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The Health Silk Road as a New Direction in China's Belt and Road strategy in Africa

Nader Habibi and Hans Yue Zhu*

(February 16, 2021)

Introduction

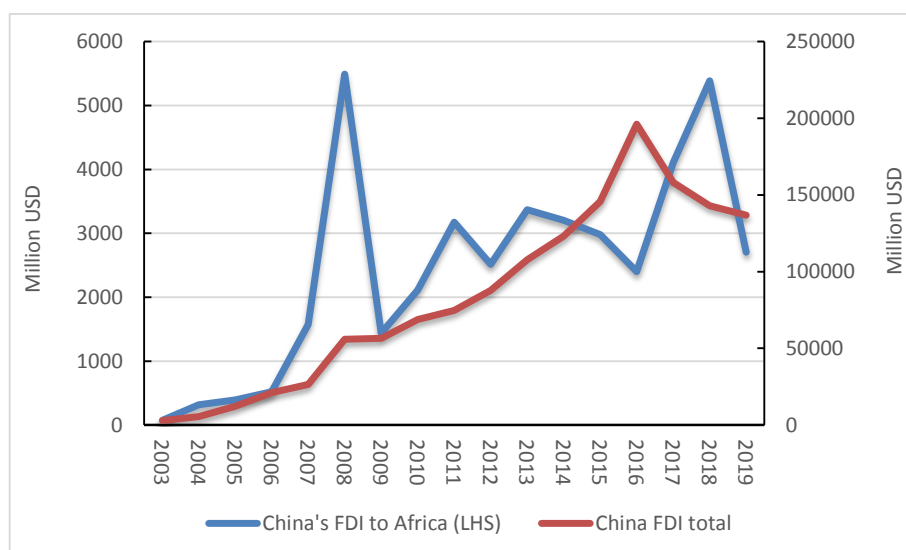
It has been eight years since China officially unveiled its continent-spanning Belt and Road Initiative (BRI). The initiative, aiming to develop a full-fledged multilateral cooperation mechanism that improves the welfare of China and participating countries alike, has suffered a spectrum of ups-and-downs including dissent and criticism, even dubbed as a “debt trap” by a few countries. In response to the incremental suspicion from both insiders and outsiders, China is endeavoring to revamp the original initiative in order to gain more support and trust. This redirection has not gone unnoticed. A senior research fellow at the Emirates Diplomatic Academy, Dr. Narayanappa Janardhan, deemed the Belt and Road Forum in April 2019 as a watershed, which ushered in a new phase of BRI: Belt and Road 2.0, to increase the projects' transparency and quality.

In light of the COVID-19 containment and post-pandemic recovery, China is further accelerating its transformation of BRI with new elements. Among these elements the Health Silk Road (HSR), which appears much more frequently in China's official documents and diplomatic language is regarded on top of China's new BRI agenda. Represented by the HSR, China is now presenting an outline of Belt and Road 3.0---an initiative that is no longer preoccupied with conventional infrastructure projects, but now pays more attention to high-tech telecommunication infrastructure, medical equipment & healthcare services and other medical IoT (Internet of things). Second, instead of being dominated by Chinese state-owned enterprises (SOEs), which was the case in the old BRI, the new BRI branch has seen a gradual increase in the number of private-owned enterprises (POEs) involved in these projects. Since POEs are usually regarded to be more efficient and innovative, Chinese government is promoting the participation of POEs in the HSR to improve the initiative's overall efficiency. Hence, these are two major prominent characteristics of the HSR that distinguish the new branch from the old BRI: the shift to service-oriented and high-tech sectors, and the increasing participation of private-owned enterprises.

The HSR was initially developed in 2015 to strengthen the healthcare cooperation between China and BRI members. The new initiative has become a more significant priority since 2020 because of the global impact of the COVID-19 pandemic, which has infected more than 100 million people and killed more than 2 million as of January 2021. This new BRI branch, with an emphasis in the healthcare sector and the medical applications of digital technologies, has helped countries such as Spain, Italy, Egypt and Tunisia, recover from the substantial repercussions of the pandemic at a much faster pace. Furthermore, the HSR has also evolved from a pure healthcare cooperation initiative to a broad economic and diplomatic strategy that China uses to strengthen its economic and investment relationship with BRI member countries.

In this paper, we focus on China's Health Silk Road projects in Africa. In recent years, China's economic relations with Africa has strengthened substantially. Based on the data from the National Statistical Bureau of China, in 2017, China's outbound foreign direct investment (FDI) was US\$158.3 billion dollars, down 19.3%, while China's outbound FDI declined 9.6% and 4.3% in 2018 and 2019 respectively. To the contrary, China's outbound FDI to Africa increased by 71.1% and 31.3% in 2017 and 2018 respectively. China's FDI to Africa even reached an unprecedented US\$5.5 billion dollars in 2008, accounted for around 10% of China's overall FDI, which, according to Johns Hopkins' China Africa Research Initiative, is due to the purchase of 20% of the shares in Standard Bank of South Africa by the Industrial and Commercial Bank of China (ICBC).¹

Figure 1: China's Global Outbound FDI versus FDI to Africa



Source: CEIC database

¹ Data: Chinese Investment In Africa, <http://www.sais-cari.org/chinese-investment-in-africa>

² Ibid.

