Food Security Legislations in Ethiopia and China: A comparative law study

Yunhan Duan^{1, †}, Ye Liu^{2, *, †}

¹Southwest Minzu University, Chengdu, Sichuan, China ²Bryn Mawr College, Bryn Mawr, Pennsylvania, United States *Corresponding author: yliu1@brynmawr.edu †Those authors contributed equally.

Keywords: COVID-19, Food Security, Emergency Legislation, Legal Risks.

Abstract: Over the past decades, food insecurity has always been a global challenge, particularly in developing countries such as Ethiopia. The severity of food security issues has been exacerbated by the outbreak of the COVID-19 pandemic, the rapid growth of population, and a lack of adequate food availability in the country of Ethiopia. China, on the contrary, a developing country, has not seen a significant increase in the severity of its food security crisis due to the pandemic. In response to the striking contrast between these two countries, this paper discusses the possible factors which may contribute to this noticeable difference using the method of comparative research by comparing and contrasting the food security legislation in Ethiopia and China. To begin, the disrupted supply chain caused by the COVID-19 pandemic has aggravated the food insecurity crisis in many countries and regions, especially those with high food import dependency, such as Ethiopia. Second, Ethiopia has not demonstrated a clear strategic position for food security, whereas China has already made food security a central component of its national strategy. Third, while both countries have experienced severe pandemics in recent decades, China has developed a more comprehensive and wellfunctioning emergency legal system than Ethiopia. Lastly, Ethiopia is still experimenting with a new era of land reform, whereas China has already achieved great success in land and food issues in recent years. Overall, findings from this review have important implications for food security policies and legislations in the two countries and others to reduce and control the effect of the COVID-19 pandemic and prepare for future risks.

1. Introduction

The global COVID-19 is one of the most serious challenges faced by humanity in recent decades and is affecting all countries and communities [1]. Besides the severe health care crisis, the pandemic has disrupted global food systems at an unprecedented scale. The Committee on World Food Security has even suggested that the world now faces a "twin pandemic" of COVID-19 and food and nutrition insecurity [2]. According to the World Food Programme's most recent projections, the number of people facing severe food insecurity is expected to increase to 265 million in 2020, up 130 million from 135 million in 2019 [3]. The spread of the pandemic will continue to worsen and intensify global food insecurity, jeopardizing vulnerable households in almost every country through 2021, into 2022, and possibly beyond, as projected [4].

As an increasing number of people are facing growing levels of acute food insecurity, decades of development progress are being reversed. Concerns that developing countries with limited healthcare and poor food security systems may be disproportionately affected have been taken more seriously in recent days. Driven by persistent conflict, COVID-19 pandemic-related economic and agricultural shocks, and weather extremes, ten countries, including Ethiopia, constituted the worst food crises and accounted for 65 percent of the total population in food crises in 2019 [3]. In 2020, three countries, including Ethiopia, were once again among the ten worst global food crises in terms of numbers of people in Crisis, as they had been in 2019. About 75 percent of the region's 33 million people in the

Crisis or worse phase were in these three countries, where 5.3 million people were in the Emergency or worse phase [5].

For decades, Ethiopia, the second populous country in Africa, has been one of the most foodinsecure and famine-affected countries. A large portion of the country's population has been greatly affected by chronic and transient food insecurity. Over 41 percent of the Ethiopian population lives below the poverty line and above 31 million people are undernourished [6]. The situation of chronically food insecure food is becoming more and more acute in recent years, especially under the extreme weather along with the climate change combined with COVID-19, which have significantly impacted agricultural development progress. Between October and December 2020, 8.6 million people in Meher, Belg, pastoral, and agro pastoral-dependent areas across seven regions experienced a crisis or worse, despite ongoing humanitarian food assistance. Particularly concerning were the 1.4 million people who found themselves in an emergency situation of food crisis [5].

