insecurity.

still retain significant social legitimacy but can also be exclusionary – especially when it comes to minorities, women, and youth.

7. **Notwithstanding these challenges, borderlands are also areas of economic potential; and some of these risks can also provide opportunities for action (see table 1 for a summary).** Existing sources of resilience could provide potential points of entry for development interventions. These include livelihoods adapted to climate crises and oriented around mobility, the significant role of customary institutions, the increasing role of community-based organizations, the continued and growing demand for livestock products and the emergence of new economic opportunities (such as extractive industries and from urbanization).

8. **The risks and sources of resilience in the HoA borderlands are inherently transboundary, requiring a coordinated regional response.** For instance, droughts or localized food insecurity in one country can lead to increased distressed migration, affect the livestock trade and trigger communal conflicts in neighboring countries. Similarly, the impact of climate crises is felt across national borders. Cross-border livelihoods (e.g., pastoralism and trade) are a crucial source of resilience, as are traditional institutions which operate across state lines to regulate trade and manage conflict. Regional action can also help mitigate the drivers of insecurity, which remains a notable constraint on regional development and trade. These drivers include a history of economic and political marginalization and the presence of armed groups and bandits, who often operate across national boundaries. Inclusive and development interventions in the borderlands can contribute to addressing the HoA’s regional fragility challenges.

Table 4: Challenges and Opportunities in the HoA's borderlands

Challenges and drivers of fragility	Opportunities and sources of resilience
Isolation. The borderlands are at the margins of state control and often geographically isolated. Nonetheless, they are closely linked to global circuits of trade and commerce.	Spatial discounts. Differences across borders can create opportunities for people to profit from transnational pricing, knowledge and service differentials, and labor opportunities.
Conflict and governance. In addition to the region’s major interstate conflicts, there are communal conflicts—often over land or natural resources. These regions are also marked by a higher incidence of gender-based violence and rising violent extremism. Formal institutions generally lack the capacity to manage these stresses; informal and community institutions can play a role in doing so but have been eroded over time and are under pressure.	Traditional institutions. Despite having changed significantly as a result of socio-political processes and conflict, traditional institutions retain legitimacy and influence. Often based on clan or ethnic affiliations, they can cut across borders and play significant roles in providing social stability, regulating trade, and managing conflict. They may however be exclusionary, especially with regard to women, youth, and minorities, so there is a need to link them with other groups (common purpose groups, women’s self-help groups, etc.)
Displacement. Conflict and climate-induced disasters, including droughts and floods, are causing mass forced displacement. There are almost 4 million refugees and 9 million internally displaced	Trade and mobility. Trade is robust and resilient, mostly in livestock and consumer goods, continuing even in times of high conflict and in the absence of supporting investment. Trade is facilitated by mobility—the primary resilience strategy as people

Challenges and drivers of fragility	Opportunities and sources of resilience
persons living in the region. Displacement can also be a cause of conflict.	move in search of better livelihood opportunities or better conditions for farming and livestock.
Poverty. The proportion of people living in poverty has declined slightly, but the absolute number of poor is increasing. Poverty remains highly gendered.	Extractive industries. Emerging industries, including oil and small-scale mining, carry social risks but also offer the potential for local economic development, including connective infrastructure
Demography. The population is very young and is expected to double in 23 years. This can be seen as both a challenge and an opportunity.	Regional institutions. Approaches are being piloted to promote greater cross-border collaboration and policy harmonization on trade and freedom of movement. However, more can be done in this regard.

9. **Livelihood systems in the borderlands are intrinsically transnational and are oriented around mobility.** Pastoralism and trade are the main livelihoods, because they are well suited for variable rainfall and climatic fluctuations. Some inhabitants are also engaged in agriculture (or agro-pastoralism), and unskilled labor (such as in the construction sector in the rapidly expanding cities in the region). Each of these livelihoods relies on the crossing of borders. Pastoralists are well-known for migration in search of rangeland and water for herds, but also rely on robust livestock trade and export across borders. The livestock trade remains both vibrant and resilient, and a significant contributor to the GDP of the HoA countries, including in periods of conflict and heightened insecurity. Agricultural communities also rely on border-crossing for access to markets and to attract seasonal labor. The vibrant cross-border trade in consumer essentials is a vital source of livelihood to women traders, who are disproportionately affected by increased formal regulation of trade and border crossings. Efforts to build on existing livelihood systems and cross-border trade could catalyze greater regional cooperation and integration, as has been in the case in other regions (notably the Common Market for Eastern and Southern Africa (COMESA)). These would also build on existing infrastructural investments planned as part of the HoA Initiative.

10. **Community and traditional institutions are an important source of resilience in the Borderlands.** Traditional institutions play an important role in regulating trade, managing access to resources including grazing areas and in managing and resolving communal conflict. However, their role has been eroded over time due to conflict, and other socio-political factors. Nonetheless they remain important actors, with significant social legitimacy.¹⁰¹ Community institutions (such as youth groups, women’s collectives and self-help groups) are also playing an increasingly significant role in these areas, providing people who may be marginalized from traditional decision-making processes with a way of exercising agency. Active engagement with traditional governance structures and community institutions, with a view to ensuring inclusiveness and equity, could form part of broader efforts in the border regions to improve management of shared water resources, enhance the common management of pastoral rangelands, and facilitate the free movement of people. These institutions can also play a

¹⁰¹ They can, however, be gender and age-inequitable.

critical role in managing the impacts of climate crises, and resource-related communal conflicts. In turn, these efforts are also likely to have important positive impacts on cross-border trade.

11. **There is an increasing recognition among countries, regional organizations and development partners in the HoA that addressing the challenges faced by borderlands can yield tangible benefits for states but requires ambitious, urgent, and coordinated regional action and investment.** Critically, addressing these challenges can help facilitate trade and regional integration efforts, strengthen the social contract, and expand the footprint of the state in a participatory and inclusive manner. A number of cross-border initiatives backed by bilateral, regional and multilateral institutions already exist. Notable among these are the borderlands partnership, instituted under the auspices of IGAD by the countries of the HoA, international development partners, and financial institutions in 2015. IGAD's cross-border cluster approach also provides an entry point for concrete action -- this focuses development efforts on zones that share resources, services, and cultural values, and are usually bound by clan and/or ethnic networks. The cluster approach to cross-border cooperation promotes joint planning and investments, as well as involvement of communities, governments, and civil society organizations. Similarly, the IGAD Drought Disaster Resilience and Sustainability Initiative fosters regional collaboration on natural resource management, market access and trade, livelihood support, and conflict prevention. The proposed project would build on these and other related existing initiatives.

12. **The borderlands in the HoA have been deeply impacted by the COVID pandemic and the resulting health, social, and economic crises; addressing these challenges is central to recovery efforts across the sub-region.** Given the importance of cross-border trade, the transboundary nature of livelihoods, and pre-existing concentration of poverty, borderlands are especially vulnerable to the negative impacts of disease control measures, in particular those that restrict movement and hinder informal trade. In the HoA, these measures are reported to have severed access to critical supplies, water and essential medicines.¹⁰² The region has a history of experiencing supply chain difficulties, and current restrictions on the movement of cargo, are also impacting food and fuel availability in importing countries. In addition, restrictions on the movements of people and the reduction in productivity in the manufacturing sector have led to a reduction in the availability of food and agricultural products and have also interrupted several value chains. The borderlands were already food insecure prior to the COVID-19 outbreak (see Figure 1) but this has been exacerbated. Mobility restrictions and lockdowns have reportedly led to panic buying and stockpiling of food, and school feeding programs, a lifeline for many poor students, have been suspended due to school closures. High food prices have compounded the effects of a lack of employment and declining household purchasing power, increasing hunger. As a consequence, borderlands need to be at the forefront of the sub-region's recovery efforts.

