I. CONTEXT

The unprecedented immediate impacts of the COVID-19 pandemic on global, regional, and national health systems, economies, trade, cultures, and communities have attracted significant interest globally and across countries. Both the public and private sectors, individuals and communities are struggling to respond to the impact of the pandemic. Countries have adopted diverse unprecedented, varied and unequal measures to contain the virus, each according to its capacity.

Like sister Multilateral Development Banks (MDBs), the African Development Bank Group has identified up to USD 10 billion in resources that can be made available in 2020 to help Regional Member Countries (RMC) and their private sector enterprises respond to the COVID-19 crisis. The WHO and Africa Centre for Disease Control (CDC) have led the preparedness and response initiatives on the continent. African governments have also established a continental taskforce to coordinate the response - Africa Taskforce for Novel Coronavirus (AFTCOR).

As member countries continue to rightly focus on flattening the disease curve and finding vaccine and therapeutic cure, African countries also need support with regard to knowledge products and technical assistance to support them in making prompt decisions in addressing the rapidly evolving pandemic, and at the same time keep in view what the COVID-19 responses may bequeath to economies after the pandemic, in the short, medium and long term.

The African Development Institute (ADI) has established a Global Community of Practice (G-CoP) to facilitate policy dialogue, training, and technical assistance on COVID-19 Response Strategies in Africa. The G-CoP is hosted under the auspices of the Virtual Capacity Development Academy (VCDA) being implemented by ADI. The VCDA is a virtual interactive collaborative environment (VICE) that enables a consortium of certified global experts and anchor institutions to engage in facilitated policy dialogue and to provide evidence-based policy advice, technical assistance and training to the Bank’s Regional Member Countries (RMCs) on specialized policy themes. Outputs from G-CoP will also be vital to inform the Bank’s response actions in supporting the RMCs to manage the pandemic; and
inform its interventions in shaping the policy responses at the global, regional and national levels.

The ADI, in collaboration with anchor institutions in Africa and globally hosted an inaugural e-seminar on “Enhancing Resilience in African Economies: Macro-Economic Policy Responses to COVID-19 Pandemic in Africa,” on 29 April 2020. A second seminar of the G-CoP on: “Building Resilience in Food Systems and Agricultural Value Chains: Agricultural Policy Responses to COVID-19 in Africa” was held on 18 and 19 May 2020 with delegates from the Western and Eastern hemispheres, respectively. The seminars brought together 516 and 770 delegates, respectively; including leading global experts, former Ministers of Finance, former Central Bank Governors, senior leadership of Government Ministries and Parastatals, and practitioners to synthesize knowledge and experiences around the world and provide context-specific guidance on the short, medium and long-term policy options available to African countries in a post COVID-19 era. The Matrix of Policy Options (MPO) and Summary for Policymakers (SPM) from the inaugural seminar is now published and the policy documents from the second seminar are under preparation. These can be assessed from [here].

The African Development Institute (ADI) will be hosting its third G-CoP policy seminar on “Building Resilient Health Systems: Policies for Inclusive Health in Post-COVID-19 Africa”, on 22 June 2020, Time 14:00 – 17:00 hours (Abidjan time) and 23 June 2020, Time 08:30 – 11:30 hours (Abidjan time) for the delegates from Western and Eastern Hemispheres, respectively. ADI will host the seminar in collaboration with the World Health Organisation (WHO); The African Centre for Disease Control (CDC); The Bank Group’s Health Department (AHHD) and Health Centre (CHMH); African Population and Health Research Center (APHRC); Murdoch University, Western Australia; Drexel University (School of Public Health) USA; City University of New York (School of Medicine) USA; University of Nigeria (Faculty of Health Science and Technology), and Schools of Public Health, Medicine, Pharmacy, & Biomedical sciences in Africa & globally, National Health Research Institutes and Teaching Hospitals, and Health Policy Think Tanks, globally.