At the same time, China, a large developing country that needs to feed its 1.4 billion people, around one-fifth of the world's population, has not shaken the foundation of its food security system under the impact of the COVID-19 pandemic. The food insecurity problems in China were not as significant as the other developing and developed countries during the COVID-19 pandemic [7]. In the notable work on the food policy response to the ongoing COVID-19 pandemic, the Chinese case is particularly relevant not only because it is the first country to have its food security systems tested by the pandemic, but also because planning for and responding to the challenge of food insecurity was an early and fundamental part of Chinese response, providing clear lessons for other communities of the world still in the grip of the pandemic [8]. As a retrospective analysis of the pre-pandemic and pandemic period in Ethiopia and China, this paper identified the impacts of COVID-19 and extreme weather events during the pandemic period on both Ethiopia and China's food production and corresponding policy response. This paper aimed to provide opportunities for Ethiopia to learn something from China's success stories to better practice and increase its agricultural production and establish a more sustainable food security system.

2. Causes of Food Insecurity

2.1. Disruptive Supply Chain

Compared to previous pandemics, today's much greater interconnectedness of trade and market magnifies COVID-19's potential to exacerbate poverty and disrupt the food system. As the COVID-19 pandemic progresses, agricultural and food markets are experiencing disruptions as a result of labor shortages caused by restrictions on people's movements and interruption of transport, processing, retailing, and input distribution [9].

In particular, the current COVID-19 crisis has shifted some government's food trade policies toward restricting exports and facilitating imports. Export restricted policies increased global prices of staple foods such as wheat, maize, and rice, resulting in a decrease in the quantity and quality of food consumed [10]. In general, prices increased due to trade restrictions, risks, and uncertainties in international markets, resulting in higher prices in import-dependent countries. Due to export restrictions, panic buying has been observed in importing countries, and prices have increased as a result of increased demand for products [11]. In addition, when the export restrictive policies were applied, consumers, producers, and local sellers were seriously affected to different degrees. Consumers were having difficulty finding or affording certain staple food products, producers and local sellers were unable to find sufficient buyers, resulting in excess food supply and waste, as well as economic losses.

Clearly, the pandemic is affecting all four dimensions of food security (availability, accessibility, utilization, and stability), which directly and significantly threatens people's food and nutrition security, especially the poor. Regarding Ethiopia and China, Ethiopia, in specific, which has underdeveloped infrastructures and relies heavily on traditional distribution networks, has seen

significant disruptions in the supply of vegetables due to disruptions in transportation and the supply of primary farm inputs. Additionally, the shift in consumer preferences disrupts Ethiopia's dairy value chains. The changes have disproportionately impacted the raw milk value chain's distributors, collectors, and rural farmers. Farmers are unable to sell their milk, and the number of wasted milk increases, as well as the economic losses [12]. Similarly, the poultry industry in China has also suffered significant adverse effects during the pandemic. According to the National Bureau of Statistics data, pork production dropped 29.1%, and total meat production decreased by 19.5% in the first quarter of 2020 [7].

2.2. Unclear Strategic Positions of Food Security

Food security is a multidimensional concept that has continuously evolved over time [13]. It became a major concern in the second half of the 1980s and remained so throughout the 1990s. Specifically, by the mid-1990s, food security had been recognized as a critical issue at the individual, household, national and global scale. Food security was defined during this time period as when all individuals have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy lifestyle at all times [14]. Based on this definition, food security was further defined by the Food and Agriculture Organization (FAO) in 2002 as a state in which all people have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy lifestyle at all times [13]. Not only did the latest definition incorporate food accessibility, food quality, and economic status, but it also placed a high value on the social aspect of food access, emphasizing that food should be accessed in socially acceptable manners. Furthermore, this latest definition established four major food security dimensions: food availability, food accessibility, food utilization, and stability [15]. Having these four clear and specific dimensions can provide policymakers with a more comprehensive picture, and better help them deploy food security-related policies.

As an essential part of a nation's security system, food security has long been considered as one of the non-traditional securities. The Human Development Report, published in 1994, made a special mention of seven primary non-traditional security issues human beings face, including economic security, food security, health security, personal security, community security, and political security [16]. Accordingly, food security belongs to one of the non-traditional securities; however, since food as a commodity has economic and political characteristics, food security can be a more prominent issue than others. For China, most attention to its security policy is given to its military development and foreign relations. However, internal security is actually a primary direction for China's security thinkers. As of February 2017, the Chinese government published "Central Document No.1" aimed at increasing grain production and ensuring food security, and the same month, China's Ministry of Agriculture also announced the start of its annual fishing moratorium in May [17]. Both policies are interconnected by a shared understanding of national security that incorporates traditional security concerns as well as domestic stability and food security. On the other hand, Ethiopia has not established a clear understanding of the relationship between national security and food security. Even though the Ethiopian government has formulated laws for ensuring food security and food safety over the past decades, they failed to effectively address the fundamental principle behind the issue - the interrelation between food security and national security.

