

# Ethiopian Diaspora High-Level Advisory Council on the COVID-19 Pandemic in Ethiopia

## *Plan of Action*

COVID-19 caused by a novel (new) coronavirus represents a potential existential threat to the wellbeing and livelihood of the Ethiopian people. It has the potential to cause tremendous social disruptions, economic loss, and political and security crises and to reverse the health and socioeconomic development gains. Since the first case was reported on the 12<sup>th</sup> of March, Ethiopia has reported 21 confirmed cases and no deaths as of March 29, 2020. These relatively low numbers could be due to limited availability of COVID-19 test kits, lack of community testing (those tested come through airport screening), and undetected people with no or mild symptoms not seeking care and thus not tested (represent a significant proportion of infections). Thus, this number may represent the tip of the iceberg.

Data from affected countries show that older adults and people of any age who have serious underlying medical conditions to be at greater risk for more severe illness from COVID-19. Thus, we anticipate that Ethiopia's young population (median age = 17.9 years; 5% over age 60) could keep death and hospitalization rates relatively low. Its rural villages (79% rural) removed from urban centers may benefit from a natural social distancing. Ethiopia, however, faces challenges that puts its population at higher risk: population density and crowded markets, mini-buses, and living conditions make social distancing difficult to achieve; hand washing and cleansing is made difficult by the limited availability of running water, soap, and sanitizers; warm cultural practices of handshakes, hugs, and extended family (elderly) living together are now risk factors for this disease; immunocompromised population (HIV/AIDS, TB); low quality and access to medical care particularly for the poor including limited availability of personal protective and life-saving equipment, and porous borders.

Ethiopia's fragile economy relies on commodity exports such as coffee and the Chinese market for import and has limited fiscal ability to provide economic stimulus given narrow tax base and collection and high debt burdens. Wealthier countries that usually come to Ethiopia's rescue are now prioritizing their own populations having to deal with COVID-19 themselves. Ethiopian citizens are vulnerable with majority self-employed in agriculture and the informal economy with daily wages, limited savings, access to credit, and few social safety nets. A lockdown will surely require the government having to feed large proportion of the population. Ethiopia must prepare for the worst while hoping for the best by enacting proactive and evidence-based and timely policies balancing needed drastic measures (China example) that may tip its economy over with aggressive public health measures (South Korea example). That is, for the majority of the people, it could be a choice between preventing COVID-19 or surviving to the next day unless financially supported.

That is, in its efforts, Ethiopia needs to ensure that the remedy will not end up being worse than the disease. Ethiopia also needs to avoid one-size-fits-all solutions particularly from the developed world but make efforts to develop solutions that fits its realities which include building on its in-country assets. Though the cost-benefit of the drastic measures in the African context remain unknown particularly on deaths from non-COVID-19 causes, any degree of social distancing is better than no social distancing at all. While it may appear daunting to fully implement social distancing in the Ethiopian setting, whatever degree of social distancing that can be achieved will reduce viral transmission proportional to the degree of social distancing. For its setting, Ethiopia has to figure out what that level is and continuously titrate to the level and evolution of the pandemic.

***On the public health measures***, we are not talking business as usual but wartime efforts like 24/7

Emergency Operation Center, widespread testing, active COVID-19 surveillance looking for every case, tracing and quarantining every contact, and isolating every infection with **enforcements**. The city at the highest risk, Addis Ababa, for instance, needs to consider establishing a COVID-19 National Treatment Center at Millennium Hall and Satellite Centers in each of Addis Ababa's sub-cities. Referring everyone with COVID-19 signs and symptoms to these centers will keep COVID-19 away from current clinics and hospitals to the extent possible so collateral damage that may arise from non-COVID morbidities and mortalities are minimized. These wartime efforts will have to be enacted immediately because when COVID-19 takes a foothold, its rise, as we have seen in other countries, has been exponential and will surely overwhelm the healthcare system.

At the request of H.E. Ambassador Fitsum Arega and coordination of Dr. Yonas Biru and Dr. Enawgaw Mehari, the Ethiopian Diaspora High-Level Advisory Council on COVID-19 was established on the 18<sup>th</sup> of March 2020. The Council has committed to support the Ethiopian government by providing policy and technical recommendations based on currently available science and experiences learned from around the world contextualized to the Ethiopian contexts of culture, infrastructure, and resources.

