Public Disclosure Authorized

Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 12-Oct-2020 | Report No: PIDC28371

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Somalia	P173088		Somali Electricity Sector Recovery Project (P173088)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
AFRICA EAST	Mar 01, 2021	Jun 30, 2021	Energy & Extractives
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Federal Ministry of Finance,Ministry of Finance, Somaliland	Ministry of Energy and Minerals, Somaliland, Federal Ministry of Energy and Water Resources (MoEWR)	

Proposed Development Objective(s)

The Project Development Objective is to increase access to electricity services and to re-establish the electricity supply industry in the Project Areas.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	150.00
Total Financing	150.00
of which IBRD/IDA	150.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	150.00
IDA Grant	150.00

Environmental and Social Risk Classification	Concept Review Decision
High	Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Somalia bears the development burden of two and a half decades of conflict, fragility and state fragmentation following the collapse of the Siad Barre government in January 1991 and ethnic and border disputes in the Horn of Africa**. Concentrated mainly in Southern Somalia, the protracted conflict and fragility led to the collapse of rule of law, institutions, basic public services, and the social contract, resulting in the impoverishment of millions. It also destroyed much of the country's governance structure and economic infrastructure. Somalia's current political structure broadly consists of three self-administered and self-governed regions: Somaliland, Puntland and Southern Somalia.

2. **Recovering from conflict, Somalia is on a trajectory towards poverty reduction and inclusive growth including political stabilization and reconstruction**. In 2012, a provisional constitution was adopted, establishing a new Federal Government and seat of government in the city of Mogadishu. The 2012 Provisional Constitution established a federal political structure, including a parliament, the Federal Government of Somalia (FGS) and the Federal Member States (FMS). Following this political transition, the international community agreed to the Somali Compact with the FGS, based on the New Deal, a guiding set of principles for peacebuilding and state building. The second elections were held in the Federal Republic of Somalia (FRS) in 2017 to establish the current administration. The sustained political, economic and institutional reforms have enabled rebuilding core state capabilities. A series of legal and institutional reforms have been implemented to gradually develop core public sector functionalities.

3. **Somalia has a population of about 15 million, of which roughly 60 percent are nomadic and semi-nomadic pastoralists, and 60 percent live in rural areas**. About 70 percent of the population live below the poverty line (US$1.90 a day in 2011 purchasing power parity terms), and another 10 percent live close to the poverty line. About 6.2 million Somalis face acute food insecurity and 2 million are internally displaced primarily as a result of drought and flooding. Poverty is deep particularly in rural populations and among internally displaced people (IDPs). The country's Gross Domestic Product (GDP) is about 5 billion US dollars and GDP per capita is about US$339. Remittances account for 32 percent of GDP, augmenting household income and contributing to per capita income.

4. **Between 2013 and 2018, the economy grew by an average annual rate of 2.6 percent**. The economy is dominated by livestock exports to Gulf Cooperation Council (GCC), which generated trade worth 26 percent of Somalia's GDP in 2018. The Somali economy relies heavily on overseas development assistance (ODA, US$0.75 billion) and even more on financial remittances from its sizeable Diaspora – US$1.3 billion per year– which accounted for about 29 percent of Somalia's GDP in 2018. The services sector, including telecommunications, transport, money transfer services, domestic trade-related activities are the main growth drivers.

5. **The impact of the COVID-19 pandemic projects a decline in the growth rate to 2.3 percent, from preliminary estimates forecasting a 3.2 percent growth**. New estimates include the combined impact on the economy of fall in consumption, lowered exports, and a potential slowdown in private investments. Other factors which may affect the growth outlook include vulnerability to climate-related shocks and security incidences.

6. **Access to infrastructure, including energy, and social services is particularly limited for those living in rural areas, including nomads and internally displaced settlements, where poverty is deepest and markets, health clinics and schools are scarce**. Women and youth face challenges - women across all population groups have lower literacy and educational attainment. Women's participation rate in the labor market remains low at 37 percent, as compared to 58 percent of men, and is predominantly concentrated in the agriculture sector. An estimated 74 percent of youth are unemployed.