II. STATE OF AFRICA’S HEALTH

Africa has made progress in reducing premature mortality and prolonging life expectancy since the year 2000, adding nearly an average of 5 years in life expectancy per decade. Under-5 and maternal mortality rates have equally fallen by 54.2% and 40.7% respectively. The Maternal Mortality Ratio (MMR) also declined at an average 0.9 per cent per annum from 542 to 421 per 100,000 live births between 1990 and 2015. Communicable diseases such as malaria, measles, and HIV/AIDS which have long constituted the most prominent contributors to disease burden have substantially declined since 1990. Despite the progress, equity analyses based on socio-economic status, residence and geographical location reveal up to 14-fold difference in under-five mortality between high income and low-income countries, while access to care is also skewed against the poorest. Increasingly lack of capacity for sexual and reproductive health and rights continue to drive maternal mortality, morbidity and HIV infections especially among the amongst young people in Africa.

Under-nutrition, external and internal (household) air pollution, diarrheal diseases, lower respiratory infections, and protein-energy malnutrition continue to be the top drivers of

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1 To be confirmed
mortality in Africa. With high levels of food insecurity in Africa, it is projected that the number of undernourished people would rise from about 240 million in 2015 to about 320 million by 2025. In 2018, the proportion of children under 5 who were not growing well (stunted, wasted or overweight) was over 40% in sub-Saharan Africa compared to just under 15% in developed countries. More children and young people are surviving, but far too few are thriving. Malnutrition is both a result and a significant cause of poverty and deprivation in Africa. The causes of malnutrition also include poor access to essential health services and to clean water and adequate sanitation, which can lead to illnesses that impact in-take and absorption of nutrients.

Africa also accounts for a large proportion of preventable mortality from Non-communicable Diseases (NCDs) and associated risk factors including unhealthy diets, tobacco use, inadequate physical activity, and misuse of alcohol. Eighty-five percent of all undiagnosed people with diabetes are estimated to live in Africa. This will result in an increasingly greater disease burden and mortality now and in future.

Air pollution remains one of the greatest environmental threats to human health. In 2018, 97% of cities in low- and middle-income countries with more than 100,000 inhabitants do not meet WHO air quality guidelines (WHO, 2018). It is estimated that over 500,000 Africans (mostly women and children) die annually from indoor air pollution related illnesses.

**Density of healthcare professionals**

Globally, personal healthcare access and quality, assessed using 32 causes from which death should not occur in the presence of effective care across 195 countries, has improved since 1990. However, most countries in the highest decile (scores >90%) are clustered in Europe or nearby, Australia and Canada. Almost all countries in the lowest decile are from sub-Saharan Africa with scores as low as 19.0%, except South Africa and Botswana in the fourth decile, and Kenya, Rwanda, Namibia, Nigeria, and Ghana in third decile. Compared to the global average of 52.8 health professionals per 10,000, Africa, despite having the highest level of disease burden compared to other regions, has below the WHO threshold of 23 health professionals per 10,000 population. The few physicians are concentrated in urban centres, serving only a fraction of the population. Most countries do not have adequate specialists and healthcare workers in to deal with new threat of – the NCDs prevention and control. The ratio of nursing and midwifery personnel-to-population is 11:10,000 in Africa, compared to the global average of 28: 10,000. In some countries, the shortage is so severe that it constitutes a public health crisis. The WHO estimates that Africa has a shortage of 3.6 million health workers and 50% of the population has no access to modern health services. Yet Africa’s health professionals leave the shores of the continent in droves annually to serve in other countries outside the continent.

The African Union estimates that about 70,000 skilled professionals emigrate from Africa annually. The loss of Doctors and Nurses is more extreme— for example emigration of Doctors from Mozambique currently stands at 75% of all trained physicians. In Angola it is 70%, Malawi 59%, Zambia 57% and in Zimbabwe 51% (AU Capacity Development Plan Framework). The numbers are higher for nurses. The United Nations Commission for Trade and Development estimates that each migrating African professional represents a loss of $184,000 to Africa. Paradoxically, Africa spends $4bn a year on the salaries of 100,000 foreign experts. Annually, it is estimated that Africa loses around $2.0 billion through brain drain in the health sector alone. Many of the Doctors and Nurses cite better health infrastructure and
other policy incentives as the pull factors that draw them out of Africa. But in each of them is a palpable desire to be able to contribute to the continent of their birth and/or ancestral origins.

