



Country Case Studies of the Impact of COVID-19 in Ethiopia, Kenya, Somalia, and Sudan Vol. II

Horn Economic and Social Policy Institute (HESPI): Pillar 2 An assessment of the health and economic impact on the HoA countries¹

Disclaimer: This document benefited from comments and feedback by a discussant and participants of the virtual validation workshop. The opinions are those of the author and do not necessarily represent the views of the AUHIP or the RWG.

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Acronyms

AIDS	: Acquired Immunodeficiency Syndrome
ARDS	: Acute Respiratory Distress Syndrome
ARRA	: Administration Refugee and Returnee Affairs
AfDB	: African Development Bank
AERC	: African Economic Research Consortium
APRM	: African Peer Review Mechanism
AU	: African Union
BoP	: Balance of Payments
CBK	: Central Bank of Kenya
CBS	: Central Bank of Somalia
CBS	: Central Bureau of Statistics
CBOS	: Central Bank of Sudan
CCRT	: Catastrophe Containment Relief Trust
CDC	: Centers for Disease Control
CERF	: COVID Emergency Response Fund
CoG	: Council of Governors
COVID 19	: Corona Virus Disease 19
CoR	: Commissioner of Refugees
CPR	: Country Preparedness and Response
CRR	: Cash Reserve Ratio?
DPT	: Diphtheria Pertussis Tetanus
DSA	: Debt Sustainability Analysis
EDHS	: Ethiopian Demographic and Health Survey
EPHI	: Ethiopian Public Health Institutions
EOC	: Emergency Operation Center
EPSA	: Ethiopian Pharmaceutical Supply Agency
EU	: European Union
FAO	: Food and Agriculture Organization (of UN)
FDI	: Foreign Direct Investment
FDSE	: Free Day Secondary Education
FGS	: Federal Government of Somalia
FMoH	: Federal Ministry of Health –Sudan
FPE	: Free Primary Education
GTP	: Growth and Transformation Plan
HELB	: Higher Education Loans Board
HESPI	: Horn Economic and Social Policy Institute
HSDP	: Health Sector Development Plan
HSTP	: Health Sector Transformation Plan
HIV	: Human Immunodeficiency Virus
HoA	: Horn of Africa
HRH	: Human Resources for Health
IASC	: Inter-Agency Standing Committee

ICU	: Intensive Care Unit
IDP	: Internally displaced people
IFPRI	: International Food Policy Research Institute
IGAD	: Intergovernmental Authority Development
ILO	: International Labor Organization
IMF	: International Monetary Fund
IOM	: International Organization for Migration
IPC	: Infection Prevention and Control
KEPSA	: Kenya Private Sector Association/Alliance?
KNBS	: Kenya National Bureau of Statistics
KRA	: Kenya Revenue Authority
MDGs	: Millennium Development College
MERS	: Middle East Respiratory Syndrome
MHPSS	: Mental Health and Psychosocial Support
MoFEP	: Ministry of Finance and Economic Planning
MPC	: Monetary Policy Committee
MSMEs	: Micro, Small and Medium Enterprises
NARC	: National Rainfall Coalition
NDRM	: National Disaster Risk Management
NEC	: National Economic Council
NEPAD	: New Partnership for African Development
NERC	: National Emergency Response Committee
NGOs	: Non-governmental organizations
NSE	: Nairobi Securities Exchange
OCU	: Oral Cholera Vaccination
PDRC	: Puntland Development & Research Center
PHEM	: Public Health Emergency Management
PHEOC	: Public Health Emergency Operation Center
PPE	: Personal Protective Equipment
PTSD	: Posttraumatic stress disorder
RCCE	: Communication and Community Engagement
RHB	: Regional Health Bureau
SARS	: Severe Acute Respiratory Syndrome
SDGs	: Sustainable Development Goals
SHDS	: Somalia Health and Demographic Survey
SLFS	: Sudan Labor Force Survey
UNAMID	: United Nations–African Union Mission in Darfur
UNDP	: United Nations Development Program
UNHCR	: The United Nations High Commissioner for Refugees
UNICEF	: United Nations Children's Fund
UNOCH	: United Nations Office for the Coordination of Humanitarian Affairs
USAID	: United States Agency for International Development
US CDC	: United States Centre for Disease Control
WB	: World Bank
WHO	: World Health Organization

Case Study I

Health Impact Assessment of COVID 19 in Ethiopia

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Executive summary

This review has addressed the impacts of COVID-19 on the Ethiopian health system with measures being taken based on the 8 pillars adopted from the WHO preparedness strategy with additional cross cutting issues. Data sources such as WHO, CDC, ECDC, UNICEF, MoH/EPHI website, PubMed, humanitarian partner website and press releases were searched for relevant documents and articles then thematic analysis has been done.

The Country health strategy- HSTP is emphasizing on strengthening of primary health care unit which comprise Health posts, health centers and primary hospitals with limited resources and capacity that could not accommodate the current types of emergency situation. Therefore, the government needs to see the strategy and work on the improvement of secondary and tertiary level of health care settings in order to be ready for any kind of emergency situations for the future. Though the total health expenditure is growing steadily, it is still below the WHO minimum recommendation and the African Union declaration so the government give emphasis on the improvement of total health expenditure. The involvement of IGAD in health program is important because working together creates an opportunity to share the burden and responsibilities among the member countries.

As of June 21, 2020, Globally 216 countries/ territories are affected by the pandemic with the total confirmed case of 8, 732, 984 and with a total death of 468, 761. In Africa, the number of countries/territories affected by the pandemic are 56 with the total case of 298, 832 and total death of 7917. During the same period the total confirmed cases in Ethiopia reached 4352 with total death of 74.

Government has taken different policy measures after 3 days the first case was reported; such as schools closing, banned all public gatherings and sporting activities, and encouraged physical distancing. Travelers from abroad were put into a 14-day mandatory quarantine, hotel bars were closed until further notice, and travel through land borders was prohibited. Several regional governments imposed restrictions on public transportation and other vehicle movement between cities and rural areas. The federal level State of Emergency was declared on 8 April, 2020.

Multi-faceted impacts were observed in the country's health system. The poor health system with limited capacity in terms of trained health work force, medical supplies, diagnostic facilities, and intensive care units stood out to be key challenges to control the pandemic, to the extent that the system has been overwhelmed by the increasing number of COVID-19 cases leading to disruption of essential health service for the non COVID-19 health condition. Currently testing and case detection is being done for the high risk and suspected symptomatic groups while the virus transmission from the asymptomatic groups is reported that exacerbate the spreading due to their unseen community transmission. The failure to adhere to the recommended public health preventive measures might be due to the poor access to the appropriate information and the lack of facilities required. The occurrence of concurrent outbreaks such as cholera, measles and Yellow fever in some areas of the countries affected the pandemic control by competing priorities. The insufficient medical supply including PPE become a reason for the exposure of health work force to the virus for which as of June 07, 2020 around 97 health institution workers were infected by the virus. The poor access to appropriate information especially of the vulnerable groups also

inhibit the community engagement in pandemic control. The psychosocial consequence of COVID-19 on those with limited access to the service created an obstacle to the controlling of the pandemic.

As the case detection and management is resource intensive, intensifying the preventive measures is the greatest and affordable strategy. On the other hand, community health education focusing on the causes, transmission, prevention and consequences of the pandemic creates awareness that contribute to the behavioral change to adhere with the infection prevention and control strategies. The increase in capacity of the case detection, testing and case management should be continued and revision of the response strategies should be considered as the situation changed based on the availability of resources. Maintaining the essential health services strategies adopted from WHO should be implemented to ensure the availability of services for the non COVID-19 health related condition. The psychosocial impact of COVID-19 should be addressed properly by integrating the service in the care and isolation/quarantine center for the patient/person and health care provider with establishment of remote access of the service by telephone. Parallel strategy for the specific concurrent outbreaks should be designed. The involvement of government should continue in resource mobilization and identifying potential donors to ensuring sustainable logistic and supply management. Farmers should be supported to ensure uninterrupted supplies and food security. With the support of partners, research should be encouraged about COVID-19 pandemic including in participation of discovery of vaccine and treatment for COVID-19. In the preparedness plan measures to improve the resilience and preparedness of healthcare systems after the COVID -19 should be incorporated.

The major lesson learnt from this pandemic is, it gives an opportunity to the country to study, upgrade and renovated its health system and work on the improvement of the health of the community for the future.

1. Background

According to the supreme global health institution, the World Health Organization (WHO), the Coronavirus disease-19 (COVID-19) is termed as an infectious disease caused by a newly discovered coronavirus (WHO, 2020). The Organization in one of its 2019 assessment reports indicated that the Severe Acute Respiratory Syndrome Corona Virus-2 (SARS-CoV-2), is responsible for COVID-19, may cause various symptoms such as pneumonia, fever, breathing difficulty, and lung infection (WHO, 2019). On January 7, 2020, the virus was identified as a new strain of coronavirus and temporarily named 2019-nCoV, making it the third notable coronavirus outbreak in recent times following the Severe Acute Respiratory Syndrome (SARS) in 2003 and Middle East Respiratory Syndrome (MERS) in 2012 (WHO (8²), 2019).

The virus was found to be affecting the lower respiratory tract of patients with pneumonia first in Wuhan region, China that has been seen on December, 2019 (WHO, 2010). The first human cases of COVID-19, caused by SARS-CoV-2, were reported from this region and have been identified as

² Numbers in parenthesis for some citations are included to identify repeated publications in the same year from focal Global and National Institutions for Covid 19, such as WHO, EPHI, MoH, UNICEF, etc. They are also indicated and aligned in the reference list in section 15

the cause of an outbreak of respiratory illness in Wuhan, Hubei Province, China (WHO, 2020 (1)). This epidemic has spread to many countries within a short period of time and on January 31, 2020, the WHO has declared it as a Public Health Emergency of International Concern following the recommendation MADE BY ITS emergency Committee. On March 11, 2020 WHO officially announced that COVID-19 can be characterized as a pandemic owing to the rapid increase in the number of cases and growing number of countries affected (WHO, 2020 (10)). Ever since, the pandemic has been threatening the lives and livelihoods of people in nearly every country of the world and has become an unprecedented global challenge with continued increment of confirmed cases and deaths (Ramalingam, et al., 2020).

The virus primarily spreads from person to person when people are in close contact (within two meters or six feet) via small droplets produced during coughing, sneezing, or talking and by contact route of infected person or contaminated surfaces. The incubation period for COVID-19, which is the time between exposure to the virus (becoming infected) and symptom onset, is on average 5-6 days. However, it can be up to 14 days in some cases. The transmission can occur in three case scenarios that are from a symptomatic person, during the incubation period (pre-symptomatic) and from people who do not show symptoms. (Asymptomatic) (ECDPD, 2020; WHO, 2020 (9)).

Most infected individuals with the COVID-19 virus experience mild to moderate respiratory illness with common clinical symptoms involving fever, nonproductive cough, myalgia, shortness of breath, as well as normal or decreased leukocyte counts and recover without requiring special treatment or hospitalization but there might be also severe cases of infection causing pneumonia, severe acute respiratory syndrome, kidney failure, and leads to death. Older people and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness who need critical care service (WHO, 2020 (2)).

As response measure to the pandemic, an online comprehensive package of technical guidance has been issued by WHO with advice to all countries on how to detect, test and manage potential cases, with publications like infection and prevention control guidance to protect health workers recommending droplet and contact precautions when caring for patients, and airborne precautions for aerosol generating procedures conducted by health workers. The guideline has been shared with WHO's regional emergency directors and to country WHO representatives.

In order to protect the countries with weaker health system, WHO released the Strategic Preparedness and Response Plan. It also releases daily situation reports and holds press conferences for updating the media about the pandemic and has also launched multilingual e-learning courses about various aspects of COVID-19, including for preparedness and response. WHO has shipped personal protective equipment (PPE) and diagnostic test kits to different countries. Hand washing campaign launched by WHO urging everyone to wash their hands regularly and in order to counter misinformation WHO has created resource to the public and also presence in different social media. WHO continues to work with Member States and international health partners to gain a better understanding of the novel coronavirus and the disease in humans and will continue to provide updated information. As the situation evolves,

the World Health Organization will reassess its guidance and revise it accordingly (WHO, 2020 (4)).

Ethiopia is one of the affected countries for which the first confirmed COVID-19 case was identified on March 13, 2020 and the number of newly confirmed cases is increasing gradually, but in an increasing rate. The country is home for one of the busiest international airline hubs in Africa. And due to the direct links or high volume travel to china, WHO considered Ethiopia as a priority for the COVID 19 preparedness among the 13 African countries with the busiest international airline hubs. With the support of WHO and other partners, Ethiopia has reinforced preparedness to contain the potential outbreaks of COVID 19. The Ministry of Health (MoH) strengthened up the surveillance, diagnosis, infection prevention & control, epidemic response coordination and public health education to rapidly detect cases and control wide spread infections. WHO has provided technical support on different response activities of the country including development of protocol and guides, logistic supplies of PPEs, laboratory testing kits, infection prevention materials and mobile phones for the contact tracing activities. WHO is leading the coordination activities with different stakeholders and partners (MoH, 2020 (5); EPHI, 2020 (2)).

According to UNICEF, the increase in the spread of COVID-19 pandemic is affecting the livelihoods in Ethiopia in different ways; the following are mostly related to health condition (UNICEF, 2020 (2)).

- Mobilization of health care providers and health facilities for the COVID-19 pandemic is leading to declining of health service for the non COVID-19 related needs which affects the affordability and accessibility of health service leading to limited access to health service, lack of motivation or fear of infection.
- As it is recommended, restriction of movements and physical distancing are the most important measures for infection prevention and control of the pandemic. When these measures are strengthened, lack of income will be prominent especially for those engaged in informal operations where women are more involved which lead to deeper level of poverty especially for the poorer. This will have impact on service industries and self-employment which resulted in limited access to market which will drive poverty and exacerbate food insecurity increasing the risk of development of malnutrition especially for children and women.

The main aim of this assessment is to rapidly assess the COVID 19 situation in Ethiopia, its impact on the health systems and draw policy recommendation to strengthen the existing health system for the enhancement of preparedness and response to COVID-19 and maintain the essential health care service by improving quality, availability and accessibility to the public. More specifically, this rapid study has the following main and specific objectives.

2. Objectives of the assessment

General Objective

The overall objective of this study was to assess the impact of COVID 19 on Ethiopian health system, preparedness to response, mental health service and measures being taken to draw policy and strategy recommendations for immediate consumption.

Specific Objectives:

- To assess the impact of COVID-19 on the existing health systems of Ethiopia
- To assess the impact of COVID-19 on the mental/Psychological health services
- To explore the impact of COVID-19 on preparedness and response mechanisms of the country
- To draw policy recommendation and adoptable strategies for the health system of Ethiopia

3. Methodology

Initially the assessment was planned to deploy primary and secondary data collection methods. However, due to the difficulty of getting permission from EPHI to do key informant interview, the data collection depended on desk review of relevant documents. The information sources included WHO, CDC, ECDC, UNICEF, MoH/EPHI websites, PubMed, humanitarian partner website and press releases.

COVID 19 country situation reports (global and national), guidelines (WHO & National), Media briefings from Ethiopian public health institute and the MoH, policy documents, national survey documents, humanitarian partner reports, assessment reports on COVID-19 pandemic have been thoroughly assessed. Besides, the UN agency documents and research articles from the PubMed are reviewed and facts, figures and recommendations have been charted. The data analysis was done in thematic quarters based on the 8 pillars of WHO strategy for preparedness and response, including important cross cutting issues.

4. Results and discussion

Epidemiological situation of the COVID-19 Pandemic

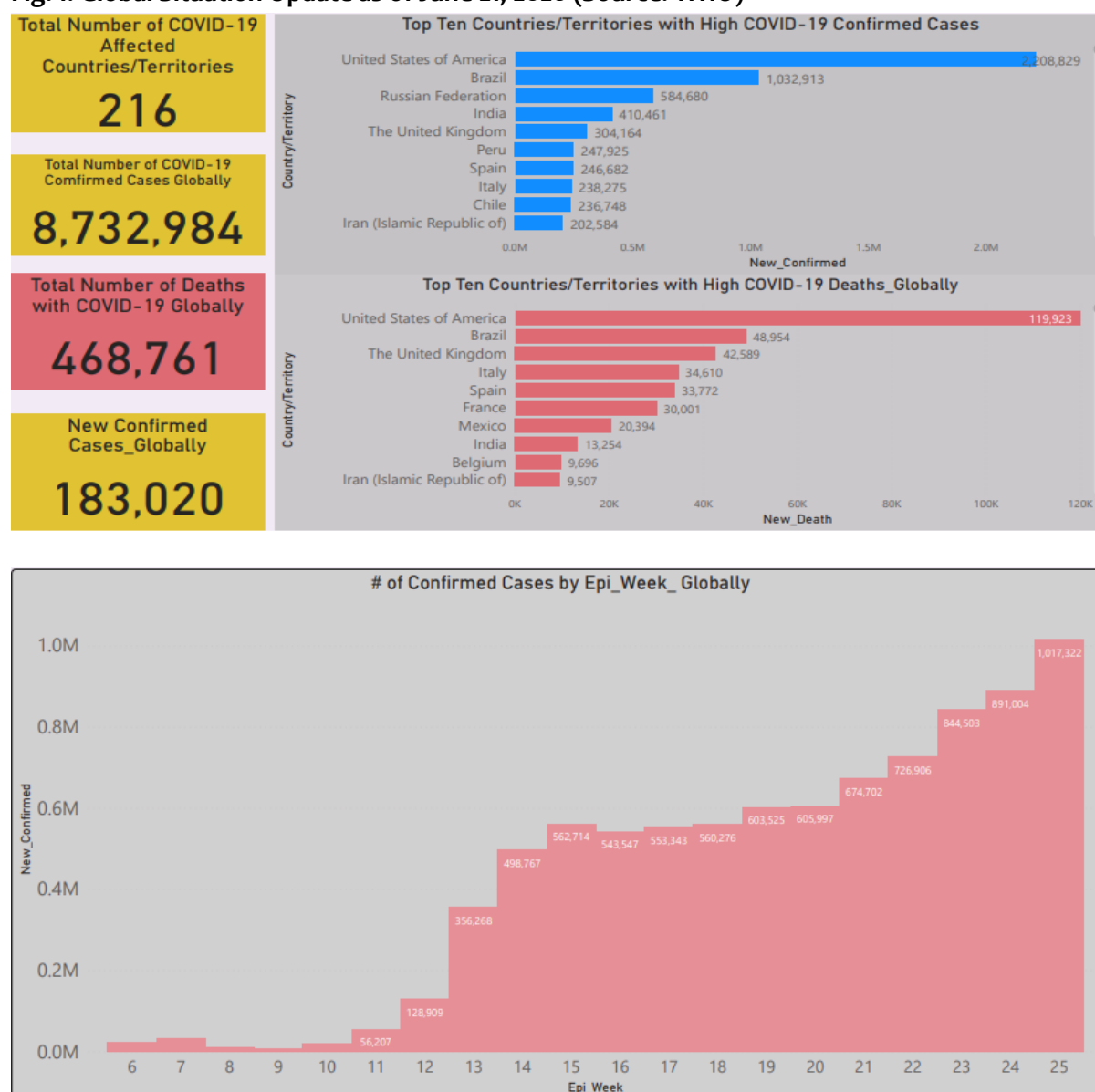
4.1.1 Global Situation

Between December 2019 to June 21, 2020, COVID-19 pandemic affected 216 countries/territories causing 8,732,984 cases and 468,761 deaths (CFR=5.37%) globally. Of the total cases and deaths reported since the beginning of the outbreak, 1,029,618 (11.79%) cases and 34,087 (7.23%) deaths were reported during the WHO Epi-Week-25. The United States of America (USA) reported the

highest number of cases (2,208,829) and deaths (119,923) with CFR of 5.43% followed by Brazil (1,032,913 cases and 48,954 deaths with a CFR of 4.74%) (EPHI, 2020 (8)).

Among the confirmed cases the highest proportion of death occurred in the United Kingdom with CFR of 14.02%. In Africa, 56 countries/territories have reported COVID-19 cases. As of June 21, 2020, a total of 298,832 cases and 7,917 deaths were reported across the continent (CFR=2.65%). During the WHO-Epi-Week-25, a total of 63,433 (21.23%) cases and 1,583 (19.99%) deaths were reported across the continent (EPHI, 2020 (8)). The highest numbers of cases were reported from South Africa, 92,681 (31.01%) cases followed by Egypt, 53,758 (17.99%) cases, and Nigeria, 19,808 (6.63%) (EPHI, 2020 (8)). The increase in the global and Africa cases will need strengthening of global and continental solidarity. See the WHO summary dashboard below:

Fig. 1: Global Situation Update as of June 21, 2020 (Source: WHO)



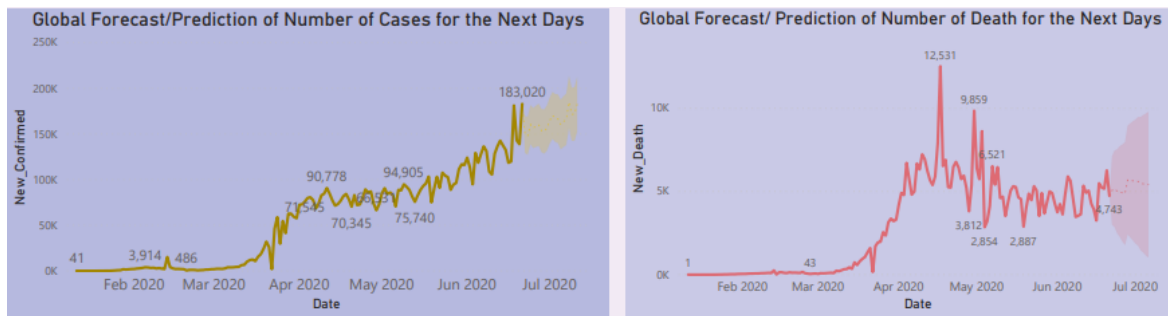
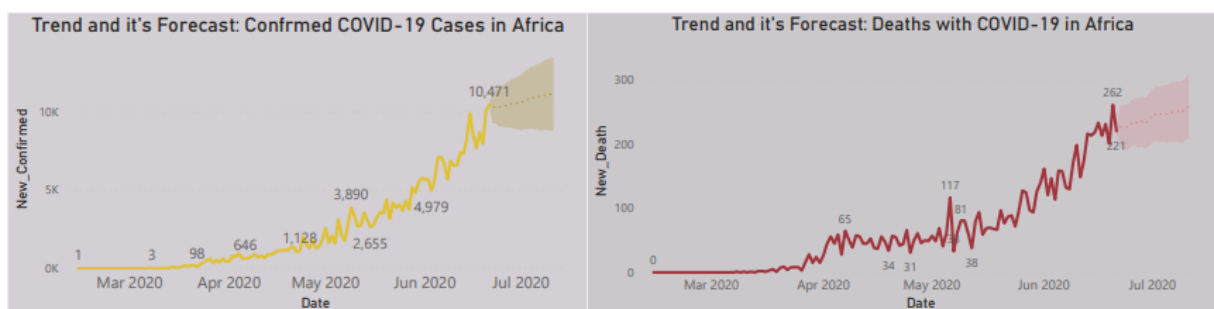
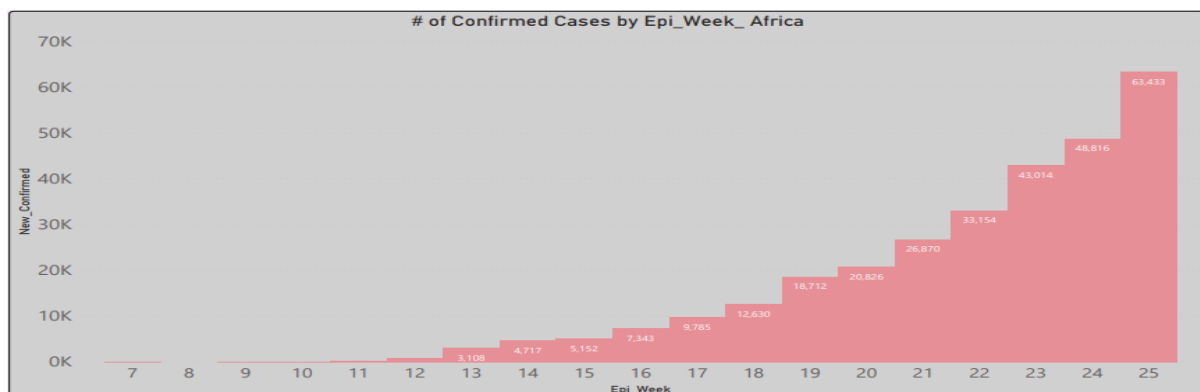
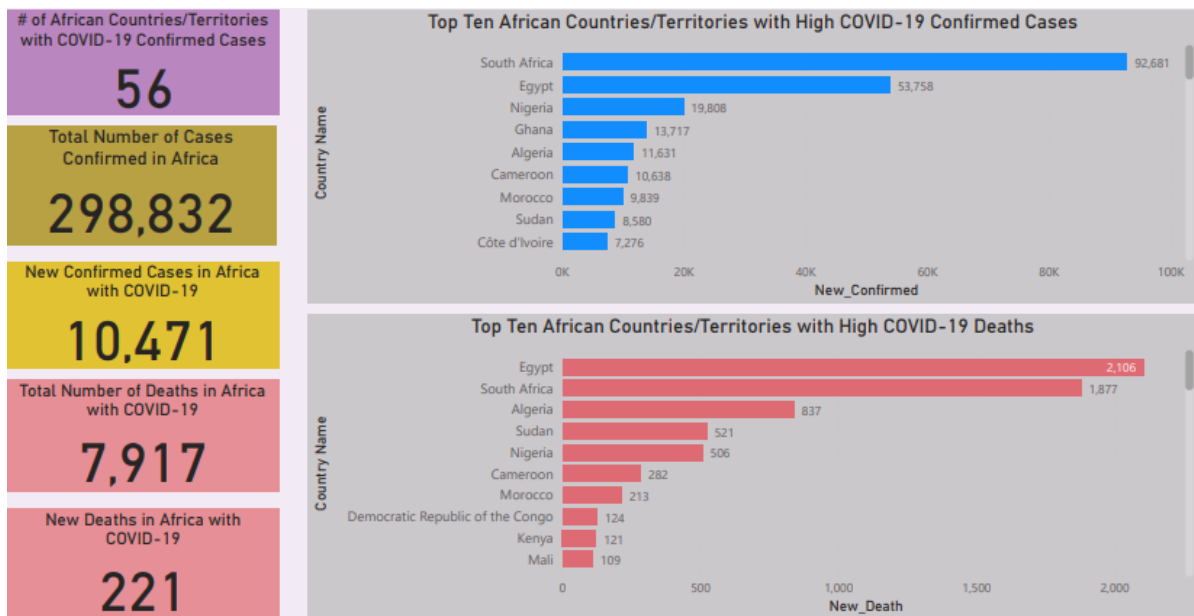


Fig. 2: Africa Situation Update as of June 21, 2020 (Source: WHO)



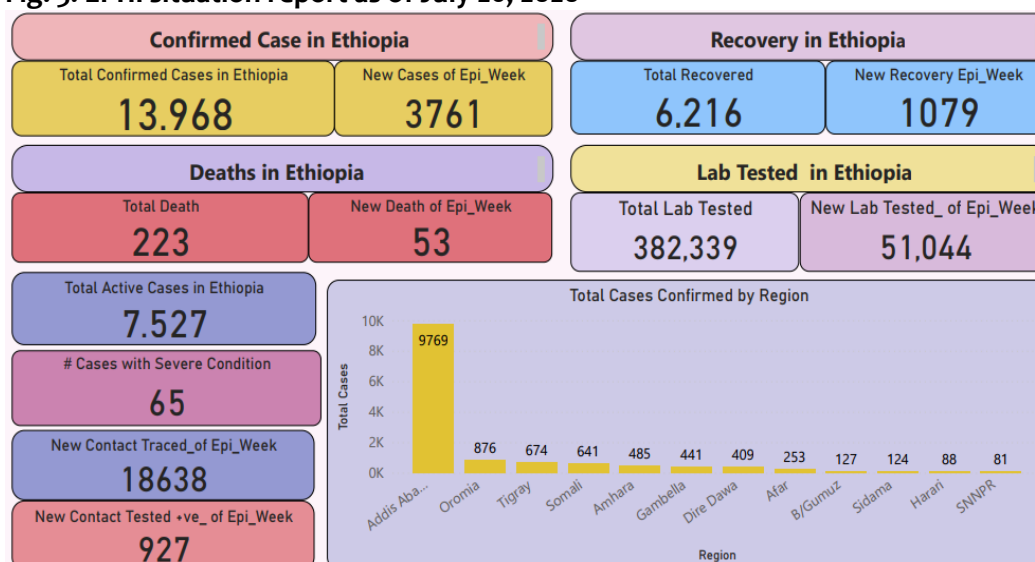
4.1.2 National COVID-19 situation

Ethiopia revised its worst-case scenario and projected about 39 million people could be infected with COVID-19. With the introduction of physical distancing and protection measures, the Government hopes to limit the spread to 102,000 cases over the next three months. Children may exceptionally be at risk compared to the average epi-curve, due to high incidence of respiratory diseases, malnutrition and acute watery diarrhea. As of June 21, 2020, 100 days have passed since Ethiopia reported its first COVID-19 confirmed case on 13 March, 2020. It took 77 days to surpass the first 1000 cases; 7 days to surpass second thousand cases, 6 days for the third thousand cases and only five days for the fourth thousand cases. This shows that there is an alarming increment of the number of COVID-19 cases in the country. One-thousand-one-hundred-eight-seven new confirmed COVID-19 cases (26.19% of the total cases reported so far) and seventeen COVID-19 related deaths (around quarter of the total deaths reported so far) were reported during the WHO Epi-Week-25 (EPHI, 2020 (8); MoH, 2020 (7)).

The number of cases in Ethiopia has been increasing alarmingly since the first case was reported. The cases are from imported cases, contacts of confirmed cases and localized transmission. As of 03 August, 2020, a total of 19,289 confirmed COVID-19 cases of the 444,226 tested and 336 deaths are recorded with 7,931 recovered been reported in Ethiopia. There is increasing number of COVID-19 related community deaths and late confirmation of COVID-19 by forensic investigation which might exacerbate the spreading of the pandemic in the country leading to overwhelming of the isolation and care centers (EPHI, 2020 (8); MoH, 2020 (7)). Please see below summary of the national epidemiological situation:

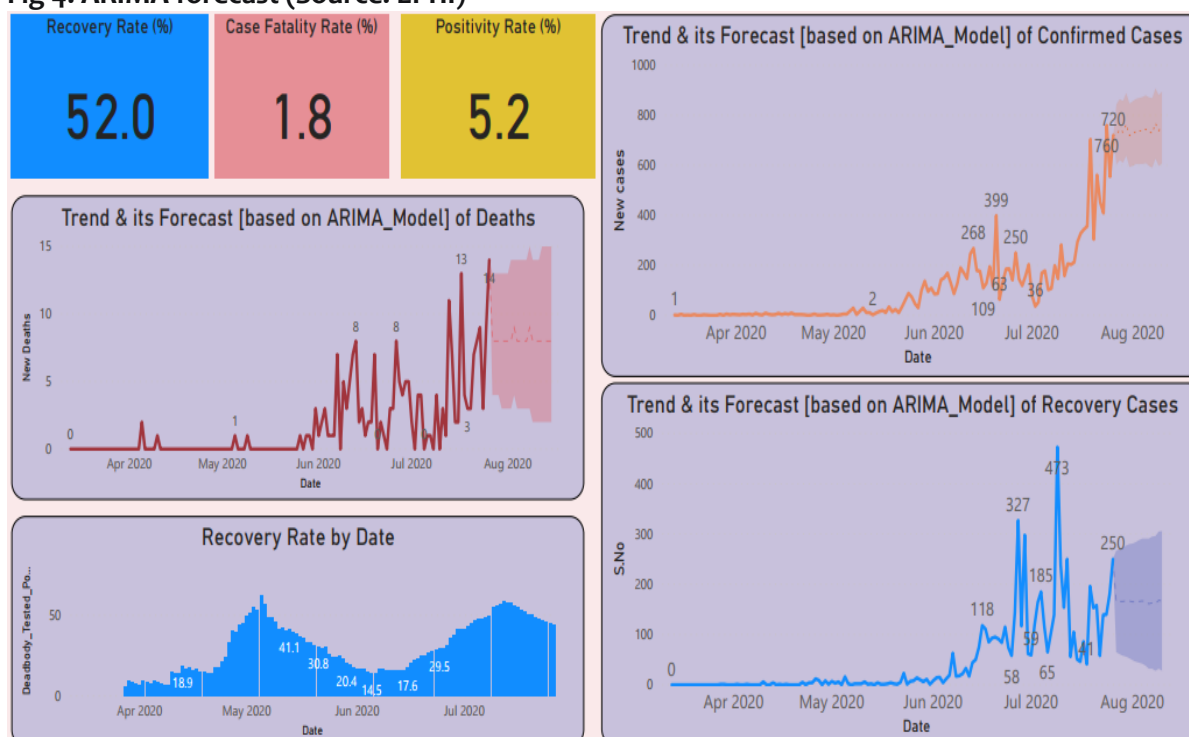
The EPHI report confirmed that as of July 26, a total of 13,968 confirmed COVID-19 cases and 223 deaths are recorded in the country. See Figure 3 below.

Fig. 3. EPHI situation report as of July 26, 2020



The Institute also displayed the epidemic progression forecast done by an ARIMA³ model shows that the number of daily confirmed cases and recovery cases in the country may increase progressively as shown in Figure 4 below.

Fig 4. ARIMA forecast (Source: EPHI)



5. Impacts of COVID-19 on the Ethiopian Health System

Leadership and coordination

5.1.1 Ethiopian National Health Sector Strategy

The health system in Ethiopia is structured into three tiers with the primary level consisting of primary healthcare units (health posts and health centers) and primary hospitals; secondary level services are provided by general hospitals; and tertiary level services by specialized hospitals. The health sector strategy has been developed with the vision “To see healthy, productive and prosperous Ethiopians” and the mission “To promote health and wellbeing of Ethiopians through providing and regulating a comprehensive package of promotive, preventive, curative and rehabilitative health services of the highest possible quality in an equitable manner (MoH, 2015 (2)).

The new national health policy has been introduced in Ethiopia in 1993 to improve overall health status of the community by increasing access to primary health care services throughout the country. Together with this policy the country shows commitment to improve the system by

³ ARIMA is an autoregressive integrated moving average is a statistical analysis **model** that **uses** time series data to either better understand the data set or to predict future trends.

developing a twenty-year, four-phase Health Sector Development Plan (HSDP) that was in place from 1995 to 2015 and brought major reforms across the Ethiopian health system (MoH, 2020 (6)). The Health Sector Development Plan decentralized management of the public health system and distributed responsibility to the Regional Health Bureau (RHB) level in an effort to improve effectiveness, efficiency, equity, and sustainability. The ambitious focus of the HSDP I and II which ran from 1997-2005 are improving health service delivery and quality of care; health facility rehabilitation and expansion; human resource development; pharmaceutical supply and management; information, education, and communication; health sector management; health management information systems; and health care financing, Phase III of the HSDP which ran from 2005 to 2010 had focused on improving maternal and child health and addressing communicable diseases. In 2003, during the HSDP II, the Health Extension Program (HEP) had been launched and continued during HSDP III with the mission to “deliver health promotion, disease prevention, and selected curative health services at the community level” to achieve universal primary health care coverage. Since then, the HEP together with HSDP has contributed the radical reforming of the Ethiopian health care system, particularly the primary health care system (MoH, 2015 (2)).

The last phase is HSDP IV covering the period 2011-2015 reflecting the Ethiopian government’s vision to achieve the health sector goals set under the GTP which are closely aligned with MDGs. The range of HSDP IV covers the entire health sector and all sources of financing having a stronger focus on results and quality of services with due emphasis on maternal and child health, HIV/AIDS and tuberculosis in order to achieve all health Millennium Development Goals (MoH, 2012 (1)).

After the successful conclusion of HSDP IV in June 2015, the Health Sector Transformation Plan (HSTP) of the second 20 year strategy has been introduced and is called “Envisioning Ethiopia’s path to Universal Health Care Coverage through strengthening of Primary Health Care.” HSTP was part of the second Growth and Transformation Plan (GTP-II) of the country with main goal to improve equity, coverage and utilization of essential health services, improve quality of health care, and enhance the implementation capacity of the health sector at all levels (MoH, 2015 (2); Annis and Ratcliffe, 1993).

Quality and equity; universal health coverage and transformation are the three key features of HSTP. In order to achieve mission and vision of the health sector, the HSTP sets out four pillars of excellence which further classified in to fifteen strategic objectives categorized under two driver perspectives (business process and learning and growth) and two results (community perspective and financial stewardship). The strategic objectives are linked each other with a cause-effect relationship and every strategic objective has set of performance measures and strategic objectives (MoH, 2015 (2)). The four pillars of excellence are as follows:

1. Excellence in health service delivery
2. Excellence in quality improvement and assurance
3. Excellence in leadership and governance
4. Excellence in health system capacity

The HSTP impact-level targets by 2020 has been set in relation to maternal and child health, nutrition, HIV/AIDS, TB, injuries. Strategic initiatives have been also identified with 4 transformation agenda:

1. Transformation in **equity** and **quality** of health
2. Information revolution
3. Woreda transformation
4. The Caring, Respectful and Compassionate health workforce

The first five years phase of HSTP (HSTP I) has been completed in June 2020 and the second phase (HSTP II) is on the process of preparation with the plan to print in June 2020. However, currently it is not available in the websites (MoH, 2015 (2)).