2.3. Lack of Systematically Legal Framework

After a long period of food insecurity that Ethiopian populations have experienced, they still face the food risks brought about by various comprehensive factors and unresolved historical factors in long-term development. In terms of natural disasters, Ethiopia is confronted with extreme weather events, pests, livestock diseases and other agricultural problems and climate change. Such as recurrent drought which has increased in frequency every 3 to 5 years. In terms of economic factors, the recurrent fluctuations of food prices in Ethiopia along with the risk of international food trade also caused a significant burden on the local population. Research shows that food prices have a major impact on consumption status. The rise in food prices has greatly reduced their real incomes, which has negatively affected their food and nutritional status [6]. In addition, the outbreak of COVID-19, as a sudden risk, poses challenges to the emergency laws and emergency measures of countries in the world.

2.3.1. Shortage of Emergency Legislation

When a new infectious disease emerges worldwide, it is often sudden and unexplained in its initial form, requiring an efficient and accurate response in national emergency response laws. In particular, food security is generally absent from national legislation. Guaranteeing the right to food is particularly crucial in times of sudden crisis. In Ethiopia, several strategic plans have been put forward in the context of successive food crises. For example, the Ethiopian government, in collaboration with partner organizations, launched the Productive Safety Net Programme in 2005 [18]. In 2008, Ethiopia launched a national nutrition strategy with the aim of improving food and nutrition security [19]. However, it is clear that these strategic plans have a low legal status, a lack of legal regulation, and a lack of a strong legal system to deal with unexpected risks.

2.3.2. Immature Land Reform Regulations

Most countries in Africa, including Ethiopia, are still in the exploratory phase of a new era of land reform. Market-based reforms have brought about a degree of land resource development in this region, but the formation of property rights remains a central part of development policy, making it difficult for capital and credit to be effective in increasing productivity, and the social rights and livelihoods of farmers and the poor who depend on land will still be endangered. The original land tenure in Ethiopia has resulted in a reduction in the activity and security of land-related investment, a related policy that does not adequately stimulate the potential for growth in food production resulting from the land activity, and failed to fully guarantee the land insecurity of local people [20]. However, in contrast to Ethiopia's long-standing land issues, land reform in China has been effective in recent years, with the exploration of land policy and the construction of a legal system that enables China to work in harmony with each other on land and food issues.

3. Implications

3.1. Make Food Security an Important Part of National Strategy

Living in a risk society preoccupied with various uncertainties and valuable lessons learned from the COVID-19 pandemic, governments that have not had a thorough knowledge of food and national security should attempt to develop their systematic understanding of these two objectives. Ethiopia, in particular, should first aim to elevate the food security issue as one of the top priorities among other national security issues, as long as the food is the fundamental right of every individual and ensuring food security is essential for protecting national security as well. By having a comprehensive knowledge of food and national security, the Ethiopian government shall attempt to formulate the concept of food security in line with its national conditions. The extension of this concept must be determined from the reality of the current national conditions as well. It should neither exceed the reality of the current conditions nor lag behind the actual capacity of the current stage.

Even though China has already had sufficient awareness of food security and national security, the Chinese government could still actively engage in using emerging risk insights as an opportunity for exploration of new recognitions for future risks and uncertainties based on their current national conditions. While each state and nation shall develop their national security system, the Food and Agriculture Organization shall also develop and promulgate assessment guidelines on national security to guide states in reinforcing their national security systems and establishing their national security legal systems on this basis.

3.2. Improve Domestic Corresponding Legal System

According to the food law, the food risk presents contagious, international and diverse. Firstly, food markets are no longer closed in the era of globalization, internationalization makes food risks spread

faster and more widely in market flows. In addition, some peripheral shocks such as economic crises and natural disasters, led to a very high probability of food risks breaking out and spreading more widely. Secondly, food security is exposed to more diversified risks due to the instability of food quality and quantity and the volatility of food prices [21].