7. **Somalia's population remains highly vulnerable to natural disasters and climatic changes - expected to increase in both frequency and severity - which in turn could strongly impact on-going conflicts**. The livelihoods of roughly half of Somalia's population is reliant on pastoralism or agro-pastoralism and since 2019 for instance, Somalia has experienced devastating floods and drought, as well as locusts, which have left about 5.2 million people in need of assistance and at risk of food insecurity. This crisis is expected to require humanitarian relief, estimated at 16.5 percent of GDP.

8. **Somalia recently adopted its ninth National Development Plan (NDP9) for the period 2020-2024, which outlines the country's priorities for programs to reduce poverty and boost inclusive growth**. NDP9 is a comprehensive and nationally owned strategy for poverty reduction and inclusive growth informed by a detailed analysis of the drivers of poverty, which include political fragility, conflict, insecurity and lawlessness, and climatic shocks. It aims at promoting human development, boost economic recovery, strengthening governance, establishing peace and security and making politics more inclusive. The NDP9 strategic interventions focus on four pillars: (a) Inclusive and Accountable Politics; (b) Improved Security and the Rule of Law; (c) Inclusive Economic Growth (including increased employment); and (d) Improved Social Development. Each pillar integrates cross-cutting policy priorities of: (i) gender, human rights and other kinds of social equity; (ii) resilience of households, communities and the government; (iii) Somalia's environment and its natural resources; (iv) durable solutions to long term displacement; (v) interface between humanitarian and development planning; and (vi) governance.

9. **In March 2020, Somalia qualified for debt relief through Heavily Indebted Poor Countries (HIPC) Initiative, a major milestone that allows resource flows from International Financial Institutions (IFIs)**. Reducing the debt-to-GDP ratio from 113 percent in 2018 to 70 percent in 2020, this milestone reopens access to regular concessional resources from IDA and other IFIs, together with investment of private capital from the International Finance Corporation. Sustaining a positive trajectory will require predictable financing and improved institutions (amongst other factors) as numerous challenges prevail, such as weak government capacity, asymmetric federal structures, security concerns, human capital deficits, and low levels of state legitimacy.

Sectoral and Institutional Context

10. **Biomass accounts for 96 percent of energy sources in the country**. This has caused profound deforestation and environmental degradation across many areas, with an estimate of about 83 percent deforestation between 1985-2015. The prevalence of charcoal and wood for cooking has serious health impacts at the household level. Petroleum products account for about 10 percent of total energy use and are used for transport and electricity generation (about 2 percent of the total), and only in smaller quantities for cooking and lighting. Transportation fuels (gasoline and diesel) account for most of the rest.

11. **The conflict destroyed public electricity infrastructure in Somalia, and electricity services are currently provided by private Electricity Service Providers (ESP)**. Electricity services are provided by a network of isolated diesel-powered mini grids. About 55 ESPs supply more than 90 percent of the power in the country. The total estimated installed capacity in the major load centers is about 155MW (2017) most of which is derived from high-speed diesel fuel powered generators (HSDGs).

12. **Electricity access rates are low**. The electricity access rate is estimated at 49 percent[1] nationally, meaning that around 7 million Somalis lack access to electricity services. A disparity remains between access rates in urban areas (approximately 70 percent), rural areas (19 percent) and nomadic households (1 percent) in addition to high tariffs and connection fees which are barriers to access expansion.

13. **Somali Government sector institutions are in the formative stage with no effective institutional and legal framework resulting in a highly fragmented and inefficient sector**. In the Federal Government of Somalia (FGS), the Ministry of Energy and Water Resources (MoEWR) have the mandate to oversee operations in the electricity sector, whereas in Somaliland, the Ministry of Energy and Minerals (MoEM) has the mandate over the energy sector. Due to the absence of regulations and standards codes of practice, there is no mechanism to vet and enforce electricity services quality, health and safety standards, compounded by the lack of capacity to develop, enforce and monitor the sector by the government institutions.