Project Rationale:

13. The challenges identified above have impacts across national borders and affect a large number of people. Left unaddressed, they have the potential to significantly hinder broader developmental efforts

¹⁰² Uta Steinwehr, "Africa: When closed borders become a problem," May 02, <https://www.dw.com/en/africa-when-closed-borders-become-a-problem/a-53311669>. See also Peter Kirui, "Border Rows Undermine Prospective African Free Trade," July 24, *Debating Ideas*, <https://africanarguments.org/2020/07/24/why-the-kenya-tanzania-border-row-undermines-prospective-african-free-trade/>.

across the region. Addressing these challenges will require coordinated regional action to expand economic opportunities, deliver services, strengthen institutions and build the resilience of borderland communities. This project will be an essential complement to, and help amplify the effects of other ongoing initiatives at the regional and country level which focus on infrastructure, trade and economic integration, and human capital. The specific objective of the proposed project is **“to support social cohesion and inclusion, access to services, economic opportunities and sustainable livelihoods in the borderlands of the Horn of Africa”**.

14. **The proposed project would apply a borderlands perspective to development.** This would place the region and the communities who live in them at the center of analysis and intervention, accounting for the transboundary nature of livelihoods and trading relationships. This approach can increase the resilience of borderlands’ communities, strengthen the social contract and expand the footprint of the state in a participatory and inclusive manner. More concretely, it can also provide additional points of entry for regional integration efforts and increase intra-regional trade.

Anticipated Outcomes:

15. The project would aim to create economic opportunities and improve socio-economic governance in marginalized cross-border regions, in addition to improving social cohesion and inclusion and reducing communal conflict. Using community driven development (CDD) approaches, formal and informal institutions across border regions would be strengthened, and trade and economic integration would be facilitated. Improved service delivery and conflict-resolution systems will also result in improved resilience for some of the most vulnerable individuals and communities in HoA countries.

16. **Cost:** US\$250 million

17. **Timeline:** An extensive consultative process with the HoA countries will be required to capture the extent of the demand in the region, including their state of readiness as well as needs and priorities. Between 12-18 months could be needed for the preparation of the proposed project.

Proposed Approach

18. **The proposed project would aim to support social cohesion and expand economic opportunities and sustainable livelihoods in the borderlands, through strengthening of institutions and systems, and improved service delivery.** More specifically, the focus would be on facilitating economic opportunities, improved social and economic governance, and improved social cohesion in marginalized cross-border regions. Potential interventions would focus on local economic growth through promotion of an enabling environment for informal cross-border trade, service delivery, and strengthening of formal and informal institutions (including both traditional and community institutions) across cross-border regions. The project will consist of five components, as outlined below.

19. **Component one** will focus on ***strengthening the social contract in the borderlands through improved service delivery***. It will consist of two sub-components:

- a. **Strengthening collaborative border management** for the smooth transboundary movement of people, animals, and products. This will be integrated across a number of policy areas in the countries in question. This could include (a) the development of a monitoring system to

capture data on the extent and the nature of small-scale trade to further remove barriers and facilitate such commerce; (b) mainstreaming of cross-border trade facilitation into national trade policies, or charters; (c) development of simplified trading regimes to facilitate the formalization of trading businesses without the imposition of unreasonable regulatory or tax burdens. This will involve, among others, inclusion of groups which have traditionally been marginalized from development planning in planning processes. The project will build on lessons from other regional economic communities in Africa where such initiatives have been successfully implemented.

- b. **Delivering basic services (such as health and water, and if possible, education), including through cross border planning and sharing of resources in identified livelihood zones.** This will involve promoting localized cross border collaboration for the establishment of shared services accessible to populations living on both side of the border. It would include cross-border local and municipal government collaboration, as well as promotion of localized cross-border private sector collaboration. CDD approaches could be adapted (with specific changes for the cross-border and local governance context) for use in this component.

20. **Component two** of the proposed project will support *community-based projects for climate change adaptation*.¹⁰³ While the exact focus will be decided based on the ongoing dialogue and the identification of country demand, it is clear that across the HoA, technical initiatives to help communities adapt to climate change (for instance, through appropriate technology transfers) need to be supported by nontechnical operations focused on human capacity building. Together they can help facilitate diversification of livelihoods and improve climate-risk management in communities.

This would involve creation of participatory processes which would involve the pastoral community in problem diagnosis, charting pathways for change and the implementation of interventions, combined with collective action, access to microfinance, and participatory education.¹⁰⁴

This component will build on the fact that the natural resources managed and used by communities in these areas cut across national boundaries and can only be considered in a borderlands operation. Further, this component can help facilitate knowledge exchange between communities, and ensure that some investment takes place in traditionally underserved areas.

21. **Component three** will focus on *local livelihood promotion*, and will consist of two sub-components:

- a. **Facilitation of cross-border trade:** Alongside the broader processes of cross-border trade and promotion of the private sector in the borderlands, this sub-component will place special emphasis on supporting and facilitating trading by small-traders (around 70 percent of whom are women), and addressing barriers faced by female entrepreneurs through skills development and access to finance. In particular, this sub-component would complement

¹⁰³ Examples include involvement of communities in the process of planning for, and managing natural resources such as water sources or pasture.

¹⁰⁴ Similar projects have been shown to result in women taking on leadership roles, major improvements in the quality of life, accumulation of wealth, reduction of hunger, and management of risk among pastoralist communities. See Layne Coppock, Solomon Desta, Seyoum Tezera, and Getachew Gebru, 2011, "Capacity Building Helps Pastoral Women Transform Impoverished Communities in Ethiopia." *Science* 334 (6,061): 394–98

work already planned under Pillar 2 of the HoA Initiative on facilitation of regional trade and the development of regional value chains. Lessons will be drawn from similar initiatives that have been successfully implemented in the Great Lakes region.

- b. **Alternate livelihoods for youth:** This sub-component will support viable, sustainable, and market-driven livelihood alternatives for youth (including those who may be at risk of illicit activities and high-risk behavior). This will also involve complimentary demand- and supply-side interventions (including market-driven jobs placement), and access to finance and entrepreneurship training. These activities will also complement other interventions planned as part of the HoA Initiative, for instance, by providing training to youth to help them find employment on infrastructure construction projects.

22. **Component four will *support social cohesion and conflict prevention***, by engaging and supporting the work of community and traditional leaders in conflict mediation and advocacy efforts to improve public safety. There is significant evidence across the HoA suggesting that community and traditional leaders play an important role in conflict prevention and management. The viability of traditional governance structures varies from place to place, as does the extent to which they treat different groups (such as women, youth, and minorities) equitably. Where they are still viable, such as among the Somali communities, actively engaging with them as development partners can help ensure the success of the other components of the project (as well as other projects in the HoA Initiative).

23. **Component five will focus on *strengthening coordination mechanisms and experience sharing across countries***. The project will support a regional coordination mechanism (perhaps under the aegis of IGAD) to facilitate regional learning and dialogue. Equally, the project will aim to include other regional organizations such as the East African Community (EAC) which are relevant for the region. Initially, the regional coordination mechanisms will focus on facilitation of cross-border trade and livelihood promotion, but can be expanded to include other areas of cooperation.

24. It is proposed that the project will commence in one or more of the clusters identified by IGAD as part of its cross-border cluster approach (see Figure 1). It can then expand to other clusters depending on a combination of need and opportunity (as well as a consideration of the risks).

