

China's Great Leap to Modernity: Reflections of a Dongfang Scholar

J. Alexander Nuetah, Ph.D

Since the foundation of the People's Republic of China (PRC) in 1949, the country has made great progress in modernizing its society and achieving economic prosperity. In about seven decades following its establishment, the nation has not only grown to become the second largest economy in the world but also succeeded in alleviating poverty for over 750 million of its people. The greatest progress of modern China is arguably said to have begun in 1978 when then Leader Deng Xiaoping launched his economic reform and opening-up program. Since the launch of the program, the country has experienced dramatic changes in economic progress not just in industrialization but also in improving the welfare of its people. Life expectancy that was just 35 years at the birth of the nation doubled to 70 year in about three decades in 1978, and by close of 2019, life expectancy in China is reported to be 77 years. The country has also made great gains in improving the income of its people with World Bank report indicating income per capita rising from just about \$156 in 1978 to about \$9,770 in 2018. Food insufficiency which led to the massive death of the Chinese race in the 1960s has also become history with China reaching national food self-sufficiency of 95 percent in 2016—thanks to the great progress in agricultural development.

In this brief review of China's great progress from the perspective of the journey of a Dongfang scholar, we focus on contrasting China's massive modernization and industrialization of its Eastern region (which makes one questions China's developing-country status) from the remaining challenges in the Western region, and the path taken by the country to transform its agriculture from peasant subsistence farming to mechanization and commercialization characterized by high-value addition integrating rural-urban development. In what follows, we begin with discussion of the China's east-west divide and proceed to discussion of the nation's path to agricultural development. We then conclude with key lessons learned and what other developing countries, including Liberia, could learn from the Chinese experience.

China's East-West Divide

The People's Republic of China has undoubtedly made tremendous progress since the founding of the nation about 70 ago. From being ranked the world's 10th largest economy in GDP terms in

1980, China surpassed all major European economies and Japan and became the 2nd largest economy in 2010 and remains so in 2019. While China's massive development progress shows the great tenacity of the Chinese state, the visits to eastern and western China revealed the diversity of path taken and efforts made by the Chinese Government and its people to achieve this great success. In eastern China which is symbolic of China's modern economic progress, industrialization seems to have made massive impact on the nation's great march to economic prosperity. For example, from the more industrial Pudong District of Shanghai to the world's largest automated Yangshan Deep Port terminal located in Zhejiang Province which is linked to Shanghai by the world's third longest Donghai (East Sea) Bridge, one can visibly see the great effort the nation has made in transforming its economy through the use of modern technology. Hangzhou and Shanghai cities convince any visitor at first sight that China has now become a developed nation with all of the characteristics befitting such description. For instance, Shanghai is home to world's second tallest building, the Shanghai Tower, and many foreign brands. The environmental-friendly wind-powered energy generating process that provides electric energy for the Port terminal and surrounding industries reminds visitors of one of China's steps towards eco-friendly and green growth and development while the Port extending into the East China Sea along with the Donghai bridge are portrayals of China's technological and architectural developments. Even villages in the peripherals of the city are no less what could be found in any developed country of the world. Arrival in Hangzhou city is also greeted by the towering presence of the e-commerce giant Alibaba. With Alibaba, the rest of China has seen an explosion of digital economy where cash is no longer a must for daily transactions. Just with your mobile phone and Alipay, which is a product of Alibaba, or your presence before one of the AI machines, you can get your daily necessities with ease. With my smart phone and wechat linked to my Bank of China account, I forgot my wallet many times because I didn't need it for any transactions. Thus, from the presence of foreign brands and financial institutions in Shanghai to the corridors of the great e-commerce technology giant Alibaba in Hangzhou, the east is a reflection of China's economic success, and puts her on par with other developed countries.