In Ethiopia, the national readiness for the general health services under normal situations is only 55 % (EPHI, 2018 (1); UN-Ethiopia, 2020). This indicates serious scarcity of basic equipment, trained health professionals, essential medicines and infrastructure. Evidenced by the 2020 data from the MoH, there are a total of 7,198 Medical doctors providing service of to population ratio of 0.7 per 10,000 and population for an Ethiopian population of 110 Million which is below the WHO recommendation of 2.3 per 10,000 (EPHI, 2020 (3)). From a data of similar year the number of specialists and sub-specialist in the country was only 2,643. The same report indicated that there are a total of 58,338 nurses with different level (diploma to specialty nursing). The report further accounted that there are 144,731 health care workers (medical and paramedical), 410 public and private hospital of different category across the country with 29748 beds in total which are equipped with 341 ICUs and 173 functional ventilators. Most of the 67 functional ventilators and 87 ICUs are located in the capital, Addis Ababa. According to the Ethiopian Pharmaceutical Supply Agency (EPSA), the availability of selected Personal Protective Equipment (PPE) is not adequate as compared to the anticipated burden. There are 40,000 mask oxygen / surgical, 508 eye goggle, 32 face shield, and 17,024 particulate respirator/grade N95 or higher which intended to use in the management of like Tuberculosis and HIV/AIDS (EPHI, 2020 (3)).

The above statistics shows that the Ethiopian health system has limited capacity to accommodate the increasing number of inpatient case-load throughout the country to cope with the COVID-19 pandemic. And at the beginning of the preparation of the preparedness plan for COVID-19 pandemic response, MoH, had considered to mobilize resources from the existing health service as one option together with collaboration of other sectors. Mobilization of resources from the existing health system possibly has impact on continuation of the essential health service to the non COVID-19 related health problems.

Surveillance

Surveillance is one of the key strategy to contain the COVID-19 spreading through contact tracing, wide spread testing, isolation and quarantine. As it is known travelers screening is being done by thermal screening which is currently considered as the primary tool in place in the point of entries and health care facilities. With thermal screening, there are likely many people who would be

missed during the screening processes at the point of entries as well in clinical settings, because of the insensitive nature of the thermal screening, as majority of COVID-19 are asymptomatic which might increase the spreading of pandemic nationally. Based on the report stated on the Rapid Evidence Synthesis on COVID-19 Pandemic to Inform the Ethiopian MoH, the effectiveness of thermal passenger screening for COVID-19 infection at airport exit and entry is only about 56% (EPHI, 2020 (3)). Cluster of COVID-19 cases have been identified in areas with, crowd in Addis Ababa City Administration (in Merkato and Lideta areas) which needs intensive case detection through the surveillance. Based on the EPHI/PHEOC weekly report bulletin there is a poor hygiene and sanitation with failure of the quarantined individuals to adhere to IPC and quarantine protocol in the quarantine sites which might increase in the chance of spreading of the infection that overwhelm the care and treatment centers including the ICU requirement. Currently Treatment and isolation centers are overwhelmed that require strategic shift in case management (EPHI, 2020 (8)).

Laboratory capacity

Even if the current laboratory testing capacity is increased, the community testing is being done from the high risk community members, returnees/passengers at mandatory quarantine centers, contacts of the confirmed cases, health facility visitors and suspects at isolation centers. Based on the EPHI-PHEOC interim guidance, the expansion of laboratory testing capacities need large amount of resources of all type (Finance, human resource and time) which might need to repurpose and mobilize resources from other activities (EPHI-PHEOC, 2020 (7)). This might create the competing priority with the other health services. Among the functional laboratories for COVID-19 testing, more is found in Addis Ababa therefore, the number of testing in the regions is very low as compared to Addis Ababa and this might leads to the decrease in testing and case detection rate. The decrease in weekly performance rate of laboratory testing (66.4%) seen in the Epi week 25 compared to Epi week 24 (93.2%) (EPHI, 2020 (8)).

Risk Communication and Community Engagement (RCCE)

Even though, one of the effective prevention strategies recommended by WHO to prevent spreading of the COVID-19 is RCCE, the problem of accessing accurate information is high in developing countries where millions of people have limited access to information due to low media access, insufficient internet penetration, illiteracy, and language diversity especially the marginalized urban populations, the rural poor, or children who have no access to critical and child-friendly information. Urban households are more likely than rural households to own a mobile telephone, radio, or television. The most commonly found item in all households is a mobile phone (55%); 88% of urban households and 47% of rural households own a mobile phone (UNHCR, 2020).

Everyone should be aware of the risks posed by COVID-19 and about how to protect themselves and their families otherwise it will be catastrophic for the country by progression of the spreading of the disease and severity with death toll which is being difficult to manage. The incomplete and delayed reports from few regions on COVID-19 cases and contacts affect other regional COVID-19 related activities (EPHI, 2020 (8)). The misuse or irrational use of PPE such as face mask and glove by few individuals in the community might affect the infection prevention and control activities of the COVID-19.

Logistics and supply

The COVID-19 outbreak is affecting supply chains and disrupting manufacturing operations around the world. Based on the humanitarian weekly bulletin which covers the date from June 08-21, 2020, there is lack of logistics in regional quarantine centers and distant test laboratory (UNOCHA, 2020 (2)). Reports from field offices indicate that inadequately equipped quarantine centers and distant test labs remain obstacles in the COVID-19 coordination and response. Some quarantine centers have been reported to lack access to water, food, personal protective equipment (PPE) and electricity. COVID-19-related awareness raising, and capacity building have also been limited. With the rapid increase in confirmed cases, health facilities are reported overstretched, while quarantine centers are full or nearing their full capacity. The shortage of PPE materials including face mask for the health workers is continuing that affect the infection prevention and control activities of themselves as well as their patients whom they are giving service. According to MoH cited in the UNOCHA humanitarian bulletin, at least 130 million masks (UNOCHA, 2020 (2)) are needed for the months June-September to contain the spread of COVID-19 in the country.

Infection Prevention and Control

Based on the Ethiopian Demographic and Health Survey (EDHS) conducted by EPHI in 2016, there is poor access to improved water supply and sanitation services especially in rural area (CSA, 2016) that can impair the effectiveness of one of the infection prevention and control strategy of COVID-19 transmission such as frequent hand washing which predispose the people to COVID-19 infection aggravating the extent of COVID -19 crisis. The housing situation of the Ethiopian people is also a risk factor for the spread of COVID-19 because the average Ethiopian family shares one room for its 4 to 5 household members which will increase the risk of household level infection and “stay at home” and “social distancing” policy may not be effective in containing the spread of the corona viruses.

Generally, the poor health capacity, low levels of health and nutrition status of the Ethiopian people with poor access to improved water supply as well as housing condition expose the people to coronavirus infection that has the potential to increase the COVID-19 burden to the health system.

Case Management

Serious shortage of mechanical ventilators in the country can exacerbate the severity of the infection resulting in increasing of death toll. Low face mask stock and PPE for the health workers in the health service centers could lead to exposure of health care workers to the infection especially in the non COVID-19 care center (EPHI, 2020 (3)). Currently, the number of COVID-19 cases going to the health facilities for the non-COVID related health conditions is increasing. For example, as of 07 June 2020, around 2340 staffs working in the health institutions are exposed to the COVID-19 and 97 others have contracted the disease which might affect the response to fighting against COVID-19 in different ways. For example, the affected health workers might be source of infection to their patients and the number of staffs who are required to engage in the

health service (routine health service and pandemic case management) will decrease (EPHI, 2020 (8)). This will possibly increase the severity of the pandemic with high morbidity and mortality rate due to both COVID-19 and non COVID-19 treatable or preventable health conditions.

Point of Entry and humanitarian crisis

Ethiopia has four international airports and 21 land border crossing points. The first confirmed case of COVID-19 was imported and most of the cases identified during the early period of spreading in Ethiopia have history of travel to other countries; and therefore point of entry has been taken as one of the possible route of spreading of the pandemic in the country.

COVID-19 pandemic has also affected the activities of humanitarian partners and organizations indirectly such as the unexpected arrival of thousands of returnees to Ethiopia without prior health screenings which added to the challenges that the country faces strengthening measures to control COVID-19 like the Ethiopian Airlines suspended flights to different international destinations. This suspension has created a restriction on humanitarian supply chains including PPEs and movement of international medical teams while the humanitarian needs in Ethiopia have increased as a result of COVID-19, impact of the desert locust infestation, and changes to the displacement landscape due to ongoing insecurity, inter-community violence in various parts of the country and flooding.

Due to the shortage of supplies, the humanitarian operations have been scaled down while currently, the number of people in need of humanitarian assistance has increased from 8.4 million (calculated end-2019) to an estimated 10.6 million. Internally displaced people (IDPs,) including those residing with host communities, are also highly vulnerable to COVID-19 due to their living condition (UNOCHA, 2020 (1)). The humanitarian situation in Ethiopia continues to be frustrating as a result of the combining effects of multiple crises.

Public health response

In Ethiopia, there is marked failure to adhere to physical distancing and other preventions advices among the public. The adherence of the individuals might be affected by different conditions as it is reported by the International Food Policy Research Institute-IFPRI (Kaleab, 2020). The barriers for the implementation of the public health responses include limited access of safe water and soap/ alcohol based hand sanitizers, limited number of sleeping rooms in most of households which lead to difficulty for self-isolation especially if the family member is suspected or confirmed COVID-19. Limited access to internet connection with as well as frequent interruption creates inconvenience for work from home and home schooling for children. Poor access to electricity with unpredictable and frequent outage also creates problem in charging phones, which may affect regular access to COVID-19 prevention messages disseminated during phone calls and through radio (EPHI, 2020 (9); Kaleab, 2020). Most of the population, even in urban centers, do not have refrigerator that leads the households decrease the consumption of perishables, or visit wet markets more frequently, compromising the effectiveness of physical distancing measures. Therefore, the spreading of COVID-19 will increase especially in the areas of limited access which might create overwhelming of the already overstretched health care service.

Maintaining essential Health System

Health systems are being challenged by increasing demand for care of people with COVID-19, compounded by fear, stigma, misinformation and limitations on movement that disrupt the delivery of health care for all conditions. When health systems are overwhelmed and people fail to access needed care, both direct mortality from an outbreak and indirect mortality from preventable and treatable conditions will increase dramatically.

The COVID-19 pandemic threatens to disrupt the provision of essential health services due to barriers to the supply and demand for services. Mathematical models indicate that large service disruptions in Ethiopia have the potential to leave 1,229,200 children without oral antibiotics for pneumonia, 3,164,600 children without DPT vaccinations, 238,000 women without access to facility-based deliveries, and 2,243,700 fewer women receiving family planning services (World Bank, 2020 (2)). As a result of disruptions in all essential services, child mortality in Ethiopia could increase by 15 percent and maternal mortality by 8 percent over the next year (World Bank, 2020 (2)).

Based on the Ethiopian health care facility COVID-19 Preparedness and Response Protocol, the existing health system is expected to carry the burdens by dedicating facilities and/or an area for COVID-19 screening, case management, isolation and infection prevention practice, involving in the non COVID-19 managing centers and making ready for patient isolation and care center and dedicate trained staffs for deployment to COVID-19 treatment center, involving in resource allocation for COVID-19 response, preparing contingency plan in case of staff shortage and increased demand, preparing COVID 19 response team including different departments in addition to maintaining essential basic routine services for patients during outbreak period (e.g., pregnant, surgery, inpatient service) unrelated to COVID 19 which make overstretching of the existing health care service (EPHI and MoH, 2020 (6)). The increase in the rate of COVID-19 in Ethiopia is also feared to overwhelm the existing health system with the disruption of the routine non COVID-19 health services leading to measurable decrease in the treatment of other pathologies and fewer services being offered for preventive health care service such as Antenatal care, Post-natal care, EPI and others (World Bank, 2020 (2)).

COVID-19 pandemic also affect Measles and polio vaccination campaigns planned for March and April 2020 which had to be postponed, increasing risks to children's health. Even before COVID-19, Ethiopia had 1.2 million unimmunized children, one of the largest cohorts of non-immunized children in the world. Vaccination is estimated to prevent around 63,000 child deaths per year. The number of children (0-59 months) for Polio campaign is 17,116,378 and for measles (9 - 59 months) is 14,699,948. By the third week of April, 10 of the country's 11 regions and city administrations had reported measles outbreaks in Ethiopia. This means that the vaccination of these children has been delayed and they are vulnerable to these infections that worsen the condition (UN, 2020 (1)).

MoH has also a concern that COVID-19 outbreak will have an unprecedented negative impact on the uptake of essential health care services such as immunization, maternal health services, and basic communicable and non-communicable services. The death toll, the burden of disease and loss of productivity due to the negative effect on the health system from such pandemic are equivalent at times greater than the effect of the pandemic itself. There is the decrease in the

uptake of the above mentioned essential health services during March-April, 2020 as compared to that of July, 2019-February, 2020 with increase in inpatient department mortality on the month of April, 2020. One of the assumptions taken by the MoH for this effect is fear of COVID-19 infection by the community (MoH, 2020 (8)).

Cross cutting issues

5.1.2 Nutrition

The nutritional status (malnutrition) of the population might be affected during the COVID-19 in three-underlying causes: household food insecurity due to loss of income particularly among the lower economic status households with children under 5 and reduced food availability and diversity; caring practices for children and women are likely to go down as livelihoods are affected such as breastfeeding and appropriate complimentary feeding practices; and disrupted access to health services for common child illnesses and for treatment of moderate and severe wasting may be overwhelmed by COVID-19 related activities and/or access to health facilities is limited due to movement restrictions. Furthermore, it is likely that due to preventive measures that limit movement and accessibility to services/ markets, the quality of dietary intake might worsen, with easier access to and relatively greater affordability of staple foods at the expense of a diversified diet of nutrient-dense foods. An estimated increase in Severe Acute Malnutrition (SAM) cases is 15% (68,935 children) above of the annual average of 459,565 children (UN, 2020 (1)). The NDRMC and Food Cluster estimate that 30 million people could experience food consumption gaps as a result of COVID-19. The negative impact on nutrition of frequent emergencies is currently being compounded by the desert locust invasion and COVID-19 pandemic. The primary and secondary impact of COVID-19 alone is expected to have devastating effects on the nutritional status of children and women if counter measures are not taken by scale up of prevention interventions like setup or scale-up food and nutrition surveillance system.

5.1.3 Concurrent other outbreaks

There is competing priorities due to superimposed disease outbreaks like cholera, measles and Yellow fever in some areas of the countries. The existing health system's local authorities and health facilities were already strained and functioning suboptimal. Therefore, emergency events were an additional burden to the low capacity. Limited funding and insecurity affected partner's presence, availability and access to emergency health services by the targeted populations. Additionally, the repurposing of resources from routine health services to contain the outbreak of COVID-19 will affect also the accessibility of the service for the targeted population such as women, children, refugees, Internally Displaced People (IDPs), persons with disabilities and older persons (Relief web, 2020).

5.1.4 Mental Health and Psychosocial support service during the COVID-19

5.1.4.1 Risk Factors of Psychological distress

According to the national mental health strategy report, in Ethiopia, mental illness is the leading non-communicable disorder in terms of burden which comprised 11% of the total burden of disease which show mental illnesses have been overlooked as a major health priority in Ethiopia accentuated the need for public health programs targeting mental illnesses (MoH, 2016 (3)).

The possible risk factors for mentally ill individuals during the pandemic include fear, anxiety and uncertainty, prejudice and stigma with the virus' toll. Besides, imposed quarantine or isolation will be an unfamiliar and unpleasant experience especially for those recognized as vulnerable such as children and adolescents, older adults, minority groups, those from lower socio-economic groups, females, and people with preexisting mental health conditions. Social isolation associated with quarantine can be the catalyst for many mental health sequel even in people who were previously well. Currently, returnees from different countries of the world are confined in mandatory quarantine which result in feelings of hopelessness, could lead to Posttraumatic Stress Disorder (PTSD).

Other group of people who are at a high risk of developing mental health sequel are health workers, especially those caring directly for COVID-19 infected patients due to the increased work burden as well as the fear of contracting the disease and/or passing it on to their families and loved ones (Yigrem, 2020). Furthermore, there are already existing gaps in the availability and accessibility of Mental Health and Psychosocial Support (MHPSS) specialists and services (UN, 2020 (2)). It is therefore critical that Ethiopia puts mental health and psychosocial services at the core of its response to COVID-19.

5.1.4.2 Impact of mass media and social media on psychological attitudes and behaviors towards the COVID-19 emergency

The COVID-19 outbreak has elicited growing media attention and public interest around the world. The media play an important role in the dissemination of information on COVID-19 pandemic. Widespread misinformation about the virus and prevention measures and deep uncertainty about the future are additional major sources of distress. Repeated media images of severely ill people, dead bodies and coffins add to the fear. However, it is important to measure whether the population is getting information that calms it down, as well as whether such news are in accordance with the magnitude of the issues. Since COVID-19 is currently the disorder with the greatest impact due to several factors (the disease itself and preventive measures), the media must have social responsibility to keep the population properly informed, because the information is one of the most important elements for disease prevention (Mejia et al., 2019; Zheng et al., 2020; WHO-PAHO, 2020).

The WHO director General noted on the press release, “the infodemic especially by social media compromises outbreak response and increases public confusion about who and what information sources to trust; creates fear and panic due to unverified rumors and exaggerated claims; and

promotes xenophobic and racist forms of digital vigilantism and scapegoating”. Therefore, it is essential that the media always provide adequate information on this issue, which is understandable, clear, and forceful.

5.1.4.3 Coping as health professional during the COVID-19 pandemic

The first groups of population affected by psychological distress are health professionals among the others who are engaged in the frontline response to the pandemic and their patients. Based on the study done in Dila University, nurses and pharmacists have more perceived psychological distress as compared to Doctors. Protecting the mental wellbeing of healthcare workers caring for people with COVID-19 has been identified as imperative for the long-term capacity of the health workforce.

In addition to fears around COVID-19 exposure, anxieties related to shortages of personal protective equipment (PPE) or other essential equipment and the challenges of family support and childcare while they work, healthcare workers may experience irregular hours and higher workloads, coupled with anxiety, as they enter new or unfamiliar clinical roles. They are at risk of emotional strain and physical exhaustion from the provision of care to growing numbers of patients who may then rapidly deteriorate; they may be exposed to critical illness or death of their co-workers and they may also face moral dilemmas in decision making around provision of care with limited resources (Bermingham, et al., 2020; Inchaustil, 2020). MoH/EPHI forwarded self-care tips and advices adopted from the WHO recommendations to maintain the mental health for the health care providers (EPHI and MoH, 2020 (5); Argaw et al, 2020).

5.1.5 Behavioral change interventions made to improve adherence and compliance with preventive regulations and guidance during COVID-19

Beneficial individual and collective public behavior are believed to reduce transmission of the virus and ultimately save lives. The behavioral change interventions to improve the adherence and compliance of preventive measure of COVID-19 infection include education, awareness creation, risk communication and reminders with availability of facilities for specific types of prevention measures.

There is gap in dissemination of adequate information due to poor access to the information dissemination media especially in rural and marginalized urban populations including vulnerable people. The most effective preventive measures recommended by WHO are regular hand washing and social distancing (WHO, 2020 (6)). Adherence and compliance of individuals with these preventive regulations and guidance needs a timely access of information, availability of water and soap/alcohol based hand sanitizer and the feasibility of social distancing is based on the number of homes and number of households with the specific home. Based on the EDHS 2016, which give us the proxy information, there were gaps on the availability of sanitary materials, proper waste disposals and the housing conditions in relation to the number of households (EPHI, 2016; Alebel and Tassew, 2020). This might affect the compliance with the stated preventive regulations and guidance leading to disruption of the infection prevention activities to COVID-19 resulting in high burden of COVID-19 cases to the health system and the country at large.

6. Measures being taken in Ethiopia to control and prevent the pandemic

Leadership and coordination

The Government has strengthened its preparedness efforts and has set up a national preparedness and response coordination mechanism through an Emergency Operation Center (EOC). Ministerial committee at national level has been established to oversee the overall COVID-19 response activities and commissioned a National Public Emergency Operation Center. The Government also establish four levels of coordination: (a) National Disaster Risk Management (NDRM) Council (highest level) led by the deputy prime minister's office; (b) Public Health Emergency Management (PHEM) Task Force (multi-sectoral) led by the Minister of Health; (c) PHEM Technical Task Force led by the Director General of Ethiopian Public Health Institute (EPHI); and (d) PHEM Technical Working Group led by the national incident manager (EPHI, 2020 (8)).

In January, 2020, after the WHO declared COVID-19 outbreak in China as a global health emergency and launched the strategic preparedness and response plan, Ethiopia has assessed its risk as high level based on the number of daily direct flight by the national flag carrier to china and immediately activated the national public health emergency operation center for COVID-19 with an incident management system directed by the incident manager working with unit heads to different thematic area(Pillars) that have been recommended by WHO such as leadership, coordination and planning, supplies and logistics, risk communication and community engagement, surveillance and laboratory capacity, case management and infection prevention and control and point of entry screening. Since its activation, the national PHEOC is collaboratively working with stakeholders: government agencies, partner organizations, UN agencies, embassies, hospitality sector, Industrial parks, individuals and others. Supports (financial, logistic and technical) are being received from partners, private institutions, individuals and others. World Bank provide grant for the government for the Emergency Preparedness and Response Program (EPRP) (WHO, 2020 (5)) to strengthen surveillance system and response capacity to early detect and respond to the possible importation of the 2019 novel coronavirus outbreak in Ethiopia.

With the support of WHO, the health authorities of Ethiopia has trained initially 60 national rapid response team(RRT) members composed of a team of professionals from Epidemiology/Surveillance, Laboratory, Case Management, IPC, and Risk Communication/Community Engagement on coronavirus surveillance, medical care for patients, public health communication and countering misinformation and rumors with cascading to the subnational level. All relevant working documents (guidelines, protocols and formats) are disseminated to isolation, care and treatment centers in all regions. Health workers are being trained and deployed in all regions of the country (EPHI-PHEOC, 2020 (7)).

After March 13, 2020, time when the first COVID-19 case confirmed in Ethiopia (EPHI, 2020 (2); (EPHI-PHEOC, 2020 (7)) the government has made additional measures to suppress the spreading of the pandemic like schools were closed, public gatherings not allowed, people encouraged to work from home, international flights to most of affected countries were suspended, and all new arrivals to the country will be subjected to 14 days mandatory quarantine. On April 08, 2020 the government has declared state of emergency for 5 months. Africa CDC has recruited volunteer

public health professionals to support efforts of COVID-19 preparedness and response in Ethiopia and the team oriented and deployed to the regions and city administration.

Revision of the response strategies planned based on the changing of situation and demands to suppress the spread and enhance the mitigation activities for areas confirmed of community transmission and recently amendments to dead body management, case management and mandatory quarantine procedure have been made in line with the State of Emergency regulations in response to the current situation of the COVID-19 Pandemic. The health authorities have planned to enhance technical support, coordination and timely and accurate information sharing at all levels and regions, to establish additional case treatment centers and quarantine sites, especially in regions, with intensification of a capacity building trainings and orientation including through virtual/online platforms, and strengthen and sustain essential health services other than COVID-19 preparedness and response which help to contain the pandemic with promoting the wellbeing of the population (WHO, 2020 (5); UNICEF, 2020 (1)).

Surveillance and Point of Entry

Surveillance activity is being implemented based on the WHO case definition. Rapid Response Team (RRT) has been established for rumor collection with verification and information provision via toll free call center working 24/7 at national and subnational level. Since January 24, 2020 travelers' health screening has been instituted at the point of entry. The Health screening of passengers for COVID-19 at the point of entry such as Bole international airports and designated ground crossing is underway including temperature screening at the point of entry. Temporary isolation units at those screening posts are available. The health screening is being done 24/7. Additionally, mandatory quarantine with daily health monitoring by the assigned health professional for travelers from abroad has been implemented; alerts and non-COVID-19 medical conditions notified and referral linkage to the hospitals is in place, Community screening and house to house search is being done in high-risk areas for COVID-19 in all regions and city administrations.

Contact tracing and follow-up of persons who had contact with confirmed cases is ongoing and home based quarantine is being implemented for contacts of confirmed case. Humanitarian partners are involved for the surveillance activities especially at the point of entry and refugee/returnee camps. Enhancement of active surveillance for COVID-19 including house-to-house case search and detection in the community with intensive testing will help to contain the pandemic spreading in the country (EPHI-PHEOC, 2020 (8)); IOM, 2020).

Laboratory capacity and related Activities

Initially testing of suspected cases has been done by sending the sample to South Africa. The national capacity of confirmatory testing for COVID-19 has developed since February 8, 2020. Currently the laboratory investigation is continuing for high risk groups such as suspected cases, quarantined individuals, and contacts of confirmed cases, random Severe Acute Respiratory Infection /pneumonia cases and community members. There is ongoing expansion of laboratory testing facilities. As of June 21, 2020 the number of functional laboratories reached to 37 nationwide with increasing number of daily testing reaching to a total number of 216,328 tests.

There are 6 laboratories which are ready to start, 3 laboratories under verification, 2 waiting for verification and 19 laboratories are candidates for the COVID-19 testing.

With this expansion of the lab capacity, it is planned to conduct intensive testing and investigation to generate evidences for appropriate strategic action including random testing of population in confined areas for COVID-19 which contributes for early detection and management of cases with appropriate infection prevention resulting in protection of people from infection (EPHI-PHEOC, 2020 (8)).

Risk communication and community engagement

Risk communication and community engagement works in dissemination of appropriate and timely COVID-19 related messages to the public and governmental stakeholders. Daily press statement, dashboard update and monitoring have been done routinely. Different poster, brochures, audio and video messages focusing on COVID-19 risk perception and practice developed. Message developed for correct use of facemasks and delivered via various channels. The media scanning and monitoring is being conducted on daily basis by the responsible health institutions. Talk-walker social media monitoring platform deployed from UNICEF project which provide Coronavirus alert news (UNICEF, 2020 (3)).

By the State Minister of MoH and the Director General of EPHI, regular media briefing is conducted twice-a-week; sensitization sessions facilitated for media practitioners to let them deliver accurate information on COVID-19 and counter misinformation. Orientation sessions about COVID-19 provided to Ethiopian Airlines cabin crew members IEC materials and key messages on COVID-19 including translation in local languages prepared to create awareness in communities and among health workers. Mobile applications to provide knowledge aid on COVID-19 and to accelerate and advance identification of people who have contacts with COVID-19 confirmed cases were launched for COVID-19 information provision for health care providers. The national and regional PHEOC are playing a pivotal role in coordinating resources from different responding agencies and coordinating COVID-19 related information through regular EOC meetings and partners' coordination forums.

The MOH and EPHI are providing information to the general public and stakeholders regularly using different means of communication modalities. Supportive supervision for HEW is making door-to-door visit and active case search and assessment are being done with intensifying risk communication and community engagement activities. This can help the communities in bringing behavioral changes to improve the adherence and compliance with the preventive measures that promote the decrease in the incidence of the COVID-19 infection which contribute to the containment of the pandemic (EPHI-PHEOC, 2020 (8)).

Logistics and supply

Since its activation, the national PHEOC is collaboratively working with stakeholders: government agencies, partner organizations, UN agencies, embassies, hospitality sector, industrial parks and others.

The Jack Ma foundation donated medical equipment and supplies to African countries including Ethiopia. Ethiopia also took the responsibility to distribute the donated materials to other African countries in several rounds. A Chinese medical expert team arrived in Addis Ababa on April 18, 2020, to share experience and support. Supports (financial, logistic and technical) are being received from partners, private institutions, individuals and others. PPE materials and testing kits have been received from different collaborators. Currently, the donation of different medical supplies including PPE, sanitary materials and infrastructures is continuing by number of governmental and Non-Governmental organizations, individuals and partners for COVID-19 response.

Ongoing distribution of pharmaceuticals and medical supplies to quarantine, isolation and treatment centers is continued. WHO regional Office for Africa continues to strengthen its support to countries to detect and manage suspect cases and ensure a robust response such as shipping of reagent kits for coronavirus detection to more than 20 countries in Africa including Ethiopia to step up identification of the virus and is working closely with countries to help them prepare for the rapid detection and response to cases or clusters (WHO, 2020 (5)).

Since the COVID-19 response is resource intensive, the availability of supplies decreasing the worries of the health workers of different department including the community due to shortage of supplies of different materials and encourages the workers and communities to engage in the fighting of the pandemic and contain the spreading (EPHI-PHEOC, 2020 (7); UNICEF, 2020 (1); UNDP, 2020).

Case Management and Infection prevention and Control

Infection prevention and case management are part of the pillars of response strategies. The facility preparedness guide has been prepared based on this guide treatment and isolation centers are established in different health facilities. Currently around 7 treatment and isolation centers in Addis Ababa are dedicated for management and infection prevention of COVID-19. The nine regions and city administrations have recommended establishing their own isolation and treatment center. In addition to this all other non COVID-19 managing health facilities (public or private) have prepared to involve in the response to COVID-19 by dedicating patient isolation area and assigning trained focal person. Recently Field Hospital has been constructed by world Food Program and inaugurated in Addis Ababa.

There is ongoing training on case management and IPC for health care workers; currently more than 300 health workers are trained. Case management, IPC protocols and guidance developed and disseminated for the quarantine, isolation, treatment centers throughout the country, Distribution of pharmaceuticals and medical supplies including PPE to quarantine, isolation and treatment centers is continuing. The establishment of appropriate case management and infection prevention control system has a pivotal role in the suppression of spreading of the pandemic contributing to the decrease in the burden of health systems (EPHI-PHEOC, 2020 (8); MoH, 2020 (7)).

Public health measures

Ethiopia has adopted the public health measures recommended by WHO such as regularly and thoroughly hand washing with soap and water or use alcohol-based hand sanitizer, cough hygiene, keep physical distancing and stay home, avoid mass gathering and hand shaking, Don't touch mouth, nose or eye by unwashed hands. In case of sickness and developing fever or cough or experience difficulty breathing, seek medical advice and call in advance the center assigned for COVID-19 response which are is highly recommended and communicated by different media platforms.

The current Public Health Policy Recommendation includes the emergency use of low dose Dexamethasone to reduce the risk of death among COVID-19 patients who require oxygen and/or mechanical ventilation however, the public should not use the drug without physician prescription. Since any one can be the next person to acquire COVID-19, every one need to practice all of the COVID-19 prevention methods in order to stay alive and healthy. The adherence of communities with these prevention measures is also a critical for suppressing the spread of the COVID-19 which contribute to the decrease in health system (EPHI-PHEOC, 2020 (8)).

Maintenance of Essential Health service

Maintaining population trust in the capacity of the health system to safely meet essential needs and to control infection risk in health facilities is crucial to ensuring appropriate care-seeking behavior and adherence to public Health advice. The ability of health systems to maintain the delivery of essential health services will depend on its baseline burden of disease, the local COVID-19 transmission scenario and the health system capacity as the pandemic evolves. Recent investments in primary health care for universal health coverage provide a critical foundation for adapting to the pandemic context. Maintaining essential health services during the COVID-19 pandemic is critical to prevent the outcomes and protect the gains made over the past years in reducing maternal and child mortality (Abebe et al., 2015).

Cross cutting issues

6.1.1 Mental health service availability during COVID-19

The COVID-19 pandemic creates crisis in many aspects of human life individually and collectively. Thus it is important to consider the mental status of the patient, vulnerable populations, those in isolation or quarantine, and the general public. It is therefore critical that Ethiopia puts mental health and psychosocial services at the heart of its response to COVID-19.

The MHPSS advisory team has been established and it is part of the COVID-19 advisory council for the MoH. The team has been established in collaboration with professional associations and chaired by the Ethiopian Medical Association. The advisory team has prepared the mental health service protocol for the quarantined/isolated people which comprises psychosocial and psychiatric support by involving the health care providers working in the site, social workers/psychologists assigned in each quarantine site, telephone counseling for psychological crisis is available. The psychiatric support is expected to be provided by involvement of psychiatry professionals on site,

telephone call or mobile mental health clinic which is already in place depending on the availability of the psychiatry professionals.

There is also a need to establish separate quarantine /isolation center with specialized psychiatry service especially for the patients who need face to face follow up. The team also has prepared protocols of self-care tips for health care providers based on the WHO recommendation (EPHI and MoH, 2020 (6); Inchaustil et al., 2020; Argaw et al., 2020; EPHI-PHEOC, 2020 (8)).

6.1.2 Response to other disease outbreaks

For the ongoing measles and Cholera outbreaks in different regions of the country and emerging of yellow fever outbreak in Gurage zone, the government and partners intensified response through surveillance, strengthening routine EPI, reactive measles campaigns in selected kebeles, case management for measles outbreak, water and sanitation interventions, risk communication and social mobilization were maintained and strengthened. Besides, ring vaccination against yellow fever has been provided for yellow fever and a mass reactive campaign is planned (Relief Web, 2020).

7. Research

Operational research initiative is started with establishing national COVID-19 research task force which is led by EPHI. The research initiative is to support the pandemic preparedness and response activities. It involves advisory council and professional associations, government/ private research institutes, key teaching hospitals and health science colleges. There are few researches regarding COVID-19 both globally and nationally which is very important for the preparation of the response including invention of medicine and/or vaccines.

8. Health Service cooperation with IGAD and/or member countries

Cooperation in the health program is one of the priorities that Inter-Governmental Authority on Development (IGAD) had identified among the others. The IGAD health programs include IGAD HIV/AIDS, TB and Malaria Program, Reproductive, Maternal, Child and Adolescent Health program, IGAD Regional Disease Surveillance & Response system, Nutrition Program, IGAD Health System Strengthening program, IGAD Regional Medicines regulatory and Harmonization Program and IGAD Regional Center of excellence for Cancer with establishment of the IGAD cancer steering committee and task forces. The implementation of most of the health programs is to support the health services in selected refugee camps and affected areas surrounding refugee camps, IDPs, returnees and cross-border mobile populations.

Based on the Administration of Refugee and Returnees Affairs (ARRA) formative assessment report, done in 5 selected refugee camps in Ethiopia in June 2017, the priority diseases that have been identified were HIV/AIDS, TB and Malaria which need attention and are included in one of the IGAD health program (ARRA, 2017). Therefore, IGAD strengthen the regional coordination and collaboration for effective HIV/AIDS, TB and Malaria service delivery in the cross-border areas and refugee settings in Ethiopia (IGAD, 2016).

IGAD is also involved in COVID-19 response. IGAD Heads of State and Government adopt a regional Approach to Combat COVID-19 with the emphasis on developing a collective and coordinated strategy and calling for the establishment of an IGAD regional emergency fund for control of pandemic diseases as well as the strengthening of health systems in the region. IGAD has prepared regional response strategy for COVID-19 with the guiding principle “No country is safe until every country is safe”, aiming to limit its rapid transmission within IGAD member states and the region in general, and to mitigate the health and socioeconomic impact of the outbreak amongst the IGAD member states (IGAD, 2020 (2)).

The strategic objectives with the guiding principle that “we can only be as strong as the weakest health system” to support the IGAD member states include to:

- Delay the virus spread, limit community transmission and reduce its impact on health systems through appropriate containment and mitigation measures.
- Support testing capacity for rapid diagnosis of COVID-19 cases.
- Train the front-line health workforce on active surveillance, case detection and contact management
- Improve information and data sharing including innovation and research

The strategic interventions to meet the above listed objectives include:

- Strengthen the regional and cross border collaboration and coordination with the guiding principle of “Be the change”,
- Support scaling up national response capacity to detect and manage COVID-19 outbreak with guiding principle “test, treat, trace and track”
- Protect vulnerable populations such as refugees, IDPs, migrants and other special populations at cross border and host communities with the guiding principle “Leaving no one behind”
- Improve knowledge management, innovation and capacity building for supply chain management with guiding principle “investment on local knowledge saves a million”

9. The budget share of the health sector in the peCOVID-19 years

i. Total Health Expenditure (THE):

According to the seventh round of Health Account (HA) (2016/17) analysis report, Ethiopia’s total health expenditure (recurrent and capital) was estimated at ETB 72 billion (US\$3.10 billion) with 45% of nominal increase as compared to ETB 49.6 billion (US\$2.5 billion) that was reported by the sixth HA (2013/14). In 2016/17, total health expenditure accounted for 4.2% of the country’s Gross Domestic product (GDP) which is slightly decreased that of 2013/14 health account (4.7%), which is lower than the expected average of 5% of GDP for low-income countries, and well below the global average of 9.2% (MoH, 2017 (4)).

The share of recurrent health spending in 2016/17 increased to 87.95% from 86.3% in 2013/14, while the share of spending on training and research remained about the same. On the other hand, the share of capital spending has decreased to 8.6% in 2016/17 from 10.4% in 2013/14 (MoH, 2017 (4)).

The comparison of the total health expenditure of 2016/17 and that of 2013/14 are shown in the table below.