Project Alignment with Key Objectives

25. The proposed project would fall within the scope of Pillar 3 of the HoA Initiative. It will build on regional and national priorities for increasing resilience and expanding economic opportunities for the most marginalized communities. It will also build on and complement the package of priority proposals agreed as part of the HoA Initiative in October 2019, in particular, to promote regional trade through the creation of economic corridors, and regional trade facilitation, as well as proposals intended to strengthen the resilience of pastoral production systems to climate change.¹⁰⁵

Risks

¹⁰⁵ Agreed at the level of Ministers of Finance of the HoA countries in October 2019. An accompanying communique issued by the Ministers is available at https://www.afdb.org/sites/default/files/documents/hoa_ministers_communique_oct_18.pdf

26. The project will be high risk, but the risk of not acting is arguably much higher. The project will be implemented in one of the most fragile sub-regions in the world, which has high levels of poverty, 22.5 million people facing severe food insecurity, over 12 million forcibly displaced people, and conflict. The health and economic shocks presented by the COVID-19 pandemic exacerbate the risks further. In response to these challenges, the project aims to strengthen the social contract, and expand the footprint of the state in an inclusive and participatory way. Further, the project design is grounded in a clear understanding of the drivers of fragility and sources of resilience in these regions.

27. Some of the more common risks in the region – such as those related to politics and governance, macroeconomy, sector strategies, fiduciary, and institutional risks -- are also expected to be high. These risks can be mitigated by proactive efforts to build capacity, assisting clients technically by sharing information, experience, and on-demand technical assistance. Putting in place a regional project technical steering committee, which could also inform broader processes of regional dialogue and support for cross-border cooperation could facilitate information exchange and the gradual joint governance and development of shared resources.

28. The project spans five countries, though it will not be implemented in all at the initial phase. Djibouti, Ethiopia, Kenya and Somalia are each at a different stage of development. Further, there are significant variations within each country. This could pose serious risks and possible implementation delays. Further risks relate to the challenging operational environment, continued insecurity, and inadequate institutional capacity.

29. Security risks are substantial, and particularly so in Somalia. However, there are areas across each of the countries that continue to be affected by active conflict or have experienced bouts of localized conflict in the past, affecting access to project locations and the security of project staff, making monitoring difficult and on occasion creating the possibility of reputational risk. The project will need to develop clear guidelines for addressing insecurity. To do so, it can build on existing conflict management tools developed in Ethiopia and elsewhere in the region, and adapt those for conflict-sensitive program/project development, implementation and supervision. Fiduciary risks are particularly high in Somalia as are environmental and social risks due to the lack of project implementation experience.

30. Across the HoA, the risks of gender-based violence (GBV) are high. Existing tools and guidance will be used to assess and address GBV risks in each context. Stakeholder risk is medium, but it is worth emphasizing that other development partners and regional organizations are also increasingly supporting borderlands development approaches, so significant impetus already exists for such a project. The project could also build in grievance redressal mechanisms to manage grievances from communities and the private sector.

31. Finally, the impacts of COVID-19 remain uncertain – both in the region, and globally. Given the timeframe planned for project design, however, it is likely that appropriate mitigation measures can be planned to account for these impacts.

Pillar 3: Building Resilience

Building Resilience to Food and Nutrition Security

Building Resilience for Food and Nutrition Security in the Horn of Africa (HoA).

Project/program Description

Persistent droughts and unpredictable rainfall patterns are recurrent features in the arid and semi-arid lands (ASALs) of the Horn of Africa (HOA) region. The larger HoA region covers an area of 5.2 million km², has a population of more than 250 million people and is endowed with a considerable range of natural resources, with a huge potential for a variety of possibilities in wealth and progress. Despite this great potential, however, the HOA countries are struggling to cope with the vagaries of their harsh and worsening ecological circumstances. Over the years the droughts have been increasing in severity and frequency and their impacts are exacerbated by advancing desertification, land degradation, global warming and climate change phenomena. These circumstances have created conditions of chronic vulnerability in the HOA, with persistent food insecurity, widespread economic hardships, conflicts, migration and untold human suffering, affecting the pastoralist and agro-pastoralist communities that inhabit the ASALs.

The strategic priorities of countries in the Horn of Africa region are defined by their greatest single imperative – the urgent need to build resilience to environmental and socio-economic shocks, through investing in sustainable development and optimizing the productivity of available resources. A sustainable solution to food and nutrition insecurity in the HOA requires improved resilience to climate change, long-term financing of the agricultural sector, and trade development and regional integration. By making sustained, longer-term investments in household resilience, the costs of emergency assistance will be significantly reduced, and the cycle of recurrent famines will be broken. The approach focuses on protecting productive assets using ex-ante interventions. The ex-post humanitarian assistance has proved ineffective because help arrives late when livelihoods have been destroyed. This is the most economical intervention option and meets the vital needs of the people of the HOA. The new program for Building Resilience for Food and Nutrition Security in the Horn of Africa (HoA) will build on the progress that has so far been achieved, leverage the lessons learnt, cover more areas, sectors and investments; and consolidate the benefits thus far made in the implementation of IDDRSI. The overall program objective is to contribute to improving living conditions and food and nutrition security in the Horn of Africa. Specific objectives are to (i) increase, on a sustainable and resilient basis, productivity and agro-pastoral production in the HoA, (ii) increase incomes from agro-pastoral value chains, and (iii) build capacity of populations to better adapt to climate change risks. The cost of the overall regional program is estimated at USD 900 million.

The Program focuses on four components: (i) Strengthening the resilience of Pastoral and Agropastoral Production systems to Climate Change, (ii) Supporting Agribusiness Development (iii) Strengthening the Adaptive Capacity to Climate Change and (iv) Coordination and program management. Gender mainstreaming and environmental requirements will be prioritized and integrated across all components. Component 1 includes three sub-components (i) Support for Sustainable Management of Agro-pastoral land, (ii) Development of Climate Resilient Infrastructure and (iii) Promotion of Climate-smart innovations and technologies. Component 2 has three sub components: (i) access to advisory services, financing and markets; (ii) Supporting Development of Entrepreneurship; and (iii) Promoting Domestic Bio-digesters and Solar Energy. And Component 3 comprises 3 sub components which include (i) Development of Climate Services (ii) Building capacity of main stakeholders in the agro-pastoral sectors in the drought prone areas

for mainstreaming and monitoring Climate Change and (iii) Strengthening the Operational Capacity for resilience.

The beneficiaries of the Program are the populations the HoA countries and IGAD Executive Secretariat as well as the IGAD Climate Prediction Center (ICPAC) and the IGAD Center for Pastoral and Livestock Development (ICPALD). The Program approach is to bring an integrated package of interventions to build resilience in selected areas. The first premise is to complete the interventions under the ongoing DRSLP program. The second premise will be to expand it to other areas. The choice of the Program interventions in the additional areas will be based on the following principles: (i) Concentrating interventions in a limited number of vulnerable districts (or equivalents), (ii) Focusing the program on structuring agro-sylvo-pastoral investments, (iii) Promoting community-managed infrastructure, (iv) Priority to cross border clusters (v) Contiguity of intervention districts to facilitate program implementation and supervision v) Developing synergies with ongoing actions in the region and in each country and (vi) Alignment with country policies and strategies. Priority will be given to consolidating the resilience of the intervention communities of past interventions.

Project Justification:

The program is conceptualized in line with the principles of key regional and national initiatives and strategies in the HOA including IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI). The IDDRSI Strategy identifies 7 priority intervention areas that highlight and prioritize the region's food security and other development challenges in relation to the objective of achieving drought resilience; and the IDDRSI strategy has been translated by IGAD Member States into their respective Country Programming Papers (CPPs) and the Regional Programming Paper (RPP), for interventions planned at national and regional levels respectively. Thus, the CPPs and RPP provide the common frameworks for resilience-enhancing policies, investments and projects in IGAD Member States had their origins in the Bank study.