But the story becomes a bit different if one crosses from the East to the West. While Zhejiang Province and the Shanghai Municipality with respective 2018 per capita incomes (based on purchasing power parity, PPP) of \$28,102 and \$38,454 represent the epitome of China's developed

east, Sichuan and Guizhou provinces are the embodiments of the remaining challenges to Mainland China's accession to the league of developed nations¹. According to local officials encountered on the West-China trip, these provinces remain home to some of the remaining people in extreme poverty. But upon arrival in these provinces, one can be quick to realize why some could still be poor. Unlike other developing countries in Sub-Saharan Africa, for example, where poverty remains visible even with the presence of abundant arable land and other natural endowments, poverty in these provinces seem to be more related to harsh environmental conditions than failure of individuals to improve their living conditions. For instance, in Sichuan Province where the journey to the West started, one can be greeted with rocky hills and mountains that are visibly unsuitable for agricultural activities. The province is also prone to earthquake as a result of the topography, and has experienced some of the worst earthquakes in China's recent history. The 12 May 2008 Wenchuan earthquake that led to the loss of over 6,000 lives remains fresh on the minds of villagers even after a decade now. Listening to the experiences of survivors and relatives of victims of the earthquake tells of the resilience of the people of Wenchuan and the Chinese nation in general. In spite of it being prone to natural disaster, the Province is however home to the Panda, the most recognizable animal species associated with China. Going to the natural habitat of this great species brightens any first-time visitor's day. From the visits to the pandas, the agriculture exhibition, and to the home of the iconic Du Fu, one can realize the role of tourism in Sichuan's economic development². The hotpot of Sichuan is also a cuisine that sets the West apart from the East.

Crossing from Sichuan into Guizhou, one gets greeted by a people full of resilience and great determination to transform their world. Rated next to the province with the second largest number of the remaining poor people in China, the officials have set their target to alleviate extreme poverty in the province by end 2019—a year ahead of China's national goal of alleviating absolute poverty by end 2020. To achieve this great target, the leadership has developed various mechanisms to drive the process. These include targeted poverty alleviation programs; relocation of the poor from the most environmentally harsh communities; specific industry-based programs

¹ These provinces, in 2018, however had per capita incomes far above most Sub-Saharan Africa countries—Sichuan (\$13,926) and Guizhou (\$11,750) while average per capita income in the region during the same period was recorded as \$5,070 (IMF, 2019).

² Du Fu is one of China's renowned poets whose poetic works continue to shifting Chinese philosophy and thinking.

that support poverty alleviation; targeted medical assistant programs, special skills training programs for the poor, etc. These mechanisms are supported by strong leadership commitment, and supervision and inspection of progress towards the targeted goals. Guizhou also stands out as one province where tea cultivation constitutes a greater income source for rural dwellers. From the journey to the West, the tea trade portrayed the historical significance of agriculture in Chinese economic history. The provincial capital Guizhou, Guiyang, is also home to China's Big Data company which has not only compiled key information to ease development planning but also attracted major global corporations including Apple, Samsung, Microsoft, etc. Thus, while Chinese consider these two provinces poor, a visitor from the poorest region of the world, Sub-Saharan Africa, would consider them among the richest in the region³. With a glance into the East and West, we proceed in the next section to present a bird-eye perspective of China's great achievement in developing its agricultural economy.

China's Path to Agricultural Development

Since the launch of the reform and opening-up policy in China in 1978 originating from a farming village, the country has experienced dramatic changes in its agricultural development in spite of limited natural endowment, and spurred economic progress and industrialization that has resulted to massive improvement in the welfare of the Chinese people. For instance, even though China accounts for about 20 percent of global population, it accounts for only 5 percent of the world's water resources and 8 percent of its arable land⁴. This is unlike Sub-Saharan Africa which accounts for about 14 percent of global population but about 13 percent world's arable land and 9 percent of water resources⁵. For small country like Liberia, for example, 47 percent of its 9.8 million hectares land area is arable with 16 rivers and abundant rainfall. But in spite of the limited availability of agricultural resources, China has sustained high growth of its agricultural sector and emerged not only as one of the leading contenders in the global agricultural commodity market but also solved the major food deficiency which led to the "three-years great famine" between

³ The World Poverty Clock indicates that Africa, especially Sub-Saharan Africa is the poorest region today and it is expected to remain so even after 2030.