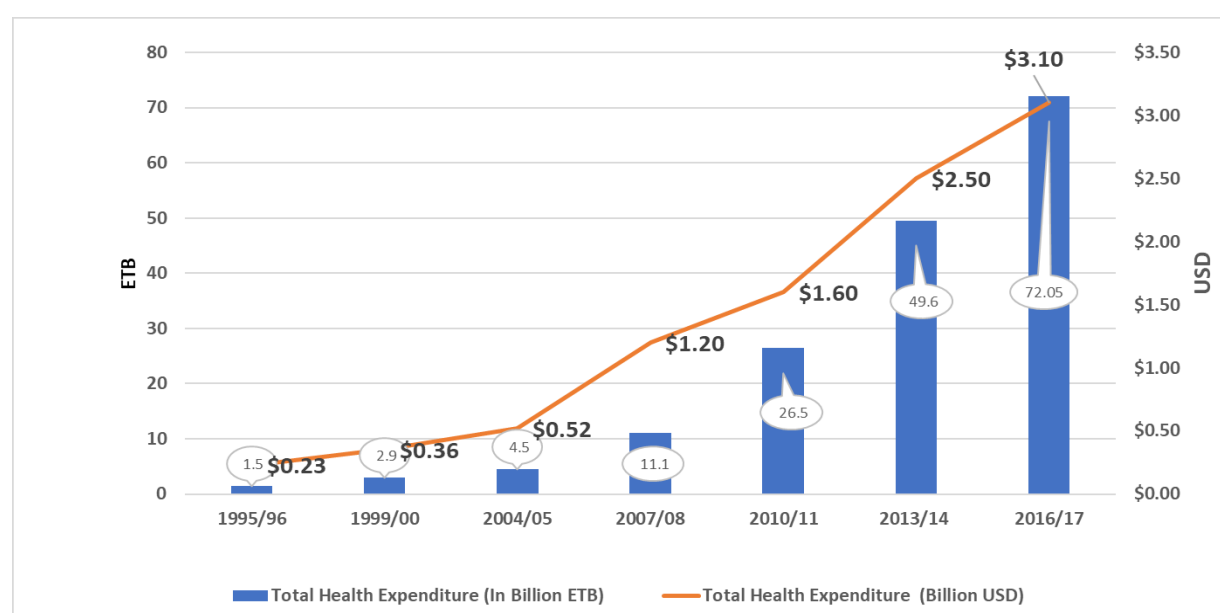
Table 1: Total Health Expenditure by Source of Financing and Spending Categories, 2013/14 and 2016/17 (ETB Billion) Source: seventh round of Health Account (HA) (2016/17)

Health Spending categories, 2016/17					
No	Source of Financing	Recurrent	Capital	Training and Research	Total
1	Donors	22.55	2.80		25.35
2	Government including parastatals	17.19	3.37	2.62	23.07
3	Households	22.08			22.08
4	Private Employee, NGOs & others	1.54	0		1.54
5	Total	63.37	6.17	2.62	72.05
6	Share	87.95%	8.6%	3.5%	

Health Spending Categories, 2013/14					
Ser No	Source of Financing	Recurrent	Capital	Training and Research	Total
1	Donors	15.68	1.95		17.63
2	Government including parastatals	9.93	3.16	1.62	14.71
3	Households	16.49			16.49
4	Private Employee, NGOs & others	0.68	0.05		0.73
5	Total	42.78	5.16	1.62	49.56
6	Share	86.3%	10.4%	3.3%	

The health expenditure has shown steady growth trend since 1995/96 as shown in the figure below.

Figure 5: Trend of Total Health Expenditure (ETB and USD Billion), 1995/96–2016/17 Source: seventh round of Health Account (HA) (2016/17)



The government spending in the total health expenditure grew by 24.7% during 2016/17 as compared to that of 2013/14. However, public allocations to fund the health sector were around 8.04% of total government expenditure in 2016/17 which is higher than the 7.6% share in 2013/14, it is slightly lower than the average of 8.7% for other low-income countries (MoH, 2017 (4)) and well below the 15% target set by the Organization for African Union’s 2001 Abuja Declaration (IGAD, 2020 (1)). The share of government health expenditure was 1.4% of GDP in 2016/17 which is lower than the low-income country average of 1.9% for the same year while the global average was remaining at 5.3% (MoH, 2017 (4)).

ii. Per capita health expenditure:

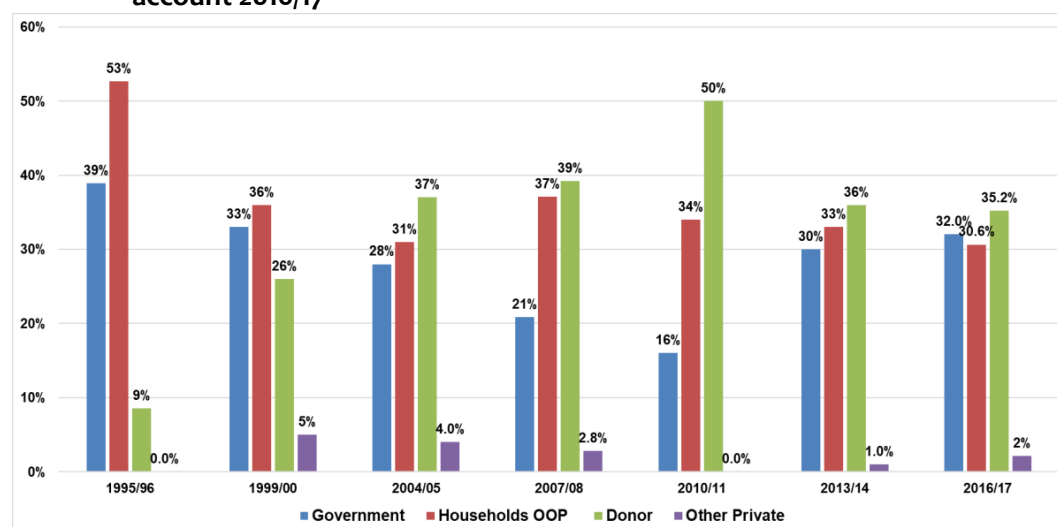
The per capita government expenditure on health, which was around US\$34.2 (in terms of purchasing power parity) in 2016/17, higher than the low-income country average of US\$25 but nineteen times less than the global average of US\$652 (MoH, 2017(4)).

iii. Sources of financing for health:

Donor assistance contributed around 35% of the total health expenditure of the country which made it an important source of financing for health services in 2016/17 slightly decreased from the 2013/14 health account 36%. Out Of Pocket (OOP) payments accounted for 31% of total financing which is 1.3% of GDP; higher than the global average 21% and was same as the low income country average 30% in 2016/17. It was also above the 20% threshold suggested by the WHO. Other private health expenditure in Ethiopia accounted for only 2% of total health sector financing 2016/17 (MoH, 2017 (4)).

The domestic sources to the total health expenditure have slightly increased from 64% in 2013/14 to 65% in 2016/17. The proportion of the government contribution has increased from 30% to 32% during the same period. Household OOP spending remains a major domestic source of financing for the health sector and its share of total health expenditure has slightly decreased from 33% in 2013/14 to 31% in 2016/17 (MoH, 2017 (4)) which is shown on the figure below:

Figure 6: Total Health Expenditure by Source of Financing (%), 1995/96–2016/17 Ethiopia health account 2016/17



The non-health account expenditure of community contribution to health through the Health Development

Army (HDA) and malaria control programs was estimated about ETB3.4 billion in 2016/17.

iv. **Management of health resources**

The managerial role of stakeholders is depending on the amount of share in the health expenditure. In 2016/17 the government had the great share in the health expenditure 52% and the health resources are managed by it. The 30% of the health expenditure accounted by households and the next largest share managing of health spending of OOP at the time of seeking health care. Rest of the world (donors and NGOs) manages 15% of Total Health Expenditure (THE) in 2016/17, which dropped from 19% in 2013/14, while insurance companies and private employers manage 3% of THE. Within the government system, regional health bureaus and the MoH managed 48% and 44% of THE, respectively. Other ministries and public units (belonging to central government) managed 6% of THE, while parastatals managed 2% of the resources (MoH, 2017(4)).

10. Funding Mechanism

The Ethiopian government has set up a resource mobilization committee tasked with coordinating efforts of gathering financial and non-financial materials for COVID-19 emergency preparedness. At the initiation of the preparedness, MoH has planned to mobilize and allocate resources at national, subnational, regional and sub-regional levels from the following possible sources:

- Internal available resources-MoH (repurposing existing resources),
- Government: Central government and other government sectors,
- Non-Government: Development partners/donors (re-purposing, new grants/loans),
- Private sectors: manufacturers, importers, service providers, new entrepreneurs,
- Civic society: Ethiopian Diaspora, Local civic societies and Health Professional Associations

According to the WHO COVID-19 Ethiopian country office response overview presentation on June 17, 2020, there is a huge financial resource gap amounting \$ 43,578,093 between demand and supply. Currently, \$ 9,421,907 is available and \$ 9,000,000 is in the pipe line. Some of the donor support information (data) is presented in the table below.

Table 2: Some of COVID related Donors' support to Ethiopia

No	Donors	Donation in cash/Kind	Purpose	Source of information	Remark
1	European Union (EU)	€10 million	Government's Preparedness and Response Plan to the pandemic	press release June 10, 2020	
		€15 million	Health sector budget support to strengthen the country's health facilities & save lives.		
2	UNICEF Ethiopia	US\$5.7 million	Procurement of PPE	UNICEF; ETHIOPIA COVID-19 Situation Report No. 13 16-30 June 2020	
3	United Kingdom (UK)	£12 million	Global leadership in fight against Covid-19	COVID-19 Response 08 April 2020	Through UNICEF
		£7 million	coordinate the response to the virus and respond to other humanitarian needs in the country		Through United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA)
4	Jack Ma donation	Medical supplies which include tests kits, medical masks protective suits and face shields in three rounds	COVID-19 pandemic response	Press release Addis Ababa, 27 April 2020 and COVID-19 response bulletin, 27 March 2020.	
5	Tencent Charity Foundation	testing kits and gloves	Increase the capacity of testing COVID 19	Press release May 25, 2020	
6	African Development Fund	\$165 million	National COVID-19 emergency response	Press release July 03, 2020	Approved as a grant
7	IMF	US\$411 Million	Emergency Assistance to Ethiopia to Address the COVID-19 Pandemic	Press release April 30, 2020	
		US\$12 million	relief under the Catastrophe Containment and Relief Trust (CCRT) on debt service		
8	Japan gives over Addis	USD 4 million	COVID-19 response in Ethiopia	Press release Ababa 29 June 2020	UNICEF
10	World Bank Group	USD 41.3 million	Emergency Support to Ethiopia to Manage Health impact of COVID	Press release April 2, 2020	
		USD 41.3 million credit	Economic impact of COVID		
11	World Vision	USD 1.7 million			
12	USA	\$37 Million	Mitigate the spread of the virus	Press release May 8, 2020	Through USAID
13	ICRC	ETB 7.2 million Birr worth PPE materials and Hygiene materials	To 14 Isolation centers and 5 primary health care units in the regions	Ethiopia COVID-19 fact sheet April –May 2020	
14	Denmark	USD 18 million Donation	Boost Ethiopia's National COVID-19 Response Plan with a focus on improving food security, enhancing social protection networks	Press release April 30, 2020	

NB. Also see the Humanitarian Response Plan from UNOCHA in Annex 1.

11. Opportunities and challenges associated to COVID-19 outbreak in the Ethiopian context with focus on the health system

11.1 Opportunities

- Having an existing Public Health Emergency Management system which only needed activation
- Political will and strong leadership from the central government on coordination of preparedness to response to COVID-19 witnessed through timely decisions on resource mobilization and budget allocation as well as developing prevention strategies such as movement restriction which are helpful for the practicality of physical distancing.
- The involvement of central government in collaboration and partnership with different stakeholders, including reaching out to donors and development partners to mobilize resources. And by establishing ministerial committee, the government involved to oversee the response activities to COVID-19.
- Establishment of four-level coordination for the execution of response activities promoting sharing of responsibilities at different level.

11.2 Challenges

- Difficulties to raise public awareness especially in the rural areas, marginalized urban area, refugees/returnees due to poor access of the dissemination media or movement restriction.
- Increase in the morbidity and mortality from COVID-19 and non COVID-19 related health conditions due shortage of health professionals with lack of medical supplies including PPEs in poor health institutions facilities.
- Failure to adhere to the infection prevention and control practices by the communities will increase the risk of being infected by the virus with increasing of the spreading of the pandemic affecting large proportion of the population in the country resulting in overwhelming of the health system with increasing the severity of the infection and death toll.
- Currently, the number of cases is steadily increasing due to increase in the tests which leads to overwhelming of the isolation and care centers that needs strategic shifting, additional resourcing.

12. Limitation of the study

The daily change of numbers on the epidemiological situation creating the difficulty to give solid data. Difficulty to access primary data as the Covid 19 data has become more sensitive and there is observed lack of some information especially on funding source and funding management mechanism and also status on the research activities.

13. Lessons learnt, Strategic and policy recommendation and the way forward to the Ethiopian Health system

The Country health strategy is emphasizing on strengthening of primary health care unit which comprise Health posts, health centers and primary hospitals with limited resources and capacity that could not accommodate the current types of huge emergency situation. Therefore, the government needs to see the strategy and work on the improvement of secondary and tertiary level of health care settings in order to be ready for any kind of emergency situations for the future.

Though the total health expenditure is growing, it is still below the WHO minimum recommendation and the African Union declaration so the government give emphasis on the improvement of total health expenditure. The involvement of IGAD in health program is important because working together creates an opportunity to share the burden and responsibilities among the member countries.

The Coronavirus is continuing to spread globally and the numbers of cases reported are increasing nationally. This increasing number will be difficult to manage with the existing limited capacity of health system and weak economy of the country. In this condition, intensifying the preventive measures should be considered as the greatest and affordable options because the case management strategy is resource intensive and unaffordable. Therefore, the proper implementation of public health measures is strongly recommended.

Public health measures; such as **personal measures** include frequent hand hygiene physical distancing, respiratory etiquette, use of masks and environmental cleaning and disinfection at home, **Physical and social distancing measures include avoid crowding**, physical distancing, reduction or cancellation of mass gatherings, work from home, **Movement measures** aim to prevent introduction and limit movement of the virus from one area to another include limiting movement of persons locally or nationally and **Special protection measures** aim to protect special populations and vulnerable groups. The proper implementation needs to balance the risk and benefit of these measures based on the country situation and the transmission scenario. Risk communication and community engagement activities should be strengthened by instituting community health education by using health extension workers with the involvement of communities at the lowest administrative unit including community based organizations like Eder and housing association, religious institutions etc.

The infection prevention and control strategies that are recommended by WHO should be adhered by the communities which should be supported by the implementation of behavioral change intervention at the community level targeting each household. The increase in capacity of the case detection, testing and case management should be continued in collaboration of stakeholders and revision of the response strategies should be considered as the situation changed based on the availability of resources as it is acknowledged by the health authorities. To maintain the essential health services the revised strategies adopted from WHO should be implemented to ensure the availability of services for the non COVID-19 health related condition which improve the wellbeing of the population.

The psychosocial impact of COVID-19 should be addressed properly by integrating the service in the care and isolation/quarantine center for the patient/person and health care provider with establishment of remote access of the service by telephone. Parallel strategy for the specific concurrent outbreaks should be designed with the involvement of the stakeholders such as humanitarian partners, WHO and UNICEF including the local communities for the response of competing priorities. In collaboration with donors, development partners, local societies, government should ensure sustainable medical supplies including test kits and PPE which are an integral for the controlling of the spread of the pandemic. Ethiopia has a risk of food insecurity due to the crisis. Farmers should be supported to ensure uninterrupted supplies and food security. Similarly, focus should be on regions and communities where risks are most acute, strengthening social protection systems and safeguarding access to food and nutrition for the most vulnerable groups, especially young children, pregnant and breastfeeding women, older people and other at-risk groups.

The major lesson learnt from this pandemic is, it gives an opportunity to the country to study, upgrade and renovate its health system and work on the improvement of the health of the community for the future.

14. Way forward

- With the support of partners, more research should be encouraged on COVID-19 pandemic including in participation of discovery of vaccine and treatment.
- In the preparedness plan measures to improve the resilience and preparedness of healthcare systems after the COVID -19 should be incorporated.

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Annex I: Ethiopia 2020 (Humanitarian response plan) source UN OCHA financial tracking service updated on July 29, 2020

<u>Source org.</u>	<u>Destination org.</u>	Description	<u>Amount (US\$)</u>	<u>Funding status</u>	Boundary
Bill and Melinda Gates Foundation	World Health Organization	COVID-19: Preparedness and response in WHO AFRO Region (portion inside the appeal) - Ethiopia	149,974	Commitment	Incoming
<u>Central Emergency Response Fund</u>	World Health Organization	Scaling up health emergency response to COVID-19 in humanitarian settings (20-RR-WHO-022)	1,000,000	Commitment	Incoming
<u>Central Emergency Response Fund</u>	United Nations Development Programme	Ethiopia COVID19: Health (part of 20-RR-UDP-003)	100,236	Paid Contribution	Incoming
<u>Denmark, Government of</u>	Danish Red Cross	COVID-19 Response	383,995	Commitment	Incoming
Ethiopia Humanitarian Fund	World Health Organization	Strengthening infection prevention and control core pipeline support to the COVID-19 outbreak response in Ethiopia	401,934	Paid Contribution	Incoming
Ethiopia Humanitarian Fund	Catholic Relief Services	Emergency Shelter/NFI and COVID-19 integrated response for IDPs/returnees in Guchi, Moyale (Oromia), and Wachile Woredas of Borena Zone, Oromia Region	485,074	Paid Contribution	Incoming
Ethiopia Humanitarian Fund	United Nations Children's Fund	Emergency support for NFI procurement and durable water scheme construction for IDPs and host communities vulnerable to COVID-19 in Somali and Oromia regions	659,845	Paid Contribution	Incoming
<u>Switzerland, Government of</u>	World Health Organization	COVID-19 preparedness and response for Somali region of Ethiopia	198,537	Commitment	Incoming
<u>Central Emergency Response Fund</u>	World Health Organization	Scaling up health emergency response to COVID-19 in humanitarian settings (20-RR-WHO-022)	1,000,000	Commitment	Incoming
<u>United Kingdom, Government of</u>	United Nations Children's Fund	COVID- 19 (SM180344)	8,674,102	Paid Contribution	Incoming
<u>United States of America, Government of</u>	United Nations High Commissioner for Refugees	UNHCR COVID Response Country portion of US \$ 64,000,000 (State/PRM)	789,000	Paid Contribution	Incoming
<u>Finland, Government of</u>	United Nations High Commissioner for Refugees	CD D0012 - Allocation from the reserve fund - Contribution in response to the COVID-19 appeal.	596,809	Paid Contribution	Incoming
<u>Ireland, Government of</u>	World Health Organization	Strengthening COVID-19 preparedness and response in Ethiopia	1,065,394	Commitment	Incoming

<u>Ireland, Government of</u>	ACT Alliance / Christian Aid	To save lives and alleviate suffering	143,739	Commitment	Incoming
<u>United States of America, Government of</u>	International Organization for Migration	Ethiopia /COVID19 - Contribution for Humanitarian Activities included in IOM Global Strategic Preparedness and Response Plan Coronavirus Disease 2019 (IOM COVID GSRP) (State/PRM)	2,950,000	Commitment	Incoming
<u>United Kingdom, Government of</u>	United Nations Children's Fund	Hygiene, Handwashing & Behaviour Change Coalition for COVID 19 Response - Ethiopia (SM200202)	250,452	Paid Contribution	Incoming
<u>Central Emergency Response Fund</u>	United Nations Development Programme	Ethiopia COVID19: Health (part of 20-RR-UDP-003)	100,236	Paid Contribution	Incoming
<u>United States of America, Government of</u>	World Food Programme	Ethiopia/COVID-19 - Emergency food assistance (USAID/FFP)	6,000,000	Paid Contribution	Incoming
<u>Japan, Government of</u>	United Nations Children's Fund	Emergency Assistance for Prevention of Further Spread of the Novel Coronavirus (COVID-19) Infection - Ethiopia (SM200344)	4,044,573	Paid Contribution	Incoming
United Nations Children's Fund	World Health Organization	UNICEF's contribution to WHO for building health system resilience for nutrition emergencies in Ethiopia (COVID)	2,480,260	Commitment	Internal
<u>United States of America, Government of</u>	Save the Children	Ethiopia/COVID-19 - Emergency food assistance (USAID/FFP)	9,000,000	Paid Contribution	Incoming
<u>United States of America, Government of</u>	African Medical and Research Foundation	Ethiopia/COVID19 - Health,Water, Sanitation and Hygiene (USAID/OFDA)	700,028	Paid Contribution	Incoming
<u>United States of America, Government of</u>	CARE International	Ethiopia/COVID19 -Health,Water, Sanitation and Hygiene,Protection (USAID/OFDA)	300,000	Commitment	Incoming
<u>United States of America, Government of</u>	Catholic Relief Services	Ethiopia/COVID19 -Health,Water, Sanitation and Hygiene (USAID/OFDA)	400,000	Paid Contribution	Incoming
<u>United States of America, Government of</u>	International Rescue Committee	Ethiopia/COVID19 -Health,Water, Sanitation and Hygiene (USAID/OFDA)	1,800,000	Paid Contribution	Incoming
<u>United Arab Emirates, Government of</u>	World Food Programme	WFP field hospital transported by the UAE from Norway to Ethiopia through 3 trips.	1,800,000	Paid Contribution	Incoming
Ethiopia Humanitarian Fund	World Health Organization	Strengthening infection prevention and control core pipeline support to the COVID-19 outbreak response in Ethiopia	401,934	Paid Contribution	Incoming

<u>World Bank</u>	United Nations Children's Fund	COVID-19 response - Ethiopia (SM200470)	7,236,953	Paid Contribution	Incoming
<u>United States of America, Government of</u>	Save the Children	Ethiopia/COVID19 -Health, Water, Sanitation and Hygiene, Protection (USAID/OFDA)	800,000	Commitment	Incoming
<u>United States of America, Government of</u>	Project HOPE	Ethiopia/COVID19 -Health, Water, Sanitation and Hygiene (USAID/OFDA)	400,000	Commitment	Incoming
<u>United States of America, Government of</u>	People in Need	Ethiopia/COVID19 -Water, Sanitation and Hygiene (USAID/OFDA)	400,000	Paid Contribution	Incoming
<u>United States of America, Government of</u>	Mercy Corps	Ethiopia/COVID19 -Health, Water, Sanitation and Hygiene (USAID/OFDA)	638,688	Paid Contribution	Incoming
<u>United States of America, Government of</u>	World Vision USA	Ethiopia/COVID19 -Health,Water, Sanitation and Hygiene,Protection (USAID/OFDA)	700,000	Paid Contribution	Incoming
<u>United States of America, Government of</u>	United Nations Children's Fund	Ethiopia/COVID19:Health,Water, Sanitation and Hygiene (USAID/OFDA)	700,000	Commitment	Incoming
<u>United States of America, Government of</u>	Pathfinder International	Ethiopia/COVID19:Health (USAID/OFDA)	500,000	Commitment	Incoming
<u>United States of America, Government of</u>	Food for the Hungry	Ethiopia/COVID19: Health,Water, Sanitation and Hygiene (USAID/OFDA)	500,000	Commitment	Incoming
<u>United States of America, Government of</u>	World Health Organization	Support to WHO's preparedness and response activities to combat the global novel Coronavirus outbreak, International Disaster Account - Ethiopia (USAID)	700,000	Commitment	Incoming
Bill and Melinda Gates Foundation	World Health Organization	COVID-19: Preparedness and response in WHO AFRO Region (portion inside the appeal) - Ethiopia	149,974	Commitment	Incoming
Ethiopia Humanitarian Fund	Catholic Relief Services	Emergency Shelter/NFI and COVID-19 integrated response for IDPs/returnees in Guchi, Moyale (Oromia), and Wachile Woredas of Borena Zone, Oromia Region	485,074	Paid Contribution	Incoming
<u>United States of America, Government of</u>	Handicap International / Humanity & Inclusion	Ethiopia/COVID19 -Health, Water, Sanitation and Hygiene (USAID/OFDA)	900,000	Commitment	Incoming
<u>United States of America, Government of</u>	International Medical Corps	Ethiopia/COVID19 -Health, Water, Sanitation and Hygiene, Protection (USAID/OFDA)	1,099,507	Commitment	Incoming

<u>United States of America, Government of</u>	International Organization for Migration	Ethiopia/COVID19 -Health, Water, Sanitation and Hygiene, Protection, Shelter and Settlements (USAID/OFDA)	1,000,000	Commitment	Incoming
<u>United States of America, Government of</u>	John Hopkins University	Ethiopia/COVID19 -Health,Protection (USAID/OFDA)	400,000	Commitment	Incoming
UNICEF National Committee/United Kingdom	United Nations Children's Fund	Donation of soap bars - COVID 19 - UNILEVER - Ethiopia (KM200068)	56,000	Paid Contribution	Incoming
Ethiopia Humanitarian Fund	United Nations Children's Fund	Emergency support for NFI procurement and durable water scheme construction for IDPs and host communities vulnerable to COVID-19 in Somali and Oromia regions	659,845	Paid Contribution	Incoming
<u>European Commission</u>	United Nations High Commissioner for Refugees	COVID-19 Ethiopia	222,020	Paid Contribution	Incoming
<u>United States of America, Government of</u>	United Nations High Commissioner for Refugees	COVID-19 Ethiopia GUSA02 -	7,900,000	Paid Contribution	Incoming
<u>United States of America, Government of</u>	ACT Alliance / Lutheran World Federation Nepal	Health and WaSH (USAID/OFDA)	499,974	Commitment	Incoming
<u>France, Government of</u>	Programme Against Malnutrition	Assistance alimentaire d'urgence en faveur des populations vulnérables en milieu urbain en raison du COVID-19	565,611	Paid Contribution	Incoming

Case Study II
SOCIO-ECONOMIC IMPACT OF COVID-19 PANDEMIC
IN KENYA

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OCTOBER, 2020

1 Introduction

1.1 Overview of Kenya's Pre-Pandemic Socio-Economic Performance

1.1.1 Socio-Economic Development Policy Framework

Overall, Kenya has mainstreamed socio-economic development in its overall development agenda. The country's development agenda is, in turn, underpinned by the national development blueprint, *Kenya Vision 2030*, and the *Kenya Constitution 2010*. The development blueprint focuses on transforming the country into a modern, globally competitive, middle income country, offering a high quality of life for all citizens in a clean and secure environment. This long-term national development strategy aims at attaining an average growth rate of 10 per cent per year and sustaining it to 2030. The growth rate was expected to generate the resources needed to address the issues of wealth creation, employment generation, equitable distribution of national wealth, as well as effective youth employment and engagement in all sectors. The *Kenya Constitution 2010* makes clear provisions for gender equality and empowerment of women and devolution of governance and socio-economic development resources to the counties. The Constitution also guarantees women and children a right of access to basic social services.

1.1.2 Macro-Economic Performance Trends.

Recent trends in the country's macroeconomic performance is presented in Table 1.

Table1: Performance of Key Macro-Economic Indicators, 2015-2019

DESCRIPTION	UNIT	2015	2016	2017	2018	2019
Overall GDP growth	%	5.7	5.9	4.8	6.3	5.4
Sectoral growth						
Agriculture, forestry& fishing	%	6.2	4.7	1.6	6.3	5.4
Manufacturing	%	3.5	2.7	0.2	6.0	3.6
Transport and storage	%	6.4	7.8	7.3	14.6	12.1
Building and construction	%	13.6	9.2	8/6	6.9	6.4
Information and communication	%	8.1	9.7	11.0	12.9	10.3
Finance and insurance	%	7.2	6.9	2.6	6.3	5.4
Inflation	%	6.6	6.3	8.0	4.7	5.2
Current account as percentage of GDP	%	-6.9	-5.8	-7.2	-5.8	-5.8
CBK interest rates	%	11.5	10.0	10.0	9.0	8.5
KSh/USD exchange rate	KSh	98.2	101.5	103.4	101.3	102.0
Size of public expenditure	KSh (tns)	1.6	1.8	2.1	2.1	2.4
Size of Public revenue	KSh (tns)	1.1	1.3	1.4	1.5	1.7
Size of fiscal deficit	KSh (tns)	0.5	0.5	0.7	0.6	0.7
Fiscal deficit as percentage of GDP	%	-8.09	-8.47	-7.86	-7.37	-7.82
Size of public debt	KS (bn)	33,043	37,718	43,436	52,864	54,595
Public debt as percentage of GDP	%	51.45	54.50	55.18	60.15	62.12
Debt per capita	USD	690	769	865	1,029	1,033
Size of Debt Service	KSh (bn)	5.7	5.9	4.8	6.3	8.5
Debt service as percentage of exports*	%	8 (31.0)	11(32)	15(34)	23 (36)	24.03 (25.02)

Source: 1.KNBS, *Economic Surveys, 2015/2016-219/2020* 2. World Bank, *International Debt Statistics 2020*

* Figures in parentheses represent debt service (sum of principal repayments plus actual interest payments actually paid on debt to non-residents) as a ratio of gross national income (GNI).

While relatively robust and resilient, the Kenyan economy experienced sluggish economic growth performance in the recent past. Over the last five years, the economy grew at an average of 5 per cent per annum. . The overall growth rate of the economy dipped from 6.3 percent in 2018 to 5.4 percent in 2019. The declining trend of the growth performance of the economy was attributed to adverse impact of global economic performance on the performance of tourism sector and external trade balance.

The dip in the overall growth of the country was reflected in all sectors except the financial services sector. The growth performance of the manufacturing sector was adversely affected by the outbreak of COVID-19 in China. The outbreak disrupted the sector's supply chain of raw materials and intermediate goods from this country. The decline in the growth performance of the agriculture sector was attributed to both declining global demand for exports and adverse weather conditions including locust invasion especially in the arid and semi-arid lands (ASALs).

Provide the 2020 assessment later. Over the years, the government has pursued prudent monetary policy, reflected in relative stability of key macroeconomic indicators namely, inflation, interest rates and exchange rate The country's overall inflation rate has remained in single-digit levels (averaging 6% in the last two years, reflecting prudent monetary policy, refinement of methodology of its computation, and declining oil prices. 0 percent.

Over the years, the Kenyan Shilling (KES) has remained relatively stable against the major foreign currencies, supported by foreign exchange inflows through remittances, increased foreign invest flows,) and the successful issuance of sovereign bond. However significant declines in tourism earnings and widening trade deficit have occasionally led to its depreciation, necessitating intervention of the Central Bank of Kenya (CBK) through moral suasion and mopping of excess liquidity in the market.

Over the years, Kenya has witnessed continuing deepening of financial inclusion based on the introduction of the mobile based payment systems, namely, M-Pesa and M-shwari. The poor have benefitted the most as, for example; M-Pesa reaches 84 percent of population earning less than USD\$2 a day, increasing financial access. The number of micro deposits in formal financial institutions (deposit accounts below USD\$1,200) has increased more than 10 times over the past 10years. Lower transaction costs, higher financial access, and continuous innovation, with many products using mobile payment platform already in place, have an impact on welfare.

1.1.3 Public Finance Performance Trends

The information in the table 1 above show that while the government remains committed to fiscal prudence and debt sustainability, its fiscal deficits, public debt and debt servicing costs have escalated in the recent years. Over the review period, the country's fiscal deficits averaged about KSh 0.5tns (or -7.92 % of GDP). The large budget deficits were explained by significant differential growth rates in government expenditure and revenue collections. The budget deficits were primarily financed through public debt leading to a similar rise the debt to GDP ratio from about 52 per cent percent to 62 percent of GDP over the review period.

The trends in both the fiscal deficit to GDP ratio, debt to GDP ratio and debt service ratio have exceeded the IMF recommend thresholds of 30 per cent, 50 percent and 20%, respectively. The growth in the country's debt service reflects its shift from concessionary to commercial and high cost debt. To create further headroom for further public debt, the government amended its Public Finance Management Regulations to increase its permissible debt ceiling. The country's debt mix currently stands at 51:49 external to domestic debt, respectively. There is wide recognition that the country is mired in deep debt crisis that has left little headroom for debt sustainability, implying potential for downgrading of its rating on credit worthiness. With support of its multilateral partners, the government is implementing fiscal consolidation reforms.

1.1.4 International Trade Performance Trends

Kenya's current account deficit deteriorated persistently over the review period due to the widening of the visible trade deficit. The sharp decline in the current account deficit is attributed to the significant decline in the performance of the tourism sector owing to insecurity, negative travel advisories and fear of continued spread of Ebola to the country. The current account deficit has been around 9 percent of GDP or more for the past three years, while the terms of trade has declined steadily. The balance of payments (BoP) improved mainly on account of proceeds from the sale of the Eurobond

Kenya's gross international reserves increased from USD 4.3 billion (equivalent to 2.9 months of imports) at end 2011 to USD6.4 billion (equivalent to 3.9 months of imports) at end-2013 and further to USD7.5 billion (equivalent to 4.5 months of imports) as at end-June 2014, following the successful inaugural sovereign bond issuance.

1.1.5 Labour Market Performance Trends

Kenya's employment statistics are disaggregated in terms of formal (or modern) and informal employment. ILO (2002) defined informal sector as activities of the working poor. Typically, these form of activities are characterised non-registered, non- taxation, ease of entry, reliance on indigenous resources and family ownership, smallness of scale, labor intensive with adapted technology, skills obtained outside the formal school system, and unregulated and competitive markets. Consequently, activities in this sector lack official protection and recognition; coverage by minimum wage legislation and social security system, trade union organization, job security, protection from work fringe benefits from institutional sources

Table 2: Total Employment and sectoral shares in Kenya, 2018-2019

Sector	2018	2019
Public sector	842,935	865,233
Private sector	2,017,000	2,063,100
Total	2,859,935	2,928,333
Sectoral shares (%)		
Informal sector	82.6	83.0
Formal sector	16.5	16.1
Self-employed	0.9	0.9

Source: GoK, Economic Survey 2020

and protection against work place occupational hazards. The recent total employment trends in the country are presented in Table 2.

The relative distribution of employment in the country in terms of sectoral composition is presented above. The private sector was the predominant source of employment, accounting for about 70 per cent of total employment in the country. The information in the Table further reveals that total employment in the country increased only marginally by about 2 per cent.

The information reveals that during the 2018-2019 period, the informal sector remained the predominant source of employment, accounting for about 83% of the Kenyan working population.

Consequently, wage employment in both the public and private sectors continued account for about 16 per cent of total employment. The major sources of wage employment in the country over the review period were distributed as shown in Table3. All of the country's major recorded employment growth during the period under review reveals the dominance of the country's education on wage employment, on account of the expansion of the sector over the years.

Table 3: Wage Employment in Kenya, 2018-2019

Sector	2018	2019
Education	576,831	598,130
Agriculture	336,607	338,578
Manufacturing	307,592	353,322
Public Administration	295,000	304,617
Wholesale & Retail	260,426	269,175

Unemployment has shown declining trend from a peak of 10 per cent during the global financial crisis of 20007/2008. During 2018-2019 review period, overall total unemployment rate of unemployment remained flat at 9.31 per cent. The country's unemployment has significant age and gender dimensions. The majority of the unemployed are the youth and women.

Approximately about 800,000 youth enter the market annually and youth unemployment is estimated at 35 per cent compared to the national average rate of about 9 per cent. Furthermore, about 80 per cent of the unemployed Kenyans are below 25 years old. The challenge of youth unemployment in Kenya is that 90 per cent of all the young people lack vocational skills

1.1.6 Poverty Performance Trends

Despite the relatively strong growth performance of the economy, the prevailing levels of poverty and inequality in the country remain still very high. The fact that nearly a half (46 percent) is estimated to still fall below the poverty line implies that many Kenyans cannot afford the recommended minimal food and non-food requirements for a dignified life. Inequality in income distribution is also high, with the bottom 20% of the population getting only 2.5% of the total income, while the highest 20% of the population gets 59% of the total income. Other signs of widening inequality include widening gender and regional disparities in terms of poverty levels and access to social services and economic opportunities. The ongoing implementation of devolution in line with the Kenya 2010 Constitution provides an important vehicle to reduce poverty across the counties while fostering improvements in the delivery of key services.

1.1.7 Performance of Education Sector

The Kenya government introduced in 2003 both free primary education (FPE) and Free Day Secondary Education (FDSE) in early 2008. The implementation of both FPE and FDSE, the country has witnessed almost 100 percent enrolment ratio at the primary education level and similarly high transition rates into secondary education level. The introduction of the state-funded higher education loan scheme has facilitated both high transition and enrolment ratios in universities. The loan scheme is being implemented by the Higher Education Loans Board (HELB) with a strong legal framework for debt recovery. With strong loan collection performance, HELB has expanded the provision of the loans to tertiary level institutions including Technical and Vocational Education Training Institutions (TVETIs).

The strong education sector development indicators led the country to be characterized by both higher literacy levels and skilled manpower than any country within the East African Community. Two primary factors underpin the country's education sector performance. The first factor underpinning the high performance achievement of the sector is the continued government policy commitment to support the sector through high budgetary outlays. The second factor is strong participation country's 'private (for-profit and not-for-profit) and community (through 'Harambee spirit')/household (through payment of fees) in the provision of education infrastructure. Unlike the Health sector (see below) the Education sector was not devolved to the 47 counties. Finally, accessibility and equity of education is unevenly distributed among the counties.

1.1.8 Performance of Health Sector

The framework for Kenya's health care system is underpinned by the *Kenya Constitution 2010*, *Kenya Vision 2030*, and *Kenya Health Policy Framework (KHPF)*. Under the framework, the ultimate goal of the country's health care system is the provision of accessible, quality and equitable health services to reduce both mortality and morbidity among the population. Health care service providers in the country comprise public (MOH and other governmental institutions), private (for-profit and not-for-profit), alternative medicine practitioners and community/households (that ensure health care support for their communities/households). About 62 percent of Kenyans rely on the public health care sub-delivery system.

On average, Kenya spends 29 USD per capita on health services; way below both the 34 USD the WHO recommends countries spend to provide a minimum health. Kenya's dependence on donor country contributions to supplement the national health budget has deepened in recent years. About 15% of Kenya's health funding come from donor sources. The level of dependence is however significantly lower than some other regional countries, where external funds account for 30-40% of all expenditures on health.