In the concept of food security, China has a relatively perfect legal system. At the level of national security, State Security Law provides overall protection for national security, including national food security. At the specific object level, China has issued Food Security Law and Law on Quantity and Safety of Agricultural Products to handle the food problems. At the level of specific behavior, Safe Production Law, for example, guarantees safe production practices [21].

3.2.1. Construction of Emergency Legal System

First of all, countries should improve the construction of their emergency legal systems in order to respond more quickly and effectively to all kinds of emergencies in the future. The COVID-19, for example, is the most widespread and most difficult to control and prevent in the 21st Century after SARS. The urgency of this kind of issue requires countries to have a strong emergency response capability, which is the key to solving the crisis, mainly in terms of emergency awareness, emergency measures and deployment of emergency resources. Take China's Emergency Response Law as an example, in terms of emergency awareness, food security should be included in the scope of the nation's security system, and also implement the principle of prevention first and the combination of prevention and emergency response while enhancing the people's awareness of public security and risk prevention. In terms of emergency response measures, establish a risk assessment system for major emergencies and set up an effective social mobilization mechanism to promote the formation of social consensus. In terms of the deployment of emergency resources, the government should not only take the major responsibility but also a framework for the integration and use of resources should be established in which multiple subjects work together to provide guidelines for the rational allocation of resources and command collective action, so as to avoid unfair distribution of resources.

Secondly, countries should improve the lack of legal norms regarding food security and establish a strong legal system to reduce the negative effects of facing food crises in the future. Ethiopia, for example, single social policy and food price management are difficult to be managed as a whole. For land reform in the region, the determination of land ownership and land use needs to be supported by additional social policies, such as risk management tools, investment and production credit. Additionally, Ethiopia's rural infrastructure and the legacy of past policies need to be addressed, which also requires the country to develop a sound and comprehensive coverage in the structuring of its legal systems, such as China's Emergency Food Reserve Policy, Seed Law and the Promotion of Revitalization of Rural Areas, which focus on the proper security attributes of regarding food issues and integrate all aspects to ensure food security from the legal concept. Food security should not only become a strategic issue to which governments must pay attention, but also upgrade the awareness of security, establish a legal system for the management of food reserves and enhance the authority of regulations and systems, so that the entire system of food security can be effectively regulated.

3.2.2. Specialized Agencies for Managing Food Security

As to put a legal system into practice, legal subjects should carry out their implementation. Traditionally, legal security subjects include the government and the market. However, only by giving full play to the initiative of all types of social subjects and learning from each other can dynamic cooperation be achieved. In China, a specialized agency for managing food security, the China National Grain Reserve Management Corporation (CNGRMC), has been set up, and special grain reserves are managed through local branches of CNGRMC, forming a grain reserve system in which the State Grain Reserve Administration and CNGRMC jointly reserve. To solve problems such as stagnant grain sales, the state implements a minimum purchase price policy, which is in the nature of a commercial reserve.

In terms of the grain reserve management system, through professional grain storage facilities and moderate scientific grain storage standards, China continues to improve the structure of reserve varieties and scientifically adjust the scale based on ensuring the population's rations. This not only reduces storage costs and national financial expenditure, but also effectively ensures the efficiency of grain circulation and activates the grain market.

3.3. Improve International Corresponding Legal System

3.3.1. International Collaboration in Maintaining Stable Supply Chain

Strong, flexible supply chains are critical for the global food system to function. While there are numerous uncertainties and the situation continues to evolve, the COVID-19 crisis may shed light on some of the actions that global governments can take to mitigate the effects of possible future crises on the food system. On the one hand, states shall strive to ensure market transparency through the timely exchange and sharing of market information. Transparency and information sharing are important. This can help alleviate panic buying and build trust in both the international and domestic markets and between importing and exporting countries, thereby encouraging cooperative solutions. Additionally, countries, particularly those developing countries and those that rely heavily on imports, can benefit from peer learning about the types of policy approaches that are proving effective.