³ "Towards a Health Silk Road," August 18, 2017, <https://www.who.int/director->

Despite the fluctuations in 2016 and 2019, Africa has become more and more important in China's global strategy blueprint. In fact, China's outbound FDI flows to Africa have shown an upward trend since 2003. From 2003 to 2018, China's outbound FDI to Africa has surged from US\$75 million to US\$5.4 billion, up 7100%. Furthermore, Chinese FDI outflows to Africa have exceeded those from the U.S. since 2013.² After 2016, China has increased its transfer of financial resources to Africa despite a slowdown in its overall foreign direct investment. South Africa, Zambia, and Ethiopia are among the top Chinese capital destinations.

Motivations for the Health Silk Road

The Health Silk Road is by no means a new initiative. Its origins can be dated back to December 2015, when China's National Health Commission, the cabinet-level department in charge of health issues, first announced its administrative guidance on improving the health cooperation under the Belt and Road Initiative. Months later, on June 23, 2016, during his speech at the Legislative Chamber of the Supreme Assembly of Uzbekistan, Chinese President Xi Jinping formally proposed to promote medical and health cooperation under the framework of Belt and Road Initiative. He also called for enhancing mutually beneficial cooperation in the fields of infectious disease notification, epidemic control, medical rescue, and traditional medicine to create a 'Healthy Silk Road'.

The concept of the Health Silk Road was made well-known on August 18, 2017, when the World Health Organization (WHO) Director-General, Dr. A.G. Tedros gave a speech at the Belt and Road Forum for Health Cooperation, headlined "Towards a Health Silk Road." Dr. Tedros mentioned that "a Health Silk Road [proposed by China], which strengthens and renews ancient links between cultures and people, with health at its core, is indeed visionary ... [which] contains the fundamentals to achieve universal health coverage: infrastructure, access to medicines, human resources, and a platform to share experience and promote best practices."³ Thus, China's HSR also experienced a transformation itself from a cabinet-level initiative to a national strategy, and finally to China's core foreign policy guidance that was made well-known by the WHO Director-General. In addition to the cooperation in the medical and healthcare arenas, the HSR also emphasized the significance of reciprocity, viability and sustainability,

² Ibid.

³ "Towards a Health Silk Road," August 18, 2017, <https://www.who.int/director-general/speeches/detail/towards-a-health-silk-road>

which are frequently emphasized by the Chinese government as the prominent characteristics of its foreign policies.

Furthermore, the introduction of HSR represents an upgrade in the development of China's original BRI strategy, by moving beyond high-cost infrastructural projects to increasing collaboration in the high-tech and service-centered sectors. For the low-income developing countries, the transition from high-cost and capital-intensive infrastructure projects to the HSR will also largely reduce the fiscal burden on the recipient countries as they wrestle with the pandemic.

Last but not least, by focusing on the HSR, China is also trying to increase its presence in the global healthcare development and governance. Amid increasing geopolitical competition, and facing escalating U.S. efforts to contain China's global role, the Chinese government is using the HSR initiative in Africa and elsewhere to expand its global influence. At the same time China is mindful not to overtly challenge the West-oriented global order. Deepening cooperation in the global healthcare sector is the ideal recipe in this direction and it now appears frequently in China's "vision of a community of shared futures for mankind."⁴ In this vein, Africa, which is often neglected by the West, is being regarded by China as a priority region for the Health Silk Road initiative projects. As such the success of HSR in Africa can become a litmus test of China's revamped BRI 3.0.

Conventional infrastructure projects and HSR

The traditional Belt and Road Initiative had been focusing on large scale infrastructure projects, such as power plants, railways, and highways. In general these are very expensive projects that are initially financed heavily by China. In several BRI countries the host government has been unable to service its debt, and it has had to either reschedule the payments or convert them into equity sales to Chinese investors. As a result, some BRI projects have been labeled as "debt traps" and some Western countries such as the United States have used them in diplomatic campaigns to discourage other countries from accepting BRI projects.

Despite these criticisms, China has completed several important infrastructure projects in Africa, which have had a positive impact on the host countries. In addition to contributing to economic growth, these conventional infrastructure projects have also paved the way for China's further collaboration with African countries in new fields. Transport infrastructure facilities, for example, have played a key role in the HSR in Africa especially during the

⁴ "Serving the Country and Contributing to the World," December 11, 2020, https://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1839532.shtml

pandemic, as medical equipment and healthcare products could be distributed to various regions efficiently and effectively.

According to a September 20th, 2020 report from the Chinese state-owned Guangming Daily newspaper, the Chinese-built and financed Addis-Djibouti standard gauge railway that connects Ethiopia's capital with Djibouti, established a crucial supply line in the fight against COVID-19. With the help of this railway, Ethiopia was able to transport essential goods and staples such as wheat and fertilizers from Djibouti at the outset of the outbreak. Since the pandemic, a total of 588 freight trains have transported 730,000 tons of cargo, effectively safeguarding the basic needs and livelihood of local people and enterprises.