Africa’s Health Systems Financing
Africa is not investing enough in the health sector to turn the tide. The health financing gap in Africa stands at US$66 billion per annum\textsuperscript{vii}. Besides this huge gap, Africa imports about 70 per cent of pharmaceuticals from outside the continent totalling US $14.5 billion and imports substantial health services.\textsuperscript{iv} Governments in Africa spend approximately US $46 billion on health against the required US $114 billion in current dollars\textsuperscript{v}. This is a conservative estimate that is likely to increase over the years.

Globally, medical tourism industry earns about USD100 billion dollars for the governments each year\textsuperscript{viii}. In Africa health and medical tourism is both a necessity and a status symbol. Although it is difficult to estimate how much Africa losses to health and medical tourism, it is expected to be significant, given the poor health infrastructure and human resources for health Africa’s Public and Private Sector Leaders alike take turns in travelling outside the continent for health care, even for cosmetic care. Sometimes, parents travel abroad to be treated by their sons and daughters who migrated elsewhere in search of credible health infrastructure and policy environment to enable them to practice. This not only bleeds the continent of scarce resources; it also exposes African citizens to risks of increased mortality during the time lags required to put together the resources to travel abroad for medical care. COVID-19 pandemic experience reminds everyone of how vulnerable nations that rely on others for health care provision are.

Building health system resilience requires a sustained investment in health infrastructure and the pharmaceutical industry, as well as in other sectors that provide a healthy environment for the human experience. South Asia and Africa South of the Sahara together account for over 50% of the global disease burden, and 37% of the world’s population; but only 2% of global health spending. Few African countries south of the Sahara have come close to meeting the target of the Abuja Declaration of investing at least 15% of the government budget allocation in the health sector. In sub-Saharan Africa, health spending as percentage of GDP estimated at 5.2% in 2017 is expected to decrease to 5.1% in 2030 and this is still lower compared to global average of 9-7% in 2017 expected to increase to 10-5% by 2030\textsuperscript{xix,iii}. In addition, about 22 percent of total health expenditure in Africa is in the form of Official Development Assistance (ODA), with some countries dependent on donor money, as high as 50%\textsuperscript{xx}, to finance their health sector. Most people in SSA pay for healthcare out of pocket and very high health expenditure has been documented as being rampant and a major cause of poverty\textsuperscript{xxi}. A large proportion of workers are in the informal sector and as such are left out of the private health insurance schemes that mainly focus on individuals in formal employment. Government supported programs are at a nascent stage and need be supported to grow while limiting leakages in the service delivery supply chains.

Leveraging Indigenous Knowledge for Inclusive Health
The use of medicinal plants as a fundamental component of the African traditional healthcare system is perhaps the oldest and the most assorted of all therapeutic systems\textsuperscript{viii,xxiii}. According to the WHO, 80% of the emerging world’s population relies on traditional medicine for therapy; with over 90% use in some African countries. In many parts of rural Africa, medicinal plants are the most easily accessible and affordable health care resource available to the local communities and at times the only therapy that subsists. However most Traditional, Complementary and Alternative Medicine (TCAM\textsuperscript{viii,xxiii}) (55.8%–100%) users fail to disclose
TCAM use to their healthcare providers for lack of acceptance of traditional medicine by healthcare professionals and patients fear of denial of healthcare. The ratio of traditional healers to the population in Africa is 1:500 whereas the ratio of medical doctors to population is 1:40,000 (WHO). In low- and middle-income countries where the number of practitioners of modern medicine may not be enough to meet the health care needs of the country, traditional medicine and its practitioners are considered an important resource for population health.

Africa’s enormous biodiversity resources is estimated to contain between 40 and 45,000 species of plant with a potential for development and out of which 5,000 species are used medicinally. These species are mostly rampant in Africa, with the Republic of Madagascar topping the list by 82%. Africa contributes nearly 25% of the world trade in biodiversity. Nonetheless, the paradox is that despite this huge potential and diversity, the African continent has only few drugs commercialized globally. The potential of the promising medicinal plants from the African biodiversity which have short- as well as long-term potential to be developed as future phytopharmaceuticals to treat and/or manage panoply of infectious and chronic conditions remains untapped. Development in national and regional regulations for assessment of the quality, safety and efficacy of medicinal plants to fast track commercialization of the African indigenous knowledge in medicine is limited, meaning Africa has to rely on western standards for approval to use its rich biodiversity for its citizens.