Table 4: Health Expenditure Trends, FY 2015/2016- FY 2019/2020

DESCRIPTION	UNIT	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
Share of health expenditure in GDP	%	2.0	2.0	2.0	2.0	2.0
Share of health expenditure in national budget	%	6.0	7.0		7.0	7.0
Share of health expenditure in Abuja Declaration	%	15.0	15.0	15.0	15.0	15.0

Source: GoK, Economic Survey, Various Issues

Under the Fourth Schedule of the Constitution, country's health care system was devolved to the 47 county level governments with the national government only retaining the roles of health policy formulation, technical assistance to the counties, and management of four level 6 national referral hospitals. The remainder five of the pyramidal the health care system were devolved and adapted to county administrative structures that now manage most of the 5000 public facilities and have oversight over the 4000 private facilities in the counties.

The counties inherited weak and fragile health care system as reflected in the overall low and inequitable facility and medical personnel densities. At the facility level, about half of the counties have fewer than two facilities per 10,000 people and fewer than 4.2 facilities per 100 km². Though higher, facility densities vary significantly among the balance of the counties with Nairobi and Mombasa counties enjoying the highest densities. Only about 63 percent of the Kenyan population have access to a public health care facility located within one hour from their homes, implying low access to health care services. The country's overall ratio of health care workers per 100,000 people, ranked globally at 169, is significantly below the WHO recommended ratio of 230 per 100,000 population.

The overall medical staff density however masks significant disparities among the 47 counties. Counties such as Nairobi and those of Central Kenya are better resourced and enjoy higher densities (ratios) than rural marginalized parts of the country. Assessed in terms of densities of critical medical personnel especially doctors and nurses, the quality of medical services in the country appear low and mixed. The ratio of doctors per 10,000 population in the 47 counties ranged between zero (Mandera) and 2 (Nairobi), falling below the national threshold of 3 per 10,000 population. On the other hand, the density of nurses was much higher, ranging between 0.9 per 10,000 people (Mandera) and 11.8 per 10,000 people (Isiolo). However, only four counties meet the national threshold of 8.7 nurses per 10,000 people. The staffing/human resources challenge becomes worse when broken down by specialization. The situation of staffing densities in the country's health care system has been attributed to low per capita public expenditure on the sector, poor working environment, and brain drain.

1.1.9 Performance of Water and Sanitation Sector

The country has made substantial progress in increasing access to safe drinking water and basic sanitation. The proportions of rural and urban populations with access to clean drinking water are estimated at about 48 per cent and 75 per cent, respectively. Similarly, the proportion of households with access to improved sanitation is currently estimated at about 25 percent. The progress is underpinned by a new water services management framework that rationalizes local water rate structures that ensure better cost-recovery, conserve water, and are geared toward pro-poor access and equity policies.

1.2 Rationale of the Study

Since its outbreak in the Chinese city of Wuhan, the COVID-19 has morphed into a monster that has crashed the global socio-economic fabric. The member countries of HoA have been morphed into the global COVID-19 pandemic since early March 2020. Over the period of two months, the pandemic has rapidly escalated in the sub-region. Though Kenya and Africa have yet to suffer the

level of devastation witnessed in the US, some western European countries and other parts of the world, impact of slowed economic activities from the containment measures has already hit livelihoods of the vulnerable populations and micro, small and medium enterprises (MSMEs).

However, the socio-economic devastation of Coronavirus pandemic is projected to worsen due to the fragilities of both the economies and health systems of the sub-region. It, clearly, seem urgent to measure the initial socio-economic impacts of the pandemic and suggest practical policy recommendations for effective management of the pandemic to reduce its adverse socio-economic impacts including effective design and implementation of containment and relief measures, funding strategies and economic recovery strategies. The assessment should comprise the broad range socio-economic indicators before and after the onset of the pandemic

1.3 Objectives and Scope of the study

The main objective of this assessment is to assess the broad adverse health and economic impacts of the COVID 19 pandemic in the IGAD region (based on data collated from member countries and cross country issues). . The specific objectives of the study are to:

- Assess the spread of the COVID-19 pandemic in the countries and identify the health system's response level and capacity at the national level.
- Identify the level of response or measures required by the regional and international community in regard to health assistance in the region.
- Understand the socio-economic and health situation in the refugee and IDP hosting areas and identify the health needs of the targeted communities (i.e. refugees and IDPs).
- Understand the overall economic impact of COVID-19 on the vulnerable groups of the population (underemployed/daily laborers, women and children engaged in informal business activities and micro and small enterprises
- Explore possibilities of domestic resources mobilization involving the public, private sector, and the diaspora, etc.
- Opportunities and challenges in the country context
- Provide recommendations that define and establish priorities for actions and resources necessary for the immediate response, so as to contain the spread of the pandemic and improve the resilience of more vulnerable groups.
- Draw policy recommendations for effective management of the pandemic to minimize its negative impact, the livelihoods (food security) and the economy (businesses), and for the recovery phase of the member countries and the sub region.

1.4 Methodology of the Study

This study is primarily based on desk review and key informants interviews. The e data were obtained mainly from secondary sources through extensive document review and analysis, and

from the Ministry of Health, the National Treasury, Central Bank of Kenya (CBK), Kenya National Bureau of Statistics (KNBS) as well as regional and international relevant organizations working in refugee and IDP hosting areas. Given the national lockdowns due to the pandemic, largely telephone interviews with the key informants in the relevant institutions/organizations were made. Key informant interviews were conducted with identified key respondents among key stakeholders from relevant institutions mainly at national level and Secretariat of Council of Governor (CoG) (representing 47 county level governments)

At the domestic level, the key sources included the *National Budgets, Economic Surveys, Economic Abstracts, and Monetary Policy Statements*. At the global and regional levels, the consultant examined IGAD, African CDC, and International Financial Institutions' 2020 *Economic Outlook* reports. Key informant interviews were conducted on management staff of the National Treasury, CBK, Ministry of Health (MoH), COVID-19 Emergency Response Team, and regional and international entities located in the country.

Adequate and comprehensive qualitative and quantitative data relevant for the health and economic impacts analysis were collected from the documentary analysis and key informant interviews. The data from primary and secondary sources were collated, analysed and synthesized using appropriated software; descriptive and inferential methods. The analysis of the data was both synthetically and action-oriented, focusing on the identification key findings, conclusions and recommendations of the Study. The report will be analytic and come out with through synthesis than raw data presentation. Both the actual and conjectural (logical potential) socio-economic impacts of COVID-19 responses were assessed using events analysis, comparing pre-COVID-19 and current socio-economic situation. The study was conducted during the April-May 2020 timeframe.

1.5 Study report structure

Following this introduction section, the remainder of this draft report is in three parts. Part two will assess the impact of COVID-19 on the health system. Part three of the draft report will assess the economic and social consequences of COVID-19. Part four will provide concluding remarks including provision of the summary of the assessment and policy conclusion accruing from the previous part two and three.

2 The impact of COVID-19 on health and health system

2.1 The trend/ spread of COVID-19 in the country / the nature of the crisis –an overview

2.1.1 Overall Trends of COVID-19 Pandemic

Table 5. Comparative Situation of COVID-19 in Kenya

Country	Confirmed Cases	Deaths	Recovered
Kenya	1,988	52	124
HoA Total	2,674	77	786
Africa Total	33,389	1,471	10,206
Global Total	5,600,000	350,000	2,400,000

Source: WHO, AU and GoK, Reports

The first positive case of COVID-19 in Kenya was identified on 13 March, 2020. Initial epidemiological modelling had forecast between 5,000-10,000 cases in the within the first month of its outbreak.

Two months later the incidence of the actual cases is significantly below the forecast levels. The situation has been to both the crippling containment and low COVID-19 surveillance capacity. While the enforcement measures have largely been effectively implemented, mass testing of the population has been limited. The situation has been attributed to laboratory test capacity especially reagents. With significant capacity constraints, surveillance for the COVID-19 has been guided by cluster mapping of vulnerable populations. Recent surveillance results from the cluster populations have seen a spike in positive cases, increasing in double digits daily during the past one month, raising fears that the initial epidemiological projections of the incidence of the COVID-19 may not have been unrealistic.

2.1.2 Preparedness and response

Prior to 13 March 2020 when Kenya recorded the first positive case of COVID-19 pandemic, the country's preparedness and response has evolved over time. In the initial stages ((between 2nd - 13th February 2020), Ministry of Health (MOH) initiated precautionary public health safety measures against its potential spread into the country including advising Kenyans to minimize contact with people with respiratory infections, against non-essential travel to affected countries, especially Wuhan in China, and adoption of a multi-agency approach to deal with the threat of COVID-19. On 28th February, 2020, the President issued *Executive Order No, 2 of 2020* establishing the overall framework to upscale and coordinate Kenya's response to COVID-19.

The following were among its specific orders:

1. The national isolation and treatment at Mbagathi Hospital be completed and ready to receive patients within seven days from the day thereof
2. That the identification and preparation of isolation and treatment facilities in level V and referral hospitals across the country be concluded by March 15, 2020.
3. That the National Emergency Response Committee (NERC) on COVID-19 is hereby established
4. That the Cabinet's ad hoc Committee on Health and Inter-ministerial Committee on governance is hereby dissolved and merged with 3 which is also expanded to include key stakeholder COVID-19

At its meeting on 20th March 2020, the NERC issued a raft of containment/precautionary measures to minimize community transmission of the pandemic. The social and public health measures which have evolved over time to address emerging trends in the evolution of the spread of the COVID-19 pandemic in the country include:

- Work-from-home directive
- Prohibition of public gatherings
- Closure of bars and restaurants
- Dusk-to-dawn curfew (since 27 March 2020)
- Closure of borders and ban of international travel (except cargo transport)

- Restriction of movement into and from endemic areas including Nairobi, Mombasa, Kwale, Kilifi and Mandera.
- Basic hygiene measures including hand-washing, social distancing and wearing of masks

To mitigate the potential adverse effects of the containment measures on livelihoods and businesses, the government implemented the fiscal a fi Within the broad legal framework provided by the President's *Executive Order No. 2 of 2020*, other legislations were invoked and rules and regulations issued to underpin the enforcement of the containment measures. These include the Public Health (Prevention, Control and Suppression of COVID-19) Rules, 2020 , Public Health (COVID-19 Restrictions of Movement of Persons and Related Measures) Rules 2020, gazette notice on declaration of notifiable disease and the declaration of formidable disease, the curfew order (which prohibits public gatherings, processions or movement of people during the curfew period and curfew variation order (directing employers to ensure that staff that are not designated as critical or essential service providers leave their workplace by 4pm), order restricting movement of people into and from endemic areas.

2.1.3 Fiscal Stimulus

This entailed the enactment of Tax Laws (Amendment) Bill, 2020 to cushion the public (low-income earners) and economy (businesses) from the effects of COVID-19 pandemic. The Bill amended tax related laws in Kenya to provide tax reliefs to both individuals and businesses. The enacted specific tax reliefs include:

- Income Tax Act (Cap. 470) to give 100 percent tax waivers on persons earning up to sh 24,000 per year, reduction of PAYE rate from 30 to 25 percent for persons earning more than the new threshold, reduction of turnover tax rate from 3 to 1 percent. Corporate tax was also reduced from 39 to 25 percent while non-resident tax on dividends was raised from 10 to 15 percent.
- Value Added Tax Act (2013) to reduce VAT from 16 to 14 per cent (expected to reduce the shelf-price of commodities),
- Exercise Duty Act (2015)
- Tax procedure Act (2015)
- Miscellaneous levies and fees Act (2016)
- Increase of threshold for turnover tax to between sh 1 million and sh 50 million to exclude small scale traders from the presumptive tax.

The size of the stimulus package was estimated at about 1.5% of the country's GDP. It was estimated that KRA would lose about sh172 billion from the tax waivers, exacerbating its persistent revenue collections shortfalls. It has been argued that the stimulus package would limited impact in mitigating the adverse effects of COVID-19 pandemic measures on the livelihoods and businesses. The argument is underpinned by primarily two considerations. First, the personal tax

reliefs had a narrow focus on wage earners, who account for only about 16% of total employment in the economy. Even within this narrow focus the effect of the reliefs was further limited by the wage earners being forced to take unpaid leave or being laid off outright. While the reduction of VAT had a wide coverage on both wage and informal sectors, the reduction of income from both limited working hours and joblessness diminished their capacity to benefit from the tax relief measure.

Reduced business activity, declining incomes and uncertainty over the future will invariably reduce consumer spending, thereby reducing aggregate demand. Many consumers are presently restricting their purchases to basic goods, mostly foodstuff and supplies. Expenditure on other items is likely to decline due to uncertainty over future income. Second, the stimulus effect both corporate tax relief and raise of the threshold for turnover tax was potentially limited. The situation was attributed to the implied scaling down or closure of businesses (especially MSEs) and reduced aggregate demand accruing from the containment measures.

2.1.4 Monetary Stimulus

To complement the fiscal stimulus package, the Central Bank of Kenya implemented monetary stimulus package to mitigate against the adverse effects of the COVID-19 pandemic on livelihoods and the economy. The monetary and financial sector relief measures in this package include:

- Reduction of the main policy rate by 100 basis points to 7.25 per cent. This was further reviewed to 7.00 per cent by the Monetary Policy Committee (MPC) meeting of April 2020.
- Enhancement of Liquidity support to banks. In addition to the existing Central Bank liquidity support facilities such as intra-day facility, overnight lending facility, reverse repo for seven days and refinancing facility for seven days, CBK implemented reduction of the cash reserve ratio (CRR) by 100 basis points to 4.25 to release liquidity to banks to boost their lending; and introduction of extended lending facility to banks with liquidity challenge
- Easing of loan repayment conditions to borrowers affected by the COVID-19 pandemic. Banks were exceptionally allowed to restructure outstanding loans of borrowers facing temporary cash flow challenges arising from the COVID-19 pandemic
- Encouragement of use of digital channels and contactless mobile payments. This was aimed to limit the risk of transmission of the virus through handling of cash and other non-virtual means of payment for at least three months. To this end, Mobile Network Operators and banks agreed to: zero charges on all transactions between bank accounts and mobile wallets (pull and push services), zero charges on all money transfers, and zero merchant fees on payments for all contactless Point of Sale (mobile and virtual POS) transactions.

The stimulus in the package was reduced interest rates to spur demand for credit for private sector investment in businesses. The reduction in both CBR and CRR, implied that the CBK intended to pursue an accommodative (expansionary) monetary policy stance. Like the tax stimulus, the monetary stimulus would appear to have minimal immediate effect on revival of businesses. The

situation was also attributed to the implied scaling down or closure of businesses (especially MSEs) and reduced aggregate demand accruing from the containment measures.

Furthermore, the offload liquidity to the banks to lend at reduced interest rates has been counteracted by the CBK's recent aggressive participation in the interbank market to mop excess liquidity to support the KSh/USD exchange rate. Again, only a few banks have accessed the excess liquidity due both to strict terms and limited effective demand for credit due to the uncertainty accruing from the COVID-19 pandemic. The moratorium on repayment of loans would have the dual effects of allowing businesses to finance businesses and reduce the banks' non-performing loans (NPL) portfolio. Finally, the measures to encourage cashless transaction would promote adherence to the containment measures and minimize the spread of the COVID-19 pandemic through handling of dirty cash.

2.1.5 Economic Stimulus Programme

In addition to the ongoing implementation both the fiscal and monetary stimulus package, the government has proposed Sh 53.7bn (equivalent to 2% of GDP) economic stimulus programme aimed to help the country to recovery from the COVID-19 pandemic induced economic recession. The programme is organized in terms of the following eight points:

- Sh 5bn to hire local labor for rehabilitation of access roads and footbridges.
- Sh 6.5bn to the Ministry of Education to hire 10,000 teachers & 1,000 ICT interns to support digital learning and acquisition of 250,000 locally fabricated desks
- Sh 10bn to fast-track payment of outstanding VAT refunds and other outstanding payments to SMEs. Sh 3bn as seed capital to SME Guarantee Scheme
- Hire 5,000 additional health workers with diploma/certificate qualification for one year. Sh 1.7bn for expansion bed capacity in public hospitals
- Sh 3bn for the supply of inputs through e-vouchers targeting 200,000 small scale farmers. Sh 1.5bn to assist flower and horticultural producers to access international markets
- Soft loans to hotels and related establishments through Tourism Finance Corporation (TFC). Sh 2bn to support hotel industry. Sh 1bn to engage 5,500 community scouts and Sh 1bn for 160 community conservancies.
- Sh 850mn to rehabilitate wells, water pans and underground tanks in arid and semi-arid lands (ASALs). Sh 1bn for flood control measures and Sh 540mn for Greening Kenya Campaign.
- Enforce policy on "Buy Kenya Build Kenya. Sh 600mn to purchase locally manufactured vehicles.
- The coverage of the stimulus programme seem comprehensive, giving differential budgetary weights to all sectors and vulnerable groups that were adversely affected by

the COVID-19 pandemic. However, its size may prove to be inadequate depending on the ultimate depth and duration of the pandemic. The focus on infrastructure in the programme is aimed to boost employment of the youth who account for 35% of the total unemployment in the country. The programme has prioritized the liquidity of small and medium enterprises, capacity of the public health care system, revival of agricultural production through supply of inputs, revival of the flower and horticultural sector through access to international markets and revival of the tourism and related sectors through liquidity support and employment of wildlife staff. Finally, the programme will be factored in the FY' 2020/2021 and undergo normal budgetary approval. Hence, the earliest the programme would be implemented is in July 2021, by which time its underlying assumptions may have been invalidated.

2.1.6 Social Safety Net Measures

The first of these measures entails enhancement of direct cash grants (transfers) to the vulnerable groups including slum dwellers, old people (over 70 years) and disabled and orphaned children. The second of the measures government indirect provision of weekly food support to about 108,000 vulnerable families to mitigate the negative impact of the COVID-19 pandemic containment measures on their livelihoods. The Sh 250mn in food relief was initially being distributed using the traditional in-kind model (i.e. in terms of actual foodstuffs) based on pre-qualified agents. Under this model, the government releases the money to the agents who, in turn, purchase the foodstuffs and arrange the logistics of its distribution to the pre-identified families. To mitigate the challenges of this distribution model (including corruption) and leveraging on technology, the government has adopted e-voucher distribution model in which the vulnerable families receive a direct cash transfer of KES 2000 per month instead of actual foodstuffs.

2.1.7 Public Works programmes

Aware of the livelihood stresses being encountered especially by youth due to the COVID-19, the Government has recently launched a National Hygiene Programme to create employment and healthier environment in the slum areas to contain the COVID-19 pandemic. The initial phase of the programme targets 26,148 workers, mostly youth. When fully implemented, the programme is expected to employ over 100,000 youth and include those under direct cash transfers. The programme projects to employ about 4,000 tailors to produce about 250,000 per day for distribution in the neighbourhoods, reinforcing ongoing containment measures for COVID-19 pandemic.

2.2 Health strategy, health system preparedness and response to COVID-19 in the country

With both low facility and medical personnel densities that were below both WHO and national standards, the country confronted daunting capacity constraints to respond to initial epidemiological modelling projections of between 5,000 and 10,000 COVID-19 positive cases in barely less than a month from the identification of the first positive case on March 13, 2020. The quality of facilities becomes even worse when assessed against availability of emergency response infrastructure including ICU beds, Ventilators, personal protective equipment (PPEs including

gowns, face shields, gloves, surgical masks, goggles, headgear and shoe covers to protect against the transmission of germs/viruses through contact and droplet routes.), ambulances, and diagnostic testing laboratories and containment/quarantine facilities.

At the onset of the COVID-19 pandemic, the country's health care system had only 518 ICU beds, about 90 per cent of which were already occupied and majority of which were in private hospitals in Nairobi and Mombasa. Furthermore, a joint data by the Kenya Healthcare Federation and Critical Care Society show that there were only 259 functional ventilators and 140 of them were already being used to manage other critically ill patients. At the county level, the shortage of these critical health care infrastructure was worse with 21 counties lacking even a single ICU and related infrastructure like ventilators. To ease the pressure on public facilities, the Ministry of Health has directed that planned major surgeries which require patients to be put in the ICU should be suspended.

As the MOH planned to import these critical health care infrastructure, it was confronted with global supply chain disruptions and shortage of specialized medical personnel to man the infrastructure, the need for training and hiring additional medical personnel at the county level. There was also critical shortage of isolation facilities for symptomatic cases of the COVID-19 pandemic. International standards require that Covid-19 patients are housed in separate quarantine wards which must have controlled airflow. However, the inadequacy of these facilities has compelled the government to transform existing wards in county hospitals and medical training colleges into isolation units. The Ministry of Health has also called on private hospitals with specialised ICU wards to help.

Kenya has recently launched 120-bed capacity isolation and treatment facility for COVID-19 cases based at Kenya's main referral Hospital, which is equipped with state-of the-art equipment to enhance detection and treatment of the disease. MOH has procured additional 5,000 PPEs to be distributed to all facilities in the country-added additional workers would be deployed to counties to boost response to Counties had been allowed to recruit 5,000 specialist levels and to train staff. In addition, the country has a highly trained rapid response team comprising over 1,000 health personnel on standby to investigate any alert in the country.

The Counties committed KES 5 bn in County Emergency Fund to respond to COVID-19 pandemic and have progressively ramped up capacity to cope with the COVID-19 pandemic. They procured more ICU beds increasing the capacity from 162 to 208 and ventilators from 161 to 201. They have hired 5, 000 additional medical staff, trained 9,700 public medical practitioners and set up 3,000 isolation beds in county hospitals, MTC colleges, and universities which have cubicles to reduce mingling of isolated persons. However there is decried poor response in the supply of medicines and other health equipment.

2.3 Resource (human, financial, equipment, etc.) Responses to the Pandemic

2.3.1 Internal Fiscal Sources of Funding of COVID-19 Pandemic

Kenya's ability to fund a more significant fiscal intervention to fund the COVID-19 pandemic has been constrained by the fact that both its current fiscal deficit and debt servicing ratios are above

international thresholds, limited space to borrow from both internal and external sources. Walking on a fiscal tightrope, the country could not launch a sizeable stimulus package as was the case after the 2007/2008 global financial crisis. Consequently, the country has adopted both budgetary and extra-budgetary mechanisms for funding the COVID-19 pandemic.

To offset the revenue and redirect funds towards COVID-19 mitigation, the Treasury tabled a Supplementary Budget, which allocated additional COVID-19 pandemic response related expenses of Ksh 40.3 bn. The allocation was facilitated by the approval of implementation of proposed austerity measures on both the recurrent and development budgets.

To realize the budgetary allocation for COVID-19 pandemic, both the recurrent and development expenditure budgets were scaled down. Among the austerity measures introduced in the recurrent budget include halt of purchase of vehicles, slashing of expenditure for training and furniture and introduction of cuts in domestic travel by state officers by 40%, foreign travels by 25%, hospitality by 30%; research, feasibility studies 30% and Committee expenses by 30%. The development expenses were significantly scaled down with major development projects being postponed. Within the supplementary budget KES 10 bn was slated for distribution to the elderly and vulnerable through Kenya's relatively well developed cash transfer system, while a new budget line for COVID-19 response was allocated 3.9bn.

2.3.2 Internal Non-Fiscal Sources of Funding of COVID-19 Pandemic

At the extra-budgetary (private) level, the vehicle for mobilising both internal and external voluntary contributions to support the government's COVID-19 response and measures, was the establishment of the COVID-19 Response Fund. The Public Finance Management (COVID-19 Emergency Response Fund) Regulation 2020 provides a legal framework for the mobilisation of resources for emergency response to contain the spread of the disease. The fund is being coordinated by the COVID-19 Emergency Response Team appointed by the President. The multi-sectoral Team is responsible for mobilizing and distribution of resource for national response to the pandemic. The Team has mobilised about sh 3 billion from both internal (public and private) and external (including sh1.3 billion from the World Bank) sources. The disbursement of the funds has prioritized purchase of health supplies such as protective personal equipment for frontline health workers and testing equipment.

2.3.3 Cost Savings Funding of COVID-19 Pandemic Responses and Measures

The innovative spirit of Kenyans engendered local manufacture of personal protective equipment (PPEs), significantly reducing their cost by about half from about Sh.12, 500 to less than Sh. 5,000 per complete set (MOH, 2020). With the approval of the Government some local garment manufacturers in the country's Export Processing Zones (EPZs) have re-oriented their production towards PPE. The innovation has not only mitigated the disrupted supply chain for the PPE but also significantly the country's import bill for procuring them. Even local tailors within the communities have improvised the production of face masks, making them cheaply available and thereby supporting the government's efforts to combat the COVID-19 pandemic. The innovative spirit of the Kenyan technology community towards the combating the pandemic has been reflected in the development of a software to increase efficiency laboratory testing for COVID-19 (using existing

HIV testing infrastructure) in the upwards of 37,000 samples in 12 hours. The efficiency gains of the software implies significant cost saving for funding the country's COVID-19 responses and measures.

2.3.4 External Sources of Funding of COVID-19 Pandemic Responses

World Bank Funding of COVID-19 Pandemic

On May 20, 2020, the World Bank Board of Directors approved a \$1bn budget support operation for Kenya (comprising \$750mn credit from the International Development Association (IDA) and \$250mn loan from the International Bank for Reconstruction and Development (IBRD)), which will help to close the fiscal financing gap, while supporting reforms that help advance the government's inclusive growth agenda, including in affordable housing and support to farmers' incomes (World Bank, 2020). Application for the facility, under the Development Policy Financing (DPF) project, had preceded the COVID-19 pandemic and its approval has come in handy to prop the country's responses and to the COVID-19 pandemic. The facility provides concessional resources to help Kenya navigate the current COVID-19 crisis and to cushion the impact on livelihoods and jobs, while supporting the continued operation of essential public services.

The funding complements the \$ 50mn approved by the Institution's Board of Directors on 2 April, 2020 under the Kenya Covid-19 Emergency Response Project which seeks to prevent, detect and respond to the COVID-19 outbreak and strengthen national systems for public health emergency preparedness (World Bank, 2020). The focus of the emergency funding is on medical diagnostic services, surveillance and response, capacity building, quarantine, isolation and treatment centers, medical waste disposal, risk communications and community engagement as well as for strengthening of the country's capacity to provide safe blood services. About \$10 million of this funding will go the Kenya National Blood Transfusion Service to be used to expand its capacity to provide safe blood and blood products. The emergency funding facility will be implemented in the country's 47 counties.

IMF Funding of COVID-19 Pandemic

On 6 May, 2020, IMF Executive Board approved the disbursement of US\$739mn to be drawn under the Rapid Credit Facility (RCF) to support the authorities' response to the COVID-19 pandemic (IMF, 2020). The concessionary funding under this facility will help Kenya to meet its urgent balance of payments needs, stemming from the outbreak of the COVID-19 pandemic. Hence, the balance of payments (BoP) support will enable the country to maintain an adequate level of international reserves and help provide the budget financing needed to respond to the pandemic. The approval of the funding facility was premised on three grounds. First, there is recognition that the impact of COVID-19 on the Kenyan economy, acting through global and domestic channels would be severe and entail downside risk. Second, it was recognized that while the authorities had taken decisive action to respond to the pandemic's health and economic impacts, the sudden shock had left the country with significant fiscal and external financing needs. Finally, the approval of the funding facility was premised on the authorities' commitment to resume their fiscal consolidation plans once the crisis abates to reduce debt vulnerabilities.

AfDB Funding of COVID-19 Pandemic

On 22 May, 2020, the Board of Directors of the African Development Bank (AfDB, 2020) approved an €188mn loan to support the Government of Kenya's efforts to respond to the COVID-19 pandemic and mitigate the related economic, health and social impacts. The concessional loan facility, under its COVID-19 Emergency Response Support Programme, was aimed to extend additional resources to Kenya to bolster the country's responses and measures to contain the spread of the pandemic and deal with its unprecedented impact. The funding support under the facility focuses on strengthening the national health system to effectively respond to the pandemic, build economic resilience and ensure quick recovery. Some of the proceeds of facility will also be used to support the poor and vulnerable people who have been negatively affected by the pandemic.

WHO Funding/Support of COVID-19 Pandemic

Kenya, like other African countries, has received both material and technical support from WHO through its country offices in response and measures to combat the COVID-19 pandemic (MOH, 2020; WHO, 2020). The support has taken various forms including provision of testing kits, training of health workers, strengthening surveillance in communities, issuance of updated protocols on the entire value chain of surveillance of the pandemic, epidemiological modelling expertise, diagnostics and clinical care expertise and expertise in crafting of radio messaging and TV spots to inform the public about the risks of COVID-19 and what measures should be taken. It is helping authorities to counter disinformation and has guided the country set up call centers to ensure the public is informed about the pandemic to ensure adherence to the containment measures.

US CDC Emergency Funding of COVID-19 Pandemic

US CDC has committed \$6.6mn (Sh 705mn) for COVID-19 activities in Kenya to support prevention, preparedness and support. These additional resources will be used for surveillance, laboratory supplies and strengthening and surge staffing costs. Nearly about USD1.8mn will be released immediately to support the critical needs of COVID-19 response in Kenya. This funding will be used to procure diagnostic sampling and testing supplies, provide county-level support, expand surveillance of CD-19 and support health care workers in infection prevention and control practices among other activities.

In addition CDC has 50 Kenya-based technical experts to prepare Kenya to respond to the COVID-19 pandemic. These experts are working side-by-side with Kenyan Officials at the National Laboratory county government offices and the Public Health Emergency Operations Centre. Involved in a range of activities including supporting training on preparedness and response measures at the National and county levels; providing technical assistance on emergency operations, laboratory diagnostics, infection prevention and control, risk communication and community engagement, and disease surveillance; and supporting training of field epidemiologists and giving them the necessary skills to collect and analyse and contribute to evidence-based decisions.

Debt Relief Savings Funding of COVID-19 Pandemic

Amidst the COVID-19 pandemic, Kenya required to disburse about USD 800mn (KES 900mn) in debt servicing to its multilateral, bilateral and commercial lenders (GoK, 2020; IMF, 2020; World Bank; 2020). The due debt repayments have first call on the country's Consolidated Fund. Even so, defaulting on these funds is not an option as the country would run the risk of downgrading of its credit worthiness and, hence, denying it access to any future external funding. Due to the increased debt distress risk, the Kenyan Government has opted to seek debt relief from its multilateral, bilateral and commercial lenders to mitigate any credit risk. In the debt relief option the government is seeking the reorganization of debt to provide for either partial or full respite of the due repayments through either reduction of the outstanding principal amount, lowering interest rates on loans due or extending the term of the loans.

At the multilateral level, the country was not a beneficiary of the IMF's unilateral debt service relief to 25 of its poor member countries, Kenya's per capita income was significantly above the IMF's threshold (of Sh 128,790) to receive debt relief under the facility. Also, Kenya has recently eschewed the G20 debt relief initiative over restrictive terms (Reuters, 2020). The initiative was aimed at helping poor countries weather the COVID-19 pandemic. The Group of 20 major economies had in April, 2020, agreed to suspend payment obligations on bilateral debt owed by their least developed counterparts through the end of the year. Kenya's decision was the limitation to access international capital markets during the standstill, which could undermine the country's ability to finance its fiscal deficit later in the year.

Consequently, the country has shifted its focus to engage its bilateral creditor countries (including Germany, Sweden, Japan, China and France) individually with the aim of securing moratoriums on debt service payments lasting about a year. While G20 initiative only covers official bilateral debt, it calls for voluntary participation of private (commercial capital markets) lenders on comparable terms. However, none of the country's private creditors (with cumulative debt of USD 28bn) has initiated voluntary debt service payment moratorium.

2.4 The Regional Responses and Measures

2.4.1 IGAD Responses and Measures to COVID-19 Pandemic

IGAD Health Ministers and Finance Ministers met to consider outlines of the collective IGAD Regional Response Strategy to the COVID-19 pandemic presented to them by the Secretariat and deliberated on the establishment of a Regional Ministerial Taskforce to coordinate the response. They also exchanged on mobilizing support domestically and from the International Community to respond to COVID-19 and minimize impacts on their economies. They looked into costing, budgeting and mobilizing the monetary resources required to underwrite the current needs of the region including debt relief and cancellation as well requesting access to financial assistance for all IGAD member states. After discussions and deliberations the Ministers agreed to the attached Call for Action.

At the Extraordinary Summit, the IGAD Heads of State and Government held deliberations on the agenda and resolved to;

Formulate an IGAD Regional Response Strategy to pandemic diseases particularly COVID-19. IGAD Ministers of Health and Finance shall meet virtually to inform the strategy; Establish an IGAD Emergency Fund for the control of pandemic diseases and the strengthening of health systems in the region; Mobilize Support from the International Community to combat COVID-19; strengthen national health systems and build local manufacturing capacity for medical equipment and supplies to fight pandemic diseases; Ask international financial institutions to cancel the debts of IGAD Member states in order to free up resources to fight the Coronavirus; Mobilize support from IGAD medical professionals in the diaspora.

While the continental and sub-regional strategic plans for responses and measures to combat and mitigate the adverse consequences of the COVID-19 pandemic are harmonized with the WHO's Strategic Plan, the extent of harmonization of the sub-regional plans to the continental joint plan appear limited.

This, in turn, implies potential for duplication of effort and resources. The establishment of COVID-19 Funds as vehicles for resource mobilization for financing the continental and sub-regional plans has significant shortcomings. First, with overlapping membership of HoA and EAC, implies heavy burden of some member countries making contributions not only to the continental but also to each of the sub-regional Funds. Second, the creation of Funds at the sub-regional has potential for partner contribution fatigue. It is a reality that there is limited number of partners who are not contributing to national, continental, and sub-regional Funds to support the implementation of the COVID-19 pandemic responses and measures. Consequently, the lofty continental and sub-regional plans may not be implemented due to funding frameworks being adopted at the continental and sub-regional levels. Finally, the implementation of these strategic is fraught with political challenges including instabilities in some members within the HoA sub-region.

3 The economic and social consequences of COVID-19

3.1 The effect of COVID-19 on future macroeconomic aggregates

3.1.1 Economic growth

The *Economic Survey 2020* (GoK, 2020) reveals that the overall and sectoral growth performance of the Kenyan economy had been on a declining path since 2018. The declining trend of the growth performance of the economy was attributed to both unfavourable external and internal developments. At the external level, poor performance of tourism sector and adverse weather conditions, among others. Although growth is resilient, the economy remains vulnerable impact of COVID-19 pandemic (GoK, 2020). The key sectors of the economy affected by the Coronavirus pandemic include the Tourism, Agricultural, and Manufacturing sectors which were hit the hardest hit due to shutdowns in major markets and the disruption of the global supply chain. Combined, the 3 sectors account for 43.8% of Kenya's GDP in 2018. Based on the impacts witnessed so far, the National Treasury (2020), CBK (2020), World Bank (2020) and IMF (2020) have significantly scaled down the country's growth projection from 6.0 per cent to between 1.0% - 2.5% for the year 2020 depending on the severity of the outbreak and economic implications for Kenya.

3.1.2 Public Finance

The Government, as at 24 April 2020, was 22.1% behind its current borrowing target having borrowed Sh 266.5bn against a prorated borrowing target of 342.2bn and has to borrow on average Sh 175.8bn monthly in the current financial year to meet its domestic borrowing target of Sh 404.4bn and has domestic maturities worth 226.7 bn. In the recently approved Supplementary Budget estimates II, the Government raised its net domestic borrowing target by 34.7% to Sh 404.4bn for FY'2019/20 from Shs 300.3bn. Given the current market conditions and with the Government currently having a net domestic borrowing of Sh 222.8bn, with only 2 months remaining to the end of the FY'2019/20, we expect this to exert pressure on the domestic borrowing front to plug in the deficit. Given the current uncertainty in the Global Financial markets, the government may also find it hard to access foreign debt with investors attaching a high-risk premium on the country due to the economic risks abound from the effects of the COVID-19 pandemic.

3.1.3 Inflation

Inflation for the month of March came in at 6.1%, bringing the m/m increase to 0.2%. Y/Y inflation increased mainly driven by an 11.9% increase in the food and non-alcoholic beverages index. Inflationary pressure is expected to emanate from the locust invasion which has plagued the country since the end of 2019 greatly affecting the agricultural sector. The country is expecting a second wave of locust invasion and this is likely to cause a further increase in food prices which has a new weighting of 32.9% in the Consumer Price Index (CPI). Inflationary pressure will be mitigated by the decline in oil prices across the globe due to a decline in demand. We expect a decline in the transport index, which has a new weighting of 9.7% in the total consumer price index (CPI), due to the decrease in petrol and diesel prices.

3.1.4 Exchange Rate

The Kenya Shilling has depreciated by 1.5% against the US Dollar to Shs 107.62, from Shs 106.0 during July 2020, attributable to due to a slowdown in foreign dollar currency inflows from diaspora remittances and fewer offshore investors to meet dollar demand. Forex reserves have however declined to USD 8.0bn (equivalent to 4.8 months of import cover) from USD 8.3bn (equivalent to 5.0 months of import cover). This however still meets the CBK's statutory requirement to endeavor to maintain at least 4 months of import cover and the EAC region's convergence criteria of 4.5 months of import cover, thus providing an adequate buffer for the Kenyan Shilling from external shocks. In our view, we expect continued pressure on the shilling with the sentiments being on the back of high dollar demand from foreigners exiting the market as they direct their funds to safer havens as well as merchandise, and energy sector importers beefing up their hard currency positions amid a slowdown in foreign dollar currency inflows from diaspora remittances and fewer offshore investors to meet dollar demand.

3.1.5 Private Sector Credit Growth

The latest data from CBK indicates that private sector credit growth recorded a growth in the 12 months to February 2020 to 7.7% from 7.1% recorded in December 2019 but below the 5-year

average of 11.2%. The effects of the coronavirus pandemic are expected to negatively affect the financial sector. We expect to see increased caution on lending especially to businesses that rely on imports hence inhibiting private credit sector growth due to the high risk of credit default, with the possibility of heightened Non Performing Loans if the pandemic is to continue

3.2 The Impact of Pandemic on Real Economic Sectors, and Private Sector

3.2.1 Agriculture sector

While overall agricultural production grew by 3.6%, its subsectors experienced mixed performance. While production in the tea, maize, sugar cane and horticultural subsectors significantly declined, production in coffee and wheat production expanded during 2019. All agricultural production would dip significantly due the implementation of the COVID-19 containment measures *albeit* at varying degrees.