14. **There is significant untapped renewable energy resource potential as identified by numerous assessments including the recent "Power Sector Master Plan and renewable energy mapping analysis"**. The daily solar radiation (horizontal) is 6 kWh/m²/d, while the annual wind speed is over 8 m/s in most regions. Shortages of technical staff, the small scale of existing generation, and lack of off transmission infrastructure and associated regulations further limit the immediate large-scale development of renewables for power generation in most of Somalia.

15. **Current mini-grids could provide a basis for an integrated distribution system connected to a national grid with the potential for wheeling and cross-network power sales**. MoEWR and MoEM are keen to scale-up electricity access based on a plan that would strengthen efficiency along the electricity supply value chain, including through power losses reduction and development of a robust grid infrastructure. The required generation capacity for increased demand is forecasted to increase in the range of 1,000- 4,600 MW by 2037. Investments in the sub-transmission network in the major load centers are also required to strengthen the current distribution networks most of which consists of 11 kV, 15 kV and 33 kV medium voltage (MV) lines and 415/240V low voltage (LV). An estimated US$ 3 billion would be needed throughout the supply chain in the next two decades.

16. **Electricity Acts and Regulations are being prepared with the objective to contribute to a comprehensive framework of the sector**. The MoEWR is drafting an Electricity Bill which is expected to be enacted by end of 2020, whereas Somaliland adopted an Energy Policy in November 2010 as well as an Electricity Act, which is pending approval by Parliament. The electricity sector institutional and legal framework needs to be designed, implemented, and provided with adequate staffing and capacity. The Ministers responsible for energy are mandated to issue operating licenses to the ESPs, even though there are no licensing guidelines or any legal basis that can be used once licenses are granted. Without legal and regulatory requirement, ESPs are not subject to regulation, codes and standards. The ad hoc nature of private energy services has led to a highly fragmented private electricity sector throughout the country that is inefficient and significantly expensive given the lack of economies of scale.

[1] The access baseline is preliminary, more accurate results will be provided by the WB Funded Multi-Tier Framework by spring 2021.

17. **The proposed MPA will focus on reconstructing and expanding Somalia's electricity sector infrastructure and developing the institutional and legal framework and capacity needed to foster private sector investments within a long-term horizon**. The sequenced approach is needed to establish the "building blocks" of a national, integrated, power sector infrastructure and institutions. The MPA approach is needed to foster investments to rebuild and scale-up efficient and reliable infrastructures, and in line with the World Bank Group Strategy for Fragility, Conflict, and Violence (FCV) 2020-2025.

18. **Underpinned by a nation-wide geospatial plan, the proposed MPA puts forth complementary supply solutions of grid, mini-grid and standalone solutions to enhance access rates especially in rural and nomadic areas**. While mini-grids could provide a basis for the interconnection of a country-wide distribution system; a combination of high capital costs to develop new mini-grids and rural consumers' limited ability to pay for electricity services undermines the business case for such an approach. There is already demonstrated demand and need for off-grid solar products, and a variety of companies have demonstrated strong capacity to reach off-grid consumers.

19. **The proposed MPA will strengthen the private sector (ESPs) in distribution network operations management, a key aspect to the long-term sector financial sustainability**. The proposed program will support integration of distribution network operations in addition to providing utility business development support to the ESPs. As the merged distribution networks improve their operations, this would enable ESPs to attract increased commercial financing in addition to creating an enabling environment for private sector led investments in grid scale generation as there would be credible downstream off-takers. Further, the proposed Institutional and regulatory enhancement will support to re-establish transparency, trust, effectiveness, and legitimacy in the government institutions to provide an enabling operating framework for the private sector.