Despite the international trade and travel halt, brought by the pandemic, the Addis-Djibouti railway gained a 51.38% increase (year-on-year) in revenue during the first half of 2020 and is about to reach the break-even point in 2021. With the basis laid down by the railway and other costly infrastructure projects, it will be possible for China to deepen its cooperation with African countries and expand the cooperation to new sectors such as the HSR and digital telecommunication.

Toward a Health Silk Road

The new Health Silk Road in Africa significantly differentiates itself from China's traditional government-oriented medical assistance programs since the early 1960s, when China commenced its medical support to Africa by sending 100 medical specialists to assist Algeria.⁵ This assistance was part of a broader program called "Eight Principles for Economic Aid and Technical Assistance to Other Countries" that was first announced by Premier Zhou Enlai in 1964.⁶

The traditional medical assistance was mainly characterized by state level engagement such as unilateral government aid, which has continued till today especially in the fight against COVID-19. However, the overreaching involvement of the state in these initiatives raised concerns about transparency and sustainability. The state aid programs limit the access of independent observers or critics to accurate data on the amount and use of funds, and thus can easily lead to graft and poor quality of projects. The new HSR has two prominent characteristics that distinguish it from these state aids. First, in addition to mechanically building hospitals and other hardware facilities, the priority of HSR has shifted to providing subsequent healthcare

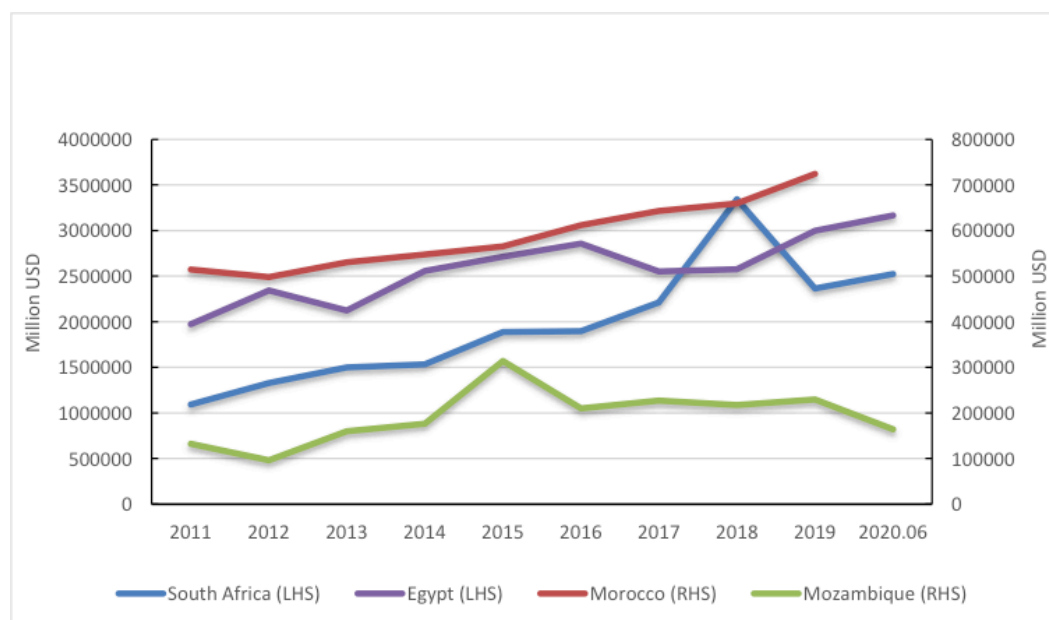
⁵ Lin, S., Gao, L., Reyes, M. *et al.* China's health assistance to Africa: opportunism or altruism?. *Global Health* 12, 83 (2016). <https://doi.org/10.1186/s12992-016-0217-1>

⁶ *Ibid.*

services and pharmaceutical products for African countries, which could mutually benefit the Chinese service providers and African people alike. Second, instead of being dominated by state-owned enterprises as in the traditional BRI projects, the new HSR has witnessed an increasing number of private-owned enterprises participating in these projects.

Without focusing solely on the construction of hardware facilities (i.e. hospitals), Chinese private investors are now putting more emphasis on the management and operation of these facilities. In September, 2017, Ethiopia saw a new Belt and Road healthcare infrastructure project taking root, a privately-funded Chinese hospital, which is also the first of its kind in the East African nations. The new Addis Ababa Silk Road General Hospital, a US\$30 million project, was funded by China's private-owned enterprise Seychelles Afei Holding Co., Ltd., and was built in two phases with 600 beds altogether, including 40 ICU beds.⁷ The hospital was inaugurated in November 2019, and equipped with the state of the art medical facilities.⁸ In addition, the hospital has professional employees and highly skilled physicians, and aims to provide high quality health care to not only the country's rich population who often travel abroad to receive health care, but also the population from neighboring countries, according to Kebede Worku, Ethiopia's former State Minister of Health.⁹

Figure 2: Select African Countries Imports of Pharmaceutical Products



Source: CEIC Database

⁷ “‘Silk Road’ hospital breaks ground in Ethiopian capital,” September 14, 2017, Xinhua News Agency, http://www.xinhuanet.com/english/2017-09/14/c_136609571.htm

⁸ “Addis Ababa Silk Road General Hospital inaugurated,” November 7, 2019, <https://www.beltandroad.news/2019/11/07/addis-ababa-silk-road-general-hospital-inaugurated/>

⁹ Ibid.