Heath innovation systems
To be resilient, Africa’s health sector needs to be rooted in robust national health innovation systems. Expanding access to care through e-health technologies is rapidly evolving across the globe. In Africa, the use of mobile phone-based applications presents intriguing opportunities. The overall global “mHealth” market was worth an estimated $23 billion by 2017 and this is expected to grow significantly. Mobile operators in sub-Saharan Africa have begun to better position themselves to facilitate health payments that are made via mobile devices. With COVID-19, the e-health technologies, including tele-medicine, are likely to become the new normal. However, Africa’s record on health innovations remains disappointingly low. The rates of drug discovery, vaccine development and clinical trials remain patchy (Box 1). The entire African countries have only 375 pharmaceutical companies for the population of about 1.3 billion people while China and India with a population of 1.4 billion people each has over 7,000 and about 10,500 pharmaceutical companies, respectively.

While Data and data systems are key to improving health and health systems, weak data value chain from collection to dissemination and use in Africa hinders health systems re-engineering for better individual and population health outcomes. Data is rather collected, to explain performance targets as opposed to being part of systems improvement.
III. RATIONALE

To improve life expectancy, and overall health and wellbeing, Africa needs to build a health system that looks at health from pre-conception to end of life, as well as building institutional capacity to respond to pandemics and other exogenous shocks. Human health is shaped by the broader socio-economic, psychological and environmental systems of interaction with the human genome and phenome. The food we eat, the water we drink, the environment we live in, our mental well-being, and our social behaviours and attitudes all interact in complex ways to shape our overall health and well-being. Building resilient health systems require a radical shift in health policy from one that focuses on medical outcomes, to the broader concept of inclusive health – the provision of quality healthcare from conception to end of life, to all people and all the time.

The impacts of COVID-19 have shown that the pre-conditions define the rates of severity of the impacts of COVID-19, including morbidity and mortality of patients. For example, in the United States of America the overall COVID-19 mortality rate for Black Americans is 2.4
times as high as the rate for Whites and 2.2 times as high as the rate for Asians and Latinos. These indicate that more people from the less privileged communities are more likely to die from COVID-19 than their peers in other communities. Covid-19 has brought to the fore the need to address structural inequalities - Africa has an opportunity to develop a health system that is equitable and addresses the social determinants of health.

Analysis to date has projected several pathways by which COVID-19 and government efforts to reduce the spread of the disease will affect Health systems in Africa. The immediate effect on health system include:

1. **Budget Swaps from Prevailing Health Conditions**: The Covid-19 pandemic continues to overwhelm the already weak health systems in Africa. International competition and disruption of the global supply chain network makes it difficult to access supplies. Resources are being shifted from other critical health needs which is likely to reverse success witnessed in the health sector in the last decade.

2. **Supply Shortages Due to Items Being Out of Stock**: The WHO has warned that severe and mounting disruption to the global supply of PPE. For example, demand for surgical masks has increased six-fold, while demand for respirators trebled and gowns has doubled. To meet rising global demand, WHO estimates that industry must increase manufacturing output by 40 per cent. However, most of the main manufacturers of PPE are based in China and India, countries which have also been hard hit by the pandemic leading to quarantines and factory shutdowns, further limiting supply, and increasing lead time.

3. **Inflated Costs**: Since the start of the COVID-19 outbreak, prices of medical products have surged, leading some countries to introduce price regulation. However, this has the potential to distort supply, with manufacturers opting to serve those customers who are willing and able to pay inflated prices.

4. **Much Longer Leadtime**: Manufacturers are attempting to expand production, with either “mothballed” production facilities being reopened or running production at higher volumes. Leadtime will also be compounded by any manufacturer shutdowns due to workers’ quarantines, transport disruption and any selling preferences to existing/domestic customers.

5. **Major Transportation Disruption**: International shipping and transportation is facing considerable disruption caused by roadblocks and quarantine measures, as well as lower availability of transportation and freight containers.