Production of exports including tea, coffee, and horticultural crops suffered from reduced working hours, scaling down of operations and closure of borders and ban of air transport (except cargo transport). Even with the exception of cargo transport, the global demand for these crops had greatly diminished due to the devastating effects of the COVID-19 pandemic in the destination countries including the UK, France, Germany, US, and China. The production of food crops is also projected to decline due to lack of farm inputs, transport, and reduced casual labour force and reduced working hours. The across –the-board reduction agricultural production will be exacerbated by desert locust invasion which ravaged nearly 20 counties across the country, drought experienced early in the year, and ongoing floods are raising concerns about food security.

3.2.2 Industry

Industries that rely on imported raw materials and intermediate goods have experienced disruptions in their supply chains. In the initial stages of the pandemic, a KEPSA report indicated that about sh 3.1bn worth of imports from China may have to be sourced from other markets and this will come at a higher cost. Business uncertainty and reduced working hours means that many companies, including those that could potentially continue production have had to significantly scale down pending the outcome of the current crisis. Even before the country reported its first case, approximately 61% of businesses had already reported feeling the effect of CD-19 on their businesses with some reporting loses. The statistics are likely to worsen as the pandemic continues to spread. Reduced supply/shortages of imported goods means higher prices for goods and services. However, with diminishing purchasing power of consumers, many firms may have to scale down their operations.

3.2.3 Services Sector

The service sector is arguably the most affected in terms of reduced income and lost employment as it caters to activities that relate to public gatherings. The Parliamentary Budget Office (PBO) estimates that the sector is the biggest contributor to economic growth, having contributed about 3% to about 5.6% GDP growth in 2019. The low income from the services sector will therefore come at a greater cost to the economy. The most affected subsectors in the sector are wholesale and retail; Accommodation and restaurant as well transport and storage. About 60 hotels are reported

to have closed due to the enforcement of the COVID-19 containment measures. With each of these firms employing at least 100 workers, about 6,000 workers lost their jobs. The financial and job losses were even more pronounced in the aviation service industry.

The closure of hotels and related services was attributed to the enforcement of the containment measures. With the closure of the borders and ban of international travel (except for cargo transport) the arrival of tourists ground to a halt. Tourism accounts for about 17% of the country's export, hence a major foreign exchange earner. Although the flow of tourist arrivals had been significantly declining due devastating COVID-19 responses and measures including lockdowns in the source countries, the ban of air travel and restrictions in local travel brought the tourism sector to its knees, with massive losses in both foreign exchange earnings and jobs.

3.2.4 Transport and Storage

The work-from-home, passenger distancing guidelines and the dusk-to-dawn guidelines means that many public vehicles are unable to earn good revenue even with reduced commuter time due to few passengers and reduced working hours. Air transport (civil aviation) is the worst hit. Even before the ban on international flights (except cargo flights), the suspension of flights to China had resulted in estimated revenue loss of sh 800 million per month. The National Carrier, Kenya Airways (KQ) has a fleet of 200 planes making about a total of 2,000 flights monthly to both global and local destinations. As a hub for international and regional transport both JKIA and Moi International Airport host a large number of flights with attendant landing fees as revenue. Clearly, therefore, the ban on all international flights the loss in revenue must be colossal, running into billions of Shillings. The ban on the international flights has led to massive loss of jobs in the aviation industry with its workers being either on unpaid leave or laid off.

The ban on the Railway transportation has also significantly losses in revenue and jobs in the KR. The temporarily suspending the Madaraka Express passenger service (making about 2 trips per day and earning about Sh. 1mn per day), express train between Nairobi and Mombasa, Nairobi-Suswa service and the Nairobi Terminus Ngong Commuter service (making about 4 trips per day and earning about Sh.100, 000 per day) have led to many job losses with most its workers being on either unpaid leave or laid off.. The ME and the Nairobi commuter schedules have also been revised to cater for the new reality.

3.2.5 Accommodation, Restaurants and trade sector

The ban on international travel, work-from –home directive and closure of bars and restaurants except for take-away services has significantly reduced activity in this subsector with many of the workers being daily earners. It is possible that many have been laid off or have taken unpaid leave.

3.3 The impact on Foreign Direct Investment

The COVID-19 pandemic is expected to negatively impact foreign direct investment (FDI) across the world In 2019, UNCTAD anticipated global FDI flows to rise marginally in 2020 (UNCTAD, 2019). However, due to the COVID-19 pandemic, UNCTAD's latest estimates are that global FDI flows could fall by between 30% and 40% during 2020 and 2021. .This significant change from the earlier estimates are a result of earnings revisions confirming the rapid deterioration of global prospects,

global demand shock's impact on sales and global supply chain disruptions. The negative effects of FDI will be concentrated in countries severely hit by COVID-19, but the effects will extend to other countries due to demand shocks and supply chains connections.

Africa's investment inflows will also be affected by COVID-19. Between 2018 and 2019, Africa's FDI increased by 11% to US\$46 billion, following consecutive decreases in 2016 and 2017. UNCTAD had also predicted that FDI inflows would rise this year. However, due to COVID-19, the continent's overall FDI inflows is estimated to shrink by 15%. Investments affected most are those in energy and primary industries because of the oil price drop as well as the airline and tourism industries due to travel cancellations and bans. According to UNCTAD's latest projections, Africa will also experience foreign capital outflows due to COVID-19.

Kenya, like many African governments have adopted emergency policy measures to protect public health and stop the spread of COVID-19. Some of these measures are intended to support investors and investments during the pandemic (e.g. finance assistance programs). Some policy measures (e.g. company closures, export control measures, lockdown regulations etc.) have negative impacts on investments.

The trends in global, continental and national FDI have been attributed to massive uncertainty in global capital flows, accruing from the adverse effects of COVID-19 pandemic. The uncertainty has been reflected in increased demand for the dollar for dividend repatriations, putting pressure on the local currency to depreciate. The economic stimulus being implemented to mitigate the adverse socio-economic impacts of the pandemic should make provisions for short-term protections. The trend in FDI has been replicated in portfolio investment. This reflected in under subscription of government Treasury Bills and bonds. It is posited that the post-crisis winners will open early to foreign investment.

3.4 The impact of COVID-19 on labour markets poverty and food security, and on vulnerable groups' livelihood

3.4.1 Labour Market

ILO (2020) projects that, globally, about 195 million people would lose their jobs within the first three months of the COVID-19 pandemic, throwing global, regional and national labor markets into a major crisis. The crisis was directly attributed to the implementation of WHO recommended response measures to curb the spread of the COVID-19 pandemic including closure of borders and travel restrictions, work-from-home directives for businesses (except for essential workers), dusk-to-dawn curfews, and social distancing, among others.

At Kenya level, the implementation of the containment measures have only significantly worsened the joblessness situation. It is estimated that more than 2,000 workers lost their jobs the second half of 2019. The situation was attributed to technology disruptions and sluggish economic performance. With declining performance during the year, implying declining capacity to absorb millions of jobseekers. The demand for jobs is amplified by the fact that at least 50,000 people transit into the labor market from the country's public and private universities. The difficult operating economic situation impacted by the pandemic witnessed a growing number of

companies issuing profit warnings and even relocating their businesses elsewhere, implying job cuts.

The significant scale down in the projected growth of the economy from 6.0 per cent to between 1.0 -2.5 per cent due to potential adverse effects of COVID-19 response and measures, the economy's overall capacity to create or even sustain existing jobs has been greatly diminished. While no hard statistics exist on the joblessness impact of COVID-19, preliminary evidence shows that the impact will be huge with significant variations across all sectors. It is projected that non-unionized workers especially those in the informal sector will be the hardest hit in potential job losses.

Preliminary estimates show that more than 7,000 employees of the country's aviation industry are either on reduced pay or on unpaid leave due to the closures and ban of international travel. The containment measures have led to a significant crisis of joblessness in the country, and the job losses in the most adversely affected sectors alone could be about 5 million jobs. Informal sector workers may suffer massive job losses, while workers in the formal sector are either laid off outright or asked to take unpaid leave. Reduced working hours for business hours implied job losses especially for casual workers.

3.4.2 Refugees

The Kenya Office of UNHCR has implemented precautionary measures to prevent any further spread of the virus and in order to protect refugees, asylum-seekers and other persons of concern from becoming infected with the virus (UNHCR, 2020). These are in line with the directives of the Government of Kenya and include:

- Services at UNHCR: No reception, interviews or counselling will take place at UNHCR offices.
- Voluntary repatriation: All movements of persons of concern wishing to return to their countries have been suspended.
- Resettlement: All movements of refugees departing to resettlement countries have been suspended.
- Movements between Kakuma, Dadaab and Nairobi: Refugee Affairs Secretariat has suspended the issuance of movement passes.

There are grave concerns over the potential impact of Covid-19 in less developed countries, and its effect on vulnerable populations all over the world. These include displaced populations, refugees and hosts that depend heavily on humanitarian operations. Although no case of Covid-19 had been reported in the settlements of Kalobeyei and Kakuma refugee camps in northern Kenya, UNHCR and UN-Habitat have instituted several preventive and preparedness actions to protect the refugees and host communities.

In addition to the national COVID-19 response measures, UN-Habitat has under its Kalobeyei Integrated Socio-Economic Development Programme (KISEDPP) collaborated with the county

government of Turkana and UNHCR to protect the refugees in the two camps: Access to healthcare and building awareness:

- Both refugee and host communities are provided access to healthcare facilities in both Kakuma Refugee Camp and Kalobeyei Refugee Settlement. To encourage safe and informed access, adaptation of service delivery sites to reduce chances of transmission and the sensitization of communities on COVID-19 safe practices, such as hand washing and social distancing should be implemented
- Safe and informed access to necessities and livelihoods: For refugee and host communities, a disruption to their access to necessities and food supply chains would be detrimental, as these communities' lack food security and food-based safety nets. In addition, continued access to an income is critical to sustain their livelihoods. Economic decline, poverty and food security often accompany one another. Both communities must continue to access marketplaces and resource distribution centers such as food aid and water, but in a safe and informed manner.
- Community mobility & movement: In Kakuma-Kalobeyei, refugees and hosts live amongst and move between settlements and interact with one another. The nomadic nature of the local pastoralist communities also contributes to the dynamic circulation patterns of people in the region. To prevent the potential of rapid transmission of COVID-19 between people, greater awareness building and knowledge surrounding the spread of the virus should be implemented.
- Engagement of the host community and community groups: Due to the unique and mutually dependent relationships between host and refugee communities in Kakuma-Kalobeyei, the engagement of both communities in any COVID-19 response is crucial. The engagement should extend as well to numerous other communities - pastoralist communities in the region face unique vulnerabilities as they are often less integrated into the urban structure, which can reduce their access to healthcare and information.

3.4.3 Youth

Aware of the livelihood stresses being encountered especially by youth due to the COVID-19, the Government has recently launched a National Hygiene Programme to create employment and healthier environment in the slum areas to contain the COVID-19 pandemic. The initial phase of the programme targets 26,148 workers, mostly youth. When fully implemented, the programme is expected to employ over 100,000 youth and include those under direct cash transfers. The programme projects to employ about 4,000 tailors to produce about 250,000 masks per day for distribution in the neighbourhoods, reinforcing ongoing containment measures for the pandemic.

3.4.4 Prisoners and Remandees

Nearly 5,000 prisoners and remandees were recently released in accordance with the National Council on Administration of Justice to avert outbreak of COVID-19 in country's congested prisons. The measures was taken in relation in line with the understanding that close and protected

interaction /contact between individuals-social distancing was the most important factor in the spread of CD-19. The decision is thus aimed at achieving the recommended one-meter social distancing within our facilities as part of the progressive review of our strategies in combating the global pandemic

4 Concluding Remarks and Recommendations

4.1 Overview of pre-COVID-19 socio-economic performance

While the Kenyan economy experienced mixed and sluggish macro-economic performance during the pre-COVID-19 pandemic, it remained relatively robust and resilient. While price stability (as reflected by inflation, exchange rate and CBK interest rates) was maintained, both overall and sectoral growth rates declined in 2019. The country's public finance performance indicators continued to deteriorate with fiscal deficit to GDP ratio, debt to GDP ratio and debt service ratio stagnating above recommended threshold levels of 50%, 30% and 20%, respectively. The informal sector continued to account for about 83 per cent of total employment. The total unemployment rate was estimated at about 9 per cent in 2019. During 2019, over 2,000 wage employees lost their jobs due technology disruptions and recessionary economic conditions caused by the outbreak of COVID-19 pandemic in China.

4.2 The impact of COVID-19 on health and health system

The country followed the WHO recommended approach in response and measures to COVID-19 pandemic, namely, institution of containment measures and disease surveillance. The actual incidence of positive COVID-19 cases is significantly below initial epidemiological modelling projections of between 5,000-10,000 cases by end of April 2020. The actual incidence of positive is 1,000 case of whom only 50 have died. However with increased cluster population testing the incidence curve appears to be increasing exponentially rather than flattening. The country's fragile health care system was less prepared to cope with the COVID-19 pandemic both in terms of adequacy of key infrastructure and medical staff.

With both low facility and medical personnel densities that were below both WHO and national standards, the country confronted daunting capacity constraints to respond to initial epidemiological modelling projections of between 5,000 and 10,000 COVID-19 positive cases in barely less than a month from the identification of the first positive case on March 13, 2020. The quality of facilities becomes even worse when assessed against availability of emergency response infrastructure including ICU beds, ventilators, personal protective equipment (PPEs including gowns, face shields, gloves, surgical masks, goggles, headgear and shoe covers to protect against the transmission of germs/viruses through contact and droplet routes.), ambulances, and diagnostic testing laboratories and containment/quarantine facilities.

The government funded it stimulus package (equivalent to 2 per cent of GDP) from a mix of internal and external sources. At the internal level and owing to limited fiscal space, Parliament approved a supplementary to re-allocate about KSh 40.3bn the national response and measures to combat COVID-19 pandemic. Internal resources were mobilized through an extra-budget framework of COVID Emergency Response Fund (CERF). CERF has collected huge sums from voluntary contributions whose disbursements have prioritized the purchase of PPEs and other critical health

care equipment. Both the World Bank and IMF have cumulative approved USD1, 809mn in emergency funds in emergency and budgetary support to the country's response and measures to curb the spread of COVID-19 pandemic. Additional funding of USD50mn was received from US CDC. UNHCR has enforced the government responses and measures to stop the spread of COVID-19.

4.3 The economic and social consequences of COVID-19

Preliminary evidence reveals a downturn of all the socio-economic indicators. As already indicated, the country's economic growth was the first casualty of COVID-19. The COVID-19 pandemic measures have had significant *albeit* adverse impact on all of the country's productive sectors including Agriculture, Industry, Services as well as private sector. The remittances from the diaspora has significantly declined due the devastation of the countries by COVID-19 pandemic. The containment measures for COVID-19 have induced a joblessness crisis in the country's labour market. Cumulatively, it is estimated that about 5 million workers may have lost their employment already.

5 Policy Recommendations

1. After implementing social distancing and the curfew, the government should provide proper protective equipment (like hand wash, sanitizers, masks, etc.) Regular hand washing with running water and soap is an essential precaution for the COVID-19; hence, the county and national governments through relevant departments should enhance availability of 24hr clean water and soap in the low-income homes especially in the informal settlements i.e. Kibera, which is the largest urban slum area in Africa. It would be disaster containing COVID-19 in such informal settlements where population density is very high.
2. The Kenyan government should also plan on how to distribute sufficient, and quality food to its citizens in the event it required to go through total lockdown due to increasing cases. Due to reduced activities by the judiciary, there will be increased case of lawlessness. The security parameters should be vigilant and enhance intelligence especially in densely populated areas.
3. Kenya to adopt the WHO strategies including but not limited to Interruption of human-to-human transmission including reducing secondary infections among close contacts and health care workers, inhibiting transmission amplification events, and preventing further international spread, abate social and economic impact through multi-sectoral partnerships among others.
4. In addition to the ongoing public health initiatives, the MPC of the Central Bank of Kenya (CBK) recommended that the Government could also explore the following additional options:
 - Initiate an enhanced Economic Stimulus Package to help spur the economy and hasten its recovery following the effects of the Coronavirus. This will be directed to the affected sectors such as tourism and horticulture.
 - Social transfers to vulnerable persons, laid-off workers, and self-employed persons in the informal sector for three months. This can be done through a "Lifeline Fund" where

these payouts will cushion the affected households and ultimately help enforce the set curfews and movement restrictions in an effort to curb the spread of the novel Coronavirus.

- Setting up a credit facility to lend to businesses that have kept their staff on payroll to help reduce job losses attributable to the current economic situation.
 - Reaching out to external partners to help mobilize response capacity putting into consideration the country's current fiscal position. International organizations such as the IMF & World Bank can provide financial aid to be directed towards containing the spread and adverse effects of COVID-19.
 - Initiate conversations with our foreign debtors regarding the existing repayment arrangements of the country's debt and propose a debt relief, having considered the current market conditions. Restructuring the existing bilateral, multilateral and commercial debt will help ensure the livelihoods of the citizenry is not compromised.
 - Encourage banks to give concessionary loans at lower rates to facilitate businesses and as well as provide moratoriums that are due and,
 - Strengthen the local supply chain of traders to be able to access import substitute goods.
5. While the country has actively engaged its creditors for debt relief, amounts expected will be miniscule. However, it could provide an important fiscal breathing space and, to a certain degree, offset the loss incurred by contracting export revenue and decline in other financial inflows. Factoring the current debt levels and the risks abound in the medium term, the government to reduce its debt levels, in line with the IMF sustainable levels, it should consider;
- Negotiating for a temporary debt stand still. Kenya could save approximately Kshs 84.3bn in debt servicing to China and with precedence already existing on debt stand still, following G-20 nations agreeing to postpone some of Africa's debt, the stand still would be a realistic and immediate approach,
 - Debt swap for sustainable development since they offer a win-win situation through reduction of debt and development spending increased, while creditors benefit from an increase in the value of remaining debt claims
6. The findings and recommendations of this study are highly preliminary in nature. They are based on rapid appraisal study on scales and trends of the epidemic. However, a more comprehensive assessment of the long-term impact and recovery plan would need strategic analysis based on solid data sets, and would require in-depth subsequent impact studies that are focused on specific sectors and vulnerable groups in Kenya. Given the uncertainty about both the duration and depth of the COVID-19 pandemic, its full adverse socio-economic impacts may not have matured and therefore are not well understood to recovery strategies.

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Case Study III

Health and Economic Impact of COVID-19 Pandemic in Somalia

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OCTOBER, 2020

1. Introduction and Background

1.1 Background

The impact of the Corona virus (COVID-19) pandemic has devastated many countries in the globe and severely set back both developed and developing economies⁴. As all nations struggle to contain and manage the pandemic, the fragile states including Somalia are facing grave health, social and economic impact that calls for urgent action to contain the effects. In such countries, the problem is compounded by lack of trust citizens have on the governments, and because the healthcare systems are weak or non-existent. Thus Somalia is woefully unprepared with only 20 intensive care beds at the onset of the pandemic for a population of 15 million.

The likely impact of COVID-19 pandemic in low income countries have been aggravated in many instances by some unique conditions prevailing in these countries. The common weaknesses that make the pandemic more lethal include inadequate public healthcare systems, high incidence of poverty and the poor resilience of large segments of the populations. In many of these countries, citizens face food insecurity and unavailable social safety nets, including health and unemployment insurance.

All the above challenges are magnified in Somalia, as it is one of the most fragile and high pandemic risk states in the world. CARE's Global Risk Index data ranked Somalia among the world's 'highest risk' countries⁵. A recent assessment by the WHO also concluded that Somalia is among 15 countries in the world that are at peril and require support in their preparedness for tackling the virus pandemic. According to the Johns Hopkins Health Security Index⁶ for 2019, Somalia ranked 194 out of 195 countries and scored zero in several areas, including emergency preparedness and response, infection control practices, and healthcare access.

The country's economic and social conditions are extremely vulnerable to Covid-19. Basic vulnerability of the Somali population to the pandemic are manifested by UN humanitarian agencies estimates that 2-3 million are at risk of acute hunger and in need of health assistance, water, and sanitation support. Also, 2.6 million are internally displaced and lack shelter because of instability and insecurity.

Efforts by the Federal Government of Somalia (FGS) to control the spread of COVID-19 in the country have been effected through bans on international air travel, encouragement of social distancing, closing of borders and domestic travel restrictions, school closures, and bans on large gatherings. In addition, a dusk-to-dawn curfew was enforced from mid. April 2020. This will have large negative effects on social and economic activities. Exceptions from these measures have been given to healthcare providers and those offering essential services, such hospitals, pharmacies, security and ambulance services and supermarkets.

⁴ The impact of the pandemic on the health systems of these countries is unprecedented, and the economic impact mirrors that of the great depression of the 1930s.

⁵ CARE International rated Somalia among the 15 'highest risk' countries in the world, March 2020

⁶ Johns Hopkins, *Global Health Security Index*, Bloomberg School of Public Health. October 2019.

There are concerns that some of the measures, such as social distancing and partial lockdown are not having the intended effects, as people are not complying with social distancing because the measure is viewed as going against cultural and religious behavior of the Somali Society. The economic and social standing of large numbers of the poor and the IDPs are also lacking the housing and living capacity to implement the social distancing requirements.

1.2 Objectives of the study

The main objective of the study is to assess the direct and indirect health and socio-economic impacts of COVID-19 in Somalia and to delineate the appropriate policies and measures to address these effects in the near term and the longer term recovery phase. In this context, the study will identify pertinent areas of immediate concern and the actions required to contain and mitigate the economic impact of the Covid-19 pandemic in Somalia. It will also review and recommend mechanisms and policies for building resilience, particularly for the most vulnerable communities.

The study aims in particular to generate evidence that would inform the design of policies, strategies and interventions to address the pandemic. The findings are expected to inform policymakers at the national, regional levels as well as development partners and other stakeholders on policy measures required to mitigate the pandemic.

On the health aspects, the study evaluates healthcare systems in Somalia focusing on the framework, institutional capacity, internal governance systems and procedures, and the roles played by stakeholders in the overall healthcare delivery system. The study provides a framework for analyzing the effectiveness and vulnerabilities of the healthcare system, including allocation of financial and human resources to the sector. The study is expected to establish a comprehensive status of the delivery of healthcare services in Somalia; including financing and capacity gaps, and accessibility of services.

The study also aims to generate data and evidence that would inform the design of policies, strategies, and interventions in Somalia's health sector. The findings are to inform

Policy makers and practitioners at the national, FMS and local government levels, as well as development partners and other stakeholders, on the policy measures and responses required to mitigate the pandemic.

The specific objectives of the assessment of socio-economic impact of the pandemic is to (i) define the status at the onset of the pandemic (ii) delineate the impact of COVID-19 pandemic on the nations as reflected in the main socio-economic indicators; (iii) provide in detail the measures required to address the specific requirements of the most vulnerable groups of the population, and (iv) define priority actions and resources that are necessary for the national response, so as to contain the urgent socio-economic impact of the pandemic, build the resilience and coping capacity of the most vulnerable, and enhance the longer-term post-pandemic recovery phase of the country.

1.3 Study methodology and structure

The study was based on desk review of information collected from primary sources, by local consultants at the national and regional levels, as well as secondary data from various national and international development partners' sources. The primary data relied on a questionnaire and Key Informant Interviews, as well as submissions from government ministries, including Federal and member states Ministries of Health, Finance, and Planning and Economic Development. The secondary data sources included reports by the government, and pertinent documentation issued by national and international relevant organizations working in country, particularly UN humanitarian agencies, and bilateral country partners assisting with national recovery and with IDPs and other most vulnerable communities.

Available but limited quantitative data relevant to the health and socio-economic impact were collected through surveys and interviews and consultations with senior government officials at federal and state levels, NGOs, and International agencies, such as the WHO, UNICEF and UNFPA country official. Other donors involved in the development of the health sector in Somalia were also surveyed. Primarily, the study was conducted by a multidisciplinary team of experts composed of resource persons and data analysts. Stakeholders on public resources management were appropriately sampled to ensure participation of those actively involved in the healthcare and economic sectors.

The structure of the report is organized as follows: After this brief background, objectives, and methodology and structure of the study; section two covers an assessment of the impact of COVID-19 on the health system. Section three provides rapid responses by the Somali authorities and supporting international development partners. Section four covers the framework and strategy for addressing the health consequence of the Coronavirus pandemic, as well as concluding remarks on the health assessment. Section five details the [economic impact and consequences of the COVID-](#) and the pre-existing economic vulnerabilities before the pandemic. Section six covers a Longer-term economic transformation strategy, and the final section 7 includes policy measures and recommendations.

2. Impact of COVID-19 on Health System of Somalia

2.1 The Country's Health Status and Capacity

Capacity to manage COVID-19 pandemic as public health crisis is a cause for serious concern. Somalia's healthcare system was severely damaged by decades of conflict and state fragility. The country's health sector thus suffers from shortage of infrastructure, equipment, ICU and ventilator capacity, medicine, and qualified health personnel. Another legacy of the protracted conflict is the displacement of millions who live in overcrowded and poorly served camps. Continued insecurities are contributing to more displacements, and hindering efforts to contain the COVID-19 pandemic. Other complicating factors are communal living standards of extended families in overcrowded quarters, and practice of visiting sick family members.

The Somali health care system is a product of various administrations that adopted different policies, priorities, and health care services approaches; commonly influenced by international

during the past three decades as a result of conflicts. The result has been excess mortality, displacement of people, and vulnerability to communicable diseases and pandemics.

Somalia's healthcare system has been destroyed by the breakdown in the country's governance and extreme state fragility. As a result,⁷ there has been limited infrastructure development, and technical capacity building required for effective management of the health system. The flight of skilled human resources has left an enormous capacity gap to provide health services, develop effective health policies and regulate delivery of health services throughout the country. The inadequacies are also especially challenging in financial management terms.

Most of the existing health institutions were developed during the two decades to respond to the challenges facing the country; by Non-Governmental Organizations (NGOs), UN agencies and the domestic private sector without clear strategy and comprehensive mandates. Many of these institutions were established with poor physical infrastructure, inadequate human and financial resources and are dependent on donor support for basic services delivery.

Recently, the government has been gradually assuming control and responsibility of health services by jointly working with partners and leading the reform process; together with WHO and UNICEF in designing and implementing health policies and strategy. The FGS has been taking the lead in the health sector reforms, but in consultation with stakeholders and decentralization of certain function to the FMS was undertaken

The current health service delivery system is biased towards urban areas, and coverage in rural areas and nomadic populations, and in IDPs camps is extremely limited. It is estimated that less than 15% of the rural population has access to any health provider. There are few initiatives by the authorities to remedy the situation, through introduction and training of the community-based health workers program and piloting of Essential Package of Health services, which has been applied in other fragile states to redress health imbalances.

One of the major obstacles hindering development of health sector policy design and strategy is lack of comprehensive information. The link between the quality of health information and improvements in delivery efficiency and effectiveness is crucial. It is therefore essential that health related data is compiled and analyzed to facilitate effective decision-making processes for improvement. In the short run, consideration should be given for a dual approach of building capacity for information management, as well as mounting an advocacy campaign to raise awareness on the importance of health information systems among the health workers. In the medium to long term, establishment of a database encompassing civil registration and population health-based surveys would be necessary.

Similarly, it must be said that the country needs a strong health information system to monitor progress, improve decision-making and increase accountability. Limited resources dedicated to compile statistics at FGS level, together with limited capacity at FMS has resulted in the inadequacy of basic health statistics and the health workforce in the country. This weakness is accentuated by

⁷ Conference-declaration-national-health-conference-forsomalia-transforming-somalis-health-sector, December 2014

the widely accepted view by all agencies that available information is to be used with caution, as it may not reflect the real situation on the ground.

Also, a weak legal and regulatory framework in the health sector has led to a considerable growth in private health care system⁸. A dominant system for-profit health delivery system has left the majority of the population without access to affordable health services. Lack of health regulations facilitated the opportunity to exploit health seekers in the private health market and has contributed to the widening of health and social inequality.

2.2 The current state of health indicators⁹

It is widely acknowledged that decentralization of federal health policy has been largely supported by all the key stakeholders, but it is poorly implemented and continues to encounter considerable challenges. Loss of human resources due to poor working conditions is one of the main causes of weak institutional capacity building. In addition, lack of accountability and transparency is among the main challenges facing the health sector. Regulation of health professionals and facilities and enforcement of health regulations are non-existent.

Somalia health system has in recent times dealt with several health emergencies arising from localized displacements, heavy floods and droughts. But the arrival of coronavirus could push the country into a severe crisis. The Ministry of Health reported 2,890 confirmed COVID-19 cases on 25th June, 2020. These numbers are believed to be understated owing to deficiencies in testing and gaps in reporting by the country's health system. The government is working with WHO and "Action Against Hunger" to procure more kits and medical supplies and equipment to boost the capacity of the laboratories and train technicians to operate them.

The COVID-19 is putting heavy pressure on the country's health and social services system, and would worsen the prevailing inadequate humanitarian situation. Somalia has suffered from extreme weather conditions, in the form of recurrent droughts; as well as other calamities and communicable diseases. . In addition, locust infestations have been problematic recently in the country, particularly in the northeast. In this context, the virus pandemic poses a catastrophic threat to the Somali people who are extremely vulnerable.

Somalia's health indicators are distressing as average life expectancy at birth is at 56 years; maternal and child mortality rates are very high; with data in 2018 indicating that 7 in 1,000 mothers die from childbirth. It has been observed that tuberculosis and cholera have become endemic. Less than a quarter of the population has safe drinking water, and under half of the population have

Table 1: Somalia's social indicators

	Partners estimate
Total population ¹	14.5 million ¹
Life expectancy at birth	56 years
Birth rate	41.4 per 1000
Population at risk of hunger	6.3 million
Population in need of health assistance	3.1 million

Sources. Somali authorities, UNFPA and other international

⁸ Warsame A. Opportunity for health systems strengthening in Somalia. Lancet Glob Health 2014.

⁹ Based on Various UNICEF and WHO country reports.

sanitary hygiene facilities, putting the underserved at risk of diseases like dysentery, cholera, diarrhea, and typhoid.

Somalia has 7-10 persons per square mile and is one of the most sparsely populated countries in the world. Even with a relatively small population, insecurity and adverse climate change have led to a large and expanding population of IDPs. This “push” factor has led to rapid unplanned urbanization, with most cities and towns having a huge increase of IDP settlements and other nomadic communities moving to urban centers. With high levels of unemployment and underemployment women and, in some cases, children enter the workforce at daily laborers in the informal labor market.

2.3 Health Sector Financing

There are no current and credible data on health sector financing in Somalia, as for some decades the health sector has been financed through out-of-pocket expenditures by households and funding from NGOs, and development partners. Also, it is difficult to determine the total national health expenditure since the bulk of financing is channeled through humanitarian organizations, and international NGOs, and United Nations agencies, prominently UNICEF, WHO and UNFPA.

There has been a significant increase in funding for health sector in Somalia over the past decades. According to the World Bank¹⁰ financing from conventional donors increased substantially in the period 2010-20, and this financing significantly exceeds the government contributions. Comparatively, some FMS are doing better than FGS in this area. For example, Somaliland’s budget allocation for health ranges between 3 to 4.5 percent of the total budget, followed by Puntland with allocations ranging from 2 to 2.5 percent. On the other hand, the Federal Government lags the two states, with low allocation ranging from 0.5 to 1.1 percent during the period 2018 to 2019 as shown in Table 2.

Table 2. Federal Government Health Sector Financing 2018-2020

Year	Health Budget (In million US\$)	Total Budget (In million US\$)	% of Health budget/Total
2018	1.4	274	0.5
2019	3.8	344	1.1
2020	9.4	476	1.9

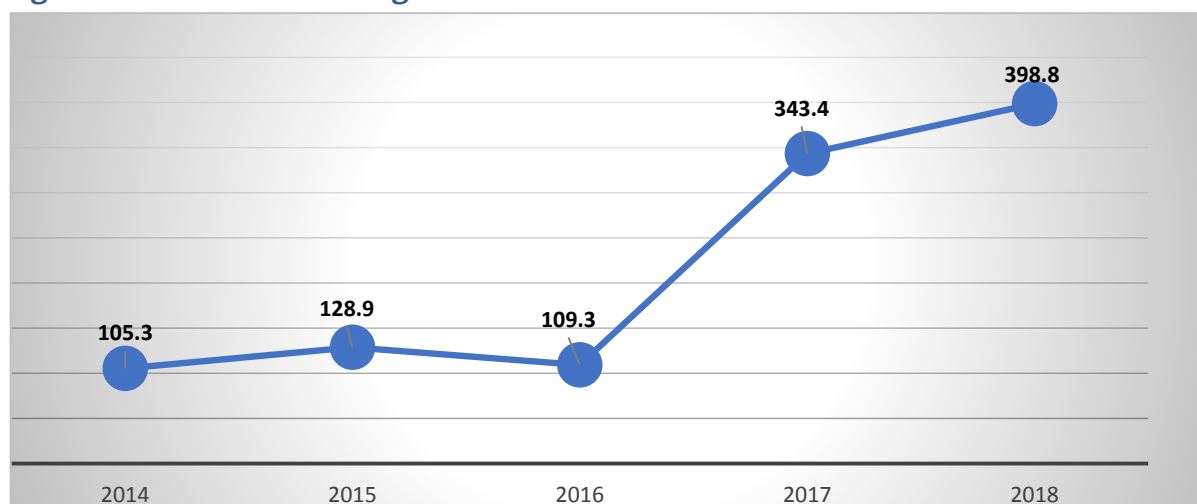
Source: FGS (2020), Appropriation Act for 2020 Budget

Financial Aid Flows at National Level

In Somalia aid to the health sector flows through an intricate network, characterized by three groups of financiers and many intermediaries. The traditional donors (bilateral, multilateral and others) provide direct and indirect funding to several agencies and institutions operating in country. Funding is directly channeled to international NGOs and more frequently to the UN agencies. The UN plays a crucial role in further channeling funds to a series of implementers that include local NGOs/institutions, international NGOs, ministries of health, and the Red Cross/Red Crescent Movement. Total financial aid flows to Somalia grew substantially from US\$105 million in 2014 to US\$398.8 million in 2018. (Figure 1).

¹⁰ World Bank (2010), A decade of AID to health sector in Somalia

Figure 1: Aid Health Financing in millions of US Dollars



Sources: UNDP (2018), Aid Flows in Somalia

Although public health expenditure in Somalia has increased recently, it is estimated at current US\$8 per head in 2017 compared to US\$ 83.4 on average for Sub-Saharan Africa in that year. While private spending and humanitarian assistance has not been quantified, these are more substantial. The unreliable and fragmented health information in Somalia is also a major concern on the part of policy makers to formulate sound policies for the sector.

Low per capita health expenditure by the government increases financial burden of households, who must allocate high out-of-pocket expenditure on health care services. This conclusion is borne by the evidence from the recently published Somalia Health and Demographic Survey (SHDS) 2020, which found that on average annual expenditure by the surveyed households on treatment and health care services were as follows: 43% of households spent US\$49 on average; 24% spent US\$50-99; while 18% spent US\$100-199; and 13% spent over US\$300. It further established that the sources of financing for the health services were little over half from savings, sale of assets, and contributions by relatives; while 47.8% was from own income.

Health Financing at Federal Member States (FMS)

As shown in Table 3 below, the health sector in Somalia is financed at the FMS level through the state's own resources, transfers from the FGS and external funding. Out of its 2018 budget of US\$52 million,

Puntland allocated one million to health sector, which correspond to 1.9 percent of the overall budget. This allocation is mostly intended to finance, staff salaries and recurrent costs,

Table 3: FMS Budgets and Allocation to Health Sector in million US\$

Year	Puntland	Jubaland	South West	HirShabelle	Gal Mudug
2018--Budget	52.0	15.0	-	-	-
Share to health	(1.0)	(0.4)			
2019--Budget	67.0	38.0	-		-
Share to health	(1.0)	(0.7)			
External Financing (2018)	58.4	40.1	32.8	38.3	32.2

Sources: NEC (2020), Health Survey

operation, and administration. The same trend is observed in 2019, where the total budget for that

year was US\$67 million, only one million was allocated to the health sector, which correspond to 1.5 percent of the total budget, which barely cover for the salary and other recurrent cost.

Out of its total budget of just US\$15 million in 2018 Jubaland allocated US\$0.4 million; and in 2019 it allocated to health sector \$0.7 million of its total budget of US\$38 million. There has been no budget allocation for the health sector in the recently formed states of South West, HirShabelle and Gal Mudug. However, in all the states, most of the health financing came from external financing, which amounted to between US\$32.2 —US\$58.4 million in 2018.

Private Health Care Financing

Although the sector is poorly regulated, it provides most of the healthcare services and has experienced high level of growth even though the population has very low income per capita. It has been observed that in recent years the growth of private sector health care delivery has taken place, throughout Somalia. The private health sector is estimated¹¹ to deliver over 60% of health care. This contrasts sharply with the finding that less than 15% of the rural population can access the public health system. As pointed by Pavignani¹² (2012), the private healthcare business involves many entrepreneurs and workers, moves large amounts of money, and it is growing with low barriers to entry and large variations in service quality.

In the absence of comprehensive data on the provision of health care services by the private sector, it is without doubt providing essential services that are often the first point of contact for consumers and patients seeking health services. A detailed study is necessary to get a good understanding of the contribution of the private sector in Somalia's healthcare, which could be designed with the Somali Demographic health survey.

NGOs Health Financing

Development partners often provide direct and indirect funding to international and local institutions, including UN agencies and NGOs operating in the country. In many instances, UN agencies further channel the funds to several implementers including NGOs, local institutions, and humanitarian agencies, such as Red Crescent Movement. The size of NGOs financing is not known; most are contracted by donors as implementing agencies instead of them implementing their own self-financing programs.