⁴ Jikun Huang (2019), *China's Agricultural Transformation and Policies: Experiences and Lessons for other Developing Countries*, China Center for Agricultural Policy (CCAP), School of Advanced Agricultural Sciences, Peking University, Beijing

⁵ Yongxin Xu, Paul Seward, Cheikh Gaye, Lixiang Lin, Daniel O. Olago (2019) Preface: Groundwater in Sub-Saharan Africa, *Hydrogeology Journal*, 27:815-822; World Population Statistics

1959 and 1961 that reportedly killed over 15 million Chinese people. For instance, China has managed to position itself as a major food exporting country and achieved food self-sufficiency—existing as a net exporter until 2006 and achieving 95 percent food self-sufficiency in 2016 while most of Sub-Saharan Africa still have backward agriculture and remain food deficit countries.

In an attempt to understand China's great agricultural development success, this essay presents some of the key actions taken by the nation to drive its massive agricultural growth, which has been accompanied by massive poverty alleviation and improvement in rural lives. This essay therefore looks at four major actions taken during in China's path to agricultural development and rural transformation, and discusses some of the major institutional reforms, policy prescriptions and investments made to stimulate agricultural growth.

1. Increasing Staple Food production

One of the challenges faced by China during the early days following the birth of the new state was insufficiency of major staple food for the population. As result, the country experienced major famine that led to many deaths. The persistent food problem and poor conditions of rural dwellers pushed some villagers into taking actions that turned out to become the impetus of reform in the country. For instance, 18 members of the Xiaogang village in Anhui Province signed a secret agreement that became known as the “Big Contract” in Chinese reform history. The “Big Contract” led to institutional reforms that clearly defined land user/ownership rights. China, learning from the “Big Contract” results, introduced the household responsibility system (HRS) which reallocated/transferred land user rights to individual households and moved away from the commune system of farming. This move encouraged individual households to increased work hours, and thus served as the initial impetus for increased domestic output of national staple crops. The Chinese leadership also took actions to increase irrigation facilities for the number of acreage/mu under cultivation. With increased irrigation came increased efficiency in the use of scare water resources, which then increased the output of cultivated crops. China also took appropriate actions to increase farmers' access production technology such as fertilizers and land preparation equipment. These actions led to an increase in total factor productivity of major staple food such as rice, wheat and maize, and helped not only to increase Chinese people's access to food but also greatly impact poverty alleviation.

2. Encouraging agriculture diversification and commercialization

As China achieved major growth in its grain outputs, its focus was turned to the diversification and commercialization of its agricultural sector. The government took measures that resulted to improvement in institutions, formulated appropriate policies to promote agricultural productivity growth and made appropriate investments to improve rural infrastructure and enhance agricultural development. China also liberalized its agricultural commodity market that had been dominated by the state, and developed policies to support development of agricultural commodity market. Some of the key actions taken include:

- Dismantling agricultural parastatals (state-owned trading companies or SOTCs)—SOTCs were the major players in the agricultural commodity market; they set prices for major agricultural commodities, which were much lower than market prices. These government-set prices became disincentives and demotivated farmers thereby resulting to lower production and sales of agricultural commodities. The dismantling of SOTCs and the introduction of free market system where demand was allowed to determine commodity prices motivated farmers to increase production and thus national agricultural outputs;
- Deregulating the trading rules—the dismantling of parastatals meant that farmers could sell to middlemen who could offer better prices in a relatively competitive market. The measures further motivated farmers to work harder to increase their outputs and improve income in rural communities;
- Facilitating structural changes in agriculture—China began encouraging farmers to shift from low-value (cereal) crops to high-value agricultural commodities with potential to generate higher income; for example, in Guizhou—one of the remaining poor provinces—some farmers were encouraged and facilitated to abandon the cultivation of maize and rice for high-value crops such as tobacco and tea to enable them generate higher income and alleviate themselves out of poverty;
- Helping improve farmers' access to production resources—China took appropriate actions that facilitated the lowering of agricultural input prices while output prices increased; for instance, state enterprises involved with the production of agriculture-related inputs required to supply farm inputs at affordable prices to enable farmers access and utilize those inputs;