With a large population but relatively poor healthcare infrastructure, the region's domestic capacity for production of medical devices and pharmaceutical products is very limited and it is heavily reliant on imports. While the Chinese government is participating in construction of pharmaceutical facilities in Africa, Chinese-made pharmaceutical products, both the Traditional Chinese Medicine (TCM) and western medicine, are entering the local markets to meet the increasing demand for medicine.

Figure 2 shows the value of imported pharmaceutical products of South Africa, Egypt, Morocco, and Mozambique. Between 2011 to 2019, the value of imported pharmaceutical products in the four countries above, on average increased by 12.4%, 6%, 4.4%, and 13% per year respectively. In the first half of 2020, the value of imported pharmaceutical products in South Africa and Egypt even exceeded the overall imported value in 2019, largely due to the spread of COVID-19. As African countries display a sizable healthcare market, Chinese private-owned enterprises are seizing this opportunity and increasing trade and cooperation in the pharmaceutical sector with Africa.

China's relatively low-priced, reliable and efficient drug producers are gradually increasing their market share in African countries. For example, the Guangdong-based New South Group's dihydroartemisinin, artesunate and related products have become Africa's top choice for malaria treatment. In 2017, the company's artemisinin products made a profit of 86 million yuan only in Comoros. The Chongqing-based Sansheng pharmaceutical Plc further established a subsidiary in Ethiopia, which owned a new factory there and began to produce antibiotics and acesodyne in August 2018. The US\$85 million dollars worth project hired 270 local workers, and exported medicine to Kenya, Sudan, Tanzania, and other East African countries. In addition, the Shanghai-based Fosun Pharma announced a 1.5 billion yuan revenue from Africa in 2019, with operations in more than 35 African countries, most of which are located in Sub-Saharan Africa.¹⁰ Another Chinese POE Neusoft Medical Systems Company Ltd signed a contract with the Tanzanian government to build a medical equipment manufacturing factory, which is regarded as the largest in Africa and will be capable to design and manufacture a wide

¹⁰ "Chinese Pharmaceutical companies help Africa with malaria prevention", October 28, 2020, https://www.sohu.com/a/427936386_120022585 (in Chinese)

range of medical products that diagnose, monitor and treat diseases, such as Magnetic Resonance Imaging (MRI) and X-ray machines.¹¹

China also pays significant attention to the promotion of the Traditional Chinese Medicine (TCM) in the context of its broader “Going Out “ strategy.¹² The Chinese authorities drafted the “TCM Belt and Road Development Plan (2016-2020)” to promote the overseas use of TCM, which put African countries at the top of the agenda. For example, the China-Mauritius Chinese Medicine Center was put into operation by the end of 2019, becoming the first platform in Africa to showcase the promotion of TCM. The center was founded by the Yueyang Chinese and Western Medicine Hospital, which is affiliated with the Shanghai University of TCM and the Mauritius City Medical Group. By providing TCM assistance to African countries, China is trying to make TCM better known and more accepted in Africa, partly to facilitate the sales and outbound investment of Chinese pharmaceutical companies in this field. Thus far, the China-Africa TCM cooperation has made encouraging progress. In terms of trade volume, China’s TCM export to Africa increased from approximately \$2.1 billion USD in 2012 to approximately US\$2.5 billion in 2017, maintaining a 3.8 percent annual growth on average. Among the more than 7400 Chinese TCM export companies, most of them are private-owned enterprises.¹³

Health Silk Road after the Covid-19 pandemic

The COVID-19 pandemic undoubtedly accelerated the promotion of the HSR initiative in Africa as China not only ramped up its scale of medical assistance, but also deepened its medical cooperation to help African countries fight against the pandemic. In particular, China is promoting the access and acceptance of Chinese pharmaceutical products in Africa, while developing a comprehensive cooperative mechanism between the Chinese healthcare institutions and their African counterparts. Furthermore, the Chinese government is supporting this initiative at a time when the US and EU have been preoccupied with the pandemic at home and could not provide effective assistance to Africa.