2.4 Health Infrastructure

The Somali health infrastructure is small, poorly equipped and concentrated mainly in secure urban areas. A rough estimate of the facilities by WHO¹³ are shown in Table 4 below. The above information is based on estimates provided by various institutions in the country. Almost all these facilities are supported by NGOs and donors, with a few supported by the governments. Moreover, WHO and UNICEF play a role in providing technical support to most facilities.

¹¹ Affara, F. (2011), Operationalizing the Somaliland National Health Professions Council

¹² Pavignani, E. (2012), The Somali healthcare arena: A (still incomplete) mosaic

¹³ WHO (2019), Health Profile System, Somalia

It is also important to note that most of the health facilities are based in Mogadishu and at the FMS regional capitals. Many such facilities in rural areas offer limited services, and were disabled by the civil conflict and the continuing disorder. Diagnostic facilities that are essential for patient care are limited or nonexistent. Statistics concerning X-ray machines are not available, but every hospital was equipped with at least one. Most of existing diagnostic machines are non-operational as they have not been maintained properly.

Table 4: Existing Health Facilities

<i>Facility</i>	<i>Number</i>
Mother Child Health (MCH)	196
Health Post (preventive outpatient services)	520
Hospital	74
Hospital Beds	3,405
Clinical laboratories	114
X-ray	
TB Centers	26
Malaria Microscope centers	43

Sources: WHO (2019), Health Profile System, Somalia

The regional distribution of health facilities (Table 5) shows that Puntland is the most endowed. Furthermore, it was established that most of the listed facilities in Puntland are operational. In the South West and Galmudug states most of the facilities are not operational. Jubaland also has

Table 5: Regional Distribution of Health Facilities

Facilities	Puntland	Jubaland	South West	HirShabelle	Galmudug
General Hospital	7	2	14	--	2
Referral Hospital	15	1			4
Health Center	132	62	26	--	21
Health Post	192	1			23
TB Centers	15	1	13	--	--
VCT Centers	7				
Other Health Institutions	13				
Regional Hospital		1	14	--	--

Source: NEC (2020), Health Survey

several facilities that are not operational; and the operational ones are operated by NGOs and financed by relief organizations. Authorities in HirShabelle are in process of compiling the current condition of existing facilities in the state and are developing a program for operations.

2.5 Human Resources

Shortage of qualified health professionals has restricted progress in reducing mortality and morbidity of the Somali population. A large number medical doctors, qualified nurses, midwives, and skilled health technicians migrated overseas, depleting the qualified health workforce, a problem compounded by the clustering of the majority of the limited number of available health professionals in major urban areas. Based on the current health situation, the country was not able to meet the health Millennium Development Goals (MDGs) by a large margin, and has a challenging road ahead to embark on the Sustainable Development Goals targets, unless the existing health workforce gaps are effectively addressed. Table 6 below presents the distribution of health professionals by category in the country.

The level of human workforce available for the health sector is far below acceptable international standards. The availability of the health workforce is measured by the current level of available doctors, nurses, which is currently estimated at 4 persons for 10,000 people. This level of medical workers is extremely low when compared with the minimum threshold of 23 doctors, nurses, and midwives per 10,000 people considered by WHO as required minimum density ratio for such health professionals.

Table 6: Doctors and Qualified Health Workers

Categories	Males	Females	Total
Doctors	609	139	748
Qualified Nurses	1,430	1,307	2737
Qualified Midwives	0	690	690
Skilled Technicians	1,130	259	1389
Total	3,169	2,395	5564

Sources: FGS (2016) Ministry of Health

Disaggregating the composite measure for the three categories, the desired ratio between doctors to nurses and midwives is at 1:4; while the ratio between the nurses and midwives is expected at two nurses for every midwife. In this case, the desired number of doctors was many times lower, while the projected ratio between nurses and midwives was consistent with the indicated 2:1 proportion.

Health Workforce at the member states

Health workforce at the states level are in short supply, most of the staff work in hospitals and health centers which have inadequate facilities to enable them provide adequate services. Table 7 presents shows the number of health workers in

Table 7: Health Professional at the Federal Member State (FMS) Levels

Category	Puntland	Jubaland	South West	HirShabelle	Galmudug
Doctors	237		45	--	--
Midwife	1,089		230	--	174
Others	2,431		776	--	--
Total Force	3,757	1,266		--	728
			1051		

Source: NEC (2020), Health Survey

each Federal Member State. Only Puntland and Southwest provided disaggregated data on their number of health workers; and evidently more work is needed to assess the adequacy of the workforce at the FMS level.

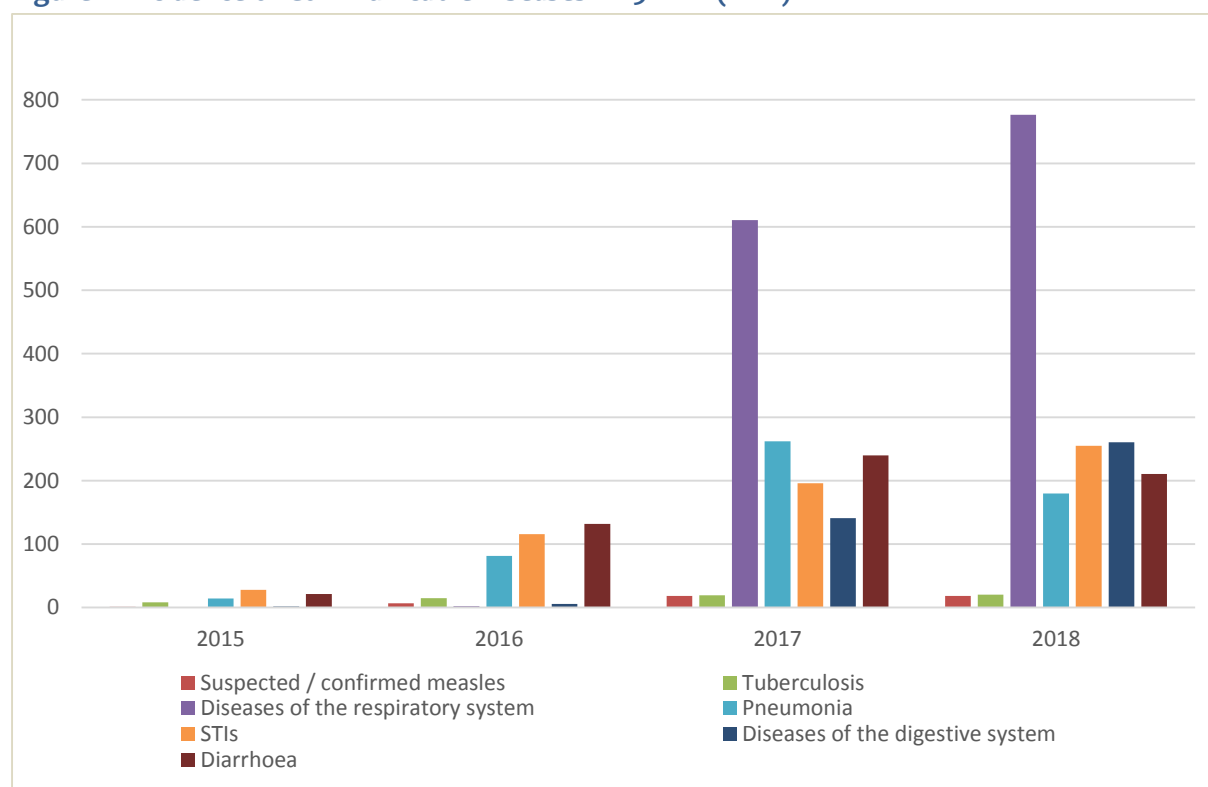
2.6 Incidence of Diseases

In Somalia, average life expectancy is estimated at 56 years. In this paper, data from the Health Demographic Survey (SHDS) 2020 is used to get morbidity and mortality rates of some diseases and the likely causes. As shown in Figure 2, the main causes of morbidity associated with communicable diseases are diseases of the respiratory system, which rose sharply in 2017 and 2018. Most of these diseases spread due to poor living conditions, where people for example consume food prepared with contaminated water or live under unhygienic environments. Moreover, high prevalence of diarrhea that exists can be easily treated are major cause of morbidity and mortality, especially among young children.

Other diseases such as typhoid fever, Hepatitis A and cholera, which if left untreated could lead to high mortality rates, are of recurring frequency. Tuberculosis is of common occurrence and is

spread through the air, making others in close proximity infected. Sexually Transmitted Infections (STIs) and diseases of the digestive system are also increasing in recent years, as reflections of poor health care system in the country.

Figure 2: Incidence of Communicable Diseases 2015-2018 ('000)

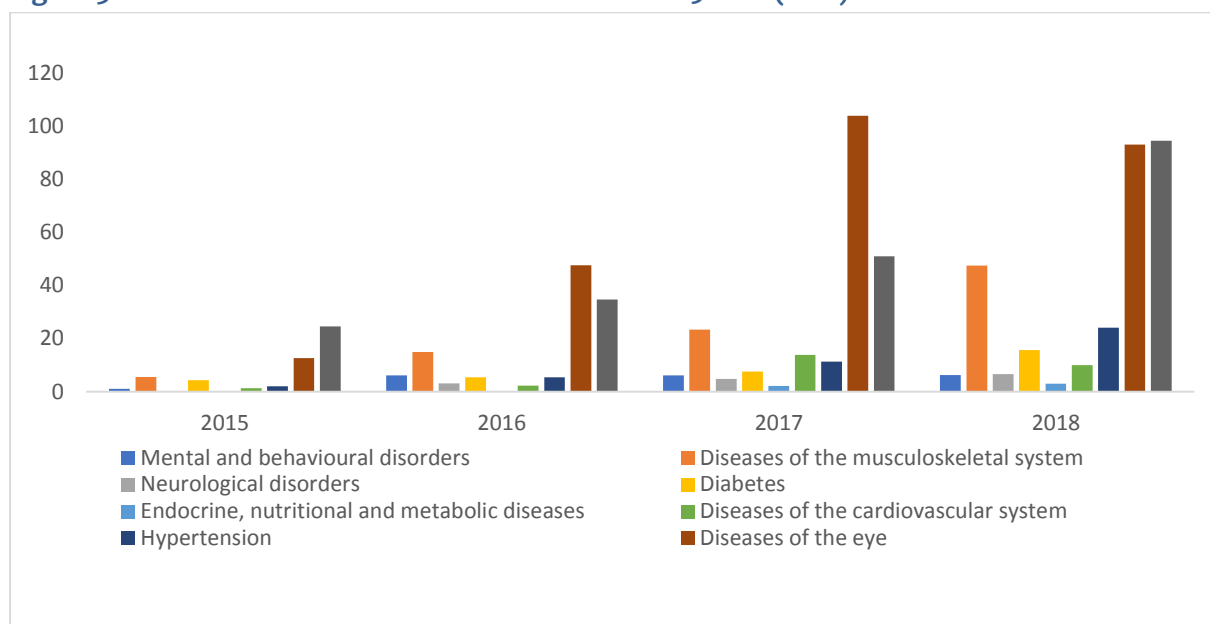


Source: FGS (2018), Ministry of Health

A series of cholera epidemics affected the country in May 2019 in several regions, and was contained in the affected zones following implementation of Oral Cholera Vaccination (OCV) and other control interventions. However, active transmission of the disease was more protracted in the Banadir region because of limited access to safe water and sanitation in IDPs camps.

The most prevalent non-communicable diseases, as shown in Figure 3, are those affecting the eyes, ears and musculoskeletal systems. Diabetes and cardiovascular diseases have also been on the rise. Some of these diseases are those categorized as chronic; those lasting one year or more of medical attention, have no medical cure or require regular attention. These diseases, which include blood pressure, diabetes, heart and kidney diseases, arthritis, and asthma, impose a huge burden on the affected individuals and the economy.

Figure 3: Incidence of Non-Communicable Diseases 2015-2018 ('000)



Source: FGS (2018) Ministry of Health, Health Statistics

The SHDS established blood pressure/hypertension and diabetes as the leading chronic diseases, affecting 33% and 20% of households' members, respectively. Overall, 6% of members suffered from at least one chronic disease, and those affected the most were members between ages 40 - 70 years. Furthermore, the diseases were more prevalent among urban than rural and nomadic households; among women than men; and among the poor than the wealthy. On treatment, the survey found that more women were diagnosed by a doctor and treated than men were; and this applied more to urban residents compared to rural residents.

Finally, assessment of common diseases in Somalia leads to the conclusion that the country's health sector requires considerable improvement to alleviate the deadly effects of illness. The most vulnerable people to diseases are those internally displaced by years of conflict and drought. Access to health services is limited by high levels of insecurity in central and southern Somalia; and the existing facilities in the country are unable to provide the required treatment.

2.7 Access to Hygiene Facilities

According to UNICEF 52 percent of the Somali population have access to basic water supply. Limited regulation of private water suppliers often leads to expensive prices, forcing families to fetch water from far and unsafe open wells. Disaggregated data indicate that only 28 percent of rural inhabitants have access to water and 83 percent in urban areas. A Joint monitoring program report by WHO and UNICEF in 2019 suggests that 40 percent of existing water sources are not functional; because of weak management of water supply systems, high operational and maintenance costs, lack of supply chains of spare parts, and technical limitation of service providers. Groundwater provides 80 per cent of the domestic supply, but the groundwater table is deep, 100 to 300 meters, and high salinity in most parts of the country makes water quality poor. The only regular surface water resources in the country are the Shebelle and Juba Rivers.

The 2019 WHO and UNICEF report also notes that access to sanitation facilities is very low in Somalia, with only 38 per cent of people having access to basic sanitation facilities, 20 per cent rural and 61 per cent urban. Without access to clean water and good hygiene practices, the risk of contracting easily preventable diseases, such as acute watery diarrhea, cholera, and respiratory infections, is high.

3. Responses at Local and International Levels

Notwithstanding some progress in developing the health sector and larger financing through the international organizations to tackle epidemic diseases, Somalia's capacity to manage the public threat posed by COVID-19 is a cause of serious concern. The country's health infrastructure was severely damaged by the severe state fragility, and the Health sector is short of financial resources, equipment, ICU facilities and medicines, and qualified health personnel.

Assessment of Somalia's healthcare system clearly points to weak and in some cases nonexistence of public health institutions and emergency health facilities, required to stop the spread of COVID-19. This confirms the alarming prognosis that Somalia could be among African countries likely to be severely hit by COVID-19. The presence of a large internally displaced persons and refugees around Mogadishu and other major cities could be a major contributing factor to the spread of the pandemic. As the Coronavirus gains a foothold, fears are growing that Somalia's fragile healthcare system will provide little protection from the pandemic's damages. At the same time, there is lack of public trust in government institutions, one of the most critical resources needed to mount effective social responses to pandemics.

Some of the measures introduced by the FGS to deal with the pandemic include suspension of all international flights and restricted entry for all travelers from worst-hit countries through June. All learning institutions were closed, and public meetings were banned in a bid to curb the spread of the virus. The FGS has dedicated limited budget support to cushion against the effects of the pandemic; and has received substantial international assistance so far.

Furthermore, the crisis can potentially exacerbate underlying grievances, mistrust, and sense of injustice over access to health services, decent jobs and livelihoods, and therefore fuel conflict that could undermine efforts to deal with COVID-19 pandemic. There is thus a need to tackle underlying fragility factors while addressing immediate needs arising from pandemic.

The health impact of the pandemic and economic crisis arising from it are expected to have disproportionate impact on the most vulnerable groups of the population, which could trigger worsening inequality. In these context, efforts must be made to maintain and reinforce social cohesion and peaceful coexistence to prevent social tensions between individuals and communities experiencing a sense of inequality and injustice. These groups would include IDPs and host communities; and also women, youths, persons belonging to minorities, and workers in the informal economy. Urgent action must be taken to address potential grievances, discrimination, and stigmatization over access to resources, livelihoods, and health services.

According to WHO most of the cases, including the first fatality, had no travel history signifying local transmission of COVID-19. This observation means that infections may rise significantly if

community transmissions go undetected, and the infected persons are not traced and diagnosed early enough before they spread infections further. The impact of undiagnosed community cases in IDPs living settlements with limited access to health and water, sanitation and hygiene services would be catastrophic.

Substantial progress is being made on in-country testing capacity, with support from WHO and both bilateral organizations and multilateral institutions participation. Besides direct support to the health sector, there are substantial efforts from international partners to support the broad country preparedness and response efforts. Somalia recently cleared its debt arrears with the African development Bank, the International Monetary Fund and International Development Association (IDA)¹⁴ and will benefit from the World Bank Group's US\$14 billion global package of fast-track financing to assist countries in their efforts to prevent, detect and respond to COVID-19. However, additional resources will be required to meet current and future humanitarian challenges brought by possible further spread of the pandemic.

Building on global risk assumptions, the FGS has developed a national risk assessment and plan to guide public, private and civil society organizations to take appropriate and effective measures in addressing the COVID-19 pandemic. These efforts were to build on Somalia public health emergency, preparedness, and response plans.

A key first step was the activation of a national emergency response committee, led by the Prime Minister, to take the lead in coordination of these functions; and to provide a forum for partners to coordinate the response operations. In coordination with WHO and other UN agencies, and the Ministry of Health, the committee has taken measures to contain the spread of the pandemic and to strengthen health systems. The measures included restricting large meetings and gathering; closing schools and universities, closing the country's entry points except for trade movement, suspending international and domestic flights. The government intensified communication and pertinent information dissemination through various official channels and the social media; and imposed a dusk to dawn curfew in the Capital city.

The travel suspensions, movement restrictions, and border controls, together with social-distancing and limit on social gatherings have been having severe impacts on humanitarian services delivery and economic activities. The authorities and international health experts recognize that, given the country's very weak health infrastructure and large vulnerable population, the country is ill-prepared to cope with any significant outbreak of the virus.

In this regard, Somalia's partners and the Ministry of Health have launched a Country Preparedness and Response Plan to address the immediate humanitarian and socio-economic consequences. The joint effort will focus on averting large-scale community spread through risks awareness communication, testing, contact tracing, and isolation of the infected. Also, distribution of personal protective equipment to health workers has been expanded.

¹⁴ World Bank Statement on the HIPC decision point for Somalia, 5 March 2020

4. The Framework for COVID-19 health Strategy

4.1 Longer-term health strategy framework

As noted in this assessment, addressing the immediate measures required for the COVID-19 pandemic should catalyze steps towards policy reforms in the healthcare sector. However, the current public measures, and the humanitarian relief efforts in Somalia's healthcare sector include basic emergency curative health services, communicable disease control, immunization, and supplementary feeding programs, particularly in the IDPs camps. These efforts should constitute part of the key elements of reforming the Somali health system. But, the rehabilitation and reconstruction of the Somali health sector should encompass a spectrum of activities consisting of three stages, namely:

- Initial response to immediate health needs, such COVID-19 readiness, and other epidemic diseases.
- Thorough assessment of essential health care needs in a longer-term framework;
- Policy formulation and implementation, including reconstruction and rehabilitation of the entire healthcare system in the future.

The critical factor in this processes is that the stages are not to be operated in isolation, but rather to be sequenced properly. The way the immediate humanitarian needs are met can have profound implications for fostering sustainability. Where possible the three stages should operate synergistically and as part of a continuum.

At the initial stage, the focus would be on preparedness and setting the pace to implement immediate measures to assist communities facing the epidemic to meet their health needs. In addressing the impact of COVID-19, the immediate focus should be on investing in facilities, equipment and training technicians to operate laboratories and testing instruments. This should be followed by development of sustainable health care and mobilization of additional resources.

Subsequent to stage one, health sector efforts must focus on restoring the systemic delivery of health services. These include disease surveillance, food security, immunization, clean water and sanitation facilities delivery. As a country transitioning from conflict, this second stage will have to play a central role in the reconstruction of health services that have not been available beforehand. The reforms should take a comprehensive approach where essential health services are restored, and resources are directed towards long-term needs in the areas of human and financial resources. In this context, the World Bank¹⁵ is responding to the longer-term health sector challenges of Somalia through the existing Recurrent Cost and Reform Financing (RCRF) project.

The proposed project will build on the ongoing activities under RCRF, which supports re-establishment of the Government's Female Health Worker program. The proposed project will be financed through an IDA grant of US\$75 million, co-financed by the Global Financing Facility Trust Fund through an additional US\$25 million over five years. The proposed project will be developed

¹⁵ World Bank 2020: Improving Healthcare-Services-in-Somalia-Damal-Caafimad-Project.

in partnership with the FGS and the FMS to support expansion of the coverage of a prioritized package of essential primary and secondary healthcare services. The selection of target geographical areas will incorporate experience from RCRF and findings from ongoing work, health service delivery needs, political considerations, available information on health outcomes, and equity. The proposed project is planned to be delivered in early financial 2021.

In addition, the World Bank approved a \$137.5 million IDA grant in May 2020 to help Somalia respond to and recover from multiple, ongoing, and overlapping crises. Somalia has been in the grip of insecurity and climate change challenges, with repeated cycles of flooding and drought over many years, and in addition is now facing current swarms of desert locusts threatening food security, as well as the COVID-19 pandemic.

Substantial financial resources are required to rebuild Somalia's healthcare systems; this is because the health sector was chronically under-funded for decades: during and while transitioning from conflict. In the current circumstances, expenditures on infrastructure, equipment, and other capital investments will initially absorb much of available resources. In addition, recurrent expenditures will be necessary to sustain the delivery of healthcare services. The ability of the government to finance recurrent costs from domestic resources is limited; but the government ought to make all efforts to assume as much of the recurrent costs to ensure sustainability and ownership.

The health sector policy framework should assign significant importance to the rehabilitation and reconstruction of the country healthcare system. In this regard, emphasis should be on political commitment, coordination among donors, partnerships with civil societies (including NGOs, private sector), prioritization and integration of health services, and sustainability of the rehabilitation efforts.

As there are obvious limitations of resources and functional institutions, Somalia and the HoA countries should be *taking collective and region-based measures on prevention*". At the end of March 2020, the Heads of State and Government of the HoA countries decided to adopt a joint strategy and to strengthen coordination and regional responses to curb the spread of the virus in the sub region. They announced their intention to coordinate regional response to the pandemic, and given their inter-connectedness and open borders, such coordinated policies and efforts, including unified community approaches, are imperative for addressing the pandemic. The sub region's capacity to cope and recover from the severity of the pandemic will also be determined by the effectiveness of the global solidarity to respond to health services deficiencies, and to ease the financial burdens imposed by the economic crisis.

4.2 Concluding remarks on health assessment

The prolonged insecurity over the last three decades in the country has shattered the institutional Foundations; in particular the country currently has few qualified and skilled personnel in key positions in the public health sector. Somalia's health sector also faces governance challenges, particularly transparency and accountability. This study provides a broad-based review of the health institutions, its human resource capacity, financing, and infrastructure. The analysis covers

capacities and capabilities, governance structures, and transparency and accountability frameworks in the health sector. Despite the national challenges of insecurity, lack of data and access to information, and COVID-19 restrictions sufficient data was collected for the study.

The assessment concludes that Somalia's health care system is weak and operates with an inadequate legal framework. The healthcare system's weakness arises from poor institutional structures, inadequate capacity, lack of financial resources, and poor coordination of service delivery. The sector is dominated by the private sector, NGOs and international development partners operating independently and competing without any government coordination mechanism, leading to huge gaps in the management and delivery of health services.

Efforts have been made by the government and WHO to strengthen the coordination and management of pandemic disasters and other humanitarian challenges, including COVID-19 by involving major stakeholders at all levels. Somalia has recent experience in managing disasters in a collaboration with other partners. However, the nation is having an onerous task ahead in addressing the triple problems of adverse climate conditions, locust infestation, and the COVID-19 pandemic, at one go.

In the face of unprecedented threat posed by the COVID-19 pandemic, Somalia has an opportunity to emerge with stronger healthcare systems and improved global collaboration by strengthening its pandemic preparedness. As the country focuses on addressing the crisis, it must also learn from the experiences of other countries, and cooperate with regional governments to ensure responses to the pandemic. Similarly, building resilience requires the ability to build capacity to adapt to unexpected changes in crisis times.

5. Economic Consequences of COVID-19 Pandemic

5.1 The economic vulnerabilities before the pandemic

Somalia has been on the path to recovery from the effects of the prolonged civil conflict and insecurity, and although there have been remarkable achievements, the nation continues to face serious underlying socio-economic challenges. The progress on the economic front is manifested in the programs adopted to achieve the recent debt relief for Somalia under the enhanced HIPC debt Initiative. Nevertheless, the country's economic and social structure and its institutional capacity remain weak, thus marking the country as one of the most vulnerable and at risk nations to the pandemic.

The specific economic and social characteristics that expose the nation and make it more vulnerable to the COVID-19 pandemic and other major shocks are the following: (i) Endemic insecurity and insurgency that is active in many regions of the country; (ii). Adverse recurrent climate shocks that contribute to chronic food insecurity, large internal displacement of people and high prevalence of poverty; (iii). Inadequate recovery of productive economic activity and low economic structure; (iv). Considerable weaknesses in institutional capacity that has yet to recover from the collapse of central authority that led to low levels of preparedness and prevention for natural disasters;(v). The limited access to adequate financial resources at all levels of Government

and the consequent low delivery of basic social services; and (vi). Generalized weaknesses in public resources management.

Prevalent insecurity and terrorist insurgency: The nation continues to face a *potent terrorist insurgency that limits the reach of the government* in many regions of the country and that constrains its effectiveness to intervene in health pandemics and other crises. Such insecurity limits the provision of government services and international humanitarian assistance in many regions. The constrained interventions have been demonstrated in the past by poor responses to common disease outbreaks such as malaria and measles, and the ineffectual responses to the droughts. The insurgent forces have also contributed to massive displacement of people from their homes and agricultural lands, thus contributing to acute food shortages, widespread hunger, and occasional wide spread famine.

Adverse climate and food insecurity: Somalia has for decades suffered chronic food insecurity attributable to extreme climate change, and poor resilience of the nomadic and agro-nomadic communities to frequent droughts. The decades of civil strife and instability compounded by droughts led to severe famine in 2011 and loss of hundreds of thousands of lives, as well as displacement of many more from their traditional subsistence farming. The insecurity, adverse climate, poor economic infrastructure contributed to massive dependence of the nation on food imports. Thus the country turned from a net exporter of basic food grains in the 1980s to importing most basic food stuffs in 2018.¹⁶

According to an FAO assessment, the country is currently experiencing multiple shocks. In February 2020, before the onset of the virus pandemic, about 4.1 million people were assessed to be food insecure in the country.¹⁷ The Food Security and Nutrition Analysis Unit (FSNAU) declared that 2.7 million people across the country are expected to face crisis outcome without sustained humanitarian assistance, and that an additional 2.9 million will be stressed, in June 2020, bring the total number facing acute food insecurity to 5.6 million.

Low productive capacity and severe poverty: A key and current economic characteristic of the country is the marked nascent productive capacity of the economy that has led to severe poverty. The relatively narrow growth performance of the economy, in recent years, has not been yet translated to significant per-capita income increase or inclusive growth, and the prevailing levels of poverty and inequality in the country remain still very high. About 70 percent of the population of the country is estimated to fall below the poverty line. Other signs of widening inequality include widening gender and regional disparities in terms of poverty levels and access to social services and economic opportunities. The low base of economic production and impact of Covid-19 affect all segments of the society, but certain sub-groups are particularly vulnerable. Those at extreme risk of the pandemic include the poor, the IDPs, the unemployed, and communities that suffer inadequate access.

Inadequate delivery of basic social services: The challenges facing Somalia in the fight against the coronavirus include the lack of basic social services and the inadequate institutional capacities to

¹⁶ World Bank –Somalia –Country economic memorandum (CEM), Agricultural main report, July 2018.

¹⁷ FAO: Food Security and Nutrition Analysis Unit (FSNAU) and Famine Early Warning System Network (FEWS NET), in Somalia, May 2020.

formulate and execute effective policies to contain and mitigate the pandemic. The struggle against the pandemic is considerably handicapped by inability to undertake effective testing, obtain data on the incidence of the virus in the country, undertake effective isolation, and trace the contacts of the infected. As noted above in the assessment of the impact of COVID-19 on health care, the country is rated as among the least equipped to tackle the consequences of the pandemic.

The country's public education and health systems disintegrated following the collapse of the central government authority decades ago, and has not been revived in any significant fashion. Almost all levels of education and health delivery – primary, secondary and tertiary-- that currently takes place in the country is provided by private entities or civil society in conjunction with humanitarian entities. The country has made limited or no progress in increasing access to essential public services, including the provision of public health and education, safe drinking water and basic sanitation. The share of the population with access to clean water and hygiene services are estimated at 32 percent and at about 24 percent, respectively, in 2013; some of the lowest indicators in the world¹⁸.

Binding financial resources constraint: Another considerable challenge of the Somali authorities is the binding financial resources constraint at all levels of governments in the country. . Reflecting the low level of available resources (estimated \$344 million in 2019), the total FGS expenditures allocated for public security and public administration (or wages and salaries) accounted for 86 % of available resources, as shown in Table 8 below. The rest of the budget allocations in that year were for economic services which amounted to 8%; education and health at 4% and 1% of total expenditures, respectively, in 2019.

The data available for the fiscal operations of the FGS show that the entire domestic revenue base of the country averaged 3.3 percent of GDP, in 2016-18; and is estimated to have risen to 4.6 percent in 2019. These levels

Table 8: Somalia--Distribution of Government expenditures, 2019 and 2020 (US\$ mn)

By Economic sector	2019 Actual	2020 Budget	2020 Revised	Share (% total exp. 2019)	Share (% exp.2020)	Share (% total rev. exp.2020)
Public Adm.	163.2	222.9	333.5	52%	47%	52%
Public security	107.3	146.8	150.9	34%	31%	23%
Economic affairs	26.0	41.9	66.0	8%	9%	10%
Health sector	2.6	9.4	30.9	1%	2%	5%
Education	13.5	21.0	23.4	4%	4%	4%
Other Expenditures	3.1	34.2	43.1	1%	7%	7%
Total	315.7	476.2	646.9	100%	100%	100%

Source: Ministry of Finance of Somalia estimates, (2020 budget)

of revenue mobilization, (annual average to US\$ 261 million in four years), are possibly the lowest effective tax efforts for any nation in the world. The revenue picture exhibits the severe state of economic fragility, the lack of legal and administrative capacity to enforce tax obligations, and endemic culture of tax avoidance and evasion.

¹⁸ UNICEF/WHO Joint health and nutrition assessment in 2013, quoted by AfDB study on improving access to water and sanitation rural Somalia, September 2016.

Weaknesses in financial management and integrity: The country has been often rated by Transparency International Corruption Perceptions Indices, as one of the most corrupt among 190 plus countries rated annually in the past decade. The misuse and poor management of public resources has contributed to a culture of impunity that is difficult to treat. Thus, despite modest economic and financial progress in the last few years, *the country remains extremely fragile*. Such inherent fragility extends beyond the economic sphere to the social, political and cultural fabric of the society. The extreme economic fragility and poor management characteristic magnify the societal impact of natural disasters like the pandemic, and man-made crisis alike. This rapid assessment of the economic impact of the Covid-19 would accordingly takes into account the inherent vulnerabilities of the nation in order to properly focus on the policies and measures needed to address the near- and longer-term effects of the pandemic.

Table 9. Somalia: Selected Economic and fiscal Indicators, 2016-21

	.	Est.		proj	proj	
	2016	2017	2018	2019	2020	2021
National income and prices						
Nominal GDP in millions of U.S. dollars	4,198		4,721	4,958	5,218	5,507
Real GDP, annual % change	2.9	1.4	2.8	9	- 6.0	3.0
Consumer prices (e.o.p.	1.2	6.1	3.2	3.1	3.0	2.5
Central Government finances (In % of GDP)						
Revenue and grants	4.1	6.0	5.7	6.8	9.5	10.8
O/ W revenue	-2.7		3.9	4.6	4.5	4.2
Grants	1.4	2.8	1.8	2.2	5.0	6.0
Expenditure (FGS)	3.3	5.3	5.7	6.3	9.1	9.5
Compensation of employees 2/	1.3	2.8	3.0	3.3	4.2	4.3
Purchase of non-financial assets	0.3	0.1	0.2	0.3	0.8	0.9
Overall balance	0.8	0.7	0.1	0.5	0.4	1.4
Overall balance, net	0.0	0.0	0.0	0.6	0.0	1.0

Source: Government of Somalia. Fiscal operations are recorded on a cash basis.

5.2 The economic impact of the COVID-19 pandemic

The global onset of COVID-19 and its containment measures have resulted in severe and varying impact on economic developments in all countries. The initial rapid assessments of the macroeconomic implications of the early stages of the pandemic demonstrate that Somalia confronts a harsh situation owing to the global shock and its impact on the domestic economy, particularly if the pandemic lasts a long time. The COVID-19 pandemic has affected the economy through the unprecedented decline of economic activity worldwide, and the measures adopted to control the spread and impact of the disease.

The sharp drop in economic activity owing to closures and lockdowns in the trading partners led to sharp reduction in trade and more importantly in migrant's remittances, foreign direct investment, and international financial assistance flows. The impact of the COVID-19 pandemic on the global economy is diagnosed to be severe and is estimated that real growth of the world

economy will decline from 2.9 percent in 2019 to negative 3.0 percent in 2020¹⁹; and the Sub-Saharan Africa growth is projected to decline from 2.4 percent in 2019 to minus 5.1 Percent in 2020²⁰.

Despite the dearth of evidence on economic impact of COVID-19 in Somalia due to the lack of timely and credible data, it is already clear that there has been a remarkable decline in economic activity and deterioration in aggregate economic performance since the emergence of coronavirus outbreak in early 2020. In this section, we assess the impact of COVID-19 on macroeconomic developments and productive sectors' performance; the government's fiscal operations and financial markets; economic activity and labor markets; foreign money transfers and financial assistance; and social safety nets of the vulnerable communities.

The Federal Government of Somalia established a COVID-19 Response Coordination Committee (chaired by the Prime Minister), and the Federal Member States (FMS) set up Task Force Committees under their respective health ministries to “prepare contingency plans to prevent, rapidly detect and effectively respond to the pandemic outbreaks, and to reduce morbidity and mortality rates in the country”²¹. Consequently, the authorities introduced health measures to control and mitigate the pandemic and these measures caused severe disruption in supply chains and productive economic activities. In addition, the travel restrictions and lockdown measures had a devastating effect on the informal workers and the underemployed.

5.2.1 COVID-19 impact on macroeconomic aggregates

While it is too early to assess the full economic impact of the COVID-19 and the containment measures, the situation in the first 5 months of the year gives an indication that the country has witnessed a sharp decline in economic activity. According to government estimates, *the real GDP is projected to decline by 6% in 2020, compared to annual average increase of 2.5 % in the proceeding 4 years* (Table 9 above). The spread of the pandemic has negatively affected real economic sectors, particularly agriculture and services, which employ the largest share of the labor force, and contribute significantly to GDP. The agricultural sector challenges include higher cost of production inputs and disruptions of value chains; and reduced outputs.

Available estimates²² indicate that Somalia's formal economy has experienced severe collapse, as livestock, which account for over 50 percent of the country's export earnings, and remittances from the diaspora (around 23 percent of GDP) declined sharply as impacted by the pandemic. Consequently, this will compound the concern about poverty as these financial inflows support private consumption and investments.

The envisaged decline in exports and in remittances would lower overall domestic consumer demand and impact negatively on production and employment. Another adverse impact of the

¹⁹ IMF (April, 2020), *World Economic Outlook*.

²⁰ World Bank (April, 2020) “COVID-19 (Coronavirus) Drives Africa towards first recession in 25 years”.

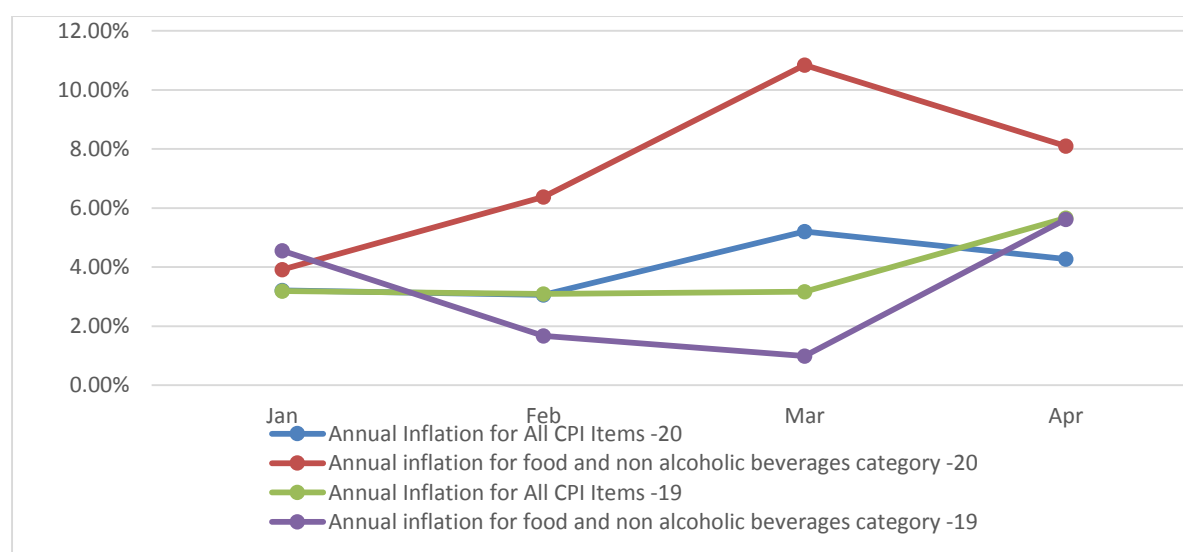
²¹ FGS (28 March, 2020), “Socio-Economic Impact and Required Response for Covid-19 in Somalia”.