- Promoting the development of wholesale marketing and processing industries—the Chinese government also encouraged the development of township and village enterprises (TVEs) to get involved with the processing of agricultural commodities, and supported the development of wholesales markets which consolidated farmers' produce to supply processing TVEs; with TVEs expanding demand for agricultural produce and adding value, agricultural output further grew along with rural income as rural agro-processing industries developed;
- Investing in the development of road and transport infrastructures—road is a significant infrastructure for agricultural development given the perishability of most agricultural commodities; to facilitate the movement of agricultural produce from farm to market in time and good conditions, China increased investment in road construction and linked most remote communities to wholesales centers through better roads; it further expanded investment in technological innovation—these have resulted to the existence of more 143,000 kilometers of express way (excluding rural road networks) and 30,000 kilometers of high-speed railway, which has further facilitated the easy movement of both commodities and people;
- Investing in communication infrastructures—agricultural extension services are important for enhancing growth and development of the agriculture sector; efficient extension services provide farmers new skills and technology to spur agricultural growth. Given the enormity of the land size and number of farmers in China, providing efficient extension services would be difficult in the absence of effective communication system; China thus has made massive investment in communication infrastructures such internet connectivity, television cables and other related-services to provide farmers the necessary information on improved production techniques, pests and disease control, market conditions and other opportunities that can be appropriately explored to improve productivity and increase farm income;
- Investing in appropriate technological research—China has invested in research to reduce pesticide use, increase crop yields and animal outputs, and develop production inputs with high level of efficiency; the success of research in these area has led not just increased agricultural output to reduced cost of production input and higher net farm income.

3. Integrating Farming with part-time off-farm activities—as China transitioned from subsistence agriculture to commercialization, it has built on its successes and formulated policies that support labor-market development and the reallocation of land for agricultural

expansion, and further increased support to the development of TVEs that create off-farm employment opportunities. As more rural dwellers have become absorbed into off-farm activities due to rapid industrialization of the country and the development of TVEs in the countryside, land market have become further liberalized to facilitate the transfer of land to households who intend to expand the scale of agricultural production. As a result of the new policy direction, the number of rural households renting out their farmland to take up off-farm employment has been increasing since 2003. The process of contracting out farmland has been especially facilitated by the Government's creation of the Land Transfer Service Center (LTSC). LTSC helps collect and provide information on households who are willing to rent out their farmland; provide would-be clients information on the location, size, major characteristics and prices of each plot of land; help to prepare formal land contract to be signed by the contracting-out and contracting-in parties, and deals with contract dispute mediation and resolution. As a result of the farmland contracting system, the share of merchandized cropping area has been on the rise since 1998 with ploughed land area increasing to over 70 percent in 2015⁶. This has further increased China's agricultural output and strengthened its food self-sufficiency.

- 4. Supporting agricultural mechanization and full-time off-farm job creation**—to further expand its agricultural development effort, China extended its land transfer platform and adopted more production-enhancing policies to encourage mechanization and the development of rural industries. For instance, the government has increased the tenure of land user rights to 30 years—thus creating security of tenure and encouraging long-term investment in agriculture. China further adopted agricultural growth-enhancing policies such as improving rural finance to expand credit facilities for farmers, eliminating agricultural taxes, and introducing agricultural subsidies to reduce cost of agricultural inputs and encourage farmers access more high-quality inputs such a machinery and improved seed varieties. The country also instituted special grain subsidies and provided general support to farmers as part of efforts to reduce the rural-urban income gap. These policy measures resulted to further increases in the output of major grain crops, including rice, maize and wheat, which has not only further contributed to increased national food self-sufficiency but also increased farm income.