If this situation persists for long, Africa’s already weak health systems will be overstretched beyond its capacity. There are fewer than 2,000 functional ventilators in 41 African countries, while the total number of available intensive care unit beds in 43 countries on the continent is less than 5,000. This is about five beds per 1 million people, compared to 4,000 beds per 1 million people in Europe.

The recurrent health pandemics – the Ebola, COVID-19 and others, underscores the importance of building resilient and inclusive health systems in Africa. A resilient health system has been described as one that is “integrated with existing efforts to strengthen health systems”; and able to “detect and interpret local warning signs and quickly call for support,” able to provide care for a diverse population, able to “isolate threats and maintain core functions,” and is able to “adapt to health shocks.” To further support country actions in this regard, the World Health Organization (WHO) has developed a framework and process designed to measure capacities to implement the requirements of the International Health Regulations (IHR) through
application of the Joint External Evaluation (JEE) tool. This tool helps to assess the ability of the health systems to prevent and detect public health emergencies of international concern, and subsequently develop action plans to address gaps in response actions.\textsuperscript{xxix}

IV. \textbf{OBJECTIVES}

The seminar will bring together global experts to critically examine the impacts of COVID-19 on the health systems in Africa, with a view of identifying evidence-based policy options that can help African countries build more resilient and inclusive health systems in Africa post-COVID-19.

\textbf{Specific questions to be addressed are:}

1. What health policy responses are African countries currently implementing or proposing to implement to prevent and contain COVID-19? What is the multiplier and or unintended effects of these policies on other social, economic and environmental sectors of African economies and how can these impacts be mitigated?
2. What policies should African countries adopt to build resilient and inclusive health systems in Africa post COVID-19? In addition, what policies can enhance public-private partnerships in driving the inclusive health agenda.
3. What are the lessons that can be learned from previous health epidemics such as Ebola, HIV/AIDS, etc., to accelerate an inclusive health system in Africa?
4. Are there examples elsewhere that African Countries should learn from to build an integrated health policy to foster a resilient and inclusive health system in post-COVID-19 Africa? What are the specific lessons to be learned to inform health sector policies to build more resilient and inclusive health systems in Africa post-COVID-19?
5. How can Africa-led health policy institutes, universities and national research institutions be strengthened to inform evidence-based research and policy guidance that are embedded in African realities in the post-COVID-19 world?
6. What policies are required to incentivize African health professionals to remain in (or return to) Africa and contribute towards building inclusive health systems resilience in Africa, post-COVID-19?
7. How can the African Development Bank Group intervene through its High 5 strategic priorities to support its member countries to improve the quality of health infrastructure and national health innovation systems in Africa post-COVID-19?

V. \textbf{IMPLEMENTATION}

The seminar will be hosted under the Global Community of Practice (G-CoP) on policy responses to COVID-19 in Africa. The outcome of each seminar is a policy brief that is critical to shaping policy responses by the Bank’s Regional Member Countries in key thematic policy areas. In addition, ADI will work with the partner institutions to produce policy relevant knowledge products, including policy review papers from the outcomes of the seminars.

VI. \textbf{PARTICIPATION}

Participation in the e-seminar is strictly by invitation. A select group of anchor institutions, global experts and practitioners will receive special invitations as discussion leaders /conversation starters and participants in the seminar. The discussion leaders will provide a short think piece addressing each question in advance of the seminar and provide a 5-minute opening remarks to start the conversation.
VII. CALL FOR PARTICIPANTS
To participate in the G-CoP e-seminar on *Building Resilient Health Systems: Policies for Inclusive Health in Post-COVID-19 Africa*, please complete and submit the online registration

**G-CoP Online Registration.**

Alternatively request for the registration form by sending email to ADIGCOP@AFDB.ORG.

Prof. Kevin Chika Urama, FAAS,
Senior Director, African Development Institute;
African Development Bank Group,
Immeuble Siege - 6,
Avenue Joseph Anoma, Abidjan Plateau; 01 BP 1387; Abidjan 01 – Cote d’Ivoire;
Email: k.urama@afdb.org; Website: www.afdb.org
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4 Percentage of children aged 0–59 months who are below minus two or three standard deviations from median weight-for-height of the WHO Child Growth Standards.


8 For more details, visit https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS


11 For more details, visit https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS


