



**DEVELOPMENT
REIMAGINED**

Health Cooperation Under The FOCAC Umbrella

Authors:

Bogolo Kenewendo and
Jing Cai

TABLE OF CONTENTS

Section 1 – Introduction.....	4
1A) Challenges in Africa’s Health Sector	5
1B) Africa’s Key Health-Related Cross-Continental Initiatives	6
Section 2 – Previous Focac Policy on Health.....	9
2A) Overall Trends in Focac Health Policy	9
2B) Interim Results of China-Africa Health Cooperation Under The FOCAC Umbrella	11
2C) The SDGS and Africa-China Cooperation In Health Under The FOCAC Umbrella	14
Section 3 – Country Case Studies	18
Section 4 – Conclusions and Recommendations	29
Section 5 – Annex.....	34

ACKNOWLEDGEMENTS

Development Reimagined would like to first thank the African Ambassadors to China for their inspiration, call, and input in creating this deepdive during the second African Ambassadors in China retreat, which we hosted in September 2021. We are grateful for their continued trust and support, as well as that of the Bill and Melinda Gates Foundation (BMGF) for their support, and the Chinese Academy of International Trade and Economic Cooperation (CAITEC) who helped facilitate the discussions that fed into this work.

We are particularly grateful to all the Ambassadors and diplomats in China that specifically participated in the retreat discussions. Their insights were highly valuable, and we look forward to continued collaboration with all.

Development Reimagined would also like to thank the authors of this report – Bogolo Kenewendo, Non-Resident Fellow at the Center for Global Development (CGD) and Jing Cai, Policy Analyst at Development Reimagined.

Last but not least, special thanks go to Development Reimagined team - including Patrick Anam, Leah Lynch, Anna Chistina Baisch, Michael Feng, Jade Scarfe, and Jinyu Chen who all contributed in various but crucial ways to its delivery, and Hannah Ryder for her overall stewardship.



DEEP DIVE – HEALTH COOPERATION UNDER THE FOCAC UMBRELLA

For Chinese Policymakers

SECTION 1– INTRODUCTION



For the first time in a global context dramatically changed by the COVID-19 pandemic, the 8th FOCAC Ministerial Conference will be held in Senegal in the fourth quarter of 2021. The pandemic has had a significant negative impact on Africa's economy, with many countries facing declining GDP and economic growth rates. Beyond this, the past months have helped shine a light on policy areas that require further attention. This context necessitates a reflection on past China-Africa cooperation under the FOCAC umbrella, as well as an exploration on how to best adapt it to newly highlighted policy priorities.

Despite the efforts over the years, Africa still has the lowest life expectancy and accounts for half of all child death, as well as HIV/AIDS, malaria and tuberculosis cases in the world.¹ With the growing number of middle-class, the continent is now facing the double burden of communicable and non-communicable diseases. Traditional communicable diseases, including HIV/AIDS, malaria, and tuberculosis are still the main drivers of mortality, while chronic conditions such as diabetes, cancer and cardiovascular diseases are also emerging as major killers on the continent. The continent has the highest mortality rate from chronic diseases globally, with chronic diseases accounting for 60% of morbidity and 65% of mortality from all diseases,² and it is expected that by 2030, Africa will have more deaths from chronic diseases than infectious diseases.

This deepdive, intended for Chinese policymakers and stakeholders, draws on desk research, and exchanges with both Chinese and African experts and government officials. These include an interview with the Permanent Representative of the African Union to China, the August 2021 CAITEC *African Needs Assessment under FOCAC Consultation Meeting with African Embassies*, and Development Reimagined's September 2021 *African Ambassadors to China Retreat*.

Following an overview of the challenges to Africa's health sector in this introductory section, section two of this deepdive analyses previous FOCAC policy on health cooperation. This is followed by four country cases, each highlighting an issue area of health cooperation: Egypt, Sierra Leone, Ethiopia and Botswana. Finally, based on the preceding analysis, this deepdive provides a number of

¹ WHO. *The State of Health in the WHO African Region*. (2018). <https://www.afro.who.int/publications/state-health-who-african-region>

² AfDB. *Health in Africa over the Next 50 Years*. (2013)

recommendations to key Chinese actors in order to further improve Sino-African health cooperation in anticipation of the 8th FOCAC Ministerial Conference and beyond.

1A) Challenges in Africa's Health Sector

Healthcare systems in some African countries have been ranked amongst the worst in the world. For instance, in a 2018 WHO index measuring whether countries provide all the possible health and related services that their population needs, within Africa Algeria scored highest at 70 percent – against an average for the entire region of 48 percent³.

Underfunded and overwhelmed health systems cannot address the challenge of disease burden. Urbanization, population growth and economic development are again overburdening the fragile healthcare system. The number of health professional in Sub-Saharan Africa is lower than WHO's minimum recommendation, with 18 physicians per 100,000 population and according to an assessment from WHO, the overall score of infrastructures is too low to meet the ever-growing need of healthcare.⁴ While many projects have focus on improving health infrastructure, proving quality training and education for health workers remains a challenge.

Having the ability to consistently procure drugs, devices, and equipment is fundamental to establishing a robust health system. According to our previous research, 34 out of 55 African countries have some level of pharmaceutical production, with countries offering an array of incentives to encourage pharmaceutical investment.⁵ Yet, the total size of Africa's pharmaceutical industry is less than 1% of the global industry, meaning that Africa is importing 70% of all the pharmaceutical and medical products that it consumes.⁶ This has put Africa in a disadvantaged position when facing a global pandemic like COVID-19. At the time of writing (November 2021), only 4 countries in Africa had signed or are negotiating the agreement to produce a vaccine and just over 6% of the population have been fully vaccinated, and under 10% received their first vaccine dose⁷.

Health financing remains the main barrier of quality and accessible healthcare for African people. According to WHO, Africa accounts for 24% of the global burden of disease, while possesses only 1% of global financial resource.⁸ Abuja Declaration of 2001 calls to increase government funding in the health sector to 15% of the GDP by 2015⁹. However, the average

³ WHO. *The State of Health in the WHO African Region*. (2018). <https://www.afro.who.int/publications/state-health-who-african-region>

⁴ Ibid

⁵ Development Reimagined. *Q&A: How the Chinese Private Sector Can Help Develop Pharmaceutical Production Capacity in Africa?* (2021) <https://developmentreimagined.com/2021/04/23/qa-how-the-chinese-private-sector-can-help-develop-pharmaceutical-production-capacity-in-africa/>

⁶ UNAIDS. *An Introduction to Local Pharmaceutical Production Opportunities in Africa*. (2017) https://developmentreimagined.com/wp-content/uploads/2019/01/unais-report-new_english_webversion.pdf

⁷ See: <https://africacdc.org/covid-19-vaccination/>

⁸ Knight Frank. *Healthcare in Africa*. (2020) <https://content.knightfrank.com/research/1981/documents/en/healthcare-in-africa-2020-7198.pdf>

⁹ African Union. *Abuja Declaration on HIV/AIDS, Tuberculosis and Other Related Infectious Diseases*. (2001) <https://au.int/sites/default/files/pages/32894-file-2001-abuja-declaration.pdf>

spending on healthcare remained as low as 5-6% of GDP during 2000 and 2015¹⁰. Africa's health sector is highly dependent on donor funding.¹¹ There is no doubt that donor countries, international institutions and global development agencies have been playing a significant role in increasing Africa's health capacity, as well as in providing financial support. The Abuja Declaration in 2013, coming out of the Special Summit on HIV/AIDS, Tuberculosis, and Malaria, reiterated the need for donor countries to meet their 1970 UN commitment to allocate 0.7% of their GNP as official Development Assistance (ODA) to developing countries. However, ODA targeting health in Africa started to decline in 2009 due to the global financial crisis¹², and COVID-19 may exacerbate this trend even further. For example, the UK cut its foreign budget from 0.7% to 0.5% of its GNI earlier this year.

However, African countries have looked towards South– South cooperation and been open to private–public partnerships with a wide range of actors. For example, the China-Africa Development Fund (CAD Fund) has invested more than \$5.4 billion in 37 African countries¹³. In 2017, the Government of Kenya and the UN partnered with the private company Philips to accelerating primary healthcare transformation in support of universal health coverage¹⁴.

To this point, Africa needs a holistic approach to improving the health status of its people, which will require multisectoral interventions from both regional and international cooperation partners, including governments, private sector and local communities.

1B) Africa's Key Health-Related Cross-Continental Initiatives

The **Africa Health Strategy (AHS) 2016-2030** is the overarching document for the continent to provide a strategic direction to Member States in their efforts in creating a better performing health sector. It is a consolidative document for all African commitments in the health sector and is adopted in line with the AU Agenda 2063 and the SDGs.

The Africa Health Strategy (AHS) 2016-2030 lays out strategic plans/priorities it hopes to achieve during the plan period. The first objective of the AHS is to achieve a universal health coverage by strengthening existing health systems and promoting social determinants of health by promoting social protection mechanisms, increasing health financing, strengthening health R&D and ICT, strengthening human resource and enhancing emergency health preparedness and response systems and capacities at national level. Secondly, the AHS hope to reduce morbidity and end preventable mortality from both communicable and non-communicable diseases as well as other health conditions. Africa plan to end maternal and child mortality and

¹⁰ UNECA. *Healthcare and Economic Growth in Africa*. (2019)

http://gbchealth.org/wp-content/uploads/2019/02/HealthReport_eng_fin_9Feb.pdf

¹¹ United Nations Economic Commission for Africa. *Healthcare and Economic Growth in Africa*. (2019) http://gbchealth.org/wp-content/uploads/2019/02/HealthReport_eng_fin_9Feb.pdf

¹² AfDB. *Health in Africa over the Next 50 Years*. (2013)

¹³ China-Africa Development Fund. <https://www.cadfund.com/Column/1/0.html>.

¹⁴ <https://www.philips.com/a-w/about/news/archive/standard/news/press/2017/20170502-philips-partners-with-the-government-of-kenya-and-the-united-nations-to-improve-access-to-primary-healthcare-in-africa.html>

ensure equal access to the provision of family health services; ending communicable diseases and NCDs; sustaining and scaling up extended programs on immunisation; addressing issues relating to health nutrition especially for young children; and prioritising programs to address risk factors and premature mortality from diseases. In order to achieve these objectives, a combination of strategic approaches will be employed, and these are improving the overall health systems and their performance, good leadership and good governance, sustainable health financing and expanding social protection to address equity.

The 2013 Abuja Special Summit on HIV/AIDS, Tuberculosis, and Malaria highlighted the need to utilize and build on the research capacities to produce new and effective medicines, diagnostic tools, vector control tools and vaccines, and to promote research, invention and innovation in traditional medicine and strengthening local health ecosystems, considering the socio-cultural and environmental situation of the people.

Priority 2 of the Science Technology Innovation Strategy for Africa (STISA) intends to strengthen the research and knowledge capacity on diseases prevention and control in order to ensure the well-being of African people. The focus areas are:

- Better understanding of endemic diseases - HIV/AIDS, Malaria, Hemoglobinopathies
- Maternal and Child Health
- Traditional Medicine¹⁵

The **Africa Center of Disease Control (Africa CDC)** is a key institution linked to the AHS. It was established in 2016 to support African Union Member States in their efforts to strengthen health systems. IT aims to build capacity of public health institutions (these include strengthening public health systems and laboratories and improving the competencies of the workforce to ensure quality and safety); focus on prevention of infection; strengthening public health surveillance systems and response to emergencies (including outbreaks, disasters and public events of regional and international concern); building capacity to reduce disease burden on the continent and investment in health research and development (R&D). To achieve its vision and mission, Africa CDC developed a strategic plan of 2017-2021 with five strategic pillars:

- Surveillance and disease intelligence
- Information system
- Laboratory system and networks
- Emergency preparedness and responses
- Public health research¹⁶

¹⁵ African Union. Science, Technology and Innovation Strategy for Africa 2024. https://au.int/sites/default/files/documents/38756-doc-stisa_science_tech_innovation_strategy.pdf

¹⁶ Africa CDC Strategic Plan 2017-2021. <https://africacdc.org/download/africa-cdc-strategic-plan-2017-2021/>

Africa CDC demonstrated its role in response to COVID-19 crisis. Africa CDC and the AU held an Emergency Ministerial Meeting on February 22nd, just 8 days after the first case was recorded in Egypt, which launched the joint continental strategy. The impact of this rapid response was immediately clear, with most African governments imposing African-appropriate social distancing measures before recording 10 cases – such as border closures, curfews, and crowd control measures. In fact, Africa CDC was the first on the continent to provide clear advice on wearing masks.¹⁷ The Africa CDC's leadership was also essential in procuring tests, mobilizing contact tracing and purchasing vaccines. Due to delayed international procurement system, the continent is facing increasing difficulty in accessing test kits and vaccines. Despite the challenge, the Africa CDC set up the Trace, Test & Track (CDC-T3) initiative to establish distribution hubs for medical supplies and deploy 1 million community workers for contact tracing. In addition, the Africa CDC has gone to directly procure vaccine doses, securing 670 million doses independent of other initiatives such as COVAX. To manage this longer-term, the Africa CDC created the African Medical Support Platform (ASMP) to supply countries with vaccines and essential equipment and has also supported governments on how to distribute limited vaccine supplies, adapted to Africa's own situation and demographics. African countries have currently ordered the same number of vaccines from COVAX as they have from the Africa CDC, each equating to 14% of the continent's total vaccine orders.¹⁸

Following the Africa CDC, the African Union Assembly adopted a treaty to establish the second cross-continental Africa health agency-African Medicines Agency (AMA). The establishment of AMA will enhance regulatory oversight and facilitating access to safe and affordable medicines across the continent. So far, the Treaty has been ratified by 15 African Union Member States, meeting the minimum number of ratifications to make AMA come into force.



¹⁷ See: <https://developmentreimagined.com/2021/04/12/how-would-africa-have-managed-covid-19-without-the-africa-cdc-the-role-of-china/>

¹⁸ Ibid

SECTION 2 – PREVIOUS FOCAC POLICY ON HEALTH

2A) Overall Trends in FOCAC Health Policy

FOCAC has become a platform for packaging health-related commitments and gradually scaling them up. In general, direct commitments around China-Africa health cooperation made at FOCAC have been consistently made since the beginning – 2000 - and mainly focused on the following topics:

- medical teams and short-term expert groups,
- medical supply donations,
- health facility construction (e.g. new hospitals),
- training and knowledge transfer,
- prevention of communicable diseases.

Furthermore, since 2012, a set of new commitments, such as high-level exchange, pharmaceutical investment, health system building and traditional medicine have been introduced. For example, health system building and public health policies was introduced into the FOCAC agenda in 2012 and China has also affirmed its commitment to universal health coverage (UHC) in the 2018 FOCAC. China also committed to support the Africa CDC and in this way is working with African governments to build their own capacity, focusing on technology transfers, pharmaceutical capacity around essential medicines and training of African health personnel.¹⁹

Annex 1 includes a summary of the individual FOCAC meetings and the decisions made at each on health cooperation. Evidence and progress on all of these commitments can also be traced through various projects and some data are revealed in China's Foreign Aid White Papers. However, although these programs are no doubt beneficial to Africa's health system strengthening, limited independent analysis is available on their impact, and on how they link directly to African strategic health priorities or programs. Yet, such evaluations can be very helpful. **Box 1** below illustrates some learning points from a pilot trilateral cooperation project between China and the UK in health in Tanzania. In addition, some newly-made commitments, such as easing the burden of non-communicable diseases, building a more responsive public health system and surveillance system, are still in progress.

¹⁹ Lin, Shuang, et al. (2016). "China's health assistance to Africa: opportunism or altruism?" *Globalization and Health* 12 (1): 83. doi:10.1186/s12992-016-0217-1. <http://dx.doi.org/10.1186/s12992-016-0217-1>.

BOX 1: The China- UK- Tanzania Pilot Project on Malaria Control

Problem: Tanzania is one of the countries with the worst malaria epidemics in the world. More than 93% of the Tanzanian population remains at risk of malaria and malaria remains the leading cause of morbidity and mortality among children under 5 years of age in the country.²⁰

Solution: The pilot project, known as the China-UK-Tanzania Malaria Control Project, was funded by the UK Department for International Development (DFID), jointly organized and implemented by the Institute of Parasitic Disease Prevention and Control of the Chinese Center for Disease Control and Prevention (CDC), and Ifakara Health Institute and the National Malaria Program Office in Tanzania.

Implementation was from 2015-2018 using the Chinese scientific model known as “1-3-7” which was customized to 1-7 in the context of Tanzania, which means that local cases are reported within one day, the cases are diagnosed within three days and the treatment is carried out within seven days after the diagnosis is confirmed, and an epidemic site is made for each case. Mosquito repellants and mosquito nets were distributed to high-risk groups. The project provided the screening and antimalarial services in 18 villages of nearly 60,000 population in Muhoro and Ikwiriri within Rufiji District.

Through the field intervention over the past three years (2015-2018), the malaria prevalence rate in the high incidence community decreased by 85.4% from 36.9% to 5.4%²¹, and the malaria prevalence rate in the low incidence community decreased by 70.1% from 15.9% to 4.7%²². The malaria case fatality rate in the targeted communities was reduced and no malaria deaths were reported in health facilities during the intervention period.

Inspiration: This trilateral malaria control programme between China, the UK and Tanzania was the first of its kind for the Chinese government. It aimed to share and translate the Chinese experience into Africa’s context and thus reduce malaria burden and promote community participation. However, according to a study, the main challenges of the project include poor language communication, lack of security mechanisms and insufficient government support²³. The study recommended that the sustainability of China -Africa public health cooperation projects should be further promoted by enhancing the capacity building of both Chinese and African personnel, promoting government support on both sides as well as resource integration and sharing.

In light of the complexity of and large number of FOCAC commitments, the following section maps them under a set of categories in order to gain further insight.

²⁰ WHO. World Malaria Report 2020.

²¹ Ma et al. (2020). Main achievements and challenges of China-UK-Tanzania Pilot Project on Malaria Control. *Chinese Journal of Parasitology and Parasitic Diseases*. kns.cnki.net/kcms/detail/31.1248.R.20200608.1441.006.html

²² Ibid

²³ Ibid

2B) Interim Results of China-Africa Health Cooperation Under The FOCAC Umbrella

China began providing medical support to a range of African countries in the 1960s. For instance, in 1963 China sent its first medical team to Algeria. Since then, Hubei province has been in charge of dispatching of medical teams to Algeria. By 2006, Hubei had sent more than 3,000 medical personnel to Algeria as well as to Lesotho.²⁴ Africa-China cooperation in health has made significant headway since the first FOCAC Ministerial Conference in 2000. The tracking of outcomes is complicated by the broad nature of some commitments (both in terms of goals and destination country) and by the limited number of follow-up reports. Therefore, the following section primarily focuses on the numeric, input-based commitments made over the years under 9 specific categories broadly aligned to FOCAC commitments. As such, this is of course non-exhaustive. Progress in areas of cooperation and broad goals of cooperation is even harder to track.

i) Mechanisms and High-level Exchange

Under the FOCAC framework, China and Africa have held 4 ministerial conferences on health cooperation. First, China and African health ministers signed and release the Beijing Health Declaration in 2013, which was timed to commemorate the 50th anniversary of the first CMT sent to Algeria.²⁵ The declaration set the course for future collaboration between China and Africa to address the priority health challenges affecting the continent, including malaria, schistosomiasis, AIDS, reproductive health, vaccines and immunization. As the result of the second ministerial conference in October 2015, the Cape Town Health Declaration²⁶ set strategic plans to address China-Africa cooperation in the fields including public health cooperation, establishment of disease prevention and control system, information exchange and cooperation on major diseases, human resources and medical institutions. At the China-Africa Ministerial Conference on Health Cooperation in April 2017, China signed cooperative agreement with Malawi on maternal and child health project, hospital partnership agreement with Republic of Congo, Ghana, Mauritania, Zambia, Niger and Chad and agreement to carry out “Light Walk” projects (free cataract cooperation) with Sierra Leone.²⁷ Finally, 2018 Beijing Initiative on China-Africa Health Cooperation (中非卫生合作 2018 北京倡议) came out as the result of High-Level Meeting on China-Africa Health Cooperation on 2018. The conference focused around multiple areas,

²⁴ Li, Anshan. (2011). Chinese medical cooperation in Africa: With special emphasis on the medical teams and anti-malaria campaign.

²⁵ http://www.chinadaily.com.cn/m/chinahealth/2015-09/24/content_21971639.htm

²⁶ http://en.nhc.gov.cn/2015-10/06/c_46261.htm

²⁷ http://www.xinhuanet.com/politics/2017-04/25/c_1120866568.htm

including public health cooperation, enhancing the accessibility of pharmaceutical products in Africa, hospital management cooperation, health specialist training, and maternal and child health cooperation.²⁸

ii) Medical teams and short-term expert groups

To date, the data suggests that China has dispatched 993 medical teams with 22,000 medical personnel to 48 African countries and regions, benefiting at least 220 million patients.²⁹ Currently, 46 medical teams with nearly 1,000 medical personnel are providing medical services to local people in 100 medical sites in 45 African countries.³⁰ After FOCAC 5, China started to send short-term medical teams to Africa to treat cataract, heart diseases, dental defects as well as maternal and child health for free. The latest application of this short-term aid model is the dispatch of medical teams from China to 15 African countries to fight against COVID-19, which all took place during 2020.

iii) Health Facility Construction

As date of November 2020, China has assisted in the construction of at least 130 medical facilities in Africa.³¹ For example, in 2018, China fully funded and constructed Niger's largest hospital - one of the most advanced healthcare facilities in West Africa. China has also made significant contributions to multilateral organizations, such as supporting the construction of the Africa CDC in 2015.

iv) Knowledge Transfer

To date, China has hosted workshops on malaria treatment, funded training for health workers and offered health training courses in China for over 15,000³² African students, and provided government scholarships for African students to earn medical degrees in China. During the Ebola outbreak, China provided training for over 13,000 health workers in 13 affected countries.³³

v) Maternal and Child health

In 2006, China donated 50 million USD to fund NEPAD's nurse training program to help improve maternal and child health in Tanzania and Kenya.³⁴ From 2011 to 2012, China's Ministry of Commerce organized a number of trainings to African health

²⁸ <http://www.nhc.gov.cn/gjhzs/s3582/201808/a3af26963d1a4035ab19bba28accccd3.shtml>

²⁹ FOCAC. https://www.fmprc.gov.cn/zfhzlt2018/eng/zfzs_1/t1807530.htm

³⁰ *Ibid*

³¹ State Council of China. <http://www.scio.gov.cn/m/zfbps/32832/Document/1696685/1696685.htm>

³² Development Reimagined, CHINA'S ROLE IN "DECOLONIZING" HEALTHCARE IN AFRICA <https://developmentreimagined.com/2021/05/12/chinas-role-in-decolonizing-healthcare-in-africa/>

³³ *ibid*

³⁴ <http://news.cctv.com/china/20060726/106742.shtml>

officials on maternal and child health. In 2016, representatives from 8 African countries and UNICEF officials met with officials from China's Health and Family Planning Commission and Ministry of Commerce to advise the Chinese government's "100 Maternal and Child Health Projects" program on how to make it produce measurable results.³⁵ In 2020, the Chinese government provided 1 million USD to support UNICEF's maternal and child health program in Niger, which is one of eight beneficiaries of China's South-South Cooperation Assistance Fund to support maternal and child health projects in Africa.³⁶

vi) **Medical Supply Donations**

According to China's White Paper on Foreign aid in 2014, China has provided about 120 batches of medical equipment and pharmaceutical supplies to the recipient countries (which goes beyond Africa), including high-end medical equipment such as Doppler ultrasound machines, CT scanners, automatic biochemical instruments and medicines for disease control.³⁷ In addition, China provided 750 million RMB to the affected areas to help West African countries fight the Ebola epidemic. During the recent COVID-19 pandemic, 5.4 million masks, 1.08 million kits, 40,000 sets of protective clothing and 60,000 masks were delivered by Ma Yun Foundation and Alibaba Foundation to support 54 countries in Africa to fight the epidemic. By August 2021, Development Reimagined calculated that China had donated more than 6 million doses of vaccines to 36 African countries and that 42% of the vaccines secured in Africa (both purchased and donated) were from Chinese manufacturers, making China the largest COVID-19 vaccine supplier on the continent, larger than COVAX the multilateral vaccine distribution mechanism³⁸.

vii) **Pharmaceutical Trade & Investment**

The trade volume of pharmaceuticals between China and Africa has doubled in the past ten years, from about US\$1.31 billion in 2010 to about US\$2.931 billion in 2019.³⁹ The number of enterprises engaged in pharmaceutical trade with Africa rose from more than 5,000 in 2010 to more than 10,000 in 2019. Nearly 70% of the trade volume is completed by private enterprises.⁴⁰ According to China Chamber of Commerce for Import and Export of Medicines and Health Products (CCCMHPIE), there are 14 Chinese companies investing in local pharmaceutical production in Africa.⁴¹ Human Well Group in Mali and Ethiopia and SanSheng Pharmaceutical Plc. in Ethiopia Eastern

³⁵ <https://blogs.unicef.org/zh/blog/全民健康覆盖改善中国的妇幼健康/>

³⁶ <https://www.unicef.cn/stories/niger-receives-US-1-million-in-aid-from-China>

³⁷ MOFCOM. White Paper on China's Foreign Aid. (2014)

³⁸ See: <https://developmentreimagined.com/2021/08/20/halfafricancitizenscouldhavebeenprotected/>

³⁹ 中国医药保健品进出口商会.(2020). 2019 年度中非医药合作报告

⁴⁰ Ibid

⁴¹ Ibid

Industrial Park are successful examples of the initiative. For example, local production of Human Well in Mali resulted in a 30% drop in drug prices locally.⁴²

viii) Traditional Medicine Cooperation

Over the years, acupuncture has been a prominent aspect of the promotion and dissemination of Chinese medicine in Africa. African medical teams and African students studying Chinese medicine in China have contributed to this effort. Research conducted in 2018 for UNAIDS and the China Chamber of Commerce for Import and Export of Medicines and Health Products (CCCMHPIE) suggested that for 21 African countries, on average TCM accounted for 2% of all pharmaceutical and health exports from China to those countries, with the highest level being 5% – for Ghana. On September 25, 2020, the China-Zimbabwe Acupuncture Center was officially opened to provide acupuncture and moxibustion services to local people.⁴³ Chinese medicine has also encouraged African countries to pay more attention to their own indigenous and traditional medicine and expand new ideas for their health services⁴⁴.

ix) Prevention of Communicable Diseases

From 2003 to 2009, China provided more than 100 million USD of medical equipment and drugs to fight malaria. In Comoros, China launched a project for the rapid elimination of malaria in 2008. The 8-year project has resulted in zero deaths due to malaria. In addition to bilateral medical cooperation with African countries, China is also actively participating in various WHO relief activities in Africa, such as the pilot project on schistosomiasis prevention and control in Zanzibar, which disseminates information on schistosomiasis prevention and control and provides relief methods and medicines. The China- UK- Tanzania Pilot Project on Malaria Control help reduce the malaria prevalence rate from 36.9% to 5.4% in the high incidence community and from 15.9% to 4.7% in the low incidence community⁴⁵ (see **Box 1** above).

2C) The SDGs and Africa-China Cooperation In Health Under The FOCAC Umbrella

Based on our analysis, Africa-China cooperation in the health sector has the potential to contribute to a multitude of the 17 UN Sustainable Development Goals, agreed in 2015. The following SDGs are likely to be most impacted. It is important to note that this table exclusively focuses on FOCAC actions listed under the “Health” section of the FOCAC Action Plans. In

⁴² Ibid

⁴³ http://www.cssn.cn/gjgxx/gj_ttxw/202101/t20210125_5246965.shtml

⁴⁴ See: <https://developmentreimagined.com/2020/06/29/traditional-chinese-medicine-is-gaining-traction-in-africa-can-it-also-help-in-the-fight-against-covid-19/>

⁴⁵ Ma et al. (2000). Main achievements and challenges of China-UK-Tanzania Pilot Project on Malaria Control. *Chinese Journal of Parasitology and Parasitic Diseases*. kns.cnki.net/kcms/detail/31.1248.R.20200608.1441.006.html

connection with other FOCAC measures, such as those in the area of education, further benefits can be reaped.

TABLE 1: The 5 Top SDGs potentially benefiting from Africa-China cooperation in health

SDG Goal	How does China-Africa Health Cooperation potentially contribute?
 <p>3 GOOD HEALTH AND WELL-BEING</p>	<p>Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases</p> <ul style="list-style-type: none"> Chinese pharmaceutical expertise has already begun to address persistent health challenges in Africa, yielding a Nobel-prize winning remedy for malaria and supplying markets with relatively inexpensive generic medicines Specialized facilities and training can halt the “brain drain” of African medical professionals and build healthy foundations for disease prevention <p>Target 3.d: Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks</p> <ul style="list-style-type: none"> Strengthening institutional ties facilitates emergency relief in the event of natural disasters or disease outbreaks, like the Chinese response to the 2013 Ebola crisis
 <p>4 QUALITY EDUCATION</p>	<p>Target 4.4: ‘By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship’</p> <ul style="list-style-type: none"> Health sector can directly contribute to education of the workers by ensuring equal access for to quality technical, vocational and tertiary education. It increases the number of youth and adults who have relevant skills for employment. <p>Target 4b: By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology,</p>

SDG Goal	How does China-Africa Health Cooperation potentially contribute?
	<p>technical, engineering and scientific programmes, in developed countries and other developing countries.</p> <ul style="list-style-type: none"> • China offer scholarships to African students to complete their degree for higher education. • Chinese government and Chinese medical teams organize vocational trainings for health workers and health officers on regular basis.
 <p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>Target 8.2: 'Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.</p> <ul style="list-style-type: none"> • Growth of the pharmaceutical and medical equipment sectors can directly contribute to enhancing economic productivity through creation of job opportunities and further help achieving higher levels of economic productivity through focus on high-value addition • Development of health sector provide productive employment and decent work for health professionals
 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.</p> <ul style="list-style-type: none"> • Health facilities constructed with the help of China can help promote inclusive and sustainable industrialization and raise industry's share of employment and gross domestic product. • Use of innovative medical technologies can help establish state of the art medical facilities that effectively use resources to stimulate economic development and human well-being in the region
 <p>17 PARTNERSHIPS FOR THE GOALS</p>	<p>Target 17.6: Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.</p>

SDG Goal	How does China-Africa Health Cooperation potentially contribute?
	<ul style="list-style-type: none"> • Support for the medical sector to grow is part of promoting the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favorable terms. • Standards development and other capacity building for medical employees and others can be part of North-South, South-South and triangular cooperation • Support for the health sector can encourage and promote effective public, public-private and civil society partnerships



SECTION 3 – COUNTRY CASE STUDIES



Given the paucity of evaluation of China-Africa health programmes, and in order to move from considering China-Africa cooperation in health in abstract terms to understanding how it functions in specific instances, this deepdive will focus on four cases of Chinese health cooperation under the FOCAC umbrella: cooperation with Egypt, Sierra Leone, Ethiopia and Botswana. The selection

criteria for countries was designed to show the heterogeneity of African countries and “theories of change”⁴⁶ – i.e. an explanation of how inputs of how health can be improved in a country/region, as follows:

- a) Varying levels of economic development: It was important to select countries across the broad spectrum of economic development and show how cooperation may vary in such instances.
- b) Regional importance and influence: Some member states have considerable influence and experience high health migration - meaning as such the benefits of upgrading their health system creates ripples beyond their domestic market - while others selected have a much smaller regional influence.
- c) Extent of Chinese cooperation and health intervention: All countries in the case studies are members of the Belt and Road Initiative and have varying cooperation and health needs.

The country cases are intended to give a general overview of the health landscape, strategies, and Chinese involvement up to date. Finally, in each country case, this deep-dive highlights a theory of change in terms of improving health outcomes and uses the experience of the case study to explain both the benefits and limitations of these theories.

Recommendations on how China and Africa can cooperate in future, to address these issues as well as align to Africa’s overall strategic health priorities are then made in the following section. The issues chosen are not isolated cases but problems common to many other African countries and lessons can also be drawn for those (while keeping local circumstances in mind). Particular attention has been paid

⁴⁶ Defined as a means of explaining how inputs transform into impacts - in this case health related inputs transform into improved health outcomes.

to address issue areas that (1) could benefit from a streamlining of cooperation; and (2) which have only recently become FOCAC focus areas, thus representing a new path forward.

Case Study 1: Egypt - Africa's current pharmaceutical manufacturing hub

1. Health care overview

Life expectancy is 71.9 years in Egypt. Non-communicable diseases, such as cancer, cardiovascular disease, diabetes and mental health disorders, are the main causes of morbidity and mortality, accounting for approximately 89% of deaths in Egypt.⁴⁷

The health care system in Egypt is governed by the Ministry of Health and Population (MoHP) and the country has a plural health care system comprising of public and private health care services. Physical access to health care in Egypt is good and about 95% of the population lives within 5 km radius of a medical facility.

The significant improvement in the health indicators in Egypt is attributable to the continued implementation of the health sector reforms. For example, the Health Sector Reform Program (HSRP), commenced in 1997, provides health services using a family focused model whereby a package of health services like maternal, child, reproductive and other infectious disease services are provided under one health facility. Under five mortality rates reduced from 186/1000 live births to 20/1000 live births, while maternal mortality rate fell from 138/100,000 to 37/100,000 live births in 2017.⁴⁸

Total expenditure on health per capita increased between 2005 and 2018 from US\$ 66.6 to US\$ 125.5, respectively.⁴⁹ General government expenditure on health increased during the same period, from US\$ 26.1 to US\$ 36 per capita.⁵⁰ However, total expenditure on health as a percentage of the gross domestic product (GDP) remained constant for the same period at 4.9% of GDP⁵¹. In addition, the health financing system is characterized by a high share of out-of-pocket spending, at 62% in 2018.⁵²

⁴⁷ WHO. Country Cooperation Strategy for WHO and Egypt 2010-2014.

⁴⁸ WHO. World Health Statistics 2021. <https://apps.who.int/iris/bitstream/handle/10665/342703/9789240027053-eng.pdf>

⁴⁹ Ibid

⁵⁰ WHO. Global health expenditure database: Table of key indicators, sources and methods by country and indicators.

⁵¹ Ibid

⁵² Development Reimagined. 21 Country Profiles: An Introduction to Local Pharmaceutical Production Opportunities in Africa. https://developmentreimagined.com/wp-content/uploads/2019/01/unaid-report-new_english_webversion.pdf

2. Special focus: Pharmaceutical production

In 2019, pharmaceutical market in Egypt is estimated to be 2.1 billion, accounting for 30% of production in North Africa and Middle-East Region.⁵³ Egypt's domestic pharmaceutical industry is robust, with around 120 pharmaceutical companies in the country and produces 93% of the pharmaceuticals it consumes.⁵⁴ However, although Egypt has a large pharmaceutical industry, it also relies on imported ingredients. 90% of ingredients for local manufacturing need to be imported. Egypt imports about 600 million USD in finished medicines per year and 1.8 billion USD in active ingredients. About 70% of all drugs in Egypt are generic and domestic-made.⁵⁵ Multinational pharmaceutical suppliers like Pfizer, Novartis, GlaxoSmithKline and Sanofi cover 40% of the market in Egypt, while 60% of the market belongs to domestic suppliers.⁵⁶

Egyptian Holding Company for Biological Products and Vaccines (VACSERA) is the largest producer of biologics and vaccines in Egypt. However, locally manufactured vaccines have not met the WHO vaccine pre-qualification requirements of assured quality. The technical capacity of the national regulatory authority for vaccines in Egypt needs to be strengthened to meet functional requirements.

In this respect, in 2020, China become an important new health partner for Egypt. In December 2020, China and Egypt signed an agreement to produce the COVID-19 Sinovac vaccine. China's Sinovac then dispatched technical teams to provide proper guidance for the production, packaging, storage etc. in Egypt. To improve the efficiency of vaccine production, China provided 2 million doses of vaccine solution to Egypt.⁵⁷ Six months after the signing of the agreement, The Egyptian Government announced that it has produced 1 million Sinovac doses through VACSERA, making Egypt the first country in Africa to cooperate with China in the production of COVID vaccine. Local manufacture of Chinese vaccines in Egypt is a concrete step for China to make vaccines a global public good, as well as an important step to promote equal distribution of vaccines worldwide and overcome the "immunization gap".

⁵³ Fitch Solutions. (2019). Egypt Pharmaceutical & Healthcare Report 2019 Q1.

⁵⁴ Ngage Consulting. (2017). Egypt's Pharmaceutical Sector Following Bold Economic Reforms: Challenges and Opportunities

⁵⁵ Development Reimagined. 21 Country Profiles: An Introduction to Local Pharmaceutical Production Opportunities in Africa. https://developmentreimagined.com/wp-content/uploads/2019/01/unaid-report-new_english_webversion.pdf

⁵⁶ Ibid

⁵⁷ Ministry of Foreign Affairs of People's Republic of China.

https://www.fmprc.gov.cn/web/gjhdq_676201/gj_676203/fz_677316/1206_677342/xgxw_677348/t1893074.shtml

Case study 2 - Sierra Leone – a large health spender

1. Health care overview:

The overall life expectancy in Sierra Leone is 60.8 years. Infectious diseases are the leading cause of death and disease in Sierra Leone, of which malaria is the single biggest killer, accounting for 38% of all hospital admissions with 20% of the admitted patients dying from the disease.⁵⁸ 334.8 people are at risk to have malaria per 1000 population.⁵⁹ Tuberculosis is another significant public health problem and Sierra Leone one of the 30 highest-burden countries per capita worldwide with an estimated three new infections per 1,000 each year.⁶⁰ The national HIV prevalence rate is at 1.5%, with only one third of them on antiretroviral therapy⁶¹. Diarrheal diseases are also a major issue, with one in 1000 people dying each year due to lack of safe water and sanitation.⁶² Sierra Leone is estimated to have the world's highest maternal mortality ratio, at 1,120 maternal deaths per 100 000 live births in 2018.⁶³ Child mortality is also very high, with over 109 of every 1000 children dying before the age of five, mainly from malaria, diarrhea, pneumonia and malnutrition.⁶⁴ Almost one third of under-five children suffered from stunting in 2014.

Sierra Leone's latest Health Sector Strategic Plans (2017 – 2021) sets out a direction for the health system, building on the promise of the SDGs to provide high quality, accessible, affordable and equitable healthcare to all Sierra Leoneans. The plan covers eight priority areas⁶⁵ including strengthening leadership and governance; quality service delivery; skilled and qualified human resources; efficient health financing; improved medical products and health technologies; health information and research, health security and emergencies, as well as deeper community engagement and health promotion.

⁵⁸ WHO. Sierra Leone Country Cooperation Strategy 2017-2021. <https://www.afro.who.int/sites/default/files/2017-08/WHO%20Sierra%20Leone%20Country%20Cooperation%20Strategy%202017%202021.pdf>

⁵⁹ WHO. World Health Statistics 2021. (2021) <https://apps.who.int/iris/bitstream/handle/10665/342703/9789240027053-eng.pdf>

⁶⁰ WHO. Global Tuberculosis Report 2016. <https://apps.who.int/iris/bitstream/handle/10665/250441/9789241565394-eng.pdf?sequence=1&isAllowed=y>

⁶¹ WHO. Sierra Leone HIV Epidemiology Report 2016. <https://www.afro.who.int/sites/default/files/2017-06/sierra-leone-hiv-epidemiology-report--2016.pdf>

⁶² Ibid

⁶³ Ibid

⁶⁴ Ibid

⁶⁵ NATIONAL HEALTH SECTOR STRATEGIC PLAN. (2017-2021) https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/sierra_leone/sierra_leone_nhssp_2017-21_final_sept2017.pdf

Sierra Leone's current health expenditure accounts for 16% of its GDP in 2018.⁶⁶ However, the country remains heavily reliant on out-of-pocket payments. In 2018, the health expenditure per capita was 85.7 USD, with 44.6% being out-of-pocket payments.⁶⁷ External sources accounted for 24% of the expenditure, with government contributions being only 9.7%.⁶⁸ The remainder of the expenditure came from non-governmental organizations.

2. Special Focus: Global Health Security

Sierra Leone has experienced many health-related emergencies over the past few decades. Cholera re-emerged in Sierra Leone 1994 – 1995 affecting more than 46,000 people from 1994 to 1995 and affecting 23,308 people with 301 documented deaths during 2012-2013.⁶⁹ Lassa fever is a viral hemorrhagic fever endemic in the country and that has continued to present a significant threat. By mid-2018, 20 cases of Lassa fever had been reported as compared to annual cumulative of 23 in 2017 and 33 in 2016.⁷⁰ Sierra Leone was severely hit by the most widespread Ebola virus disease epidemic in history. In total, 8,706 infections were recorded, of which 3,590 died between May 2014 and March 2016.⁷¹ The risk of epidemics and other public health concerns remains high with 4,000 survivors.

To better cope with the issue, Sierra Leone adopted the Integrated Diseases Surveillance and Response (IDSR) strategy in 2014, as well as the technical guideline with the selection of 22 priority diseases. The US CDC helped develop IDSR system after the outbreak of Ebola in 2014 to provide timely health data to district and national decision-makers. The system now monitors 44 diseases, conditions, and public health threats. In 2016, Sierra Leone became one of 50 partner countries to endorse the Global Health Security Agenda (GHSA), launched in 2014 with the aim to build country capacity to control infectious diseases through a multi-lateral and multi-sectoral approach. However, data quality, incomplete coverage, and a plethora of vertical data systems are major challenges for implementing health information systems in the country.⁷²

China has become an important health partner for Sierra Leone, with key characteristics. After the outbreak of Ebola in 2014, China took the lead in providing four rounds of emergency assistance to countries in the epidemic zone. China has provided emergency humanitarian aid

⁶⁶ World Bank. <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=SL>

⁶⁷ World Bank. <https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD?locations=SL>

⁶⁸ Knoema. <https://knoema.com/atlas/Sierra-Leone/topics/Health/Health-Expenditure/Out-of-pocket-expenditure-as-a-share-of-current-health-expenditure>

⁶⁹ Sierra Leone National Action Plan for Health Security. (2018-2022)

<https://reliefweb.int/report/sierra-leone/sierra-leone-national-action-plan-health-security-2018-2022>

⁷⁰ Ibid

⁷¹ Sierra Leone National Action Plan for Health Security. (2018-2022)

<https://reliefweb.int/report/sierra-leone/sierra-leone-national-action-plan-health-security-2018-2022>

⁷² WHO. Sierra Leone Country Cooperation Strategy 2017-2021.

<https://www.afro.who.int/sites/default/files/2017-08/WHO%20Sierra%20Leone%20Country%20Cooperation%20Strategy%202017%202021.pdf>

totaling 120 million USD to 13 African countries⁷³, including Sierra Leone. A team of 1200 medical experts were dispatched and more than 13,000 local health professionals from nine countries were trained. China also helped setup mobile testing laboratories, detention and treatment centres, and fixed biosafety laboratories in Sierra Leone. During the COVID-19 pandemic, the Chinese government and the private sector have provided several donations of anti-epidemic materials to Sierra Leone and shared their experience in epidemic prevention and control through video conferences with Chinese experts. In February 2021, China donated a first batch of 240,000 doses COVID-19 vaccine to Sierra Leone, enough to fully vaccinate 1.5% of its population.

However, for all of Sierra Leone's partners - as the health sector remains largely dependent on external funding sources, limited investment in the country's overall health system and a lack of access to affordable health services is a key obstacle of Sierra Leone's emergency response system. Equipment, medication, diagnostics to properly tackle the emergency is still insufficient. There is also a huge gap on skilled and well-trained medical staff, as well as training programs in emergency care and responses across the country.⁷⁴

Based on the Joint External Evaluation (JEE) process, Sierra Leone launched a comprehensive five-year National Action Plan for Health Security (NAPHS) in compliance with International Health Regulations in 2019. Implementation of this plan will hopefully enable Sierra Leone to prevent the likelihood of epidemics and reduce its impact and other public health hazards; build national capacities for early detection and effective response systems to public health emergencies and other events of public health threats.

However, in all this, it is important to realise that focusing on donations or emergencies is simply treating the symptoms – it is not treating the cause, which remains Sierra Leone's overall high rate of poverty and poor infrastructure, even beyond health.

Case Study 3 - Ethiopia – building human capital

1. Health Overview

Primary health care is at the core of Ethiopia's health system and is viewed as an important gateway to achieving universal health coverage and achieving the Sustainable Development Goal (SDG) 3. Hence, Ethiopia plans to achieve universal health coverage through primary level health care by providing basic and essential health service to everyone. Ethiopia has comprehensive health policies and strategies which has helped the country achieve some of the health goals including Millenium Development Goal (MDG) 4; achieving about 67%

⁷³State Council of People's Republic of China: http://www.gov.cn/xinwen/2015-12/28/content_5028463.htm

⁷⁴ Johnson et al. Challenges to developing emergency services in Sierra Leone. European Journal of Emergency Medicine: October 2020 - Volume 27 - Issue 5 - p 321-322 doi: 10.1097/MEJ.0000000000000749

decrease in under-five mortality. The development and implementation of health plans are centered within the different Growth and Transformation Plans (GTP). These are five-year strategies to achieve Ethiopia's long-term vision, and sustainable and inclusive growth. Similarly, the guide on planning and implementation of health-related policies and programmes is done through the Health Sector Development Programme (HSDP) and has been since 1997/98.

However, ensuring access to good quality healthcare remains a challenge, where infectious diseases, lack of safe water, sanitation and hygiene, and malnutrition continue to threaten the gains made in improving health outcomes. The Burden of diseases in Ethiopia is dominated by acute upper respiratory tract infection, followed by acute febrile illness, pneumonia, diarrhea, and malaria, accounting for 64% under five morbidity. An estimated 660,000 people in Ethiopia live with HIV.⁷⁵ Nearly half of all Ethiopians get their daily water from unclean water sources, and only 15 percent have access to improved toilet facilities.

According to the 6th National Health Accounts (2013/14), health service in Ethiopia is primarily financed from 4 sources: the federal and regional governments; grants and loans from bilateral and multilateral donors; non-governmental organizations and private contributions. It also revealed that households contribute 36%, government 33%, and bilateral and multilateral donors 16%.⁷⁶ Per capita health expenditure increased from 16.1USD per capita in 2007 to 24.5 USD in 2018.⁷⁷ However, the government health budget dropped sharply from 5.4% in 2010 to 3.2% in 2018.⁷⁸

2. Special Focus: Domestic and Regional Human Resources Capacity Strengthening

Given the country's emphasis on expanding primary healthcare services, there was a focus on growing the low and mid-level health workforce. The government introduced the Health Extension Program in 2003, which provides basic health and medical care close to community, to increase access to and coverage of essential health services. Since 2005, Ethiopia has expanded training programs for health workers to address the country's urgent health needs by increasing the number of vocational education and training centers. Between 2009 and 2014/15, the number of medical schools has increased from 7 to 35 (28 Public and 7 Private);⁷⁹ annual enrollment in medical students has increased from 200 to 4,000⁸⁰; the number of physicians in the country has increased from 1,540 to 5,372⁸¹; midwifery teaching institutions

⁷⁵ USAID. Fact sheet on Ethiopia. (2020).

https://www.usaid.gov/sites/default/files/documents/Ethiopia-Fact-Sheet_Health_Oct-2020.pdf

⁷⁶ WHO. Ethiopia Country Cooperation Strategy 2012-2015.

https://apps.who.int/iris/bitstream/handle/10665/136003/ccs_ethiopia.pdf?sequence=3

⁷⁷ World Bank. <https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD?locations=ET>

⁷⁸ Ibid

⁷⁹ MoH. National Human Resources for Health Strategic Plan 2016-2025

⁸⁰ Ibid

⁸¹ Ibid

have also increased from 23 to 49 and the number of midwives increased from 1,270 in 2009 to 11,349⁸². The overall health professionals to population ratio increased from 0.84 per 1000 in 2001 to 1.5 per 1000 in 2016.⁸³ However, according to Ethiopia's National Human Resources for Health Strategic Plan 2016-2025, challenges in human resource development include: poor quality of health workforce education and training; underdeveloped human resources management systems and practices; weak human resource information system and insufficient financial resources for HR development and management⁸⁴.

The development of the health workforce in primary healthcare is believed to have contributed greatly to Ethiopia meeting most of the MDG targets.⁸⁵ Among the notable achievements include achievement of MDG-4 with a 76 percent drop in under-five mortality from 216 per 1000 living birth in 1990 to 51 in 2019⁸⁶, that contributed to an increase in average life expectancy at birth from 45 in 1990 to 68.7 in 2020.⁸⁷ A 69 percent decrease in maternal mortality from a high estimated base of 1400 per 100,000 live births in 1990 to 401 per 100,000 in 2017.⁸⁸ Mortality and morbidity due to HIV/AIDS, Tuberculosis and malaria has reduced markedly. Malaria outbreak has not been witnessed for the last decade. Death due to malaria has declined, with an estimated 30,323 deaths in 1990 and 1561 deaths in 2015, a 94.8% reduction over the 25 years.⁸⁹ HIV new infection has dropped by 90% and mortality cut by more than 50% among adults. Similarly, the country has achieved the targets set for tuberculosis prevention and control. Mortality and prevalence due to tuberculosis has declined by more than 50% from 1990 and incidence rate is falling significantly.

Alongside this domestic work and progress, Ethiopia also hosts the headquarters of the African Union and its associated institutions. In 2017, the Africa CDC was launched and works to support member countries' health institutions for an effective response to health threats and build capacity across Africa through the following areas: Surveillance and Disease Intelligence, Laboratory Systems and Networks, Information Systems, Emergency Preparedness and Response and Public Health Research and Institutions. It is comprised of 5 regional centers across the continent with Headquarters and Emergency Operations center located in Addis Ababa. By January 2018, the Africa CDC had responded to 9 disease outbreaks in 7-member states. For example, to combat an Ebola outbreak in the Democratic Republic of Congo and Uganda between 2018 to 2019, the Africa CDC deployed 48 health experts, trained over 470 local healthcare and community workers on infection prevention, alongside over 350 people on

⁸² Ibid

⁸³ Ibid

⁸⁴ MoH. National Human Resources for Health Strategic Plan 2016-2025

⁸⁵ Assefa Y, Van Damme W, Williams OD, Hill PS. Successes and challenges of the millennium development goals in Ethiopia: lessons for the sustainable development goals. *BMJ Global Health*. 2017;2(2):e000318.

⁸⁶ WHO. World Health Statistics 2021. <https://apps.who.int/iris/bitstream/handle/10665/342703/9789240027053-eng.pdf>

⁸⁷ Ibid

⁸⁸ Ibid

⁸⁹ Deribew, A., Dejene, T., Kebede, B. et al. Incidence, prevalence and mortality rates of malaria in Ethiopia from 1990 to 2015: analysis of the global burden of diseases 2015. *Malar J* 16, 271 (2017). <https://doi.org/10.1186/s12936-017-1919-4>

cross-border screening.⁹⁰ The Africa CDC's leadership was also essential during the COVID-19 outbreak, especially in coordinating Member State responses, procuring tests, mobilizing contact tracing and procuring vaccines.

Since the establishment of diplomatic relations with Ethiopia in November 1970, China has actively supported the development of its medical and health services, and both bilateral and regional health cooperation has been increasing. Domestically, China's cooperation on health human resources with Ethiopia includes training health administrators focusing on health systems and policies, training medical students and sending medical teams abroad for emergencies and to meet current needs. Regionally, China started to support the building of the Africa CDC Headquarters in 2015. The project covers an area of 90,000 square meters, with a total construction area of nearly 40,000 square meters, including an emergency response center, an information center, a training center, a conference center, a laboratory, a library, a press hall, office buildings and apartments for experts. There is no doubt that these facilities have already enabled Africa CDC to better play the role of coordination and organization on emergency management, strengthen disease prevention, surveillance and emergency response in Africa through cooperation with the World Health Organization and health departments of African countries.

While this human capital resource building is clearly much needed and can have a significant impact, it can also be limited in some ways. For example, a study shows that although China provides training programs for health workers, language and culture difference remained a major barrier that affects the outcome of training.⁹¹ Also, one of the African diplomats mention during the consultation meeting that human capital resource deployment of training medical students in China is not cost nor timely-efficient. In addition, it is important to take account of future regional planning and Africa CDC has a clear role to play in it. To support regional workforce development, Africa CDC is proposing to launch the Africa Epidemic Service Program- an early disease fighting forces that will provide field epidemiologic training programs. The CDC also launched the Kofi Annan Global Health Leadership Program, which trains top leaders in poverty management, as global public health is not just a health issue in face of COVID-19, it is indeed an economic issue and security issue, where leaders are needed to help resolve.⁹² To improve regional cooperation and collaboration, Africa CDC is designed to operate a decentralized model that allows it to work with National Public Health Institutes (NPHIs) of Member State through five Regional Collaborating Centres (RCCs) located in Egypt, Gabon, Kenya, Nigeria, and Zambia.⁹³ The RCCs serve as hubs for Africa CDC surveillance,

⁹⁰ Development Reimagined. HOW WOULD AFRICA HAVE MANAGED COVID-19 WITHOUT THE AFRICA CDC? THE ROLE OF CHINA.

<https://developmentreimagined.com/2021/04/12/how-would-africa-have-managed-covid-19-without-the-africa-cdc-the-role-of-china/>

⁹¹ Huang et al. (2020). *Study on the willingness of China-Africa health cooperation and its influencing factors: Based on a survey conducted among representatives at the High-level Symposium on China-Africa*

Health Cooperation. Chinese Journal of Health Policy, April 2020, Vol. 13 No. 4

⁹² Development Reimagined. 2021 African Ambassador Retreat Report.

⁹³ Africa CDC. <https://africacdc.org/regional-collaborating-centres/>

preparedness and emergency response activities and coordinate regional public health initiatives by Member States in consultation with Africa CDC headquarters.

Botswana – when finance needs to transform into innovation

1. Health Overview

Botswana has made commendable progress towards achieving the MDGs. Life expectancy at birth stands at 62.2 years compared to 55 years in 2001. Botswana is one of the countries with the highest HIV/AIDS prevalence rate, estimated at 19.9% in 2020⁹⁴. Maternal mortality remains a major challenge in the country with Statistics Botswana estimating that 144 women die from pregnancy-related causes for every 100 000 live births.⁹⁵ Non-communicable diseases (NCDs) have emerged as a major public health issue for Botswana. This has effectively created a significant double burden of communicable and non-communicable diseases for the country.⁹⁶ In addition, poor nutrition in children under the age of 5 years remains a challenge in Botswana. Re-analysis of the national household survey indicated that 31.2% of children under the age of 5 years were stunted, 11.9% underweight and 8.6% were wasted.⁹⁷

In Botswana, public health care programmes are financed mainly from domestic sources, with a modest donor contribution, with the government accounting for 68.1%. Private sources came second at an average of 20.6%, while donors contributed an average of 11.5%. Budget allocations to public healthcare have increased steadily over the years, with an increasing share of total government spending and a stable share of around 4 percent of GDP. Government health spending per capita reached an estimated 350 USD per capita in 2018/19.⁹⁸ However, in 2019/20, health spending amounts to 12 percent of general government expenditure, below the Abuja Declaration target of 15 percent.

2. Special Focus: Health infrastructure and supply chain

Botswana is facing major challenges in addressing health threats such as HIV/AIDS, malaria, and tuberculosis. The COVID-19 pandemic is worsening the situation. Over the years, the government seeks to improve health care infrastructure and provide and upgrade medical and surgical equipment improve service delivery in the health sector. The government has developed a Health Financing Strategy during the second quarter of 2019, which will enhance efficiency by involving the private sector in the delivery of health services at full cost recovery

⁹⁴ UNAIDS: <https://www.unaids.org/en/regionscountries/countries/botswana>

⁹⁵ WHO. World Health Statistics 2021. (2021) <https://apps.who.int/iris/bitstream/handle/10665/342703/9789240027053-eng.pdf>

⁹⁶ WHO. Botswana Country Cooperation Strategy 2014-2020. https://www.afro.who.int/sites/default/files/2017-05/ccs_bwa_en.pdf

⁹⁷ Ibid

⁹⁸ Ibid

rates to ensure financial sustainability. For the 2020/21 financial year, healthcare was scheduled to be the third ministry to have been allocated the largest recurrent budget of \$740 million USD⁹⁹, while a development budget was set for construction and upgrading of health facilities. However, due to shortages of trained healthcare professionals, the government may seek to outsource several health services.

The largest private hospital in Botswana - Sidilega Private Hospital was established in 2019, with the major funder from China. The hospital is of international standard with 110 beds and advanced medical equipment, medical intelligent information management system, and will also serve as a nursing education center to provide sustainable support for medical education and development in Botswana. It also has a goal to promote medical tourism and provide professional medical services to those in need in Botswana and neighboring countries.

Despite the improvement in health infrastructure and facilities, supply chain management systems remain weak. The demand for drugs, medical equipment and other supplies has increased dramatically as a result of the increased complexity and burden of medical conditions. However, Botswana do not produce their own medical drugs or supplies and imports drugs and other medical supplies through the government owned central medical store. Then hospitals and clinics order their requirements from the central medical store, which is located in the capital city Gaborone with no branches in other towns.¹⁰⁰ This results in limited availability and regular stock-out of some essential drugs and related medical supplies.¹⁰¹

⁹⁹Parliament of Botswana. Budget Speech 2021.

¹⁰⁰ Kabossa A.B. Msimangira. Just in Time Supply Chain Practices in Developing Countries: A case of the Public Healthcare Sector in Botswana. <https://www.pomsmeetings.org/confproceedings/015/fullpapers/015-0601.pdf>

¹⁰¹ WHO. Botswana Country Cooperation Strategy 2014-2020. https://www.afro.who.int/sites/default/files/2017-05/ccs_bwa_en.pdf

SECTION 4 – CONCLUSIONS AND RECOMMENDATIONS

China is no doubt one of Africa's premier development partners, and for health has been a key leading partner when it comes to Africa's Ebola and COVID-19 response. The need to entrench cooperation between China and Africa in health is seen as fundamental by China. While improving the basic medical and health conditions of African people, the health projects help establish a positive image of China in Africa, create markets for China's exports of medical and health equipment and medicines. Indeed, health is seen as a “breakthrough” form of cooperation beyond direct economic engagement¹⁰². Not only this, over time, as Chinese firms scale up operations in African countries, it is likely that health outcomes of local employees will become fundamental concerns.

Yet, in order for the partnership to continue to work and have a sustainable impact, it needs to focus on bolstering Africa's sustainable development goals and Agenda 2063. The cooperation also needs to take account of the heterogeneity of member states and the varying levels of development as well as to promote regional integration.

This report, based on the research and analysis of FOCAC commitments, the linkages to SDGs, and the case studies (and underlying theories of change) as presented in this report, as well as stakeholder consultations and experiences, overall suggest that through the high-level FOCAC health mechanisms and dialogues in particular, the alignment of FOCAC, Agenda 2063 and the SDGs when it comes to health has increased over time, however there is also scope for strengthened cooperation, especially at the forthcoming 8th FOCAC to be held in November 2021 in Dakar, Senegal. Tackling health requires using various entry-points, various theories of change, and while addressing the symptoms is important, it is the root causes that must be addressed for sustained impact.

In particular, we have two sets of recommendations – substantive and process based.

In terms of substance, we recommend that using the AU's Science, Technology and Innovation Strategy (STISA), as a stronger guide can help China strengthen its support to African countries, by prioritizing the following **four areas and shifts in cooperation**:

1. ***As far as donations (aid) and humanitarian commitments are concerned, these will continue to be needed by many African countries, but they can be better targeted and aligned to regional, member states development plans, policies and strategies.***

While the Chinese approach of non-interference in policy affairs of African countries is rightly welcomed by African countries, the overall health system in African countries does have an impact on the ultimate impact of Chinese aid and donations. The coordination of policies and

¹⁰² 翟曹敏. 中国对非洲医疗卫生援助研究. (Doctoral dissertation, 上海师范大学).

strategies to optimize the health care systems, reduce redundancies and promote regional integration is important. In this regard, then, it is important to both target certain types of medium-term aid support to countries that clearly need it (for example medical teams) while providing more predictability and clarity around short-term emergency support. This is a challenging balance, but, for instance, the initial donations of an equal number of COVID-19 testing kits from foundations to all countries, coordinated in partnership with the AU and Ethiopian Airlines, was a new welcome development from Chinese stakeholders. It helped allay concerns that China was prioritizing certain countries for geostrategic interests, a narrative which was initially labelled as “vaccine diplomacy”¹⁰³. It will also distinguish China from aid donors who do favour certain countries above others.

Thus, given the continued challenges of COVID-19, announcements at FOCAC 2021 for clear predictable, and perhaps even multi-year amounts of vaccine donations across the continent, coordinated with the Africa CDC, alongside other health-care support with clear principles of which countries could be the recipients, will provide a stronger basis for aid cooperation with impact. For example, achievement against STISA can be used as a means for China to target countries that need the most support on non-COVID-19 health issues (e.g. countries falling behind on epidemic control – for instance six African countries accounted for approximately half of all global malaria deaths in 2019¹⁰⁴, while China has eliminated malaria - it can prioritise providing relevant support to these six African counties in particular).

2. ***While some African countries will require emergency health assistance in the short term (beyond COVID-19), the focus of China’s cooperation with many African countries should shift from aid and exporting of medicines to incentivizing local manufacturing - promoting African sustainability and growth through industrialization and technological transfer.***

Africa’s health leaders are clear that the sustainability of Africa’s health care system will rely on member states’ ability to produce and have access to vaccines, other medicines and medical equipment. Thus, cooperation with China should shift away from supply of drugs to incentivizing Chinese and African producers to work together to produce and manufacture in Africa as well as allowing access of raw materials for production to African businesses. Furthermore, such promotion – especially of encouraging Chinese companies to shift to African countries - can and should be well aligned with the Africa CDC and AMA strategy and plans. In this way, Chinese cooperation could **focus on gaps in the African pharmaceutical supply chain**: raw materials, packaging, storage, and so on. The economic ripple effects – for example job creation - will further ensure the sustainability of the health system. Practically, this

¹⁰³ <https://thediomat.com/2021/03/5-reasons-to-worry-about-the-chinese-vaccine-diplomacy-narrative/>

¹⁰⁴ Nigeria 23%, DRC 11%, Tanzania 5%, Burkina Faso 4%, Mozambique 4% and Niger 4%.

“incentivization” could take place and be introduced within FOCAC 2021 outcomes with two specific proposals:

- a) First, by exploring the possibility to **adjust the remit of the CAD Fund**, for instance, to be able to fund smaller manufacturing projects, as well as existing and planned African manufacturers directly, even without partnering with a Chinese firm. This will enable the fund to prioritize facilitation of health sector businesses and promote the establishment of the African pharmaceutical and medical equipment production sector.
- b) Second, **by committing to sharing vaccine and other medicine patents - such as for HIV/AIDS and Malaria - with Africa – for example in partnership with the African Medicines Agency (AMA)** - to help African countries develop their own vaccines and medicines, put in place a viable production system, cut costs, and increase vaccine and medicine accessibility. This will also provide a useful example for developed donor countries to follow, whom to date have been reluctant to share intellectual property.

3. **It is important to move beyond “hospitals” as the key means to tackle health challenges. STISA indicates the African priority is prevention and control of diseases not just general health sector improvements. This is crucial for China to bear in mind. In this regard, logistics improvements (including digital access) and promotion of efficiency driven systems is key, and a multi-stakeholder exercise.**

Expanding infrastructure investment to build laboratory and information systems will be key, including supporting the Africa CDC regional hubs. Strengthening health systems through logistics (incl. telemedicine potential) can help scale up health and medical skills transfer to achieve universal coverage, health equity and overall long-term benefits of improved quality healthcare delivery towards sustainable national development and growth.¹⁰⁵ Furthermore, encouraging cooperation in the private sector, NGOs and research institutions, beyond governments is key, for example the use of PPPs (e.g. UN and Kenya example¹⁰⁶) in the health sector, where appropriate. Diversification of actors could bring more resources in terms of funding, technology and innovation that can contribute greatly to China-Africa’s health cooperation.

4. **Building Africa’s own human capacity, knowledge and innovation potential is crucial for long-term sustainability of the Africa China partnership – including when it comes to medical practice, traditional medicine and R&D. In this respect, a localization agenda is**

¹⁰⁵ See Ernest Tambo, et al(2016), China-Africa Health Development Initiatives: Benefits and Implications for Shaping Innovative and Evidence-informed National Health Policies and Programs in Sub-Saharan African Countries available at;

¹⁰⁶ As above, <https://www.philips.com/a-w/about/news/archive/standard/news/press/2017/20170502-philips-partners-with-the-government-of-kenya-and-the-united-nations-to-improve-access-to-primary-healthcare-in-africa.html>

highly relevant. For example, the WHO recommended doctor-patient ratio is 1:1,000, however most African countries are struggling in reaching this target. While African medical students are increasingly travelling to China to study, there is also significant potential for China to work with African countries and the Africa CDC to set up regional training centers in Africa to train local doctors and essential health professionals, which will also help keep costs down while increasing the scale. The Africa CDC plans for human capital development are extensive and useful to align with. Strengthening the linkages between China-aid hospitals and medical teams to provide training for local health workers; share knowledge on hospital management with local health authorities will also be crucial.

Furthermore, when it comes to the promotion of Chinese traditional medicine in Africa, this should always go hand in hand with the recognition and promotion of African traditional medicine, which has been badly disregarded in the past. Initiatives to ensure African stakeholders can singly or jointly apply for research funding from China in this respect, and avoid Chinese R&D and solutions being seen to take on a “colonial” nature.

Finally, and building on proposals for patent sharing, supporting local R&D is key, and certain priority countries could be identified for collaborative efforts through STISA (e.g. countries progressing on local research and development (R&D)).

In terms of process, we suggest that the following **three recommendations will support** China and African countries to strengthen their cooperation:

1. To date, there has not been a clear bilateral mechanism on health, which inhibits the potential to have a long-term strategic plan for China-Africa health cooperation. **A formalized FOCAC joint framework for health and health cooperation** is badly needed, so that China and African countries can formulate medium- and long-term plan, and strengthen feedback to each other on progress and challenges. This will also ensure, as this report suggests, that the ambitions outlined many African Union frameworks including Agenda 2063, the African Continental Free Trade Agreement (AfCFTA) and STISA will be espoused and the bedrock of the cooperation, alongside China’s own domestic priorities. This will also set a benchmark for other aid providers to African countries.
2. **Most initiatives to date under China-Africa health cooperation have been primarily China-led.** For example, deployed medical teams are Chinese, the CAD Fund only supports Chinese companies directly. However, expanding cooperation mechanisms to African partners (known as “untying” support) as well as to the entire continent will not only enable a proper scaling up of the support, it will also build trust from all sides. China’s support for the Africa CDC is a clear example of how excellent African partners can be - it has supported the entire African continent with essential coordination among health stakeholders and is building health

research integrity ¹⁰⁷. The time has come to enable African partners to also design, direct and implement China-Africa support mechanisms.

3. So far, we have only been able to find one clear example of independent monitoring and evaluation of China-Africa health programmes – the trilateral project in Tanzania referred to in Box 1. As a result, there remain concerns that China-Africa health initiatives are low quality or low impact, but there is no evidence to assuage such concerns. Indeed, establishing quality system for health projects is crucial to get the best out of them. For example, China was able to build a 1,000 bed hospital in 10 days domestically due to building efficiencies. The hospital still stands as testament of the quality. This kind of innovation and efficiency should be associated with Chinese support to Africa – for example ensuring that the construction companies that are facilitated to build health cooperation projects are subjected to Chinese government quality and efficiency control. We therefore encourage more openness and quality evaluation across Chinese and African health partners, which could also be coordinated through and with the AMA.

¹⁰⁷ Supra note 2

SECTION 5 – ANNEX

New Commitment	
FOCAC 1 (2000)	<ul style="list-style-type: none"> Adopted the Programme for China-Africa Cooperation in Economic and Social Development and the Beijing Declaration of the Forum on China-Africa Cooperation <p>Means of cooperation/action points:</p> <ul style="list-style-type: none"> Set up the African Human Resources Development Fund, sponsored nearly 300 training courses of various forms, trained more than 6,000 African personnel (in the areas of diplomacy, economic management, national defense, agriculture, medical treatment, health, education, science, technology and culture) Signed or renewed protocols with 40 African countries on dispatching Chinese medical teams, pledging continued provision free of charge of pharmaceuticals, medical equipment and other hospital materials, and cooperation with in the prevention and treatment of HIV/AIDS, malaria and tuberculosis The two sides also agreed to cooperate in reducing infant and maternal mortality. (Note: At the next FOCAC the Chinese government reported that: <i>Medical teams have been dispatched to 5 countries and students from the respective African countries are regularly being sent to China on Chinese government scholarships.</i>)
FOCAC 2 (2003)	<ul style="list-style-type: none"> Addis Ababa Action Plan (2004-2006) adopted <p>General goals:</p> <ul style="list-style-type: none"> Tackling infectious diseases such as AIDS, malaria, tuberculosis, Ebola and atypical pneumonia and strengthen cooperation in public health emergency response mechanisms and to vigorously pursue exchanges in the field of health and medicine Strengthen cooperation and exchange of experience and technology in the development of traditional medicine. <p>Means of Cooperation/Action points:</p>

New Commitment	
	<ul style="list-style-type: none"> • Training of 15,000 African professionals in China (some of whom will be in the medical field); • China-Africa Forum on Traditional Medicine and adoption of the Plan of Action for the Cooperation of Traditional Medicine between China and African Countries. • Building of 30 hospitals and 100 rural schools; • Donation of US\$ 37.5 million towards an anti-malaria campaign; • (Note: At the next FOCAC the Chinese government reported that it: <i>Built 28 new hospital, opened 30 malaria prevention and treatment centers, and sent 1,200 medical workers and 300 Chinese youth volunteers to work in Africa.</i>)
FOCAC 3 (2006)	<p>General goals:</p> <ul style="list-style-type: none"> • Strengthen exchanges and cooperation between the two sides in the prevention and treatment of infectious diseases such as AIDS, malaria, tuberculosis, Ebola, chikungunya and avian influenza, health quarantine and public health emergency response mechanisms. <p>Means of cooperation/action points:</p> <ul style="list-style-type: none"> • Assist African countries in building 30 hospitals and provide RMB300 millions of grant for providing anti-malaria drugs, building 30 demonstration centers for prevention and treatment of malaria in the next three years. • Continue to send new and additional medical teams in next three years on basis of China's capacity and need of African countries; • Continue to provide medicines and medical supplies needed by African countries and help establish and improve medical facilities and train medical workers; • China will dispatch 300 young volunteers to African countries to work in medical, health, sports, agriculture, education and other fields • (Note: At the next FOCAC the Chinese government reported that it: <i>Provided medical equipment, materials and medicines to 30 hospitals and 30 malaria prevention and treatment centers, has sent 13 malaria prevention teams to 27 African countries; Dispatched 42 medical teams. There are 1,067 Chinese medical personnel in Africa now.</i>)

New Commitment	
FOCAC 4 (2009)	<p>General Goals:</p> <ul style="list-style-type: none"> • Increase cooperation in the joint prevention and treatment of major infectious diseases such as AIDS, malaria, tuberculosis, avian influenza, and influenza A (H1N1). • Continue to strengthen cooperation between the two sides on public health emergency response mechanisms. <p>Means of cooperation/actions points</p> <ul style="list-style-type: none"> • US\$1.5 million contribution to support NEPAD's projects to train nurses and maternity assistants; • Invite 100 African post-doctors to conduct scientific researches in China; • Provide RMB500 million-yuan worth of medical equipment and malaria-fighting materials to 30 hospitals and 30 malaria prevention and treatment centers (in 3 yrs); • Train a total of 3,000 doctors, nurses and administrative personnel over the next three years;
FOCAC 5 (2012)	<p>General Goals/Commitments:</p> <ul style="list-style-type: none"> • Expand exchanges and cooperation between the two sides in the prevention and control of AIDS, malaria, tuberculosis and other major infectious diseases and port prevention and control, health personnel training, maternal and child health care, health system construction and public health policies. <p>Means of Cooperation/Action points</p> <ul style="list-style-type: none"> • The two sides will set up high level exchanges in the health field and hold a China-Africa health workshop at an appropriate time. • The two sides will expand their exchanges and cooperation in the prevention, treatment and port control of AIDS, malaria, tuberculosis, and other major communicable diseases, health system building and public health policies. • China will continue to provide support to the medical facilities it has built in Africa to ensure their sustainable development and upgrade the modernization level of hospitals and laboratories. • China will continue to train doctors, nurses, public health workers and administrative personnel for African countries • China will conduct the "Brightness Action" campaign in Africa to provide free treatment for cataract patients.

New Commitment	
	<ul style="list-style-type: none"> China will continue to send medical teams to Africa. In this respect, it will send 1,500 medical workers to Africa in the next three years.
FOCAC 6 (2015)	<p>General goals/commitments:</p> <ul style="list-style-type: none"> The Chinese side will assist Africa to develop public health systems and policies, help African countries to improve the public health, surveillance, epidemiological and prevention systems, strengthen prevention and treatment of malaria and other common infectious and communicable diseases in Africa, enhance the assistance in maternal and child health, reproductive health and other major public health fields in Africa. <p>Means of cooperation/action points:</p> <ul style="list-style-type: none"> Support cooperation between 20 hospitals of China and Africa from each side on demonstration projects, upgrade hospital departments, and will continue to train doctors, nurses, public health workers and administrative personnel for African countries. The Chinese side will support the building of an African Union Disease Control Centre and regional medical research centres, reinforce laboratory and diagnostic capacities and encourage the African Union Commission to play a leading role as the custodian of Africa's continental initiatives in the health sector. The Chinese side will continue to send medical teams to Africa, including short-term medical teams consisted of clinical experts to African countries, and conduct the "Brightness Action" surgeries and other short-term free medical services in Africa, and provide Africa with doses of anti-malaria compound artemisinin. The Chinese side will support the investment by Chinese medical and health care enterprises in Africa, encourage Chinese medical institutions and enterprises to jointly operate hospitals and produce medicines in Africa, improve health information systems, help Africa to improve the availability of health and diagnostic services and commodities, and improve Africa's capacity for independent and sustainable development in the field of medical care and health, support Africa's continental health initiatives. The Chinese side will improve health infrastructure in Africa through the construction, renovation and equipping of medical facilities. The Chinese side will continue to strengthen high-level exchanges in health, build an institutionalized high-level dialogue between China and Africa and

New Commitment	
	agree to incorporate the Ministerial Forum on China-Africa Health Cooperation as an official sub-forum under the framework of FOCAC
FOCAC 7 (2018)	<p>General Goals/Commitments</p> <ul style="list-style-type: none"> China will continue to scale up medical assistance to African countries and will carry out exchange and information cooperation on public health in order to improve the latter's health situation, strengthen its capacity for self-reliant development and build a more responsive public health system, and provide technical support for strengthening health-related capacities under the International Health Regulations (2005). China will continue to support Africa in improving its medical and health service and hospital management to provide better services to the African people. China will continue to assist Africa to strengthen health systems and policies towards achievement of universal health coverage including strengthening primary healthcare, addressing gaps in health infrastructure and the workforce, building capacity for the production of essential medicines and exploring technology transfer on the basis of friendly consultation. China will assist Africa to halt and reverse the double burden of communicable (HIV, TB, Malaria and Schistosomiasis) and non-communicable (cancer and cardiovascular diseases) diseases through enhanced bilateral and multilateral collaboration, sharing of best practices and support to identified priority program. China will continue to support exemplary cooperation between Chinese and African hospitals and the development of professional and specialized departments, and will continue to train medical staff, public health workers and administrative personnel for African countries. <p>Means of cooperation/action points</p> <ul style="list-style-type: none"> China will upgrade 50 medical and health aid programs for Africa, particularly flagship projects such as the headquarters of the African Center for Disease Control and Prevention and China-Africa Friendship Hospitals. Cooperation programs will be launched on the prevention and control of emerging and re-emerging communicable diseases, schistosomiasis, and HIV/AIDS. China will train more medical specialists for Africa and continue to send medical teams that better meet Africa's needs. More mobile medical services will be provided to patients for the treatment of cataract, heart disease and dental defects and medical and technical support will be provided to African countries.

New Commitment	
	<ul style="list-style-type: none"> • China will continue to carry out anti-malaria projects with African countries, in support of the Catalytic Framework to End AIDS, TB and Eliminate Malaria in Africa by 2030 and to reach the goal of global malaria control and elimination program with the international community. • The two sides will support traditional Chinese medicine and African herbal medicine cooperation, strengthen high-level exchanges, and encourage traditional Chinese medicine and African herbal medicine institutions to set up traditional Chinese medicine and African herbal medicine centers in Africa and carry out medical, education, research and industrial cooperation. • China and Africa will strengthen quarantine cooperation bilaterally or through the African Center for Disease Control and Prevention (Africa CDC), Regional Collaboration Centers (RCCs) or other channels, establish cooperation mechanisms, and communicate disease prevention and control information in a timely manner, and China will help train quarantine professionals for Africa.