²² The IMF estimates the real GDP to decline by about 3% in 2020, and to increase by 2.9% in 2021, under favorable climate conditions.

epidemic is a sharp decline in travel and transport sector (domestic and international) activities. Owing to the closure of airports, the limited mobility could have a major negative impact on the economy and more specifically on fiscal side as revenues from entry points and customs decline. All these challenges would result in harmful effects on services and SMEs sectors in general, with many enterprises shutting down or being unable to meet their legal and financial obligations. In addition, large numbers of people who rely on these sectors for employment or irregular income would lose their livelihood.

As shown in Fig. 4, the annual inflation rate of the first four months for 2019 and 2020, for both All CPI and food category is higher in 2020 than 2019, except for April, when the rate in 2019 for all CPI expenditure is higher. Accordingly, the higher inflation has been recorded as a result of the COVID-19 effect on overall consumer price increase and particularly in food prices, including some essential food stuff such as fruits and vegetables and some imported food items. The evolution of inflation rate in January-April 2020, based on the urban price indices available through April, was led by food prices – and consequently the rise in inflation hit hard the vulnerable groups such as, informal workers and internal displaced people who lost their daily income due to the lockdown and curfew.

Figure 4: Annual Inflation indices chart for the years ending Jan-April, 2019-2020



Sources: National statistical office, Somalia

5.2.2 Impact on trade and external inflows

While the financial crisis of 2008-09 had limited impact on the Somali economy and on most African countries, the current crisis induced by the pandemic is considered to have much larger adverse effects in all primary producing and low income countries. This is because the transmission mechanism of the current economic crisis is demand driven and affects both commodity and labor markets. Somalia's export earnings are expected to face sharp decline as economic activities and incomes in the major trading partners decline. This applies particularly to the Gulf States, which have witnessed recent sharp decline in oil prices and the cancellation of the 2020 Hajj in Saudi Arabia that would sharply reduce receipts from livestock exports to the region.

Further, economic slowdown and the rising unemployment in the Western nations and Middle East countries will seriously reduce inflows of remittances from Somalis in the diaspora which have been a major source of funding for private consumption and investments in the country in recent years. The global recession, which is already in progress is forecast to be the worst since the 1930s, and will reduce Foreign Direct Investment (FDI) inflows and reduce diaspora remittances to Somalia by more than half in 2020, as compared to the year before, resulting in foreign exchange scarcity (Table 10).

Table 10: External Financial Flows in Somalia, 2018-2020 (in millions of US\$)

Sources	2018	2019	2020 (proj)
FDI	406.0	446.0	356.0
Remittances	2,219.5	2,382.0	1,061.0
ODA	2,168.0	1,862.0	--
o/w humanitarian	1,140.0	934.0	--

Source: Ministries of Finance and Planning, and the Central bank of Somalia

The domestic lockdown in Somalia and international markets, designed to limit the spread of the virus, is disrupting value chains resulting in shortages of essential inputs for production and basic necessities; thus worsening the already poor economic performance. The severity of the effects of the pandemic will depend on the outcome of measures taken to manage the pandemic and boost the recovery of the affected economic sectors.

5.2.3 The impact on public Finances

The financial impact of the pandemic on Somalia is assessed to be extremely severe. The country has a very narrow revenue base and relies on taxes on international trade for over 80% of domestic tax receipts. This will be greatly reduced by import reductions. Similarly, decline in private consumption and the economy in general will lead to decline in revenue from other sources. The lower domestic revenue mobilization combined with increased government expenditures to meet rising healthcare expenses will aggravate the already constrained fiscal position.

The COVID-19 crisis hit severely the government budget on both sides of the revenues and expenditure. On the revenues side, the 2020 budget will witness sharp reduction owing to the loss of taxes associated with the decline in economic activity and the lockdowns. Port fees and taxes on imports represent a significant portion of income for the FGS and FMS; and the reduced level of imports and port activities will lead to significant loss of revenue. In addition, the restrictions in air travel will contribute to the reduction of landing fees, entry visa and other related taxes. The reduction in business activities and closure of markets, hotels and restaurants will adversely impact on the modest collection of inland receipts.

The authorities are seeking donor support to respond to the crisis and offset the impact of revenue losses. Effective April 15, they introduced a three-month tax holiday on some specific basic commodities (including rice), reduced consumption tax on some additional basic goods (including [flour]) by 50 percent and lifted restrictions on imports of rice from Vietnam. The authorities have also made additional transfers to federal member states and the Banadir region to help them respond to the impact of the pandemic.

The public expenditures will continue to face unexpected pressure to confront the unplanned spending associated with the urgent health crisis as well as supporting the poor with their basic

needs and in particular cash relief to assist the IDPs and most vulnerable poor communities during the pandemic. Moreover, any substantial reduction in the budget owing to COVID-19 pandemic re-prioritization may affect the achievement of the much needed recovery.

5.2.4 The impact on financial sector

The financial sector is among the hardest hit sectors in the economy by COVID-19 pandemic and the containment measures. The economy of Somalia has been sustained for many years by the operations of money transfer companies foremost, and the annual US\$1.5 -2.0 billion they transferred annually from the Somali Diaspora to their families and friends. The indicative estimates are that severe disruptions in the services of these money transfer companies, which relied un-conventional means of cash transfers have contributed to sharp inflows of remittances (by more than 50%) at the beginning of the severe logistics and mobility restrictions. The nascent commercial banking sector also suffered losses during the first months of the pandemic onset, adding more pressure to the ongoing economic crisis. The disruption of money transfer channels also impacted adversely on investment activities, and led to a severe shortage of foreign exchange and liquidity in a dollarized economy,

The remittances flow challenges also led to constraints on other international transfers, including humanitarian assistance and some official flows channeled through the money transfer companies, and hence intensified the shortage of foreign exchange availability. Also, the shutdown of ports and customs entry points prevented indirect financing of essential imports through remittances. A detailed analysis of the COVID-19 impact on remittances, both via transfer companies or indirect means such as imports finance are provided in an NEC assessment of impact on inflows²³

The central bank has no monetary policy tools to effectively support and underpin the deteriorating economic activity, such as lending to government to meet its financing needs, or to increase the commercial banks access to liquidity. Thus far, the Central Bank released nominal funding (US\$2.9 mn) for-lending support to micro enterprises through commercial banks; and has encouraged them to use their excess liquidity to support such lending.

5.2.5 The impact on labor markets and poverty

The drop in economic activities associated with emergence of COVID-19 has resulted in remarkable increase in unemployment rates in the first quarter of this year. Classifying employment into several main categories: formal wage and salaries employment, under-employment, and informal workers; the most affected categories since COVID-19 are the under employed and informal workers. As the entire informal sector labor engage in work without social protection and security (e.g. craftspeople, street vendors, and day laborers) this category is exposed to the risk of unemployment and poverty, because of imposed movement restrictions and decline in business activity. Thus, for many people in the informal economy, the ramifications of the envisaged downturn in the economy and measures to mitigate the pandemic have endangered the livelihoods of the vulnerable communities.

²³ National economic Council (NEC) of Somalia report on diaspora remittances to the country, June 2020.

6. Longer-term Economic Transformation

6.1 Developing a growth and transformation strategy

The remaining sections of the economic assessment is aimed at delineating innovative ways of formulating a longer term recovery and transformation strategy for the country. The focus is to present a diagnostic analysis of future policies and measures based on key economic issues such as building sustainable security, rebuilding economic productivity and inclusive growth, addressing the structure and trajectory of poverty country wide, and investing in human resources endowed with technological skills to drive a modern state and economy.

The policies for recovery and growth strategy of the government of Somalia should aim to unlock private investment by removing selected barriers to doing business and support the private sector to create a conducive investment climate regime in the country. More specifically the required new policies should aim to improve the business environment by reducing the time and cost of starting and operating a formal business; rebuild and incentivize the operations of small and medium enterprises (SMEs) that are the basis of economic activity; and enhance state development capacity to guide economic recovery and transformation.

Unlocking the country's development and transformation potential: The country is endowed with considerable natural resource, including significant oil and gas reserves, solar energy potential and abundant marine resources, and livestock which is the country's largest export. Somalia offers unrivaled opportunities for investment in these marine resources, transport, livestock, agriculture, and tourism, once the preconditions of security, political stability and good governance are ensured. It has also a young and dynamic populations that could be trained to support investors to develop the natural resources that include many untapped minerals (uranium, iron ore, tin, gypsum, bauxite, and copper).

The major reasons why the country remains in a cycle of limited economic productivity and low growth is that it currently lacks sound and institutionalized policy framework, and the skilled human resources and government institutions needed to manage its potential resources effectively. This has led to low investment and economic diversification. The institutional capacity deficit is marked by the World Bank's "Doing Business" review of 2017, which rated Somalia's performance the last/worst in the world out of 190 countries evaluated. The poor performance is found across all categories of indicators of institutional effectiveness, and are across the main development challenges including: (i) low literacy rate of only 38 percent and lack of skilled manpower, (ii) weak legal system and institutions, (iii) poor economic infrastructure, and (iv) prevalent corruption.

Diversifying and expanding the country's production base: A growth strategy that is led by the country's agricultural (farming, fishing and livestock) potential should be formulated and urgently put in place. The current reliance on food imports and humanitarian assistance for nearly a third of the population is unsustainable. Somalia development policies for longtime have targeted agriculture as the main engine of economic growth. This can be achieved through the production

of high value crops and modern livestock management. A Joint FAO/WB²⁴ study suggests that the country needs to follow bold and forward looking approach to support the sector's recovery and capitalize on its many growth opportunities. It calls for public and private investment in agriculture to strengthen to enhance national recovery and withstand increasingly frequent and severe weather shocks. Stronger institutions, extension services and infrastructure are needed to support private investment in agricultural products. In addition, it is essential to rebuild the pre-existing manufacturing base of the country that has been decimated, and to expand the services sector with the right incentives.

Investing for the future in economic infrastructure: The paucity of transport, energy and communication infrastructure are critical to promote and sustain private sector productive activities and inclusive growth. Accordingly Large investments are required in physical infrastructure in order to ease the critical deficit of roads and rail networks; energy generation, particularly of renewable sources, and distribution; and access to water, efficient telecommunication and other public utilities that contribute to addressing the high cost of doing business in the country.

Building Economic infrastructure has long gestation period and sourcing adequate funds for complex and costly infrastructure projects, contracting services, and completing them takes time. Improvements in economic infrastructure would remove bottlenecks for cross border trade and open access for international trade to the underutilized ports of Somalia and for outside markets for land-linked countries. Considering the long lead time of capital projects, government should start at an early stage to prepare “a set of ready to implement projects” in order to scale up investment s in this areas within the earliest possible time.

Enhancing social protection measures and human resilience: As noted a large share of the people of the country are surviving on marginal existence and humanitarian support. These include the millions of IDPs, and the many that are challenged by climate shocks and prevalent poverty, and often faced with acute food insecurity and hunger. In the current limited public resources, the capacity of the authorities are constrained putting in place affordable social safety net programs. In the circumstances, less costly programs should be considered for return of IDPs to their farms, instead of marginal existence in semi-permanent urban camps. Such return to productive existence is more dignified than their current state that breeds dependence.

As the nation responds to the current COVID-19 emergency, the authorities should be mindful that the health and economic impact of the pandemic will further aggravate the deep rooted challenges and structural drivers of income inequality and should be tackled forcefully on a longer-term basis. In particular, providing opportunities for women and the youth, improving the livelihoods of IDPs and other vulnerable communities, and broadly investing in the delivery of basic social services (health education on a longer-term basis) are essential elements to build human resilience.

Strengthening skills development based on technological innovation: Somalia is currently without a skilled workforce to effectively generate growth or compete within the region or internationally.

²⁴ FAO/WB 2018: Rebuilding Resilient and Sustainable Agriculture in Somalia

Moreover, there are no comprehensive programs of skills development or institutional building to generate the capacity that will drive economic growth and transformation Strategy. The resources being made available and expended on human resources and institutional building in the country are minimal and insufficient to make a difference in the near term, to underpin the growth and transformation required. The role of the large diaspora, and reliance on imported man power from the sub-region could assist in meeting the skill gaps, and knowledge in transfer, and infusion of high technology skills.

While the penetration of access to mobile communications and digital money usage in the country is among the highest in Africa and ahead of many middle income countries, transforming the national economy into a knowledge-based economy is still an arduous task ahead. To achieve a knowledge-based economy much more will be needed, including infrastructural investment in the areas of broad internet access, telecommunication infrastructure, reliable and affordable energy to reduce costs, while increasing quality and reliability of such services. Major reforms and increased investments are required in the digital economy, such as access to e-Governance, education, and commerce in order to take advantage of changing global dynamics and to promote economic diversification, and connectivity at home and abroad.

Availing sufficient financing for recovery and transformation: The country requires massive financing for broad recovery from the travails of fragile states. There is clear need for increasing domestic financial resources mobilization to meet the current savings deficits and social safety net requirements. Other sources of funding productive economic activity should also be mobilized, including from Diaspora remittances, Foreign Direct Investment, and Official Development Assistance. In addition, non-debt creating access to funds, such as Foreign Direct Investment (FDI) should be sought and the right incentives be put in place to cover the massive gap between the domestic savings and gross investment in the country. The authorities have been making efforts to incentivize FDI flows especially in the hydro-carbon sector. More innovative approaches and ways to fund major capital projects still need to be developed to encourage investment in the economy's productive sectors, from domestic sources such as equity markets and creation of a functional national development bank.

6.2 Concluding remarks on economic assessment

The severe impact of COVID-19 on the international economy and its control and mitigation measures are having severe damage to Somalia's economy. Limited available data indicate that real GDP growth is expected to decline by 6% or more, inflation has risen sharply in the first 4 month of 2020, trade of goods and services has been declining and has impacted on domestic economic activity. The spread of the pandemic has negatively affected the agriculture and services sectors (the main contributors to GDP) and further increased unemployment in the country, leading daily wage workers to face acute food shortages and insecurity. The government's financial operations have been marked by lower domestic revenues and higher pandemic associated expenditure, which has aggravated the fiscal position.

Weaknesses in the Somali economy attributable to corrosive insecurity and adverse climate conditions have been aggravated by the immediate effects of the pandemic. As the authorities

imposed measures to control the spread of the coronavirus, inadequate access to health, acute food insecurity, and endemic poverty among the vulnerable communities have been magnified.

The impact of the pandemic on Somalia's public finances has been extremely severe. The country's narrow revenue base that relies on import duties for 80% of domestic tax receipts, have shown marked reductions at the Federal Government and Member States levels. Similarly, decline in the economy has led to a drop revenues from other sources. The lower domestic revenue mobilization combined with increased government expenditures to meet rising healthcare expenses will worsen the already constrained fiscal position.

The economy of Somalia has been sustained for many years by remittances inflows that transferred US\$1.5-2.0 billion annually to dependents at home. The authorities expect a sharp reduction in diaspora remittances, due to global economic recession on migrants' employment that is estimated to reduce remittances flows by more than half during this year. The nascent operations of the commercial banks will also be among the hardest hit sectors by COVID-19 and by government measures to contain the pandemic.

The drop in economic activities and movement restrictions associated with emergence of COVID-19 has led to worsening conditions for informal workers and the unemployed. Moreover, the pandemic effects on large and small enterprises alike will further aggravate the food insecurity for the poor. Their living conditions are expected to further worsen, unless effective social protection measures are put in place to protect their livelihood.

In order to contain and mitigate the COVID-19 consequences, the authorities introduced urgent measures to support the health system through availing required equipment and dedicated facilities. As noted, within the limited fiscal space, public expenditure were increased and relief on duties and taxes on basic food imports was granted to cushion the higher cost of living. The authorities appealed for international financial support and committed to reallocate more resources for health services spending.

7. Policy Measures and Recommendations

7.1 Short-term health responses

The Federal Government in partnership with the FMS should manage the health challenges faced through improved cooperation, coordination of efforts, and enhanced broad governance. Specific areas of collaboration between FGS and FMS could include²⁵:

- Strengthened communication campaign consisting of general and specific information on the pandemic to be disseminated to the public through all media and in public places, religious locations and public transport, through active engagement of change agents and religious leaders.

²⁵ Abdinor Hassan Dahir; April 2020: Community empowerment

- Leveraging the power of the community to control the spread of the COVID-19 pandemic, and empower them to carry out community-based surveillance, and care.
- Cooperation and coordination among the key stakeholders should be given priority in responding to and tackling the public health threat by ensuring timely responses.
- Consideration should be given to engage “Al Shabaab” through community leaders to reach a ceasefire as suggested by the UN. This would free resources and time to focus on the fight against pandemic.
- Collaborate with regional governments and organizations to prevent the spread of the pandemic, and to jointly address social and economic problems related to the pandemic. These might involve developing a sub-regional and pan African strategy to coordinate cross border responses and surveillances, and information sharing.
- The Federal Government should engage international organizations and other stakeholders and seek international emergency assistance from bilateral and multilateral partners; including direct budget support, additional equipment (masks, ICU beds, ventilators, protective clothes, etc.) and funds to support the health sector.

7.2 Short –term economic measures

In addition to on-going health measures and based on their limited capacity to intervene, through vigorous mobilization of domestic and international financial resources, the authorities should consider the following short-term measures:

- Enhance the economic efforts to support productive enterprises through injection of liquidity, as well as hasten the recovery of key sectors (agriculture including livestock and fisheries).
- Formulate and implement a program of support for vulnerable people, particularly the households at risk of acute food shortage and the IDPs for the duration of the pandemic, subject to availability of resources.
- Ensure coordinated and collaborative efforts of all government levels and the private sector in the delivery of essential measures and in order to avoid inequities in the distribution mode.
- Implement effective financial governance mechanism, processes and systems that assure the public and development partners alike that the utilization of Covid-19 targeted resources are executed with utmost, accountability, transparency and integrity.
- Cooperate with regional institutions and governments in order to maximize the concerted efforts to control and mitigate the health and economic impact of the pandemic(e.g. establishing and operationalizing a joint Center for Disease Control (CDC) for the IGAD, so as to share epidemiological data and health expertise.

- Exert maximum efforts to mobilize additional financial resources from the international development partners (bilateral and multilateral) to create fiscal space to provide for effective social safety net programs and to assist the productive sectors, as feasible

7.3 Longer-term reform measures

The threat of the pandemic has highlighted key weakness across the globe for both developed and developing economies, particular in provision of adequate health care and income inequality. The authorities should be mindful that necessary as the short term measures are, these are not sufficient to deal with the challenges Somalia faces that have been magnified by the pandemic. In this context, the authorities should concentrate on the imperatives of the longer-term socio-economic recovery and transformation, including the following:

- The nation should take full opportunity to address the characteristics of economic and state fragility highlighted in this rapid assessment.
- As a priority, the “prerequisites for recovery and transformation” including enhanced security and stability, and strengthened financial management are ensured.
- Diversify and expand the country’s production base; putting especial focus on agriculture led growth strategy (farming, fishing and livestock) in order to attain food security, and achieve exportable surpluses.
- Prioritize and rebuild the national economic infrastructure; and strengthen the skills and institutional capacities, based on technological innovation.
- Improve the livelihoods of IDPs and the poor communities, to attain the benefits of a humane and cohesive society.

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Case Study IV
Socio-economic Impact of Covid-19 in Sudan:
A rapid assessment

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Executive Summary

Like other open countries with trade and migration relations, Sudan was not protected from the spread of COVID-19, as of 15 June, the number of confirmed cases reached 7,435- the highest so far among the East African countries. To suppress the transmission of the virus, the central and regional government authorities have adopted a number of containment measures including lockdown, curfews, and the closure of airports and land crossings. Given the country is already suffering from a prolonged economic hardship, the spread of COVID-19 coupled with its preventive measures has further undermined the socio-economic situation. This rapid assessment aims to identify the direct and indirect socio-economic effects of the pandemic and the adopted preventive measures. The assessment is based primarily on desk review of secondary data and key informant interviews.

The assessment reveals that the Sudanese health system suffers from chronic problems such as underfunding, and lack of well trained staff, infrastructure, equipment, medicines and supplies. All these reduce the preparedness of the system to respond to COVID-19 pandemic. In addition, the outbreak of the virus undermines the ability of the health sector to respond to other widespread diseases, such as chikungunya, dengue, malaria, and Rift Valley as well as the huge number of elderly people with chronic health conditions. Moreover, dozens of hospitals in the country were shut down due to shortage of personal protective equipment.

Sudan is currently hosting about two millions of internally displaced populations (IDPs) and more than one million refugees living in crowded camps and rural settlements, with inadequate health care, Water, Sanitation and Hygiene (WASH) services facilities. The majority of IDPs and refugees face high levels of poverty, limited access to livelihood opportunities, and are hosted in the poorest regions of the country, where host communities are also suffering from poverty and unemployment. While refugees/IDPs often benefit from generous support provided by national and international organizations, significant funding gaps persevere for the refugee response in Sudan, which have been further exacerbated by the ongoing economic crisis and the emergence of COVID-19 pandemic. Thus, refugees and IDPs population are vulnerable to the risk of the pandemic and the adopted preventive measures.

The spread of COVID-19 intensified the pre COVID-19 economic crisis in the country. Before the appearance of the pandemic, the national economy has been suffering from several economic problems including for instance, negative economic growth, high inflation rate, rising costs of basic goods, large fiscal deficits, trade and balance of payments difficulties, and consequent shortage of hard currencies. The assessment revealed that the onset of COVID-19 and the preventive measures have resulted in considerable negative impact on the macroeconomic indicators such as, inflation rates, exchange rate, government budget and trade balance. Following the closure of airports and curfews, the inflation and parallel exchange rate have increased to unprecedented rates. The official estimates indicate a 7.2% GDP contraction in 2020, as a result of the impact of COVID-19 pandemic. Moreover, the spread of COVID-19 is expected to hit severely the 2020 budget, with sharp reduction in the total revenues if this pandemic continues for prolonged time this year. Furthermore, the total exports are expected to shrink by about 20% (MoFEP, 2020).

The spread of COVID-19 pandemic also negatively affected the real economic sectors, particularly agriculture and services sectors - the main contributors to GDP and national economy. The industrial sector has also been impacted adversely by the consequences of COVID-19 and the preventive measures. High inflation rates coupled with the lockdown disrupted the value chains of all productive sectors, and consequently increased concern about poverty and food insecurity. Moreover, the pandemic is projected to increase unemployment rate and poverty rate, posing a real challenge to achieve the UN Sustainable Development Goals by 2030.

The financial sector is among the hardest hit sectors in the economy by COVID-19 pandemic and its associated containment measures. This year, the economy expects a sharp reduction in migrant remittances, foreign direct investment and international assistances due to global lockdown and ports closure. It is expected that migrants' remittances will fall by about 500 million USD. The promised grants from Sudan development partners in international community are also under the risk of suspension due to global economic slump.

In response to COVID-19 pandemic and the negative consequences of lockdowns, the government of Sudan proposed a number of economic and social supportive measures. These measures include cash transfers to most affected population groups, support for the unemployed, informal workers and public servants, subsidies for badly affected businesses and measures to prevent defaults on loans and keep the banking sector solvent. However, the current economic hardship and tight fiscal position may disrupt implementation of such measures.

Based on the assessment we recommend several measures which include urgent support to the health system through availing equipment and resources to manage COVID-19 pandemic. The international organizations and NGOs should be encouraged to increase their support of refugees, IDPs and hosting communities through strengthening water, sanitation and hygiene services. In addition, the budget needs rapid revision to reallocate more resources to the health spending so as to respond effectively to COVID-19. Moreover, business sector needs urgent supportive package such as tax relief, subsidies, and investment incentives to keep jobs and stay open. Likewise, vulnerable groups such as irregular workers and poor household should be provided with special packages such as, cash relief and food subsidies. Furthermore, the government should urgently prepare for the post COVID-19 recovery plans, taking into account issues the crisis has highlighted including inequality, unemployment, poverty, and education as well as health coverage. Finally, the IGAD should reinforce the preparedness of its member countries through several avenues including, promoting national public health legislation to support safe cross-border travel; developing policies to support social protection of vulnerable groups; and encouraging research and exchange of information.

1. Introduction

1.1 Background

The outbreak of Coronavirus 2019 (COVID-19) presents as a global health crisis that poses serious challenges on all aspects of human life at national, regional and global levels. Since its spread in early 2020, COVID-19 increasingly hit hard low and middle-income countries. Like other open countries with trade and migration relations, Sudan was not protected from the spread of COVID-19, as of 15 June, the number of confirmed cases reached 7,435 - the highest so far among the East African countries. In light of the mounting spread of the virus infections the effect of COVID-19 is expected to compound an already unfavorable situation that characterized by an economic crisis, malnutrition, food insecurity, civil conflict, displacement and the prevalence of large refugees people.

The spread of the COVID-19 coupled with its containment measures may result in several long term effects at economic, social and health levels. In view of the fragile health system in Sudan, the country is expected to suffer from acute shortage of medical coverage and scarcity in health resources to combat the pandemic. From economic side, the lockdown and business closure may lead to devastating impacts in many sectors including transportation, logistics, tourism and financial sector as well as agricultural sector. Given more than 60% of labor force works in the informal sector without any forms of social security, informal workers will be exposed to poverty and become vulnerable to income slump that result from the curfews and business closure. In addition, the increased uncertainty and risks associated with spread of COVID-19 in the coming months will lead to serious implications in many macroeconomic aggregates, notably exchange rates, consumption trends, inflation rates and foreign investment, as well as international remittances. Therefore, assessing the socio-economic impacts of COVID-19 is imperative to support any efforts that aim to control the spread of the virus and identify the short-term and long-term responses to minimize the consequences of the epidemic. This also is critically important in designing effective recovery strategies to mitigate the impact of COVID-19 on vulnerable groups, such as poor, informal workers and forcibly displaced populations, including refugees and internally displaced persons (IDPs). Moreover, the assessment will help in identifying some avenues through which the IGAD can promote regional cooperation among member countries to combat the virus and enhance the long-term recovery efforts.

1.2. Objectives

The main objective of this study is to assess both direct and indirect socio-economic impact of COVID-19 in Sudan. The specific objectives are as follows:

- Identify the preparedness of the health system and its response to COVID-19
- Identify the level of response required by the regional and international community in regard to health assistance and human supports in general.
- Understand the socio-economic and health situation in refugee and IDP hosting areas, and identify their health and social needs.

- Understand the economic impact of COVID-19 on the vulnerable groups of the population (underemployed/daily laborers, poor)
- Understand the impact of COVID-19 on government budget and the main macroeconomic indicators.
- Identify the potential role of IGAD in reinforcing cooperation among member countries, so as to mitigate the negative consequences of the pandemic and enhance long-term recovery plans.
- Provide recommendations that define and establish priorities for actions and resources necessary for the immediate response, so as to contain the spread of the pandemic and improve the resilience of vulnerable groups.

1.3. Methodology

This study is primarily based on desk review and key informant interviews. The data is obtained mainly from secondary sources including the Federal Ministry of Health (FMoH), the Ministry of Finance and Economic Planning as well as regional and international relevant organizations working in refugee and IDP hosting areas, such as UNHCR and its partners. Given the national lockdowns during this study, telephone interviews with key informants in the relevant institutions/organizations were adopted.

2. The impact of COVID-19 on health and healthcare system

2.1. The spread of COVID-19 and containment measures: An overview

On 13th March 2020 Sudan recorded its first case of Covid-19. While most of the first cases were either imported or had a history of contact with infected persons, the later cases were infected through the community transmission. Table 1 shows the weekly evolution of the confirmed cases, deaths, recovered and the active cases since the declaration of first case and up to 15th June- the date of this report. The table indicates that until the end of March the number of infected persons did not exceed ten. However, since the mid of April the number of infections has increased dramatically, and the end of April the number of confirmed cases jumped to 375, with death toll stood at 28. Unexpectedly, during the first week of May (1-7th May) the number of confirmed cases increased three-fold, from 375 to 930 cases, while the number of deaths has doubled. The second and third week of May also witnessed a sharp increase in both infections and deaths. Most of first cases were in Khartoum, but lately the virus spread over all Sudanese states.

Table 1: The evolution of total cases, deaths, recovered and the active cases (March- June)

Week	Total cases	Deaths	Recovered	Active cases
13-20 th March	2	1	-	1
21-27 th March	3	1	-	2
28 th March- 3 rd April	10	2	1	7
4 rd -10 th April	15	2	3	10
11 –17 th April	33	6	4	23
18 –24 th April	174	16	14	134
25 th April- 1 th May	375	28	32	315
2- 7 th May	930	52	92	786
8- 14 th May	1,818	90	198	1530
15- 21 th May	2,728	111	286	2131
22 st -29 th May	4346	195	749	3402
30 th May -6 th June	5865	347	1924	3594
7- 15 th June	7435	468	2720	4247

Source: Federal Ministry of Health, Sudan, last updated: 15/6/2020, 6:00pm, local time.

Moreover, as can be read from the table, the deaths as a percentage of total infected cases is very high compared to other countries in the region. According to epidemiologists the numbers of actual cases may be far higher than that announced, owing to low testing capacity and weak public health surveillance. Despite the closure of airports and land crossings since the mid of March, the number of infected cases has increased sharply, confirming the role of community transmission in spread of the virus.

The Government response to contain COVID-19

To contain the transmission of COVID-19, the central and local government authorities undertook a number of measures to enhance social distancing, which include the following:

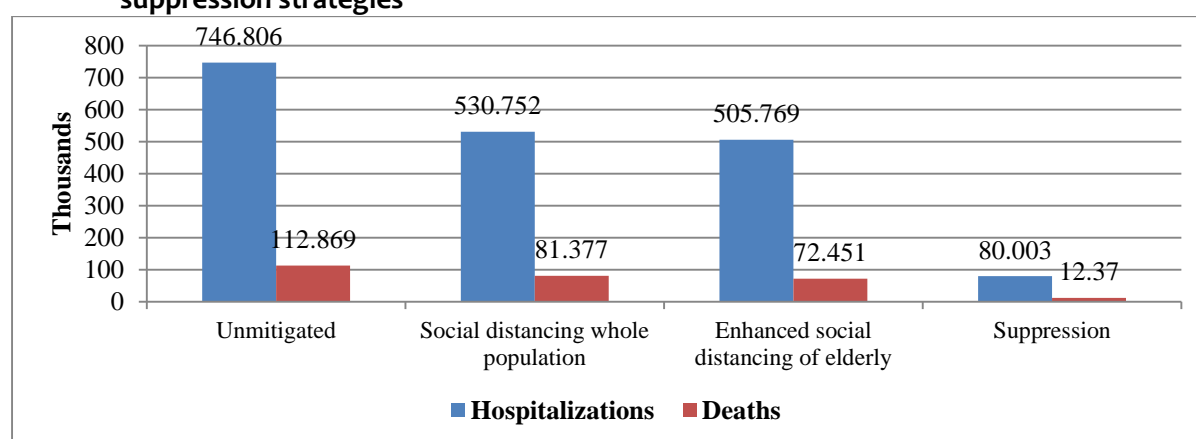
- Setting up a High-level Committee to lead and coordinate the national response to COVID 19.
- Closing the learning institutions (schools and universities).
- Suspending public gatherings and events and encouraging limited contact between persons (social distancing).
- Closing all airports, ports and land crossings in the country, except for humanitarian, commercial and technical support shipments.
- Wearing of face masks in public places is mandatory.
- The health authorities have recruited additional health workers to manage the COVID-19 pandemic.
- On 18th April, the government imposed a national lockdown for three weeks, renewed for ten more days and two more weeks, successively, to be ended by first of June.

- Intensifying awareness campaigns in the refugee/IDP hosting areas.
- Scaling up awareness programs on radio and TV in capital city and all states.
- Preventing public gatherings in mosques and other religious events.
- Banning movement between cities and states, except for transportation of food supplies and other cargo.

However, to mitigate the negative consequences of lockdown and business closure, the Ministry of Labor has proposed a 6 billion SDGs (equivalent to \$110 million) program to support 30% of the population for one month, through a mixture of goods and cash. Moreover, the Ministry of Finance is also proposing a package of support most affected population groups such as, informal sector workers and public servants, subsidies for badly affected businesses and measures to prevent widespread defaults on loans and keep the banking sector solvent.

The underlying public health rationale for the national lockdown measures is the fear of rapid community transmission. Figure 1 presents an epidemiological modelling of the global impact of COVID-19 conducted by the Imperial College of London, projecting the number of infected, deaths and hospitalization using different mitigation measures for all countries. The Figure indicates that for the case of Sudan if COVID-19 was allowed to continue unabated, about 747,000 individuals would have been hospitalized and about 113,000 deaths would have occurred. Moreover, if mitigation measures of mild social distancing of the entire population (reducing social contact rates by 45%) and social distancing of the elderly (reducing contact rates of the elderly by 60%) had been adopted, the number of deaths would reduce to 81,377 and 72,451, respectively. A national lockdown—which is equivalent to a suppression strategy that reduces interpersonal contact rates by 75% would lead to only 12,370 deaths caused by COVID-19.

Figure 1: Projected hospitalizations and deaths in Sudan according to different mitigation and suppression strategies



Source: Author's calculation based on data from Imperial College of London (2020)

2.2. Health system infrastructures and response to COVID-19

In light of the fragile health system in Sudan the spread of COVID-19 poses a huge pressure on the available health resources. Indeed, for many decades the health system in Sudan has been suffering from underfunding, and lack of well trained staff, infrastructure, equipment, medicines

and supplies (CPRP, 2020). Share of the health sector in the National budget, at best, reached 8%. In fact, the country has a serious shortage of adequately skilled human resources for health (HRH) to support increased demand. According to recent statistics, the physicians' density is 1.9 per 10,000 population, which is very low compared to the regional average (UNDP, 2020). In addition, HRH are inequitably distributed, as about 70% of health workers are located in urban areas, of which more than half are in the capital (Khartoum). Over the last two decades, the country also has suffered from huge waves of brain drain at all HRH. All these are mainly due to low wages and salaries, poor working and living conditions (mainly in rural and remote areas), lack of security in conflict-affected areas and low chances for career development (UNDP, 2020). From financing side, the country is suffering from high out of pocket health payments (around 80%) and low Universal Health Coverage (UHC) - do not exceed 50% (UNDP, 2020). Moreover, the country exhibits a high rate of inequality in the distribution of health system inputs including health expenditure across regions and states. Moreover, the health system lacks sufficient isolation and intensive care units, infection control material, medicines and medical supplies. The number of intensive care beds to treat critical cases is about 80 ventilators in the whole country. Medicine availability is only 49% in the national health insurance fund, and 59% in the private sector (UNDP, 2020). In addition, the country remains prone to other disease outbreaks, including cholera, chikungunya, dengue, malaria, measles and Rift Valley as well as huge number of elderly people with chronic health conditions, who are at high risk should the pandemic spread.

Furthermore, several factors are weakening the health system including limited access to safe water and sanitation as well as poor hygiene practices; these also further increase the risk of COVID transmission. Indeed, statistics indicates that about 5.3 million people lack access to improved water sources, 6.2 million people lack access to improved sanitation, and 7.5 million people lack access to hygiene services (CPRP, 2020).

Despite the shortage of resources, the FMoH has exerted great efforts to respond to COVID-19 since the announcement of the first case. FMoH works on availing testing service, isolating and caring for confirmed cases, while also tracing and quarantining people who have come in close contact with the infected. The ministries of health on the state level do the same efforts and monitoring the evolution of the virus.

Telephone interviews with key informants in health sector revealed that COVID-19 poses many challenges on health situation, which can summarized as follows:

- The spread of COVID-19 frustrates the ability of the health sector to respond to other diseases such as, malaria, diarrheal disease, dysentery, typhoid, and pneumonia.
- COVID-19 disrupting the preparedness for other basic health services such as immunization, TB, HIV/AIDS, particularly for vulnerable population.
- Availability and affordability of essential medicines including medications for chronic diseases is a critical area of concern due to high spread of the virus among elders.

- The widespread of COVID-19 infection may undermine the ability of the health system to prepare and respond to other threats, outbreaks, and emergencies, particularly those linked to the rainy season such as cholera, malaria, chikungunya, and dengue.
- The spread of COVID-19 expose medical and health personnel in the country to difficult conditions as they lacking protective gear and the medicines needed to carry out their duty.
- Dozens of hospitals in the country were shut down due to the absence of equipment including protection gears.
- Medical professionals are not trained to deal with COVID-19 infections; thus the health system suffers from acute shortage of HRH to manage COVID-19.

2.3. Resource (human, financial, equipment, etc.) needs and gaps

Despite the lack of detailed information on the items needed to confront COVID-19, the current situation in Sudan indicates a huge gap in human and financial resources as well as health equipment. It is clear that contraction of economic activity coupled with prolonged economic crisis heighten the existing gaps in such items. Based on the available information from secondary sources and key informants interview, we can summarize the needs and shortages in the following items:

- Health system lacks medical professionals who are well trained in the management of COVID-19. This problem was appeared with the outbreak of the virus, forcing the authorities to recruit and train new staff to deal with equipment (e.g. ICUs) that used in treating COVID-19 cases.
- Health system lacks sufficient intensive care units, as the country has 80 ICUs for critical cases, while some devices do not work.
- Acute shortage in Personal Protective Equipment (PPE), including goggles, sanitizers, caps, face shields, N95 masks, aprons and gowns.
- Medical professionals lack protective gear and the medicines to carry out their duty.
- Low testing facilities, as the current capacity allows for the completion of 130 tests per day, and all COVID-19 testing is done by the National Public Health Laboratory (NPHL) in Khartoum; there is aspiration to increase testing capacity to at least 600 tests per day, by using labs in Red Sea, Gezira, and North Darfur.