On the other hand, states shall avoid imposing trade restrictions unless the country temporarily applies the restrictions under limited circumstances to prevent critical shortages of food products. Series of export restrictions exacerbate market instability and destabilize supply, particularly detrimental for net food-importing countries. Thus, having open borders can contribute to the stability of the supply chain. Furthermore, G20 and the World Trade Organization members could take an active role in coordinating global food security orders. As long as the organizations' member states have a sizable population and market capacity and are the primary importers and exporters of the global food trade, their food trade policies heavily influence the stability of the global food market. Therefore, they shall contribute to avoiding excessive restrictive actions that could result in excessive food price volatility on the international market, ensuring food supply and price stability, reducing trade restrictions, and guaranteeing supply chain flexibility [18].

3.3.2. Reinforce the Rules-based International Order From the Perspective of Global Food Security

Though international law is considered soft law, the member states from the G20, WTO, World Food Programme (WFP), and Food and Agricultural Organization (FAO) shall strictly adhere to agreements to help the agricultural industry reduce the effect of the COVID-19 outbreak. Treaty committees shall monitor whether or not member states comply with their treaty obligations. Furthermore, the COVID-19 crisis demonstrates that all states shall strictly adhere to the principle of human security when governing global food security. In the short term, great powers shall take responsibility as leaders to fight back against the pandemic, promoting economic recovery, strengthening supply chains, improving the overall effectiveness of humanitarian aids, and reducing vulnerable groups and communities. In the long run, states shall contribute to the international community's development by establishing a more just and rational food security governance system and enhancing the food production capacity of developing countries.

Besides, the coordination between international agricultural associations (FAO, WFP, and others) and the recipient country governments should be strengthened. Close collaboration with local organizations, community groups, and other authorities in recipient countries is essential to enhance the effectiveness of international assistance. Moreover, the networking capabilities of international agricultural associations should be promoted as well. Advanced networking capabilities may facilitate horizontal coordination among a variety of sectors, including intergovernmental organizations, nongovernmental organizations (NGOs), donor countries, and recipient countries. Overall, the international community must overcome collective action dilemmas and strengthen collective capabilities in order to address non-traditional threats, including pandemics and hunger, in the future.

4. Conclusion

Since the outbreak of the COVID-19, countries around the world have experienced a severe test. Taking this opportunity, it exposes the inadequate coordination forces and cooperation mechanisms in the face of the global problem. This period has also fully revealed the weaknesses of the international community in its consideration of food security issues. From the international level, globalization makes the grain circulation between countries become an important and key link in the international grain market. As a result, food security is faced with problems such as the circulation of resources and impeded cooperation in the new international context, which has led to a dysfunctional food supply chain in the international market and a lack of experience in the global public health governance system in guaranteeing food security, inadequate emergency response and a response that is ineffective in addressing food issues, combined with a lack of timely response from international organizations and a refusal by some countries to cooperate and help, which has led to a deepening of the food crisis in the country.

China's emphasis on the "Community of Shared Future for Mankind" has become more and more prominent in recent years. For China, legislation and policies on food security have been continuously promoted and reformed, while its own food reserves are sufficient in quantity and variety, and a comprehensive food supply system has been formed, which has enabled China to respond to emergencies in a timely and efficient manner. For example, when the COVID-19 broke out, China promptly adapted its regulations and policies to the actual situation and was able to control the spread of the epidemic and ensure the safety and health of its people. Internationally, China has also cooperated with the international community on all fronts, sharing information with international organizations such as the World Health Organization in a timely manner and making efforts to provide assistance, including food supply, to the international community. In short, as China continues to develop economically and actively promotes globalization, it has adhered to a people-centered approach and taken the initiative to lend a helping hand, actively demonstrating its attitude and assuming international responsibility, both in terms of its own progress and in helping other countries.

References

[1] A. Kassegn, E. Endris, Review on social-economic impacts of 'Triple Threats' of COVID-19, desert locusts, and floods in East Africa: Evidence from Ethiopia, Cogent Social Sciences, 2021, 7(01). DOI: https://doi.org/10.1080/23311886.2021.1885122

[2] J. Clapp, W. G. Moseley, This food crisis is different: COVID-19 and the fragility of the neoliberal food security order, The Journal of Peasant Studies, 2020, 47(07), pp. 1393-1417. DOI: https://doi.org/10.1080/03066150.2020.1823838

[3] WFP, 2020-Global Report on Food Crises, 2020. https://www.wfp.org/publications/2020-global-report-food-crises (accessed 22 September 2021)