Countries in the Horn of Africa region have, since 2012, been engaged in the implementation of the IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI): a comprehensive and holistic undertaking, which is being executed in a concerted, coordinated manner throughout the IGAD region, aimed at building the resilience of drought-prone communities, to effectively address their challenges and vulnerabilities, including food insecurity, poverty and environmental degradation. The pursuit of the objectives of IDDRSI arose from a collective decision to end drought emergencies, which was made in a Summit in Nairobi on September 2011, by the IGAD Member States, Development Partners, implementing agencies and stakeholders interested in curbing the impact of drought in the IGAD region.

The table below indicates the activities included in the proposed program

Impact	<i>Strengthened resilience of pastoralists to climate change in Horn of Africa</i>		
Outcomes	<i>(i) Resilient agro-pastoral production systems, (ii) diversified livelihood services and increased incomes from agro-pastoral value chains, and (iii) strengthened capacity of populations to better adapt to climate change risks.</i>		
Outputs	<i>Development of local markets for feed, water and medicines; Sustainable pastoral land</i>	<i>Development of local value chains with finance, private sector platforms and capacity</i>	<i>Development & dissemination of climate services; Building capacity for mainstreaming</i>

	<i>management; Development of climate- resilient infrastructure for livestock; Use Of climate-smart technologies to improve livestock production.</i>	<i>building; Establish market demand, sales and logistics; Improve the processing of livestock products (abattoir, feedlots, hygiene).</i>	<i>and monitoring Climate Change; Strengthen the Operational Capacity for operationalization of countries NDCs.</i>
Components	<i>1. Building resilience of agropastoral systems (production)</i>	<i>2. Agropastoral Value Chains Development (Trade)</i>	<i>3. Strengthening the adaptive capacity to Climate Change and</i>

The Program will be a catalyst for the dissemination of innovative approaches in the areas of intervention. Innovations that will be scaled up include (i) Climate Smart Villages, ii) Eco-villages, iii) Agroecology, iv) Spreading climate services to agro-breeders, vi) Semi-intensification of livestock and vii) promotion of alternative off grid energies for agricultural transformation (bio-digesters and Solar PV energy).

The component 3: of the program aims to strengthening the adaptive capacity of agro-pastoral communities in the Greater horn of Africa to Climate Change. A particular focus will be on training, institutional support, and access to knowledge to ensure more effective product control, consideration of environmental issues, and better data/information.

Project readiness, practicability and complementarity to other projects:

On strengthening livestock production and strengthening livestock value chains, several initiatives are ongoing, and new ones are lined, for example, **Drought Resilience and Sustainable Livelihoods Program (DRSLP)**. In harmony and support of the objectives of IDDRSI, the African Development Bank (AfDB), in collaboration with IGAD Secretariat and the IGAD Member States, developed the DRSLP. DRSLP was developed as a 15-year, multi-phased, multi-national investment program, aimed at addressing the negative impact of recurrent droughts in the Horn of Africa Region. IGAD implemented the first phase of DRSLP started in 2013 to support the execution of resilience-enhancing projects in six countries (Djibouti, Eritrea, Ethiopia, Kenya, Somalia and Sudan). The IGAD Member States lauded achievements of the DRSLP projects and are keen to build on the progress made, and lessons learnt in the projects that have so far been implemented. Member states have requested AfDB to the extent the IDDRSI with a commitment to use their allocations of ADF-15 resources, to finance the implementation of drought resilience-enhancing projects in the next phase of DRSLP. AfDB has already engaged all the IGAD countries on the second phase of DRLSP whose activities would support strengthening livestock resilience and value chain.

Although the program identification has been based on the priorities set out in the IDDRSI, the Regional Country programming (RPPS and CPPs) for the drought resilience and sustainability initiative, however, there is a need for a pre-investment (Feasibility) study for the Program by country to confirm the technical, economic and environmental feasibility of the proposed actions. Feasibility studies will focus on components and comprise: i) Technical and economic optimisation studies (including selection of intervention areas, quantification of the expected results and quantification of program costs) ii) Environmental and social impact assessment and licensing and iii) Defining the Program structure, financing, and procurement arrangements. A dedicated team of National Consultants will be recruited to undertake the feasibility studies at the national level. The results of the national studies will be consolidated by a team of regional consultants supporting the IGAD secretariat.

Pillar 4: Strengthening Human Capital

Human Capital Service Delivery Systems and Networks

Strengthening Human Capital Service Delivery Systems and Networks.

The proposed project ideas outlined in this note build on discussions in the HoA Technical Workshop, held in Addis Ababa, October 10-11, 2019 and the virtual technical workshop held in March 2020. The Ministerial in May had asked for the health aspect of Pillar 4 (human capital) to be strengthened in light of the ongoing health and economic crisis. The activities are further refined to reflect the current context of the COVID-19 pandemic and the need to prepare for vaccine procurement and deployment. The total estimated cost of new financing proposed is **US\$735.5 million**. This note focuses on two aspects of the human capital pillar – i.e., disease surveillance, preparedness and response; and regional regulatory systems for pharmaceuticals and medical commodities. The other aspects of the human capital pillar have been discussed in previous workshops and are not included in this Note. The revised Profile for the human capital pillar to be prepared after the technical workshop will include all proposals under the pillar.

Concept Description:

Objective: The overall objective of the project is to use regional approaches to improve the availability, quality, and connectivity/integration of services contributing to human capital development in HoA participating countries. The project has two components:

Component 1: Health security, disease surveillance, preparedness and response (US\$521.5m):

The COVID-19 pandemic has shown that a public health threat in one country can easily cross international borders and pose a significant global damage to health, the economy and livelihoods. The pandemic has emphasized the importance of regional arrangements for disease surveillance, preparedness and emergency response. Regional integrated networks such as the Regional Integrated Surveillance and Laboratory Network (RISLNET) are instrumental for strengthening the existing laboratory and surveillance functions in Eastern Africa and will also play a major role in supporting HoA countries. Strengthening functional laboratories at all levels for all the countries will be an uphill task and thus, cross-border collaborations and specimen referrals between countries becomes essential. The delivery of vaccines, therapeutics and diagnostics into already stretched and weak health systems will require coordinated efforts. In line with the RISLNET model, this component will provide an opportunity to leverage on existing capabilities within countries, facilitate the sharing of best practices in implementation and join efforts in the development of stronger systems for preparedness and response. More than 80 percent of the African Union member states have carried out Joint External Evaluations (JEEs), but action on the resulting recommendations has been very limited. Countries urgently need to develop multi-hazard, multi-sectoral national action plans for health security; fund these plans; and conduct public-health simulation exercises at recommended intervals.

Priority areas for support include : a) training healthcare workers and laboratory technicians to support rapid expansion of testing, b) reinforcing laboratory infrastructure to support expansion of testing without crowding out other services, c) strengthening storage, cold-chain and distribution networks to enable effective and timely deployment of testing, vaccines and therapeutics d) enhancing disease surveillance systems, including digital decision-support tools and integrating into overall health management information systems, e) building digital contact tracing and communication tools to support “test, trace, treat” strategies, f) the development of costed national action plans for health security and g) the procurement, distribution and delivery of medical commodities (vaccines, tests and therapeutics);

and h) developing NPHI development roadmaps, vii) development of costed National Action Plan for Health Security (NAPHS).

Participating countries and proposed activities:

Country	Activity	Cost (US\$mn)
Djibouti	<p>The 2018 JEE identified a number of areas for improvement, including: coordination across sectors; surveillance system to monitor events in human and animal health, and disseminate epidemiological reports at different levels; need for a health human resources strategy; points of entry training and coordination; and risk communication. The National Action Plan for Health and Security (2019-2023), developed in August 2019 and estimated to cost US\$13.5 million, has not been implemented due to lack of financing. The HoA financing would help implement some of the national plan activities, including:</p> <ul style="list-style-type: none"> • <u>Integrated national digital health systems</u> that include early warning systems and rapid response against disease and disasters resulting from climate change; • <u>Establishment of laboratory information system</u> and hospital information systems for all secondary and tertiary hospitals; • <u>Digitization of the medical register</u>, collection of real-time data and establishment of a data warehouse • <u>Establish an effective multi-sectoral coordination mechanism</u> for potential health pandemic and/or emergencies at national and district level, including associated procedures and trainings. • <u>Support the development of Human resources strategy</u> 	21
Ethiopia	<ul style="list-style-type: none"> • Strengthening regional Public Health Emergency Surveillance and Management, including: • 1. National and regional training center (center of excellence for East Africa) to confer: Disease surveillance and outbreak management; EOC hands on training; Adding “soft component” to the existing Antiretroviral Therapy (HIV) ART (4 million USD). • 2. establishing sentinel sites for disease surveillance (malaria, TB, HIV, Other zoonotic diseases) in regions with all component of the facilities (10 Mill USD) • 3. Vaccine production center. EPHI is the only vaccine producing center for Rabies vaccine in Ethiopia for almost 5 decades. The current production facility and technology is outdated and need to change this inclusion of few additions (20 mill USD) • 4. One health: addressing the great threat posed from Zoonotic diseases in Ethiopia and the region. Encompassing intervention from different sectors (including health, agriculture, livestock) (8 mill USD) • 5. Electronic PHEM system. Ensuring electronic data flow from facility to national level to strengthen disease surveillance (8 mill USD) • 6. Traditional medicine development. Building indigenous knowledge through capacitating traditional healers, biodiversity, Research (10 mill USD) • 7. Biological sample referral and transportation system. System building, Networking, special vehicles for sample transportation at national and regional level. (15 MILL USD) • 8. Establishing quarantine and isolation centers including stand by treatment centers for disease outbreaks. These sites could also serve as training 	75

	centers at national and regional level to get hands on training on actual scenarios plus simulation exercise (extend to East Africa).	
Eritrea	<ul style="list-style-type: none"> Respond to gaps identified by the JEE, including: Development and implementation of multi-hazard national public health emergency preparedness and response plan; Strengthening capacity to activate emergency response operations; Establish a port of entry surveillance system, Strengthen laboratory testing and response system to control transmissible and vaccine preventable communicable diseases. 	TBD
Kenya	<p><i>Establishing the National Public Health Institute (NPHI)/ Kenya Centres for Disease Control and Prevention (KCDC)</i></p> <ul style="list-style-type: none"> <u>Infrastructure development</u>- expansion of office space and other administrative functions and amenities; expansion of the EOC and enhancing its effectiveness; establish P2 – P4 labs for active surveillance and collaborative research with KEMRI, as well as a situation room. The KCDC function will be at national and county level requiring regional centres in 13 sites- <i>Amount TBD at the workshop and in view of Kenya’s role as Host Country for the Africa CDC Regional Collaborating Center.</i> <u>Surveillance systems</u> at national, county and along international borders and Points of Entry (POE) <ul style="list-style-type: none"> Strengthen community, event and sentinel surveillance across the country- <i>40 million USD</i> Vector surveillance (to break transmission of diseases from animal or the environment to human beings)- <i>50 million USD</i> <u>Preparedness and response</u>- Contingency fund for health emergency (ensure prompt response and support the incident management structure)-<i>50 million USD</i> <u>Medical counter measures</u> (mobile high-risk treatment units, negative pressure ambulances, negative pressure stretchers, isolation units and other critical facilities at national and the 13 regional sites)- <i>100 million USD</i> <u>Development of inventories of pathogens and biological agents</u> of security concern and critical institutions and install security measures to reduce internal risk- <i>5 million USD</i> <u>Human resource development</u> (rapid response teams at national and county level regular trainings, TTX, Simex and drills)- <i>20 million USD</i> <u>Migrant/IDPs health</u> (to reduce transportation of diseases across borders)- <i>20 million USD</i> <u>Recovery phase (strengthen weak or affected systems post outbreak)</u>- <i>40 million USD</i> <u>Vaccination of high-risk populations</u> in the country to prevent them from COVID-19 (Procure vaccine, cold chain system, advocacy, vaccination logistics)- <i>100 million USD</i> 	350.5+
Somalia	<ul style="list-style-type: none"> <u>Establishment of the National Institute of Health</u>; with priority needs of infrastructure, operations and capacity building. <u>Establish and strengthen Somalia real-time integrated disease surveillance</u> system in line with international best practice and in coordination with the regional systems (digitalization of the system, operational support, trainings) <u>Strengthen the national and sub-national laboratory capacities</u> of the country – including test of chemicals of water, food and other zoonotic diseases <u>Human Resource Development</u> (Field Epidemiologists Training Program) and deployment of rapid response team in each region of the country. 	75

	<ul style="list-style-type: none"> Identify/construct a designated space for the medical assessment, Quarantine and treatment at the points of entries with operational and capacity building support. 	
Total		521.5+

Component 2: Strengthening regional regulatory and training systems for pharmaceuticals, medical commodities, and health professionals (US\$214m):

The COVID-19 pandemic has further underscored the urgent need to remove barriers to widespread distribution and uptake of COVID-19 vaccines, therapeutics and tests across Africa. Component 2 will support developing a harmonized, regulatory process that will fast-track the market authorization of safe and effective COVID-19 vaccines, therapeutics and tests and facilitate joint approval of clinical trials on any COVID-19 related product. While the immediate need for regulatory harmonization is to tackle COVID-19, the areas of proposed support under this component, as outlined below, go beyond that.

Sub-component 2.1. Harmonization of pharmaceutical regulations: AU Member States will need to adopt standardized approaches to regulatory decisions on the market authorization of potential COVID-19 vaccines. This might include harmonized and expedited decisions for the whole continent once a vaccine receives global-level authorization (e.g., WHO emergency use authorization and/or prequalification) or guidance (developed by the appropriate bodies) disseminated to national regulatory authorities of Member States to promote standardization of processes¹⁰⁶. This sub-component will support (a) the operationalization of a governance structure to offer strategic leadership, coordination and management of regulatory activities in the region; (b) the development of governance frameworks and guidance documents, and implementation of harmonized regional medicines regulatory guidelines and standards; (c) technical assistance to identify additional measures at the country level that need to be in place to prevent delays in the rollout of vaccines; (d) operationalization of regional center of excellence for medicines registration to improve transparency; (e) digitization of key regulatory activities to increase regulatory efficiencies and transparency and, (f) the establishment of a platform for communication and information sharing among HoA countries, (g) instituting an effective risk-based pharmacovigilance (PV) and post-market surveillance (PMS) system to ensure prompt detection of safety and quality related issues from vaccines, and take necessary actions taken to prevent harm to patients. The regulatory process will align with global indicators, processes and protocols (e.g., the WHO emergency use authorization and/or prequalification and WHO Global Benchmarking Tool (GBT)¹⁰⁷).

Sub-component 2.2. Strengthening local manufacturing capacity: Domestic human vaccine manufacturing is a long-term goal for the continent, but strategic initiatives should be established immediately to develop a formal roadmap for scaling up vaccine manufacturing capacity, including how COVID-19 vaccine development can be used to accelerate this trajectory. This sub-component will strengthen capacity of local manufacturers to produce essential lifesaving medical products and vaccines for the region. Specifically, this would include technical assistance to (a) map current manufacturing capacity on the continent and the Eastern Africa region; (b) solutions for technology transfer; (c) development of a roadmap for manufacturing scale-up and mechanisms for securing intellectual property

¹⁰⁶ Africa CDC: “COVID-19 Vaccine Development and Access Strategy”, August, 2020.