The acceleration of HSR in Africa could also be revealed through Chinese leader’s repeated assurance to help the continent fight the pandemic. On May 18, 2020, Chinese

¹¹ Namkwahe, John, “Tanzania: Govt Enter Pact With Chinese Firm to Build Hospital Equipment Factory,” September 18, 2017, <https://allafrica.com/stories/201709190237.html>

¹² Wang, Hongying, “A Deeper Look at China’s ‘Going Out’ Policy,” March 8, 2016, <https://www.cigionline.org/publications/deeper-look-chinas-going-out-policy>

¹³ Ke, Xiatong; Chen, Yiming, “Analysis on China’s TCM Investment in Africa”, DOI:10.13665/j.cnki.hzjyjkj.2018.15.014 (in Chinese)

President Xi Jinping delivered a speech at the 73rd World Health Assembly video conference, titled "Together to Fight the Epidemic and Build a Community of Human Health," where he explicitly proposed that "we must provide greater support for Africa." He announced five initiatives that are either directly or indirectly related to African countries, including (1) establishing a cooperation mechanism for Chinese hospitals to pair up with 30 African hospitals; (2) accelerating the building of the Africa CDC headquarters; (3) providing US\$2 billion over two years to support the fight against the pandemic, especially for developing countries; (4) making COVID-19 vaccine a global public good and ensuring vaccine accessibility and affordability in developing countries; (5) working with other G20 members to implement the Debt Service Suspension Initiative for the poorest countries.¹⁴

China's post-pandemic HSR initiative in Africa has four important characteristics that deserve to be highlighted: first, the participation of Chinese private-owned enterprises in provision of healthcare assistance to Africa; second, combination of digital technology with healthcare assistance; third, a strong commitment by China to provide a comprehensive vaccination program for Africa in response to the covid-19 pandemic; fourth, China's support for the empowerment of a region-wide disease control and prevention system for Africa. We will discuss each of these characteristics in more detail below.

1) The expanding role of Chinese private-owned enterprise (POEs)

China has sent a large number of donations and medical assistance to African countries to support the fight against COVID-19. Based on the publicly released information, Chinese POEs walked ahead of the SOEs and pioneered in this round of medical assistance to African countries. For instance, the well-known Chinese entrepreneur, Jack Ma, announced in his microblog that the Jack Ma Foundation and Alibaba Foundation would donate 100 thousand masks, 1 thousand protective clothing, 1 thousand face shields, and 20 thousand testing kits to each of Africa's 54 countries, as well as work with medical institutions in African countries to provide online training on treatment of the new coronavirus infection to support Africa. But the actual amount of donation from Jack Ma's conglomerate is more than that. According to a March 22, 2020 report from Xinhua News, a total of 5.4 million masks, 54 thousand protective clothing, 5.4 thousand face shields, and 1.08 million testing kits from the Jack Ma Foundation

¹⁴ "Speech by President Xi Jinping at opening of 73rd World Health Assembly," May 18, 2020, http://www.xinhuanet.com/english/2020-05/18/c_139067018.htm

and Alibaba Foundation arrived at Bole International Airport in Addis Ababa, Ethiopia.¹⁵ These two foundations have made multiple rounds of additional pandemic assistance to Africa after this initial step.

On April 6, 2020, Jack Ma announced the dispatch of the second cargo of medical donations for Africa, which included 500 ventilators, 1 million COVID-19 extraction kits, 2 million pairs of protective clothing and shields, 2 thousand forehead thermometers and 500 thousand pairs of gloves.¹⁶ On April 27, 2020, the Ethiopian Prime Minister, Abiy Ahmed Ali expressed gratitude on social media for start of the delivery of the third batch of emergency medical supplies from Jack Ma, who announced on April 20 that the Jack Ma Foundation and the Alibaba Foundation, would cooperate with the African Union (AU) and provide another round of emergency supplies. This third cargo included 4.6 million surgical & nonsurgical masks, 500 thousand pairs of virus sampling tubes & extraction kits, 300 ventilators, 100 infrared thermometers, 2 thousand forehead thermometers, 200 thousand protective clothing & shields, and 500 thousands pairs of gloves.

In sum, Jack Ma and Alibaba Group donated three batches of medical equipment to Africa, which includes at least 10 million masks, 450 thousand protective clothing & face shields, 800 ventilators, 1 million pairs of gloves, 4 thousand forehead thermometers, and other important medical supplies.¹⁷ In addition, a number of Chinese private-owned enterprises joined Alibaba Group and provided immediate help to African countries, including a 2-million-yuan donation from Huajian Group, and protective equipment from Zhende Medical Co. Ltd. and Yichang Humanwell Pharmaceutical Co. Ltd., all of which have trade relations or subsidiaries in Africa.

In addition to Chinese POEs, the Chinese government also provided several cargos of healthcare products to Africa, although the magnitude of state assistance was smaller than the POEs. The Chinese Ministry of Foreign Affairs announced China's official assistance to Africa, but often released limited details on the scale of assistance. One report from the People.cn unveiled that on April 6, 2020, the first Chinese government cargo charter plane to assist African countries arrived at Accra Airport in Ghana. It was reported that the medical supplies brought by

¹⁵ Shoubao, Wang, Xinhua News Agency, Addis Ababa, March 22, 2020,

¹⁶ Matengo, Dinah, "China's Jack Ma donates second batch of medical supplies to Africa to combat COVID-19," April 6, 2020, <https://africa.cgtn.com/2020/04/06/chinese-billionaire-jack-ma-to-donate-second-batch-of-medical-covid-19-supplies-to-africa/>