Overall, there is a huge gap in the resources that needed to respond to COVID-19 in Sudan. The Government looks to donors support to meet the shortfall of the immediate response plan of some 290 million SDGs and the three months follow on response, costing 3.8 billion SDGs (equivalent to US\$ 750 million). In addition, the United Nations prepared a plan “the Corona Virus – COVID-19 Country Preparedness and Response Plan (CPRP)” to support the government of Sudan’s efforts in preparing and responding to the pandemic. The plan requires US\$ 87 million to be implemented, which focuses on public health measures for a three-month Period.

2.4. Regional and international responses and measures so far

Following the announcement of first cases, the country has received some support from few friendly countries in the international community. For example, the Chinese embassy in Sudan donated 400,000 surgical masks to the Sudanese government. The UAE and Egyptian governments also sent tons of medical supplies and medicines to help the country against COVID-19. The government of the United States has declared about 23.1 million USD to support the efforts of Sudanese government to confront the spread of COVID-19. The friends of Sudan also agreed on 7th May to allocate 100 million Euros to Support Sudan in facing COVID-19.

The transitional government is seeking also financial support from international community to response to this pandemic. The World Health Organization (WHO) and other UN agencies have supported the Federal Ministry of Health' response to COVID-19 pandemic through immediate and three-month response plans and allocated half the funds needed for the immediate response. Through this support the FMOH was able to cover management of arrivals at points of entry, isolation, case management, infection prevention and control, supplies, risks communication, surveillance, and capacity building of front-line health workers. In addition, many Non-governmental organizations (NGOs) have supported the health system through awareness, providing medicines and logistic support. Unfortunately, Sudan is still on Washington's list of state sponsors of terrorism, so it is ineligible to access the IMF-World Bank's \$50 billion emergency fund to help vulnerable countries fight COVID-19.

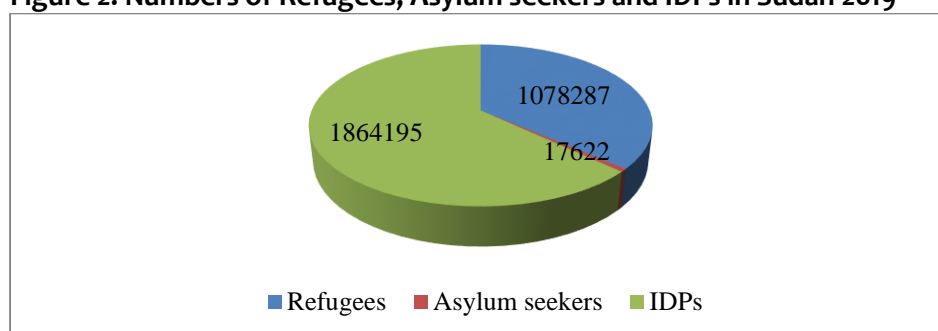
Despite the significant attention of international community to assist government of Sudan in its battle against COVID-19, the actual international support so far is very little compared to the health burden of COVID-19 as well as economic losses. Therefore, the country needs urgent financial support from donors and international community to mitigate the consequences of this pandemic.

2.5. The health situation in refugees and IDPs camps and the response to COVID-19

The health situation in refugees and IDPs hosting areas

Sudan is currently hosting more than one million refugees and asylum seekers from a number of countries including Ethiopia, Eritrea, South Sudan, Central African Republic (CAR), Chad, the Democratic Republic of Congo (DRC), Somalia, Yemen and Syria, who have arrived in search of safety from violence, persecution and other hazards in their countries of origin. A great part of refugees live in camps supported by the national and international organizations.

Figure 2: Numbers of Refugees, Asylum seekers and IDPs in Sudan 2019



Source: UNHCR (2019)

South Sudan' refugees are the largest communities in Sudan, accounting for more 840,000, as of 30 November 2019 (UNCHR, 2019). In Eastern part of Sudan, there are more than 130,000 Eritrean and Ethiopian refugees and asylum seekers, living in camps and urban city centers across Kassala, Gedarf, Red Sea and Gezira states. There are also more than 120,000 Ethiopian, Eritrean, Congolese, Somali, Yemeni, Syrian, and Burundian refugees living in Khartoum (UNCHR, 2019). In the western Sudan, there are about 20,000 CAR and Chadian refugees reside in South and Central Darfur States.

On the other hand, the internal conflict leading to wide scale population displacement; specifically, the conflict in Darfur, Blue Nile and South Krodufan resulted in millions of internally displaced people (IDPs). The recent statistics by UNHCR (2019) shows that Sudan hosts about 1.9 million of IDPs, living in camps over six states: Central Darfur, East Darfur, West Darur, South Darfur, Blue Nile and South Kordufan.

Refugees and IDPs are living in camps, rural out-of-camp settlements and urban areas in 104 localities across 18 States (UNHCR, 2020). About 70% live outside of camps in more than 100 settlements across the country, including large collective self-settlements where thousands of refugees live in "camp-like" areas adjacent to reception centers, as well as smaller dispersed self-settlements where refugees live in a more integrated manner with host communities. Many out-of-camp settlements are in remote and underdeveloped areas, where resources, infrastructure and basic services are extremely limited (UNHCR, 2019).

Both refugees and IDPs live in harsh economic and health situations making them vulnerable to the outbreak of COVID-19. Thus, the current situation in refugee and IDP hosting areas can be summarized as follows:

- Most of refugees and IDPs live in overcrowded camps/settlements or in poorer urban areas with inadequate health care and limited access to water, sanitation and hygiene facilities.
- Refugees and IDPs lack access to basic services such as public education and knowledge on hygiene and sanitation
- Refugees and IDPs lack access to labor markets and financial services.
- The majority of refugees and asylum-seekers in Sudan face high levels of poverty, limited access to livelihood opportunities, and are hosted in the poorest regions of the country, where host communities are also struggling.
- While refugees often benefit from generous support provided by host communities, local resources remain scarce and local service systems are often unable to keep up with increased demand for services.
- Significant funding gaps persist for the refugee response in Sudan, which have been exacerbated by Sudan's ongoing economic crisis and the current COVID-19 pandemic.

- All camps/settlements lack well prepared health facilities to manage patients with severe or critical COVID-19 disease due to shortage of medical staff trained in COVID-management, lack of ICUs, PPE supplies and isolation units.

These factors further intensify the effect of the COVID-19 pandemic on refugees and displaced people in Sudan. Not only will such situation increase the risk of exposure to COVID-19, but it will also increase the risk of hunger, poverty and illnesses. Based on these assessments, it is anticipated that over 3 million refugees and IDPs living in Sudan will face the risk of COVID-19 and negative consequences associated with the its containment measures.

Preparedness and response to COVID-19 in refugee/IDP hosting areas

To mitigate the consequences of COVID-19 on refugees/IDPs, the UN refugee agency (UNHCR), in collaboration with the government and different international organizations including WHO and other UN agencies has exerted great efforts to contain the spread of COVID-19. Below we can summarize the efforts that have been done so far in the refugees and IDP hosting areas:

- Raising awareness on the risk of COVID-19.
- Supporting campaigns on COVID prevention across all refugee/IDP hosting areas in all Sudanese states
- Establishing isolation units in each states with generators and ambulances on stand-by
- UNAMID has supported with Personal Protective Equipment (PPE), including goggles, caps, face shields, N95 masks, aprons and gowns.
- Providing camps with water, medical care and hygiene materials.
- Reducing the frequency of food distributions with a provision of 2-3-month rations.
- Providing a capacity building training for health care workers on COVID-19.
- All markets in IDP camps were closed to enhance physical distancing.
- Distributing soaps, sanitizer and PPE for health facilities for refugees, IDPs and members of host communicates across the country.
- Awareness messages on prevention are ongoing across the state through various media - all efforts were supported by UNICEF and WHO.
- In Khartoum, 15,000 text messages were sent to urban refugees sharing health awareness and prevention advice.
- Monitoring the spread of the outbreak and take action to limit infections.

- The Refugee Consultation Forum (RCF), chaired by UNHCR and the Commissioner for Refugees (CoR) has already disseminated messages aligned with WHO's messaging for refugees in several languages through national and international NGOs.

Despite the efforts of UNCHR and its partners to respond to covid-19 pandemic, the risk of the virus is very high given the fragile health situation. Although the number of confirmed cases of COVID-19 infection among refugees is very low, the current situation raise the concern of rapid spread. Moreover, over 80% of the Sudan's refugee population and nearly all the internally displaced people live in poor states, many of which have weaker health, water and sanitation systems and need urgent support. Therefore, further efforts in prevention and adequate response are still needed.

3. The economic and social consequences of COVID-19

The COVID-19 pandemic further aggravated the existing vulnerabilities in the economic crisis in Sudan. Prior to outbreak of COVID-19, Sudan economy was already suffering from multiple economic problems including for instance, local currency devaluation; high inflation; rising costs of basic goods; large fiscal deficits, shortage of hard currencies, and trade imbalance among others. It is worth to mention that, since the secession of the South Sudan and loss of oil resources in 2011, the Sudan economy has been in a sharp downturn, with remarkable reduction in the real GDP per capita during last two years (World Bank, 2019). **Table 2 presents some basic macroeconomic indicators, showing the unfavorable economic situation over the last two years.**

Table 2: Some basic macroeconomic indicators

Indicator	2018	2019
Annual growth of GDP	-2.3	-2.5
Inflation rate (annual average)	63.3	51.3
Government revenues (% of GDP)	8.9	7.8
Budget deficit (% of GDP)	-7.9	-10.8
Current account balance (% of GDP)	-8.7	-7.8
External debt burden (% of GDP)	180.8%	198.2
Poverty head count	-	65%

Source: IMF-Sudan Article IV Consultation (2020); except poverty sourced from MoFEP (2020 budget).

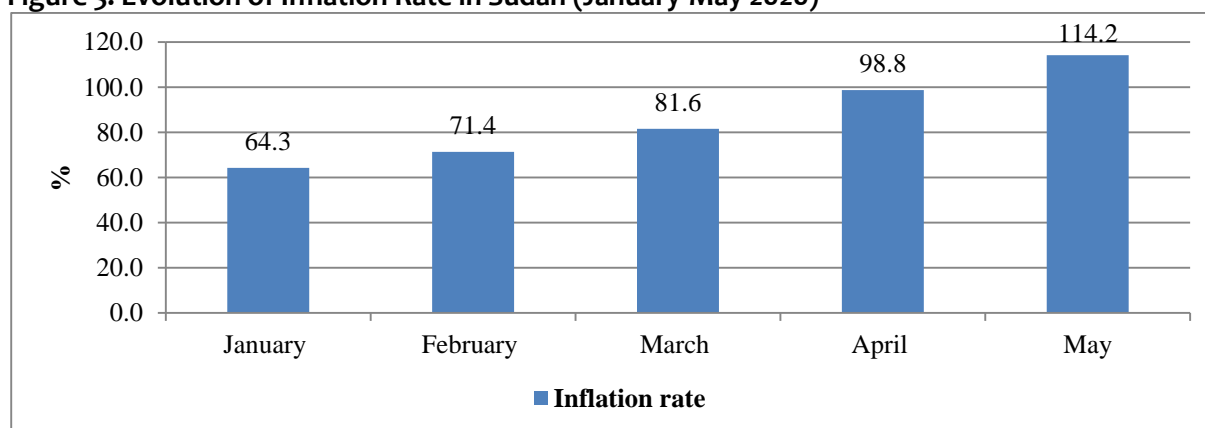
In addition to this unfavorable economic situation, the spread of COVID-19 and its containment measures have resulted in severe impacts on labor markets and business performance. Also, the sharp drop in economic activity owing to closure and lockdowns in the source countries led to sharp reduction in migrant's remittances, foreign direct investment and international financial assistance flows. Despite the dearth of evidence on economic impact of COVID-19 in Sudan due to the lack of timely hard data, it is already clear that there has been a remarkable decline in economic activity and aggregate economic performance since the emergence of outbreak in early 2020. In this section, we assess the impact of COVID-19 on macroeconomic performance, labor market and foreign transfers and assistance.

3.1. The effect of COVID-19 on macroeconomic aggregates and government budget

While it is too early to assess the full economic impact of the COVID-19 and the containment measures, the current situation gives an indication that the country has witnessed unfavorable situation over the last few months. The recent statistics indicate that Sudan economy has reported higher inflation rates since the global declaration of COVID-19 in early 2020. Indeed, the closure of the airports and entry points raised the prices of imported commodities, as most of manufactured goods imported from outside. In addition, the shutdown of business and closure of cross-state borders increased the prices of food in urban areas, as most of food are produced in the rural areas and transported to urban cities. Moreover, the increase in parallel market exchange rate has escalated inflation to unprecedented rates, which reached 114.2% in May (from 64.1% in January) 2020.

Figure 3 below presents the evolution of inflation rate over the period (January-May 2020). As can be read from the figure, the inflation rate has increased obviously in the last three months (March and May) –a period during which, a complete lockdown for Khartoum and some states went into effect. High inflation hit hard the vulnerable groups such as, informal workers and internal displaced people who lost their daily income due to the lockdown and curfews.

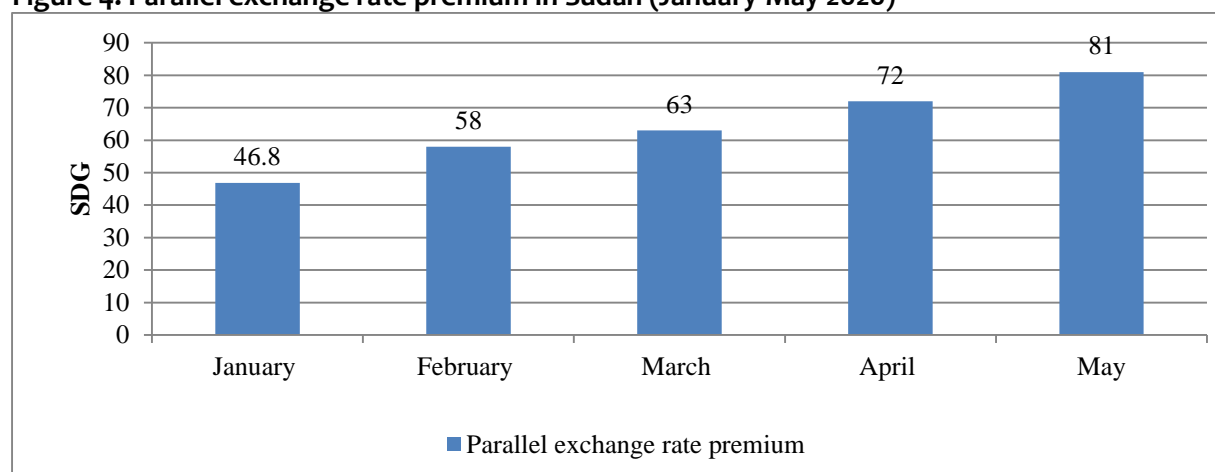
Figure 3: Evolution of Inflation Rate in Sudan (January-May 2020)



Source: Central Bureau of Statics- Sudan

Another macroeconomic impact associated with COVID-19 pandemic is the depreciation of Sudanese pound to the levels never seen before. Despite the reduction in imports owing to the ports closure, parallel exchange rate has increased dramatically mainly due to high inflation rates. Since the first of January 2020, the Sudanese pound has lost about half of its value against the US dollar. The spread of COVID-19 is not solely responsible for the reduction in national currency, but the economic crisis also adds to exchange rate devaluation. In addition, the reduction in international remittances due to closure of entry points and reduction in opening hours of the banks further intensified the exchange rate problem. It is worth to mention that the average of annual remittances sent by Sudanese working abroad is about 3 billion USD, accounting for about 40% of Sudanese imports (Ebaidalla and Idriess, 2015). Thus, the reduction in flows of these monies significantly affects the supply of foreign currency, and consequently depreciates the local currency. Figure 4 below shows that the premium of parallel market exchange rate (i.e. Parallel rate- official rate) has increased sharply during January-May 2020.

Figure 4: Parallel exchange rate premium in Sudan (January-May 2020)

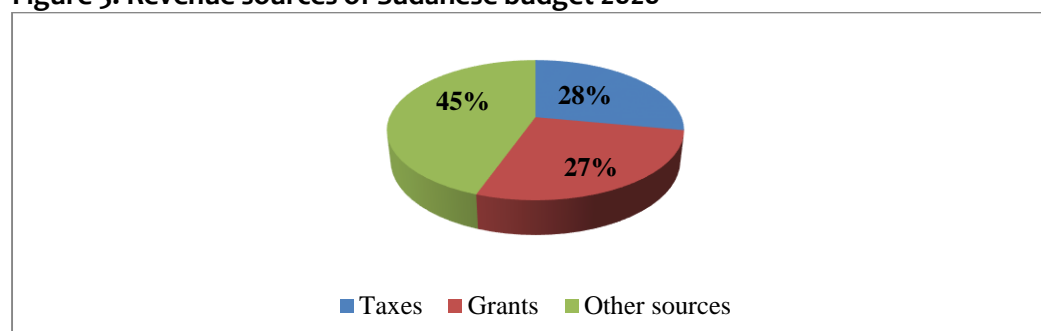


Source: Central Bank of Sudan

Despite the lack of monthly data on Gross Domestic Product (GDP), the IMF forecasts a 7.2% GDP reduction for 2020, as a result of the COVID-19 pandemic (IMF, 2020). In fact, lockdown hit the productive sectors including agriculture - the backbone of the Sudanese economy; therefore, a considerable reduction in GDP is expected. The services sector – the main contributor to GDP also is the biggest victim of this situation. The trade sector is projected to decline sharply during this year (both in exports and imports) compared to the previous year. Overall, the balance of payment will experience unfavorable performance owing to the reduction in migrants' remittances and foreign direct investments as well as international official development assistance.

Furthermore, the COVID-19 crisis hit severely the government budget on both sides -revenues and expenditure. On the revenues side, the 2020 budget will witness sharp reduction in revenues due to the loss of taxes that associated with lockdown, as well as the expected freezing of foreign grants due to the international crisis. For example, Figure 5 below shows that foreign grants represent about 27% of total revenues in 2020, while taxes are expected to finance 28% of the budget. Due to global outbreak of COVID-19 and national lockdown, the 2020 budget is expected to lose about 40% of its revenues, if the pandemic continues for prolonged time this year (Ministry of Finance and Economic Planning, 2020). The budget will be affected by the sharp fall in global prices, which significantly reduce the expected income from the transit fees paid by South Sudan to transport her oil through Sudanese infrastructures.

Figure 5: Revenue sources of Sudanese budget 2020



Source: based on Ministry of Finance and Economic Planning (2020 budget statistics)

On the other hand, public expenditures will face unexpected increase to confront the unplanned spending associated with the urgent health crisis as well as supporting the poor population with cash relief to mitigate the impact of the lockdown. Moreover, the reduction in total revenues will affect negatively a part of the budget that allocated to health sector- the matter that needs a rapid revision for the budget. As can be read from Table 3, the share of health expenditure in the total government expenditure is 3% and 7% in 2019 and 2020, respectively. To respond effectively to the current health crisis, more resources need to be allocated to the health sector and social safety nets through urgent revision of the 2020 budget. The table also shows that a huge portion of the budget in 2019 (49%) and 2020 (36%) is allocated to wheat and energy subsidies. Therefore, in light of reduction in total revenues due to COVID-19, the only option available, to respond to the urgent health needs is subsidy removal. Sudan's transitional government started to remove the fuel subsidies gradually; certainly this will create fiscal space to increase health and social spending in response to COVID-19 crisis. However, in response to the negative consequences of subsidy removal on vulnerable groups, a huge amount of subsidy cuts should be directed to social safety net mechanisms such as, health insurance and direct cash transfer.

Table 3: Distribution of Government expenditures, 2019 and 2020

Item	Share (% total estimated expenditures) 2019	Share (% total estimated expenditures) 2020
Public services	9%	5%
Defense	9%	7%
Public system and safety	3%	3%
Economic affairs	7%	10%
Environment	1%	1%
Housing and utilities	3%	4%
Health sector	4%	7%
Culture & religious	1%	1%
Education	7%	9%
Social safety net	5%	7%
Subsidies (e.g. energy, wheat, drugs)	49%	36%
Other expenditures	2%	10

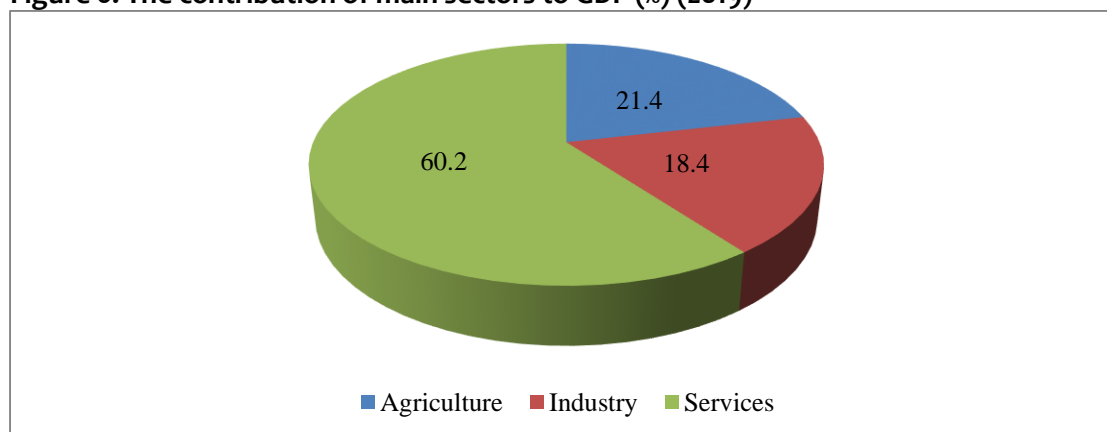
Source: Ministry of Finance and Economic Planning, (2020 budget)

Overall, the above discussion has made it clear that Sudan's economy confronts a harsh situation due to COVID-19 and the preventive measures, particularly if the pandemic continues for long time. Moreover, this unfavorable macroeconomic performance coupled with lockdown measures would devastate the real economic activity; hence harm hard the poor and other vulnerable groups such as, unemployed, refugees and IDPs.

3.2. Impact of lockdown on the real economic activities: Agriculture, industry and services

The spread of COVID-19 pandemic negatively affected the real economic sectors, particularly agriculture and services -which employ about 90% of labor force and contributes significantly to GDP and food security. Figure 6, presents the contribution of the agriculture, industry and services sector to GDP in 2019.

Figure 6: The contribution of main sectors to GDP (%) (2019)



Source: Central Bank of Sudan

In view of high inflation rates coupled with the curfews and closure of the borders, the performance of agricultural sector is negatively affected during the first quarter of 2020. Telephone interviews with some key informants and farmers revealed some obstacles facing the agricultural sector in the time of COVID-19, which can be summarized as follows:

- Lockdown and comprehensive curfews in some states increased the price of transporting products and basic inputs from and to the markets.
- Lockdown reduced internal movement of farm workers and hence increased their wages and then the cost of production.
- Closure of the state borders complicates transportation and reduces the price of the products; hence lead some farmers to bear losses.
- Closure of local and national markets reduced the demand for farming products.
- Shutdown has frozen most of agricultural extension process and government support.
- The demand for exports has declined sharply due to global lockdown and agricultural exports are expected to decline remarkably this year.
- Investment activities and framing finance has been disrupted by the closure of financial institutions.
- High inflation and exchange rate depreciation increased the prices of inputs, and the cost of production.

The above challenges would increase the cost of production destroying the production incentives and value chains; therefore, reducing the contribution of this essential sector to GDP, labor market, exports and food security. Therefore, we can conclude that COVID-19 resulted in shocking impact on agricultural sector in Sudan, and consequently increase concern about poverty and food insecurity, as this sector is a major source of livelihood for rural population.

Moreover, the services and industrial sectors were also adversely impacted by the lockdown, as these sectors depend mainly on the social interactions and business environment. In this assessment we received some feedbacks from key informant interviews in the sector, which revealed the following remarks:

- Lockdown has reduced the demand for some services and suspended demand for others such as tourism, transportation and hotels.
- Increasing risk of insolvency in some businesses due to shutdown, as a considerable part of businesses is financed from financial institutions and should pay frequent payments.
- High inflation and exchange rate depreciation increased the prices of basic inputs and general costs.
- A sizable segment of business will shut down permanently because of huge losses.
- The sectors lack government support such as, subsidies and tax reliefs, so as to compensate the loss in revenues.

All these challenges may result in harmful effects on services and industrial sectors in general, while some businesses may close permanently and other may be unable to meet their legal and financial obligations. In addition, a wide range of population relies on these sectors as daily source of income; hence many of them are expected to fall into poverty during the COVID-19 pandemic, particularly those with small business and irregular jobs. The key informants in service sector claim that they never seen like this slump in their history. On the other hand, the tax losses from these activities will definitely worsening the budget situation. Given the fact that the service sector contributes about 60% to GDP, its contraction due to COVID-19 certainly would hit the economy as whole and consequently reduce GDP growth this year.

Despite the lack of real data on the economic activities, the current economic situation indicates that the contribution of agriculture and services sectors has declined during last three months - the matter that can reduce the overall GDP significantly in this year, hence, confirming the contraction in growth of Sudan economy. Given that agriculture and services sectors are the main contributors to Sudan' GDP, their contraction would overwhelm the economy as a whole.

3.3. The impact on financial sector, international transfer and foreign assistance

The financial sector is among the hardest hit sectors in the economy by COVID-19 pandemic and the containment measures. Following the announcement of the national lockdown, most of the financial institutions including banks have reduced their opening hours, while others have been closed during the curfews periods. The closure of banking system implies a suspension of money transfer and investment activities, which led to a severe shortage of liquidity and hard currencies.

In relation to the shutdown of banking sector, a sizable portion of international transfers has been stopped, hence intensifying the shortage of foreign exchange and escalating inflation. Also, the shutdown of ports and entry points prevented thousands of Sudanese working abroad from sending money to their families. Moreover, the worldwide lockdown has affected the global

business hence reducing income of migrant's people in sending countries. Most of the Sudanese migrant workers live in the Arabian Gulf States, such as Saudi Arabia, UAE, Oman, Qatar, and Bahrain (Ebaidalla and Edriess, 2015). The average of remittances sent by expatriates working in these countries is about 70% out of the total remittance flows into Sudan (Suliman et al, 2014). More than two thirds of migrants' transfers come through unofficial channels, particularly the parallel market for foreign exchange (Elbadawi 1994, Ebaidalla and Edriess, 2015). However, expectations indicate that migrant's remittance may decline by 500 million USD in 2020 as a result of covid-19 pandemic and the preventive measures (UNDP, 2020).

Furthermore, the global lockdown influenced the foreign financial assistances that are expected to support economic recovery and financing a sizable part of the government budget. As indicated before about 27% of the 2020 budget is expected to be financed by foreign aids from Sudan's friends and international community. For instance, friends of Sudan, a group of countries and international organizations previously agreed to support Sudan's transition and promised a payment of funds after a conference to be held in June 2020. Those friends including USA, UK, Germany, Norway, and France among others, are currently fighting their own internal battles against COVID-19, consequently those promised funds may not arrive. Therefore, COVID-19 undermines the foreign transfers and assistances, and consequently further complicates the already unfavorable economic situation. In the same vein, the global outbreak of the virus is expected to affect negatively FDI from China and the Arab region. That is, the uncertainty and risks associated with the spread of COVID-19 in the coming months may reduce availability of foreign exchange and further reduce investment, which negatively impacting the construction and productive sectors.

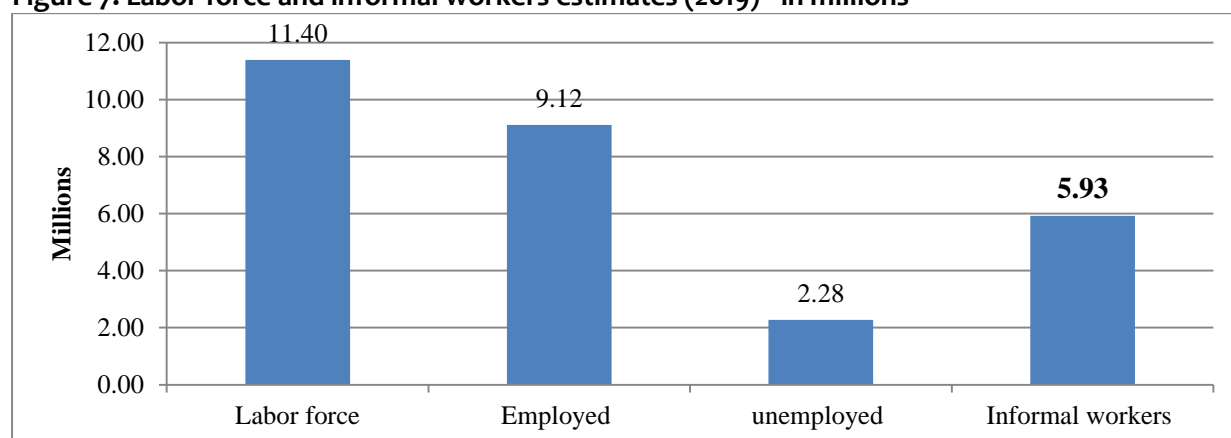
On the other front, the preventive measures associated with the rapid spread of COVID-19 complicate the flow of humanitarian assistances. Due to the closure of ports and lockdowns; many organizations are unable to provide human assistance. According to the UN statistics about 9.3 million people in Sudan need humanitarian assistance and protection, representing almost one in every four people in the country (CPRP, 2020). Indeed, measures taken to control the spread of the virus such as travel ban and curfews, have presented new challenges for programming and operations of charitable organizations.

3.4. The impact of containment measures on labor market outcomes, poverty and food security and refugees/IDPs livelihood

The drop in economic activities associated with emergence of COVID-19 has resulted in remarkable increase in unemployment rates in the first quarter of this year. Classifying employment into three main categories: self-employment, formal wage-worker and informal wage-worker, we observe that self-employees and informal wage-workers are the most affected groups by the incidence of unemployment due to COVID-19. According to ILO estimates, about 65% of Sudanese labor force engages in informal sector without any form of social security. Informal workers (e.g. craftspeople, street vendors, and day laborers) are estimated in 2019 at about 6 million as in Figure 7. Thus, the lockdown will make this category exposed to the risk of unemployment and poverty, because the lockdown prohibits them from traveling for working. In light of scarce of financial resources (budget) to provide cash relief to this category, millions of families will be exposed to the risk of huger and extreme poverty. For many people in the informal economy, who survive on daily wages

without a supplementary income or savings, staying home means losing their jobs and, for many, losing their livelihoods.

Figure 7: Labor force and informal workers estimates (2019) - in millions



Source: based on the 2011 Sudan's labor survey and projections thereafter for 2019

Moreover, the shutdown of business activities may drop thousands of formal employees out of the labor market, particularly those who working in small businesses such as tourism and restaurants. The adult population not the only affected by unemployment; youths also will be hit hard by this situation, as there is no room for new business at least in the short run. Therefore, the country is expected to report high rates of unemployment in 2020, as thousands will be out of the labor market. So based on a simple projection the unemployment rate is expected to be about 25%, in 2020 (IMF, 2020). In addition, domestic migrant workers are exposed to unique risks stemming from the nature of their jobs. The travel ban and lockdown harmed their livelihoods and ability to support families in their town of origin.

In regard to the livelihood situation in refugee and IDP hosting areas, the spread of the virus negatively affected the living condition of such groups. Thousands of refugees and IDPs engage in informal sector to support their livelihood, they will be disproportionately hit as they do not have access to social protection including paid or sick leave and unemployment benefits. Therefore, similar to Sudanese national informal workers, refugees and IDPs suffer from unemployment and underemployment, and income loss due to shutdown restriction, which will render them and their family members exposed to hunger and extreme poverty. Furthermore, people in camps suffer from limited access to services and work, limited freedom of movement, discrimination, poverty in the host communities, and high levels of vulnerability to shocks. Having the current situation of labor market and refugee/IDP communities, we can conclude that Sudan will witness high poverty rates this year as a result the COVID-19 pandemic and the adopted preventive measures.

Indeed, the lockdown measures along with the global economic contraction are expected to affect the very poor and vulnerable groups both in the rural and urban Sudan. In the rural areas, falling crop prices are likely to have substantial negative effect for the large workforce employed in the agricultural sector. In the urban areas, the freezing of the day-to-day economic activity is likely to lead to large income losses for informal workers and the self-employed. This coupled with expensive food costs as a result of inflation and lockdowns, millions of people are expected to be pushed under poverty line. Based on the novel work of Sumner et al (2020) poverty is projected to

increase from 65% in 2019 to 70% in 2020, or from 27.8 million people to 30 million people. Therefore, COVID-19 poses a real challenge to achieve the UN Sustainable Development Goal of ending poverty by 2030.²⁶

4. Conclusion and policy recommendations

This study aims to identify the direct and indirect socio-economic effects of COVID-19 pandemic and the adopted preventive measures in Sudan. The study is based primarily on desk review of secondary data and key informant interviews. The results reveal that the outbreak of COVID-19 has resulted in devastating impacts on Sudanese health system. Specifically, the spread of COVID-19 reduced the preparedness of the system to respond to COVID-19 pandemic, and undermined the ability of the health sector to respond to other widespread diseases, such as chikungunya, dengue and malaria. Moreover, dozens of hospitals in the country were shut down due to shortage of personal protective equipment.

From economic side, the spread of COVID-19 intensified the pre COVID-19 economic crisis in the country. The assessment revealed that the onset of COVID-19 and the preventive measures have resulted in considerable negative impact on the macroeconomic indicators such as, inflation rates, exchange rate, government budget and trade balance. The official estimates indicate a 7.2% GDP contraction in 2020, as a result of the impact of COVID-19 pandemic. The spread of COVID-19 is also expected to hit severely the 2020 budget, with sharp reduction in the total revenues if this pandemic continues for prolonged time this year. Moreover, the total exports are expected to shrink by about 20%. The poverty and unemployment are expected to increase to unprecedented rate. Furthermore, the spread of COVID-19 pandemic negatively affected the real economic sectors, particularly agriculture and services sectors - the main contributors to GDP and national economy.

Based on this assessment, many policy recommendations can be proposed to enhance the response to COVID-19 pandemic and to mitigate the consequences of the adopted measures. These measures include the following

4.1. Immediate and short term health measures

- Provide urgent support through availing health equipment and resources to treat COVID-19 patients, and to scale up the testing capacity. Therefore, purchasing ICU equipment, consumables, infection control equipment, and personal protection and isolation equipment should be a top priority.
- Support community-based surveillance system and enhancing physical distancing measures; this would be an imperative action to control virus transmission.
- Encourage international community and donors to provide rapid financial support to Sudanese health sector, to adequately meet the actual needs and cover gap in resources, and to provide.

²⁶ The estimation of poverty headcount is based on Sumner et al (2020) assumptions: international poverty lines of US\$1.90; medium scenario of 10% decrease in per capita income as well as the Sub-Saharan African context (see Table A2).

- Rapid assistance to refugee/IDP hosting areas. Therefore, the international organizations and NGOs should be encouraged to support refugees, IDPs and hosting communities through investments in local infrastructure, awareness, nutrition and water, sanitation and hygiene (WASH) services.
- Enhance civil society and private sector engagement in COVID-19 response; as their participation in health care provision, distribution and information dissemination and awareness is essential.

4.2. Short-term economic measures

- Policy makers should adopt serious macroeconomic policies to respond to the contraction in economic activity due to preventive measures such as lockdown and business closure. Therefore, urgent macroeconomic policies to reduce inflation and control exchange rate would be necessary.
- Given the sharp reduction in the total revenues coupled with the huge spending on health matters, the actual budget needs rapid revision to reallocate more resource to health spending so as to respond effectively to COVID-19 and the associated measures.
- Supporting real economic sectors such as agriculture should be at the top of the agenda of policy makers; therefore, measures to facilitate availability of basic inputs like finance and technology as well as ensuring timely transportation of agricultural products should be adopted.
- Moreover, business sectors need urgent supportive package such as tax relief, subsidies, and investment incentives to keep jobs and to stay open during the COVID time.
- Enhance social protection mechanisms to protect irregular workers from poverty and vulnerability. Therefore, a special support packages such as, free health insurance, cash relief and compensation would be necessary for poor and irregular workers.
- Physical distancing measures like lockdown and curfews need to be revised on a short-term basis to mobilize the economy and to reduce the burden on economic sectors.

4.3. Longer-term socio- economic recovery measures

- Preparing for the post pandemic recovery plans should be a priority of the government in this period, taking into account issues the crisis has highlighted including inequality, unemployment, poverty, and education as well as health coverage.
- Education needs to be supported by distance learning option; therefore, enhancing digital education and access to technology are necessary.
- Mobilizing additional financial resources through encouraging diaspora to establish a fund to support the government's efforts to combat COVID-19.

- The government should benefit from IMF and World Bank COVID-19 funding windows as well as other regional initiatives to fight against this pandemic.
- The IGAD should enhance regional cooperation among member countries, focusing on sharing surveillance and epidemiological data to contain the spread of the virus.
- The IGAD should support member countries to meet regional and international standards on disease surveillance and reporting and enabling cross-border information sharing on emergence of infectious diseases.
- Moreover, the IGAD should use regional cooperation platforms to deepen and extend the use of information technology to discuss best practices and support coordination at the regional level. These will provide information online, policy analysis and recommendations, serving as a basis for communication among countries on responses and policy actions.
- Finally, the IGAD can use its convening power to advice member countries on formulating emergency stimulus packages that would contribute to economic transformation and greater sustainability as countries move into the long-term recovery phase.

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Formal and informal telephone interviews with key informants from the following institution/organization:

1. Federal Ministry of Health
2. Ministry of Labor, Social Development and Manpower
3. Ministry of Finance and Economic Planning
4. UNHCR
5. Commissioner of Refugees
6. Farmers' Union
7. Trade Union
8. Casual workers