¹⁰⁷ WHO global benchmarking tool. Available: https://www.who.int/medicines/regulation/benchmarking_tool/en/

and patents right protection; and (d) the establishment of an umbrella pharmaceutical manufacturers associations of the HoA countries.

Altogether these activities will improve the availability of quality and safe medicines and vaccines in the HoA pharmaceutical market.

Sub-component 2.3. Facilitating regional labor market in health. This sub-component will also improve health professional education and facilitate a regional labor market in health. Specifically, this would include: (i) curriculum reforms and modernization of training methods in health professional education; (ii) the use of regional IT platforms for relevant training; (iii) establishing regional system for accreditation of health professional training institutions; (iv) establishing platforms for regional qualification of health professionals; (v) development and harmonization of regulations to allow for a regional labor market in health such as portability of qualification, (vi) the establishment of an umbrella organization of health professional associations of the Horn of Africa.

Participating countries and proposed activities:

Country	Activity	Cost (US\$million)
Djibouti	<ul style="list-style-type: none"> • Coordinated control of the circulation of substandard, falsified and counterfeit medicines across borders (3 million USD) • Support the development and enactment of a national food and drug control act in line with African Union Model Law on Medical Products Regulation and link Djibouti to ongoing pharmaceutical harmonization efforts for purposes of shared enforcement and information sharing. (10 million USD) • Support the development and operationalization of a digital national system for inspection and licensing/accreditation of health facilities including importation of medical products. (3 million USD) • Conduct capacity building on medicine registration, regulatory inspection, PV and PMS for the for regulatory authority (1 million USD) • Establish a digital national risk-based system of medicine registration and implementation of abridged medicine registration procedures. (1 million USD) • Establish a system for pre-registration competency assessment and licensure of Health Professionals (1 million USD) • Building on center of Excellence to support training of health professionals 	19
Ethiopia	<ul style="list-style-type: none"> • Establishment of a Center of Excellence for Food and Drug Control and Regulation (50 million USD) • International Institute of Primary Health Care (IIfPHC) – regional training center (25 million USD) • Establishing platforms to facilitate a regional labor market in HoA countries, including telemedicine (35 million USD) • Establish effective and efficient park management and operation system at Kilinto Pharmaceutical Industry Park (KPIP). (5 million USD) • Establish market intelligence and health community information system to improve access to quality assured health commodities. (10 million USD) • Establish a system for continuous environmental monitoring and impact assessment and mitigation measures to be in place. This includes: 	134

	<p>conducting baseline study and continuous internal and external monitoring; developing and endorsing respective regulations to maintain waste management system at the park. (2 million USD)</p> <ul style="list-style-type: none"> • Develop and Implement human resource development program for the KPIP including establishment of training center for the park (5million USD) • Establish partnership and collaboration platforms among pharmaceutical industries in Ethiopia and East Africa to strengthen utilization of resources and exchange of knowledge and technologies. (2 million USD) 	
Eritrea	<ul style="list-style-type: none"> • Strengthening national system for medicine registration, regulatory inspection, PV and PMS and Djibouti to ongoing pharmaceutical harmonization efforts for purposes of shared enforcement and information sharing. (5 million USD) • Conduct capacity building on medicine registration, regulatory inspection, PV and PMS for the for regulatory authority (1 million USD) • Strengthen pre-registration competency assessment and licensure of Health Professionals. (1 million USD) • Support digitization of the national medicine registration, pharmacovigilance (PV) and post-market surveillance (PMS) (1 million USD) • Establish a digital national risk-based system of medicine registration and implementation of abridged medicine registration procedures. (1 million USD) • Support the development and operationalization of a digital national system for inspection and licensing/accreditation of health facilities including importation of medical products. (1 million USD) 	10
Kenya	N/A	
Somalia	<ul style="list-style-type: none"> • Support the development and operationalization of harmonized regulatory bodies in the line with National Health Professions Act which will be linked to the regional platform of standardization of qualification and training for health professionals and health facilities. (15 million USD) • Support the development and enactment of a national food and drug control act in line with African Union Model Law on Medical Products Regulation and link Somalia to ongoing pharmaceutical harmonization efforts for purposes of shared enforcement and information sharing. (10 million USD) • Support the development and operationalization of a digital national system for inspection and licensing/accreditation of health facilities including importation of medical products. (20 million USD) • Conduct capacity building on medicine registration, inspection, PV and PMS for the for regulatory authority (3 million USD) • Establish a digital national risk-based system of medicine registration and implementation of abridged medicine registration procedures. (1 million USD) • Establish a system for pre-registration and post-registration competency assessment and licensure of Health Professionals (1 million USD) • Support training and deployment of essential health workers including midwives and nurses in areas where there are none at the moment. A phased approach will be adopted for training of key cadres that are essential for delivery of CEmONC services e.g., nurse anesthetists and 	51

	CSection surgeons where in phase one Somali nationals will be trained at Centers of Excellence in the region and deployed in their country. In phase II, selected graduates of phase I will be supported to begin training additional staff in country with support from international training Centers including through the use of ICT solution to deliver lectures and through Simulation. (1 million USD)	
Total		214

Project Justification:

The proposed project and its components are strongly aligned to both national and regional agendas.

AU-Africa CDC: The African Union through its Africa CDC recognizes that addressing the immediate and long-term impact of COVID-19 requires a regional approach. The proposed project is anchored around i) the Africa Joint Continental Strategy for COVID-19 that emerged from the emergency meeting of all 55 AU health ministers that the AU-Africa CDC convened on February 22, 2020, and ii) the COVID-19 Vaccine Strategy for Africa. The former strategy galvanized African leaders’ ownership and commitment in responding to the outbreak from the very beginning and has already demonstrated massive economies of scale in disease prevention and control efforts.

Djibouti: The government developed and articulated the long-term policy statement "Vision 2035" and its action plan, "Strategy for Accelerated Growth and Employment Promotion", SCAPE, and outlined the main objectives and challenges of Djibouti, namely achieving economic diversification, improving the governance and capacity of its public institutions, developing its human capital and addressing the risks of undermining national unity and security. The government has also developed a national social protection strategy (2018-2022) in which it has identified: (i) human capital; ii) access to basic services; and (iii) access to decent housing among its main pillars. In addition, the national health development plan (2018-2022) prioritizes expanding quality care in all regions and reducing regional disparities, strengthening health financing and integrated digital health systems, and the reduction of the prevalence of disease. The implementation of these priorities will require sectoral decisions but also joint national actions to provide combined services to dispersed population in rural areas.

Kenya: The Government of Kenya is a signatory to the International Health Regulations (IHR) (2005), which calls on WHO the Member States to work together to prevent, detect and respond to public health emergencies at the source with minimal interference to international trade and travel. Countries have also agreed to work towards Universal Health Coverage under the Sustainable Development Goals (SDGs), and the African Union Agenda 2063, to build resilient health systems which can adapt and respond to the challenges posed by outbreaks and other health hazards and emergencies of national and international concern. In particular, the Government of Kenya has earmarked the implementation of Universal Health Coverage as one of the key development priorities for the next five years under the Governments ‘Big Four Agenda’. A resilient, stable and sustainable health system through health security is a prerequisite for the realization of this agenda.

Ethiopia: Aligned with national health and poverty reduction strategies, such as the current Health Sector Transformation Plan and the new HSTP II that is currently under development.

Somalia: Aligned with national health and poverty reduction strategies, such as the RMNCAH Strategy (2019-2023)

Eritrea: Aligned with priorities identified as part of the last JEE as well as AU regional briefs on priorities for the Horn of Africa.

The proposed project has potential for transformational impact and regional spillover benefits.

On Component 1: Emerging and re-emerging infectious diseases and other acute public health emergencies pose a serious socio-economic threat to countries worldwide. This is most evident in the current COVID-19 pandemic where a public health threat in one part of the world devastated the health, security and economy of the entire globe. Some of the regional spillover effects in component 1 include: (i) reducing outbreaks and public health emergencies within the region; (ii) improving health security for citizens within the collaborating countries; and (iii) leveraging on existing strengths of countries within the region for better preparedness and response to Public Health Emergencies. As members of the African Union, HoA Initiative countries have ratified resolutions on emergency preparedness and response and cross-border collaboration with their neighbors as well as supported the establishment of the Africa Centre for Disease Prevention and Control (CDC), to bolster regional prevention, detection and response capacity, within the framework of the African Union. The proposed activities will complement existing initiatives of the Africa CDC and its East Africa- Regional Coordinating Center (EA-RCC).

On Component 2: Harmonized pharmaceutical regulatory processes and increased manufacturing capacity of essential medicines will improve the availability of quality and safe medicines and vaccines in the HoA pharmaceutical market. It will also fast-track the market authorization of safe and effective COVID-19 vaccines, therapeutics and tests in the region. The establishment of platforms to facilitate a regional labor market in health and education will improve collaboration across HoA countries to improve the quality and mobility of health and education professionals within the region. Regional spillovers are also evident in strengthening the International Institute of Primary Health Care (IIfPHC) in Ethiopia to become a regional training center for HoA countries (and the broader region). This will improve primary health care (PHC) systems across the region, an essential pillar of resilient health systems and Universal Health Coverage.

Pillar 4: Strengthening Human Capital

Regional Skills Development & Advancement

Horn of Africa Skills Development and Advancement Project (HASAD)

Project/program Description:

The Horn of Africa Skills Advancement and Development project (HASAD) aims to enhance skills development of teachers and youth in the Horn of Africa (HoA) countries (Djibouti, Eritrea, Ethiopia, Kenya, and Somalia). By focusing on teachers' skills development, this project will better prepare future generations with the relevant skills to succeed and better equip the currently large numbers of out-of-school youth with 21st century skills to transform their economies.

The proposed project is expected to upskill teachers at pre-primary, primary and secondary education in the HoA countries. There are about one million teachers in the Horn of Africa (see table 1 below). The project aims to benefit all teachers in the HoA, and about 38 million primary school students. In addition, the changing of teacher behavior and utilization of ICT in teacher improvement and professional development translate into better teaching in classrooms and better student learning. The project will also aim to benefit one million out of school youth and women through targeted short-term training and certification on ICT and English language.

The proposed project will also enhance the skills of out of school youth in these countries. This project will not only create a critical mass of skilled workers that will increase the human capital of the subregion, but it will also shift the paradigm in skills development at scale.

The project is expected to cost \$600 million covering all five countries of the HoA for a three-year period.

The project has 3 components:

Component 1. Enhance teacher's skills through technology and peer support.

Teachers are the most important factor in the learning process. How they are selected, trained, recruited, distributed and supported has a strong impact on learning outcomes. The objective of this component is to enhance the skills of pre-primary, primary and secondary teachers by (i) enabling them to master content knowledge and pedagogy (ii) establishing peer-to-peer support mechanisms; (iii) recognizing and incentivizing good teachers. At the core of these interventions is making TPD training available to all teachers through a flexible approach.

Subcomponent 1.1. Strengthen content knowledge and pedagogy. This subcomponent will strengthen teacher content knowledge and pedagogy through digital delivery models. All teachers will be supported with lesson plans on various subjects and grades via smart devices that can be used offline and online, solar enabled and using satellite technology or similar where there is no internet connectivity. The subcomponent will also include assessments that can be conducted through classroom observation. The World Bank developed a package of assessment tools such as TEACH and COACH which would be implemented across schools in the five countries. The assessments would then be analyzed and used to provide feedback to teachers and to develop training plans to address skills gaps. In addition, the subcomponent will implement an evaluation of teacher performance.

Component 1.2. Build peer-to-peer platform to support teachers. (i) establishing a teachers' platform for learning and development. The platform will allow teachers to help each other on common challenges and share lessons on successful approaches and develop a body of 'home grown' guides and knowledge resources; (ii) Create teacher support groups (TSGs). This will be at a local, national and subregional level

where teachers can regularly share lesson plans, teaching practices and discuss solutions to recurring problems. To provide perspectives and models of successful teaching practices, HoA teachers will also be paired with teachers from developed education systems outside the region in their subject and grade. The paired teachers will visit each other's classrooms to observe, provide feedback and support one another. The project will use the smart devices that are solar powered and satellite connected to allow teachers regardless of their location to connect, exchange and learn.

Component 1.3. Promote teacher role models. The objective of this subcomponent is to fundamentally change negative perceptions of teachers by recognizing the important role they play as social change agents. Under the subcomponent, the project will identify and recognize good teachers in the HoA countries by forming a pool of role models. Each country would select top teachers from each district in the country through a contest. The teachers will form the national team and will work together on national priorities, challenges and solutions. National teams will come together on an initial regional event to exchange and provide input to the design of the platform in order to serve their needs. The event will be facilitated and will include learning sessions on the use of edtech for teachers. This group of top teachers will also be designated as 'Teacher Ambassadors' and will travel to the five countries to meet teachers and discuss with them their challenges and solutions, listening to them and sharing experience. There will be wide media coverage to promote the important role of teachers.

Component 2. Provide technology enabled skills development programs for youth.

The objective of this component is to offer out of school youth in the HoA countries the opportunity to acquire skills that can increase their employability locally, regionally and in the global economy. Through this component, the project will deliver a package of 21st century skills for out of school youth. There are large numbers of young people in the HoA countries who are out of school with limited opportunities to develop skills that can improve their job prospects. Digital intermediate skills such as data coding and data management are areas of high demand globally. While in HoA countries, the market demand for such skills is still limited, creating a digitally skilled labor force can help grow national demand and build supply markets that use digital skills. Moreover, other skills such as English language skills, entrepreneurial and communication skills could further equip out of school youth to explore job opportunities that go beyond their borders.

Component 2.1. Provide short courses on ICT and English Language skills for out of school youth.

The project will partner with local and international edtech companies such as Amazon web service for cloud computing education, Google for digital marketing and search engine optimization and Code.org (U.S.) and Moringa School (Kenya) to deliver a suite of certified short courses. The delivery of short courses will be online and face to face. The project will also provide training and access to conduct online outsourcing jobs using the local and global online freelancing platforms such as [upwork](#). In Kenya, the project could strengthen the government's digital job initiative [Ajira](#).

Component 2.2. Reinforce ICT training centers.

The project will develop partnerships with universities and ICT centers in the HoA countries to establish training spaces for out of school youth. These centers will be reinforced with ICT equipment to allow online access to the short courses.

Project Justification:

Education and training are critical for building peaceful prosperous societies. Young people constitute the largest share of the population in all of the Horn of Africa (HOA) countries (Djibouti, Eritrea, Ethiopia, Kenya and Somalia). With education and training, these young people can become the human capital that will transform their economies and societies and contribute to “building prosperous, integrated and peaceful Horn of Africa”. Human capital development is at the core of the development goals of all countries in the HoA. They are making large investments in education and training to develop a skilled workforce and learned societies. Yet, they all struggle with high levels of learning poverty and large numbers of unskilled youth. The challenges they face in the quality and relevance of education and training are similar.

At the core of the education and training process are teachers. They are the conduit by which young people learn and grow their skills. They shape the trajectory of children’s lifelong learning and economic opportunities. Yet, a large proportion of teachers lack the training and support to develop professionally and teach effectively. As a result, students do not acquire the skills they need to improve their lives and contribute to their economies and societies.

Teachers face similar challenges across the world, in Africa and in the Horn. Mastering content and developing pedagogical practices are important for every teacher regardless of her location. Education strategies in the five HoA countries emphasize the need for qualified teachers to improve the quality of education and endow current and future generations with the relevant skills to build their lives, economies and societies.

A regional project that focuses on skills development has the potential to create a large pool of qualified teachers and youth in the medium and long run. This will have regional spillover benefits as well as potential for greater regional integration. In the long run, qualified teachers will build a qualified workforce. In the short and medium term, equipping out of school youth with a package of skills that include digital, language, and socio-emotional skills will enhance their ability to succeed in the labor market.

The focus on skilling out of school youth is also a key development agenda at the national and regional level. At the same time, HoA countries strive to develop a digitally skilled workforce to transform their economies. The proposed project is aligned with national and regional agenda. In Djibouti for example, the ICT strategy aims to increase the use of ICT to help grow private sector and create a regional hub as well as development of digital contents as well as Djibouti’s web presence.

At the regional level, the project is aligned with African Union’s vision 2063 on sustainable and inclusive economic growth, employment generation for youth and females, youth empowerment, and human capital development. Potential for transformational impact from the proposed project is development of cross-border team of digital entrepreneurs and tech-savvy workforce which can provide solutions for each other’s countries as well as potential emergence of cross-border online business. Furthermore, more informal sector workers begin to use ICT solutions to improve their productivity and make the informal sector digital.

Human network and common learning platform developed through the project will have win-win outcomes for all participating countries. First, more digital jobs will be open for the participants across

the borders to increase the chance of employment. Second, participating private sector and emerging digital entrepreneurs will have ease of access to entering new markets within the countries of Horn of Africa. Third, more cross-border business and service will be developed to facilitate economic activities and trade.

As the number of cross-border business emerges, policy and regulatory framework changes may be required to facilitate online payment system and labor regulation.

Finally, the project aims to attract private sector to bid on their initiative to be scaled up at the regional level. Participating private sector also needs to finance a certain percentage of the cost for the activity.

Project readiness, practicability and complementarity to other projects:

The project will be ready for implementation as there are a number of existing projects in HoA countries, especially in Djibouti, Kenya and Ethiopia that can be leveraged and scaled-up. It will also build on analytical knowledge such as in Somalia.

Pillar 4: Strengthening Human Capital

Regional Identification for Development (ID4D)

Horn of Africa Regional Identification for Development (HoA-ID4D)

Inclusive and trusted civil registration and ID systems are crucial tools for achieving sustainable development. Ensuring that everyone has access to identification is also the explicit objective of Sustainable Development Goal (SDG) Target 16.9—to “provide legal identity for all, including birth registration” by 2030. Furthermore, identification is also a key enabler or contributor to many other areas of development, such as financial and economic inclusion, social protection, healthcare and education for all, gender equality, child protection, agriculture, good governance, and safe and orderly migration

The proposed project is a regional Identification for Development (ID4D) project in the Horn of Africa to accelerate inclusive development and regional integration and to build a key tool to promote Human Capital development. HoA-ID4D will streamline the movement of people, goods, services and capital across borders, lay a foundation for future digital economy integration, and enhance access to and the delivery of basic rights and services, starting with two of the five HoA countries: Ethiopia and Somalia. The project is aligned with the human capital pillar of the HoA Initiative by enabling Governments to better target and deliver social protection, education, healthcare and nutrition interventions through reliable identification and authentication of individuals and better data for evidence-based policy-making. Importantly, providing women and girls with identification will boost their economic, social and political empowerment, and providing girls with proof-of-age will reduce the risks of child marriage.

HoA-ID4D will support the development of foundational ID systems that strengthen the delivery of services and create economic opportunities both within countries and across borders. The project will focus on increasing coverage and aligning the systems with best practices on inclusion, data protection and privacy, vendor- and technology- neutrality, while simultaneously advancing mutual recognition of ID credentials and interoperability between ID systems.

Following the model of World Bank projects focused on strengthening civil registration and ID systems elsewhere in Africa and globally, the project would be structured as:

1. **Strengthening the legal and institutional framework** – investing in comprehensive ID-enabling laws, regulations and institutions.
2. **Establishing or modernizing foundational ID systems** – investing in the development of digital ID and civil registration systems, which can include the systems’ technical architecture and the development and operationalization of, inter alia, inclusive, people-centric registration, ID issuance, identity management, identity verification and authentication, and grievance redress mechanisms as well as concurrent public engagement and awareness-raising initiatives.
3. **Facilitating access to services at national and regional levels** – investing in enhanced interoperability between national and regional systems (including bilateral linkages between Ethiopia and Somalia, and linkages with other digital ID initiatives in Africa), establishing common regulatory and technical frameworks to promote mutual recognition, and in inclusive and reliable authentication infrastructure at the point of service delivery.

The project would help close significant ID coverage gaps in Ethiopia and Somalia - with the potential to provide up to 80 million people with an official proof of identity for the first time, facilitate improved service delivery and easier access to services within and across borders, and strengthen economic and social integration across the Horn. Through the proposed interventions to strengthen legal and

institutional frameworks, alignment of system design, technical infrastructure, and implementation with international good practice, and the development of common frameworks and infrastructure for mutual recognition and interoperability, the Horn of Africa ID4D project would:

- **Improve the accessibility and coverage of foundational ID systems**, particularly among members or vulnerable and marginalized populations.
- **Increase people’s access to services**, including access to finance, mobile communications, and economic opportunities.
- **Improve countries’ ability to effectively administer public services and to deliver G2P payments** in a more accountable and better targeted manner.
- **Promote regional economic and social integration** by making it easier for people to travel, trade, access services, and do business in other countries.

Cost estimate: \$150-\$250 million

Project Justification:

The objectives and proposed interventions of the HoA-ID4D project are closely aligned with regional and national objectives and initiatives currently under way in the Horn of Africa and on the African continent. At the continental-level, the African Union and United Nations Economic Commission for Africa launched a partnership in 2018 to advance a pan-African approach to digital IDs, for which the ID4D Initiative has been providing technical support. At the regional-level, mutual recognition of digital IDs has been discussed and at various levels of realization in ECOWAS, EAC, and SADC. These initiatives recognize that the ability for people to reliably prove identity across borders will enable people to travel, register businesses, obtain qualifications and licenses, trade, open financial accounts, and pay taxes across borders, which will be critical for the implementation and maximizing the developmental impact of the African Continental Free Trade Agreement. Of the five HoA Initiative countries, Kenya has already made strides in advancing the mutual recognition of IDs on the regional level as a member of the EAC through an arrangement with Rwanda and Uganda that recognizes national ID cards as a valid travel document for passport- and visa-free travel. HoA-ID4D would build on this experience to advance mutual recognition of IDs across the Horn of Africa.

Table 1. ID coverage gaps across the five project countries

	Pop. share without national ID (age 15+)	Pop. share without birth registration (<age 5)	Pop. share without foundational ID (age 0+)	People without foundational ID (age 0+)
Djibouti	no data	8.3%	48%	464,000
Eritrea	no data	85.0%	59%	2,071,000
Ethiopia	41%	97.3%	66%	73,865,000
Kenya	9.1%	33.1%	19%	9,869,000
Somalia	no data	97.0%	76%	11,762,000
<i>Source</i>	<i>2017 ID4D-Findex surveys</i>	<i>UNICEF/2019 ID4D Dataset</i>	<i>2019 ID4D Dataset</i>	<i>2019 ID4D Dataset</i>

Project readiness, practicability and complementarity to other projects:

Subject to country interest, the project can be prepared within the next 1-2 years.