¹⁷ "Africa receives third massive donation of medical supplies from Jack Ma Foundation", Xinhua News, April, 28, 2020, http://www.xinhuanet.com/english/2020-04/28/c_139015949.htm

this charter flight included 180 thousand surgical masks, 36 thousand N95 masks, 36 thousand medical protective clothing, 9 thousand forehead thermometers, 36 thousand goggles, 180,000 pairs of medical gloves & shoes, and an unreported number of ventilators. These supplies will be further delivered to other Central and West African countries.¹⁸

Another batch of medical supplies donated by the Chinese government was sent to the Republic of Congo on April 16, 2020, but the amount of assistance was not revealed.¹⁹ In addition, according to the Chinese Embassy in Ethiopia, on April 23, 2020, the handover and distribution ceremony of pandemic related medical supplies from the Chinese government to 12 African countries was held at Addis Ababa Bole International Airport in Ethiopia, which was the third batch of the Chinese state aid to Africa.²⁰ There is also some information about the number of medical experts that Chinese government dispatched to help African countries fight the pandemic. The spokesman of Chinese Foreign Ministry Wang Wenbin said at a press conference on November 6, 2020, that China had so far sent 46 teams of Chinese medical experts to 15 African countries, who have actively participated in Africa's fight against the epidemic.²¹

Based on the information discussed above, the donations from the Chinese government and its state-owned enterprises were far overshadowed by the Chinese POEs. There could be two explanations for the smaller quantity of state aid. First, Chinese government and its subsidiaries did not donate a significant amount of medical supplies to Africa, and thus the state media were reluctant to report the scale of the aid. Second, Chinese government donated a large amount of aid but intentionally concealed the actual number domestic political sensitivities about pandemic aid to other countries.²² Some have argued that since most Chinese citizens believe that medical resources should be used domestically the Chinese government concealed this information to avoid public discontent. Another explanation for this concealment is that China wants to avoid the label of “Mask Diplomacy”, which is frequently used by the western media to describe China’s current medical assistance as opportunistic.

¹⁸ People’s Daily, Johannesburg, April 9, 2020. (in Chinese)

¹⁹ “Republic of Congo receives aid from China to fight COVID-19,” April 17, 2020, http://en.cidca.gov.cn/2020-04/17/c_472798.htm

²⁰ “Handover ceremony of Chinese government medical aid to African countries”, April 24, 2020, <http://et.china-embassy.org/chn/zagx/t1773019.htm> (in Chinese)

²¹ “Press conference by Ministry of Foreign Affairs of China,” November, 6, 2020, <http://www.china-embassy.or.jp/chn/fyrth/t1829984.htm> (in Chinese)

²² Kurtzer, Jacob, “China’s Humanitarian Aid: Cooperation amidst Competition,” November 17, 2020, <https://www.csis.org/analysis/chinas-humanitarian-aid-cooperation-amidst-competition>

Following any of these explanations, the large gap between the state and private donations is an indication that China is promoting an active participation of its private sector firms in the HSR initiative in Africa. Since the private sector is regarded to be more efficient and faces less suspicion among BRI countries, by assigning a more active role to POEs, the Chinese government is making HSR more efficient and more acceptable in African countries. It is also consistent with China's long-term strategy of empowering the private sector.

2) Combination of digital technology with healthcare assistance

During the pandemic, China has provided African nations (and many other countries) with digital information technologies that are useful for strengthening their healthcare systems. These include the applications of big data, cloud computing, and advanced digital telecommunication technologies for containing the pandemic. The tele-medicine technology, for example, has been widely adopted during the pandemic by virtue of travel restrictions, social distancing, and physician shortages all over the world. China is thus promoting the tele-medicine in Africa to help the continent solve the problems above. According to a report from Zhejiang Normal University, China's tele-medicine assistance to Africa started in 2017, while in early 2019, the China Huaxi Hospital affiliated with Sichuan University established a remote consultation platform at Maputo Central Hospital in Mozambique.²³ Since then, Chinese physicians from different provinces have set up similar platforms in São Tomé and Príncipe, Ghana, and other countries.

Not surprisingly the Chinese POEs have also played a role in offering tele-medicine services to Africa. In March 2020, soon after the spread of COVID-19 all over the world, the Jack Ma Foundation and Alibaba Group established a large tele-medicine platform called Global MediXchange for Combating COVID-19 (GMCC) to provide medical doctors and healthcare providers around the world with Chinese medical expertise. The platform has close ties with Alibaba's healthcare arm Ali Health and its cloud computing and artificial intelligence technology provider Alibaba Cloud. This platform is expected to be an important component in Alibaba global expansion blueprint.

On April 15, 2020, Ali Health, in collaboration with the Sir Run Run Shaw Hospital (SRRSH), (an affiliation of the Zhejiang University School of Medicine), held a video conference

²³ Zhejiang Normal University, "Smart healthcare changes Africa," September 10, 2020, <https://www.cn-healthcare.com/article/20200910/content-542133.html> (in Chinese)

with more than 40 directors of Rwandan hospitals and Rwandan Minister of Health Daniel Ngamije to discuss the anti-pandemic measures on GMCC. In this video conference Chinese experts shared their experience and knowledge about containing COVID-19, in various fields such as hospital management, emergency treatment, COVID-19 testing, quarantine measures, and training of medical personnel.²⁴ By the end of April, the Jack Ma Foundation and Ali Health had held six training sessions exclusively for African medical doctors and experts on GMCC to help them better prepare for the pandemic treatment and containment.²⁵

The GMCC platform also translated China's Covid-19 Prevention and Control Manual into 21 languages, and this manual is now available in multiple languages for free download. With the help of Chinese remote consultation platforms, African healthcare institutions could have the chance to use China's medical resources and services locally to not only fight against the pandemic, but also improve the overall healthcare services to better serve the African people.

3) Covid-19 vaccination program for Africa

China has promised to share its Covid-19 vaccines with other countries and give African countries a priority in its global distribution. At the China-Africa summit on June 17, 2020, Chinese President Xi Jinping announced that "We pledge that once the development and deployment of COVID-19 vaccine is completed in China, African countries will be among the first to benefit."²⁶ China kept its promise and is making arrangements to make sure African countries could receive a fair number of vaccines in a timely manner.

According to a South China Morning Post report, by late December 2020, Egypt had received two batches of COVID-19 vaccines, a total of 100,000 doses, which were manufactured by Sinopharm Group.²⁷ Wu Peng, Director of the Africa Department of the Chinese Ministry of Foreign Affairs, reassured that "China will actively consider providing

²⁴ "Ma Yun launches online anti-pandemic campaign", April 17, 2020, <http://www.cankaoxiaoxi.com/china/20200417/2407812.shtml>

²⁵ Forbes China, "Ma Yun shares Chinese experience with Africa," April 17, 2020, <http://www.forbeschina.com/business/48625>

²⁶ "Xi Focus: Xi chairs China-Africa summit, calls for solidarity to defeat COVID-19," June 18, 2020, http://www.xinhuanet.com/english/2020-06/18/c_139148210.htm

²⁷ Nyabiage, Jevans "Coronavirus: China plans cold-chain bridge to ship and distribute vaccines to African nations," South China Morning Post, December, 26, 2020. <https://www.scmp.com/news/china/diplomacy/article/3115356/coronavirus-china-plans-cold-chain-bridge-ship-and-distribute>

vaccines to other African countries in need to help ensure an early victory over the outbreak.²⁸ In addition, according to a December 25 report from the Associated Press, Morocco announced it had preordered 65 million doses of COVID-19 vaccines from China's Sinopharm and Britain's AstraZeneca, while the government's target is to vaccinate 25 million of the country's 36 million people.²⁹

China's vaccine assistance is not constrained to providing vaccines only. China is also actively cooperating with African countries to jointly develop domestic vaccine production capacity. In June 2020, under the coordination of the Chinese Embassy in South Africa, representatives of Chinese vaccine manufacturer Sinovac Biotech and other research institutes held a video conference with their South African counterparts to discuss cooperation on COVID-19 vaccine.³⁰ Similarly, in late August 2020, Sinopharm signed a cooperation agreement with Morocco on the development and use of its inactivated COVID-19 vaccine. Based on the agreement, the vaccine was tested on 600 Moroccans as part of clinical trials.³¹ Finally, both Morocco and Egypt plan to produce vaccines locally so that they do not need to rely on the Covax program and can distribute vaccines in a much shorter period of time. In December 2020, Egypt approved the production of a vaccine with the help of the partially state-owned Sinovac Biotech.³²

Even Though the vaccines are mainly manufactured by Chinese state-owned or state-associated enterprises, Chinese POEs are taking an active role in their transportation and distribution. As transport of vaccines requires a demanding and advanced ultra-low temperature logistics network, a new route and advanced facilities are required to safely transport the vaccines from China to Africa. On November 29, 2020 according to SCMP, Alibaba's logistics arm Cainiao Global said it had established the country's first cross-border cold-chain route with

²⁸ https://twitter.com/wupeng_mfachina?lang=en

²⁹ Barakah, Tarik, "Morocco acquires 65 million vaccine doses from China, UK," Associated Press, December 26, 2020, <https://apnews.com/article/africa-coronavirus-pandemic-north-africa-morocco-china-5b8e7335cd6371a633f0a3571d806820>

³⁰ Wan, Yu, "China-South Africa video conference on COVID-19 vaccine cooperation," People.cn, Johannesburg, June 10, 2020, <http://world.people.com.cn/n1/2020/0610/c1002-31741612.html> (in Chinese)

³¹ Barakah, Tarik, "Morocco acquires 65 million vaccine doses from China, UK," Associated Press, December 26, 2020, <https://apnews.com/article/africa-coronavirus-pandemic-north-africa-morocco-china-5b8e7335cd6371a633f0a3571d806820>

³² Nyabiage, Jevans "Coronavirus: China plans cold-chain bridge to ship and distribute vaccines to African nations," South China Morning Post, December, 26, 2020. <https://www.scmp.com/news/china/diplomacy/article/3115356/coronavirus-china-plans-cold-chain-bridge-ship-and-distribute>

Ethiopian Airlines, ready for the shipment of Covid-19 vaccines and other healthcare products. The cargo would be sent from Shenzhen to Ethiopia weekly and then shipped to other countries via Addis Ababa.³³ This new medical air route is a supplement to Alibaba Group's another logistical project in Ethiopia, the Electronic World Trade Platform (EWTP), which includes establishing advanced logistics infrastructure to support the movement of goods, capital and information. Hence, Alibaba Group could make Addis Ababa a regional logistics hub for trade with Africa, and a key node in its global supply chain.

Through providing vaccines to Africa, China could not only strengthen its diplomatic ties with that continent, but also develop new areas of economic cooperation with African countries in the context of HSR. Since Africa is the most vulnerable continent to infectious diseases such as malaria, dengue, and ebola, a medical cooperation channel between China and Africa could improve Africa's ability to prevent infectious disease, and also open a large market for Chinese healthcare industry.

4) Empowerment of a region-wide disease control and prevention systems

In addition to supplying immediate medical assistance, China is helping Africa build a comprehensive regional healthcare and disease control system to efficiently contain the virus and deal with emergencies.

Partially with the help of the Chinese government, the African Union (AU) launched the Africa Medical Supplies Platform in June 2020 to enable all African governments to procure key medical supply in the fight against the COVID-19 pandemic. The platform was launched during a virtual meeting for the Extraordinary China-Africa Solidarity Summit against COVID-19, convened by the China-Africa Cooperation (FOCAC).³⁴ With access to this platform, AU member states were able to purchase a large number of Chinese-made medical equipment such as diagnostic kits, masks, gloves, and clinical management devices, and receive the medical supplies in a short period of time.

In addition, China promised to help Africa expand and empower its own Centres for Disease Control and Prevention (CDC) to help the region strengthen its epidemic prevention systems and healthcare infrastructure. According to a May 2019 Facebook post of Africa CDC,

³³ Ibid.

³⁴ This platform was co-chaired by Chinese President Xi Jinping and Senegalese President Macky Sall. Hassan Isilow, "Africa launches medical supplies platform for COVID-19," June 17, 2020, <https://www.aa.com.tr/en/africa/africa-launches-medical-supplies-platform-for-covid-19/1880710>

Beijing has committed 80 million dollars to the institution, which is tasked with timely responses to healthcare crises in member countries.³⁵ On December 14, 2020, the Chinese SOE, China Civil Engineering Construction Corporation, started the construction of the Africa CDC headquarters at the Ethiopian capital, Addis Ababa. The Xinhua news agency described this initiative as a “part of the ever-growing Sino-Africa cooperation in the public health sector.”³⁶ The Africa CDC is envisioned to serve as the core of the continent’s healthcare system and it will play an active role in the drafting and implementation of healthcare policies, international communication and cooperation, disease control and prevention. It is further expected to have close ties with the Chinese CDC.

Conclusion

As the coronavirus pandemic has intensified China’s efforts to promote the Health Silk Road, Africa has emerged as a high priority region for HSR cooperation. Under the framework of HSR, Chinese government has put forward a series of crucial initiatives in public health cooperation, such as continuing to provide medical assistance to African countries, sending medical experts, assisting Africa in purchasing urgent medical products from China, promoting the construction of China-Africa friendship hospitals, and pledging to give African countries priority in receiving coronavirus vaccines. These measures are deemed to play a crucial role in controlling the outbreak in African countries. Through these initiatives, the participating countries have gained access to the technology and expertise of China in the fight against the new coronavirus. Beyond dealing with the current pandemic, this cooperation will build an information technology infrastructure that will enable the continent to contain and even prevent possible future epidemics.

As Africa has emerged as the main focus of China’s HSR projects, many Chinese private enterprises have actively joined this initiative and have scaled up their presence in Africa. These enterprises are involved in a variety of healthcare activities such as providing medical assistance, building pharmaceutical factories and promoting Traditional Chinese Medicine. The Chinese private conglomerates, such as the Alibaba Group, have also provided important and timely covid-19 assistance to African countries by supplying virus prevention equipment and medicine, while further expanding their commercial activities in Africa.

³⁵ <https://www.facebook.com/africacdc/posts/china-africa-ties-chinas-efforts-to-medicine-in-africachinas-focus-on-sharing-co/2133842826712119/>

³⁶ “Construction of China-aided Africa CDC HQ commences in Ethiopia,” December 14, 2020, http://www.xinhuanet.com/english/2020-12/14/c_139589277.htm

With the increasing presence of the private sector, which aims to benefit the investors and recipients alike, China is exploring new programmes in the healthcare areas, and effectively improving the level of medical services and trade in African countries. In this regard, Health Silk Road has become a key pivot in the China-Africa bilateral relationship, and the transformation of China's Belt and Road Initiative in general. Not only is China moving from traditional BRI infrastructure projects to new high-tech and service sectors, but it is also giving a more prominent role to private enterprises. This could represent a new vision on the role of the private sector in China's global engagement strategy.

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