20. **The proposed MPA establishes the blueprint for other financiers to collaborate on Somalia's energy sector recovery**. Major development partners active in the energy sector include Africa Development Bank (AfDB), Department for International Development (UK) (DFID), United States Agency for International Development (USAID), Swedish International Development Agency (SIDA), Kreditanstalt fur Wiederaufbau (KfW), Norway and United Nations Development Program (UNDP).

21. **Finally, the proposed MPA is a COVID 19 economic recovery response**. Over the past few months, the COVID-19 pandemic has caused an unprecedented global economic and social crisis, significantly affecting all aspects of life. The proposed project will also address the growing need to fight contagious diseases such as COVID by availing reliable electricity supply to health institutions to reduce the cost of operations in addition to the specific targeting to water supply systems. IFC implemented a rapid survey among electricity service providers (ESP) to better understand the impact that the COVID 19 pandemic on Somali electricity operations. Investments to respond to post COVID 19 socio-economic recovery will be identified and prioritized during project preparation.

Relationship to CPF

22. **The proposed MPA contributes to the World Bank Group (WBG) twin goals of eliminating extreme poverty and boosting shared prosperity**. The program is aligned with the Country Partnership Framework for the Federal Republic of Somalia for the Period FY19 – 22, which explicitly identifies energy access as a catalyst for unlocking Somalia's growth potential. The activities under the proposed program focus on increased access to electricity services.

23. **The proposed MPA contributes to UN Sustainable Development Goal (SDG) 7** by providing access to clean, modern, sustainable energy services critical for improving the health and livelihoods of people. The project will help Somalia's move to greener trajectory through utilization of renewable energy, contributing to the reduction of Green House Gases (GHG) and help achieve Intended Nationally Determined Contributions (NDCs).

24. **The proposed MPA aims to support the Federal Government of Somalia (FGS) National Development Plan (NDP9/2020-2024), and Somaliland NDP II 2017-2021 that have a strong focus on tackling poverty and building resilience.** The NPD9 outlines 5 strategies for the energy sector for the next five years: (a) Developing renewable and non-renewable energy sources to increase supply; (b) Establishing a national regulatory authority for energy market governance; (c) Strengthening the administrative and technical capacity of the federal and states ministries of energy; and (d) Providing access to energy to all populations, including vulnerable groups - particularly women, the youth and displaced persons. The Somaliland NDP II 2017-2021 sets out the following goals: (a) to raise access to electricity to at least 85 percent and 25 percent of Somaliland urban and rural households respectively; (b) 10 percent of national energy generation to be provided by renewable energy sources; (c) a 30 percent reduction in the average tariff; (d) increased investment in renewable energy technology, infrastructure and research; (e) a reduction of system losses for energy service providers; and (f) additional generation of 30 MW.

25. **The proposed MPA supports the World Bank Group Strategy for Fragility, Conflict, and Violence (FCV) 2020-2025, which pivots on the WBG's commitment to long-term engagement in contexts of fragility**. The strategy centers on the WBG's role as a development actor committed to sustained and long-term engagement to sector-wide regulatory and policy reform, and more focus on client capacity building and proactive implementation support.

26. **The proposed MPA contributes to the goals of the WB Regional Energy Engagement Strategy for Eastern Africa for FY20-26.** The Strategy focuses on the development of soft and hard infrastructure for regional power trade under the East Africa Power Pool (EAPP); with a strategic outlook towards trading with the South- the South African Power Pool (SAPP) and the North- the Gulf Cooperation Council (GCC) and the Pan-Arab Electricity Market (PAEM) countries. The proposed program also supports the Horn of Africa Initiative (HoAI), which aims at re-building the physical infrastructure within the context of regional power trade initiatives under the EAPP to provide the region with access to adequate, diverse, and affordable electricity supply. The FGS is an active member of the HOAI and has expressed interest to formally join EAPP.

C. Proposed Development Objective(s)

27. The Project Development Objective is to increase access to electricity services and to re-establish the electricity supply industry in the Project Areas.

Key Results (From PCN)

The Proposed Project Development indicators are:

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i. People provided with new or improved electricity service (number), of which women (Percentage) and public institutions (number) (Corporate Indicator)
ii. Increase in Energy Supply (Percentage)

iii. Electricity Sector Institutions established (Yes)
iv. Distribution network and commercial losses reduced (Percentage)
v. Annual greenhouse gases emissions avoided (tCO2) (number)

D. Concept Description

29. The proposed project aims to support the reestablishment of the Somalia Electricity Supply Industry (ESI) for improved delivery of electricity services to enhance job creation and improved public services delivery. Currently, sector operations are owned, managed and operated by the private sector (ESPs) whereas the government institutions are in the formative stage with the policy, legal and regulatory frameworks at various stages of development. The proposed project will help address some of the key sector challenges that contributes to lack of efficient, reliable and low cost electricity services, namely: (i) absence of an integrated national grid and duplication of distribution networks by the ESPs; (ii) poor operations practices leading to low generation efficiency and high distribution network technical and commercial losses; and (iii) lack of an appropriate institutional and regulatory enabling environment.

Proposed Project Components.

30. **The total cost of the proposed project is estimated at US$ 150 million**. The project will consist of the following four main components:

31. **Component 1 – Distribution network reconstruction, reinforcement and operations efficiency in the major load centers.** Sub-transmission and distribution network reconstruction and reinforcement in the major load centers through integration of ESPs' distribution networks and existing generation to optimize distribution network operations and scale-up of generation capacity. These activities will support the electricity service providers to: (a) decrease in the cost of operations; and (b) improve electricity supply and reliability. The proposed distribution and sub-transmission investments will enable the establishment of integrated distribution offtake infrastructure to enable scale-up of generation and interconnection with neighboring countries.

32. **Component 2 – Renewable energy generation optimization.** Hybridization and optimization of existing generation for increased electricity supply through installation of Battery Energy Storage Systems (BESS) and solar PV systems at existing diesel-based generation stations. Such hybrid opportunities offer significant improvements in fuel efficiency, fuel consumption, extended generator lifespans, reducing GHG emissions and combustion pollution, along with less reliance on fuel imports. Further to the proposed efficiency enhancements under component 1, this subcomponent will support to increase the level of renewable energy penetration.

33. **Component 3 – Electricity services for improved public services delivery (Health, Education and Water Supply Institutions)**. This component will support activities to provide electricity to existing public facilities in rural and peri-urban areas, underpinned by the nation-wide geospatial plan. Key activities under this component are proposed to include new hybrid mini-grids and standalone solar PV systems augmented by BESS targeting public institutions as the anchor loads and where viable associated distribution network to connect other loads such as SMEs and households. Besides playing a key role in enablement of community co-benefits, facilities that have access to electricity may be better positioned to attract and retain skilled workers, especially in rural areas. Further, this will equip public service institutions to better respond to emergencies, such as COVID-19.

34. **Component 4** - **Sector Capacity Enhancement and Project Implementation Capacity Support**. Proposed activities include: (a) strengthening of sector governance and regulation to foster autonomy, accountability and transparency; (b)

increasing sector operational efficiency; (c) undertaking of sector integrated planning analytics, including a Sector Least Cost Development Plan - covering generation, transmission and distribution - and an Electricity Access Plan, particularly for rural areas with related Investment Prospectus – both underpinned by a geospatial least-cost analysis. The technically sound sector plans will enable a sector-wide development framework to enhance crowding-in of funding, both private and public; and (d) project implementation support. Activities will also support to day-to-day sector undertakings with Business Support Services (BSSF) to re-establish the Somali electricity sector - providing hands-on policy, oversight, operations and management trainings and capacity building of sector staff.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

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