[4] C. Béné, Resilience of local food systems and links to food security – A review of some important concepts in the context of COVID-19 and other shocks. Food Sec, vol.12, 2020, pp. 805-822. DOI: https://doi.org/10.1007/s12571-020-01076-1

[5] WFP, 2021-Global Report on Food Crises, 2021. https://www.wfp.org/publications/global-report-food-crises-2021 (accessed 22 September 2021)

[6] A. A. Mohamed, Food security situation in Ethiopia: A review study, International Journal of Health Economics and Policy, vol.2, No. 3, 2017, pp. 86-96. DOI: 10.11648/j.hep.20170203.11

[7] M. Pu, Y, Zhong, Rising concerns over agricultural productions as COVID-19 spreads: Lessons from China, Global food security, vol.26, 2020. DOI: https://doi.org/10.1016/j.gfs.2020.100409

[8] T. Zhong, J. Crush, Z. Si, S. Scott, Emergency food supplies and food security in Wuhan and Nanjing, China during the COVID-19 pandemic: Evidence from a field survey, Development Policy Review, 2021. DOI: https://doi.org/10.1111/dpr.12575

[9] S. Johan, M. John, COVID-19 and global food security, Washington, DC: International Food Policy Research Institute (IFPRI), 2020. DOI: https://doi.org/10.2499/p15738coll2.133762

[10] H. Fyles, C. Madramootoo, Key drivers of food insecurity, In Emerging Technologies for Promoting Food Security, Woodhead Publishing, 2016, pp. 1-19. DOI: https://doi.org/10.1016/B978-1-78242-335-5.00001-9

[11] S. Aday, M. S. Aday, Impact of COVID-19 on the food supply chain, Food Quality and Safety, vol. 4(04), 2020, pp. 167-180. DOI: https://doi-org.proxy.brynmawr.edu/10.1093/fqsafe/fyaa024

[12] S. Tamru, K. Hirvonen, B. Minten, IFPRI COVID-19 blog series, 13 April 2020, www.ifpri.org/blog/impacts-covid-19-crisis-vegetable-value-chains-ethiopia

[13] E. Clay, Food security: Concepts and measurement, Paper for FAO Expert Consultation on Trade and Food security: Conceptualizing the linkages Rome, 2002, pp. 1-7.

[14] Food and Agriculture Organization (FAO), Rome Declaration on World Food Security and World Food Summit Plan of Action, World Food Summit 13-17, Rome, Italy, 1996.

[15] Food and Agriculture Organization (FAO), Climate change and food security: a framework document, Food and Agriculture Organization, Rome, Italy, 2008.

[16] United Nations Development Programme (UNDP), Human Development Report 1994: New Dimensions of Human Security, 1994. http://www.hdr.undp.org/en/content/human-development-report-1994

[17] 'In a Fortnight: Food Security and Chinese "Comprehensive National Security", China Brief, 2017, vol. 17(03), China Brief (Online), https://jamestown.org/program/food-security-chinese-comprehensive-national-security/

[18] Ethiopia's Productive Safety Net Program (PSNP), Integrating disaster and climate risk management: case study, Building resilience, Washington: World Bank Group, 2013, PP. 1-19. http://documents.worldbank.org/en/publication/documents-

reports/documentdetail/893931468321850632/ethiopias-productive-safety-net-program-psnp-integrating-disaster-and-climate-risk-management-case-study

[19] Ethiopia national nutrition strategy, Review and analysis of progress and gaps: one year on,London:SaveSaveChildrenUK,2009.http://www.fao.org/fileadmin/user_upload/drought/docs/Ethiopia_National_Nutrition_Strategy_Final_Report.pdf

[20] K. Deininger, D. A. Ali, T. Alemu, Impacts of land certification on tenure security, investment, and land market participation: Evidence from Ethiopia, Land Economics, vol. 87, no. 2, 2011, pp. 330. DOI: 10.3368/le.87.2.312

[21] Zeng Xiaoyun, Building a "security jurisprudence": legislative responses to the financialization of food and the concept of food security, Gansu Social Sciences, 2021, (4). DOI : 10.3969/j.issn.1003-3637.2021.04.028

[22] J. Zhang, Global food security under COVID-19: impact path and coping strategy, World Agriculture, 2021(04), pp. 4-12, DOI: 10.13856/j.cn11-1097/s.2021.04.001