⁶ Jikun Huang (2019)

The foregoing has briefly provided a glance into some initiatives taken by China on its journey to the successful transformation of its rural communities and economic wellbeing of its people. The section that follows provides some lessons developing nations, especially countries in Sub-Saharan Africa, could learn from the Chinese experience, and adopt measures suitable to the economic realities of each country to transform the lives of their people.

Some Lessons from China's Development Experience

China has undoubtedly surprised the world by its tremendous economic progress, especially over the last four decades. From a peasant economy at birth in 1949, its path to economic prosperity has been marked by diverse initiatives, some with severe consequences. For instance, Chairman Mao's attempt at early industrialization of China, known as the "Great Leap Forward", which led to the premature transfer of labor from agriculture to industries is argued to have caused the "three-year-great famine" which resulted to the death of millions of Chinese from starvation, and humiliated the PRC. Also, the "Cultural Revolution" which started during the era of Chairman Mao is criticized by some scholars as being responsible for the "backwardness" of the State during the first three decades following the founding of the PRC. But through all these reported periods of failures, China learned great lessons. In the words of Chinese reform theoretician Chen Yun, "We should cross the river by touching the stones beneath the water". China searched its development path. It did not just copy systems or ideas from others; it experimented new ideas and chose the ones that worked for her. As the father of China's economic reform, legendary leader Deng Xiaoping put it, "development is a hard and fast principle" and so "it does not matter whether the color of the cat is black or white, as long as it catches mice, it is a good cat". So, China tried many development approaches and incorporated those aspects that suited its needs into its development model irrespective of which system it came from. For the purpose of this reflection, however, we have learned four experiences from the Chinese development path which are important for developing countries and herein share them in the following paragraphs:

1. **Agriculture has been historically significant in China's economic development, and remained important in its fight to alleviate absolute poverty.** For example, during China's warring era, tea export became the main source of foreign exchange earnings to finance the war against their aggressors. Agriculture also became the driver of the reform and opening up

policy beginning with the “Big Contract” signed by 18 farmers of Xiaogang Village. From the onset of the reform, China conceived that appropriate institutions, right policy choices and infrastructural investments were critical for speeding-up agricultural development, transforming rural communities, and combating poverty. While some of the policy measures taken by China may not be directly replicable by most SSA countries, a combination of some elements could be useful for the region’s agriculture sector development.

Unlike China where farmers’ access to land resources may be limited, farmers in some SSA countries have access to abundant farmland while in other countries land property rights remain vague. For those countries in which access to farmland remains a challenge, governments need to take appropriate measures that clearly define ownership rights to farmland. For those with access to abundant farmland, including Liberia, but have been unable to efficiently cultivate them due to limited access to important inputs such as improved seed varieties, small farm equipment, agro-chemicals, and limited access to finance, governments should take appropriate actions to alleviate these constraints. Also, limited infrastructure—farm-to-market roads and irrigation infrastructure—remains a major barrier to agricultural development. For instance, some subsistence farmers who strive to increase their production are unable to access domestic market due to poor road condition—making it difficult for these farmers to generate sufficient income to improve their lives. Appropriate government investments feeder road development to increase farmers’ access to agricultural commodity markets would therefore be useful for improving rural communities largely dominated by farmers. Moreover, even though most SSA countries have access to abundant water resources, agriculture remains predominantly rainfed. For instance, in Liberia which has 16 major fresh water rivers and continuous rainfall, farmers depend on rainfall for production and thus produce only once a year when rain water is available for cropping. Growth in agricultural output therefore remains low due partly to seasonal constraints that limit the number of cropping per annum and low crop yields due to inappropriate access to water. Governments should therefore make necessary investments in irrigation development to enable farmers involve in all-season production of major agricultural commodities as well as encourage technological innovations that increase crop yields. The access of smallholder farmers, who constitute the poorest and largest farming communities, to credit is also a major constraint that needs remedy not just for agricultural