The Council will support Ethiopia in the following areas that are key to containing and mitigating the impact of the pandemic: 1. Travel restrictions and social distancing; 2. Mass education; 3. Expanded testing; 4. Public health measures; 5. Mass availability of personal protective equipment for healthcare workers and the public; 6. Treatment and vaccine. Given Ethiopia's weak health system including limited availability of hospital and ICU care, aggressive pursuit of prevention measures is prioritized. These efforts will be supported with mobilization of technical and financial resources.

The Council will establish an official direct line of communication with the Ethiopian COVID-19 Task Force to ensure that efforts are coordinated and supportive of in-country efforts. The Council will operate through an Executive Committee and the following subcommittees to support this plan of action: Infectious disease & ICU; Public health; Resource mobilization; Public outreach, education, and media; Vaccine development; and Economic impact assessment and recovery. The Committees will develop detail plans to implement and support these interventions. ***Given the rapidly changing COVID-19 pandemic knowledge base, this document will be a living document and continually updated to accommodate new developments.***

1. ***Travel restrictions and social distancing.*** The National COVID-19 Task Force has instituted travel restrictions including suspension of EAL flights to 30 countries and 14 days quarantine of all passengers upon entry to Ethiopia. Several social distancing measures have been enacted: closures of school, night clubs, and bars; reducing religious gatherings; and ordering government workers to work from home.
  - a. Define and communicate to the public the parameters for relaxing current travel restrictions and social distancing measures. These should include targets for:
    - i. Expanded testing and diagnostics in-place
    - ii. Contact tracing
    - iii. Mask and sanitizer availability for healthcare workers, health facilities, and the public
    - iv. Population with accurate COVID-19 knowledge, attitude, and practice particularly: knowledge of specific measures that a person will do to protect persons at higher risk for more serious COVID-19 illness
    - v. COVID-19 treatment centers in-place
    - vi. Cases decline
  - b. Consider instituting a curfew as a way to minimize non-essential gatherings and interactions and as an intervention with redced impact on the economy with exceptions

- for movement of essential personnel and activities by the public
- c. Institute measures to prevent expansion of the pandemic outside of Addis Ababa and to rural areas
- d. **Develop a plan for lockdown of Addis Ababa** and put clearly what the triggers will set the lockdown. A lockdown will entail significant planning, preparation, and logistics involving government leadership at various levels, business community, and uniformed services.
- e. Refine policy decisions and the measures undertaken continuously based on increased availability of data, lessons learned within and outside of the country, and balance with the economic realities of the Ethiopian population and the economy at large.
- f. Further develop the effort started by the Council for developing an Ethiopian model and projections of cases, deaths, and economic costs of interventions for use in policy decisions collaborating with health professionals, economists, statisticians, and modelers in Ethiopia and partner organizations
- g. Institute close monitoring and active COVID-19 surveillance to detect community transmission, clusters and hotspots, increased ARDS / pneumonia cases, and COVID-19 cases outside of Addis Ababa.
- h. Coordinate with religious leaders to institute enforceable plan of action for social distancing in their practice and among their faithful including applying alternatives such as radio or electronic platforms instead of physical gatherings to deliver religious teachings.

## **2. Mass education on providing accurate information and countering misinformation to the population in Ethiopia and the Diaspora**

- a. Establish a partnership with and work through the diaspora media organization with reach to the Ethiopian population in Ethiopia and the United States to deliver clear and consistent messaging daily. The Task Force in Ethiopia is working with local (Ethiopian) media.
  - b. Establish a partnership with and support NGOs and community-based organizations in the United States to reach their respective communities with accurate messaging and services
  - c. Re-institute the HIV/AIDS Talkline now under the Ministry of Health as the COVID-19 Hotline in collaboration with People-to-People and others.
  - d. Apply telemedicine or electronic platforms to conduct online education and discussions to and with Ethiopian professional audiences on various aspects of COVID-19 disease in partnership with reputable institutions in partnership with Ethiopian professional and civic associations
  - e. Ensure messaging selectively addresses and targets on how to protect and maintain social distancing from vulnerable population – older adults and those with pre-existing conditions
3. **Aggressively expand testing** including in partnership with private laboratories so Ethiopia can determine the magnitude of the disease in the country; undertake public health measures (***case identification, contact tracing, isolation, quarantine***); identify hotspots; and enable future policy decisions to be made based on trusted data
- a. Continue to research, track, and analyze for applicability to Ethiopian situation all diagnostic testing efforts including other sources for test kits from Africa CDC, WHO, and Asian countries (Japan, South Korea)
  - b. Develop and continuously refine testing criteria based on availability of testing kits. The

following should be considered in the testing algorithm:

- i. Selected pneumonia cases from sentinel sites in Addis Ababa and regional capitals
  - ii. Ethiopians with close interactions with foreigners coming from overseas (international hotels, tourism, drivers, tour guides etc). This includes Addis Ababa and other tourist sites.
  - iii. Ethiopians coming from countries with local transmission over the last few weeks despite their airport screening results
  - iv. 2<sup>nd</sup> degree contacts of confirmed cases
- c. Establish the following testing capabilities through donations and purchase
- i. Establish the infrastructure to utilize the test kits donated by China
  - ii. Establish Abbott Cov-2 assay on m2000 machines for COVID-19 testing. 15 machines and trained technicians on this machine already exist. The machines have a capacity to conduct 400-500 tests per day
  - iii. Identify and establish GeneXpert-based COVID-19 testing in facilities with BSL-2 including private facilities
  - iv. Facilitate acquisition of the 20,000 test kits requested from Abbott and kits from Cepheid for GeneXpert.
  - v. Facilitate expedited review and approval of new diagnostics from the Ethiopian FDA.
  - vi. Facilitate foreign currency with the Ethiopian National Bank, transportation with the Ethiopian Airlines, and importation with Customs Authority respectively. These should include same day inspection by EFDA at airport to confirm items only and waive other requirements such as COO (certificate of origin) and COA (certificate of analysis); allow Franco valuta and release goods on arrival; and no tax and tariff.

**4. Institute public health control measures.** The Ministry of Health and Ethiopian Public Health Institute have trained hundreds of field epidemiologists, lab technicians, infection prevention and control specialists, health extension workers, and other frontline workers that need to be engaged in the COVID-19 response.

- a. Continue airport screening and quarantine in line with international standards and practice
- b. Establish a strong active COVID-19 surveillance system
- c. Establish sentinel surveillance for Acute respiratory distress syndrome (ARDS) and pneumonia in Addis Ababa, regional capital cities, and tourist towns
- d. Identify cases and conduct contact tracing, isolation, and quarantine based on specific results using EPHI epidemiologists as leads and health workers surge support from the regions and through the Ethiopian professional associations with the goal of contact tracing over 80% of contacts
- e. Train in COVID-19 and utilize the health extension workers and other lay personnel equipped with PPE to conduct door-to-door education, perform screening, and conduct surveillance
- f. Employ electronic information systems including mobile phones (such as self-reporting) and tablets to support alerts, real-time information exchange, surveys, and surveillance
- g. Strengthen infection prevention and control at all health facilities
- h. Measure the population's COVID-19 knowledge, attitude, and practice and refine messages and interventions accordingly

**5. Mass availability of personal protective equipment (PPE) for first**

**responders, including healthcare workers, police officers, and others and the public.** Masks reduce the transmission of viral infection by preventing respiratory droplets from the infected person's nose or mouth land on close contacts and thus people already infected with COVID-19 should wear masks. Health workers and other caregivers (at home) should wear masks because they interact with sick patients. These groups should be prioritized for masks.

As more masks become available, healthy individuals and COVID-19 cases that are asymptomatic or with mild symptoms but spread the disease should also wear masks, i.e., the whole population in affected areas. If everyone wears a mask, individuals protect each other, reducing overall community transmission. In the Ethiopian situation, it could be difficult to avoid crowded situation and keep 6 feet away from other people. Wearing a mask can also reduce the likelihood that people will touch their face. It also lifts the stigma of wearing one from those who are sick. Masks also remind the populace that we are in a pandemic demonstrating solidarity through exercising preventive measures together.