development but also poverty alleviation and the transformation of rural communities. Also, one great source of unleashing the great potential of African agriculture would be supporting the development of agricultural cooperatives to make it easier for extension workers effectively disseminate agriculture technology and other extension services. Finally, SSA countries should strive for a deeper understanding of China's agricultural development path and find appropriate areas that could be modified and adopted, with collaboration with China, to enhance development of national agricultural economies.

- 2. Patriotism is one of the key forces spurring China's great economic miracle.** Throughout China's development path, both the ordinary Chinese and their leadership have shown absolute commitment to the development of their country for the good of not just themselves but also the future generations. This drive has made many to take risks for the welfare and image of the state and society, even if it means their personal lives. The leadership is especially praised for its selflessness, and has strived to subordinate individual interests to national ones. Some touching examples were encountered from a group of ordinary citizens from Wenchuan village in rural Sichuan province where earthquake stroke on 12 May 2008 and killed thousands of residents and first responders. According to surviving eye witnesses and relatives of victims, some officials of government and teachers sacrificed their lives and the lives of their family members to save others "for the sake of the state". For instance, a primary school teacher named Mr. Feng who would have saved his life and that of his daughter who was in the nursery section of the school he in which he taught chose instead to save the lives of 41 of his 42 students and died doing so. A government official directing rescue activities refused to turn on his mobile phone for more than a month following the earthquake because his screensaver carried the photograph of his wife and daughter who were killed during quake while he kept busy saving the lives of his fellow compatriots. The resilient villagers showed that country is more important than self. In fact, one villager stated "you can lose your house, you can lose your money, but once you have your country and your life, you can replace everything". The statement reflects the spirit of patriotism and the great faith Chinese have in the Country, and the commitments to building a nation that serves all Chinese people. The patriotic commitment of the leadership to improving the livelihoods of the ordinary citizens also motivates these

people to commit to their leaders and contribute to the government's initiatives drive development of the Chinese society.

3. **A staple political institution with committed leadership is essential for driving national development agenda.** All through the visits, the leadership of the Communist Party of China (CPC) stood up tall in their commitment to changing the lives of their citizens. From the response of the officials during the earthquake in Wenchuan to supervision of poverty alleviation programs in Sichuan and Guizhou provinces, the leadership proved that no success can be achieved without meticulous planning and dedication. If it means putting in the extra hours at the discomfort of themselves and family, Chinese leaders are prepared to go that extra mile. While political institutions in most SSA countries may not have the luxury of Chinese Communist Party, a committed leadership would give urgency to whatever time it has and make considerable impact on the lives of its people. But instead, longevity of political parties in state governance in most parts of the region has been associated with state plunders and individual wealth acquisitions. Liberia is a typical example where more than 100 years of single-party leadership left the country underdeveloped and its people impoverished.

4. **Complacency has no place in China's drive for greatness, and accountability is has become the current leadership's key drive to the realization of the "Chinese dream".** Even with the tremendous efforts made by the PRC in the last seventy years following its establishment, the Chinese leadership doesn't feel it is there yet. This can be reflected by a bill board seen in a village in Guizhou that reads "The Struggle Continues" ("yong yuan hai zhai lu shang"). Even though this bill board was reportedly put up to remind village leaders that the fight against corruption continues, it signifies the CPC's determination to continue driving China to higher heights. Thus, it can be literally translated as Chinese leaders' insatiable desire to move their country forward, and that struggle continues with the development of each five-year plan. If our countries have to move forward and the lives of our people improve, we need leaderships that selfless and capable of providing appropriate direction for governance. The fight against misuse of public resources must claim the attention of our leaders and remain so until success is achieved. Otherwise, our nations and the fates our people remain in limbo.