- a. **Protect first responders, healthcare workers (HCWs), and facilities at all costs.** Even in the developed countries with resources, significant numbers of first responders including police and HCWs are being lost; with limited numbers, Ethiopia can not afford that.
  - b. Manufacture surgical masks and hand sanitizer in the country to meet the demands in the country and potentially Africa (given Ethiopia's industrial capacity) working with the business community through the Ethiopian Chamber of Commerce, Ethiopian Investment Authority, and Ethiopian Industrial Park Development Corporation
    - i. Engage textile manufacturers to produce standardized reusable face masks. Efforts by Almeda Textile Factory and SHINTS Ethiopia Garment Plc should be supported and expanded
    - ii. Engage pharmaceutical companies to produce standardized hand sanitizers. Efforts by SanSheng Pharmaceutical PLC and Julphar Pharmaceuticals PLC supported and expanded.
  - c. **Universal wearing of masks:** Make masks and hand sanitizers available for free to the public and require and enforce the public to wear appropriate masks after having prioritized healthcare workers. Until mask production reaches everyone, population can use netela (ገጠላ), gabi (ጋቢ), hijab, or scarf.
  - d. Facilitate N-95, surgical masks, and hand sanitizer donations from friendly governments and diaspora and their transportation and importation with the Ethiopian Airlines and Customs Authority respectively
6. **Treatment and vaccines.** All the above measures will mitigate the pandemic but only a vaccine will control it.
- a. Establish COVID-19 National Treatment Center at Millennium Hall, Regional Centers in each of the Regional Capitals, and Satellite Centers in each of Addis Ababa's sub-cities. A solid triage system with strict admission criteria is an essential component. Given the vast majority of patients in Ethiopia will be young and experience mild disease, these patients should be cared for away from clinics and hospitals with a phone follow-up so they don't become a source for a sustained healthcare transmission.
  - b. Scale-up health professionals surge capacity to triage and care for patients in these makeshift facilities including retirees working with Ethiopian health professional associations
  - c. Educate the Diaspora in the United States on treatment options and rights and

- responsibilities.
- d. Support Ethiopia health professionals through telemedicine and other electronic platforms on clinical management of patients
  - e. Research and track all drugs and vaccines under development for COVID-19
  - f. Analyze potential drugs applicable to the Ethiopian context and formulate standards operating procedures (SOP) and national implementation plan
  - g. Develop a costed national implementation plan consistent with Ethiopia's vaccine regulations and GAVI's guidelines in anticipation of the development of an effective vaccine

## **7. Resource mobilization**

- a. Support the H.E. the Prime Minister's commendable continental leadership in COVID-19 response as seen with Jack Ma Foundation and G20 interventions. Expand such leadership and coordination with and through the border countries, NEPAD, and economic communities.
- b. Define and formalize partnerships with Africa CDC both for work within Ethiopia and Ethiopia's support to the continental effort
- c. Galvanize and create mechanisms for the Ethiopian diaspora to support the COVID-19 response technically and financially
- d. Identify and partner with key organizations, foundation, and institutions that can support the COVID-19 response technically and financially

### **Preparing for possible lockdown of Addis Ababa**

If all measures fail to stop or slow down the spread of the virus within Addis Ababa, a lockdown should be considered to minimize the spread within Addis and to the rest of the country. Possible triggers for the lockdown have to be discussed and developed in advance and may include:

- Clear documentation of community transmission, that is, where a source of infection or a link with confirmed case is missing
- COVID-19 positive cases of pneumonia or ARDS detected through the sentinel surveillance
- Increasing number of total cases and/or rates of increase in Addis reaching a defined threshold

If significant new clusters are detected in regional cities and towns, a targeted lock-down may have to be planned and executed for those towns as well. A nationwide lockdown may only be considered if all those measures fail and should only be considered as a last resort.

### **Implications of Addis Ababa lock-down**

Locking down a city of 4-5 million people will need advance planning. In a country, where people may not be able to buy and store 2 weeks' worth of food and water, significant logistics and financial support will be required. It is, therefore, very important that such types of planning start very early. While it may never be implemented, it is prudent that a well-constructed plan is put in place; chance favors the prepared mind.

It is the Council's best judgment that if all the above key interventions are implemented in a systematic and timely way ***at the speed the virus multiplies***, Ethiopia can significantly mitigate the impact of this pandemic on the Ethiopian people. If these are not implemented to the degree recommended, based on what has been observed in other countries, the COVID-19 epidemic will expand and more aggressive measures disruptive to the economy and life of Ethiopians would have to be implemented. Even then, it may be too late again based on what has been observed in other countries – the key is to get ahead of the virus. ***Time is of the essence!!***