

Research on Trend of China's Organic Agriculture Market in the Post-COVID-19 Era

Yang Gao

Shandong Youth University of Political Science, Jinan, Shandong, 250103, China

Keywords: COVID-19; Organic agricultural market; Research on market trend

Abstract: To Investigate the impact of COVID-19's changes in urban and rural relationship, consumption upgrading and the rise of e-commerce marketing on China's organic agriculture. This study applied a qualitative analysis to assess the changes of consumption structure in China after COVID-19, the population and preferences of China's middle class consumer groups. Based on the above research, the development trend of China's consumption of organic agricultural products in the next 10 years was predicted and explained. Results: (1) COVID-19 has caused the national recognition of China's rural value and the reflection on the relationship between urban and rural areas. China's urbanization process still has about 20% space from developed countries. (2) China will remain one of the largest consumer markets in the world in the next decade. (3) After COVID-19, China's consumer market may usher in a change in consumer preferences, which provides new opportunities for the development of organic agriculture.

1 Introduction

In China, organic agriculture has been developing slowly and is still in the infancy of the industry life cycle, which is restricted by many factors. With the normalization of the epidemic prevention and control in COVID-19, the social and economic order has been gradually restored and expanded. The overlapping effect of the post-epidemic era and the post-poverty alleviation period has begun to appear. At the same time, the promotion of poverty alleviation and the implementation of the rural revitalization strategy in China are facing new challenges. Then, how should we make use of the strategic opportunities brought by the major social events to cultivate the endogenous power to realize the leapfrog development? Can the organic agriculture industry use this opportunity to integrate into the implementation of the national rural revitalization strategy?

As the "Black Swan" incident in 2020, the COVID-19 outbreak has brought a huge impact on the social culture and consumption habits of the Chinese people. However, with the effective prevention and control of the epidemic in the country, the whole society is also entering the "post-epidemic era" (or "normal epidemic prevention and control period"), during which the consumption of Chinese residents has shown many new characteristics and trends, forming a series of new development opportunities for poverty alleviation and rural revitalization.

2 Opportunity for the Development of Organic Agriculture Stimulated by the COVID-19 Outbreak

(1) The COVID-19 outbreak has caused the whole society to think deeply about the relationship between man and nature. The COVID-19, which broke out during the Spring Festival in 2020 and continued to spread all over the world, is not only a major event affecting the world, but also a life education for people to reshape the "Three Views"-viruses are always with human beings, harmful viruses are enemies of human beings, but also a propeller for agricultural development mode, food selection and technological progress. COVID-19 virus has prompted people to rethink the relationship between man and nature, to re-understand and understand the inner relationship and endogenous relationship between man and nature as scientifically defined by the "Life Community

of Mountains and Waters, Forests, Fields, Lakes and Grasses", and how to construct a control system for the coordinated development of man and nature in the construction of ecological civilization.

(2) The COVID-19 outbreak has triggered a new understanding of China's rural values and a reflection on the relationship between urban and rural areas. Compared with rural areas, the relatively rigid urban spatial structure and high-density population gathering shorten the spatial distance between people, and people's high-frequency business activities and large-scale population mobility significantly accelerate the pace of work and life in the whole society, which determines that the impact of emergencies such as epidemics will spread very quickly. Throughout the development of the epidemic crisis, rural areas have become the safety valves for China's political, economic and social security, highlighting their role as stabilizers and reservoirs to resolve the crisis. For individuals in society, wealth, property and even business are no longer important in the face of the epidemic. Family, health and sustainable development have become the common basic demands of urban and rural residents. The cities may not that important for rural areas but cannot be separated from the rural areas at all times. The revitalization of the rural areas is destined to move towards the road of deep integration and development of urban and rural areas with Chinese characteristics.

In the post-epidemic period, in order to better cope with public health emergencies, it is expected to dialectically treat the two spatial characteristics of "agglomeration" and "mobility" in urban development and governance, break through the spatial form of "center-periphery", and form a networked and multi-center spatial pattern, which will undoubtedly alleviate the bipolar opposition between urban and rural areas, promote the rational flow of production factors such as population, capital and technology between urban and rural areas, and promote urban-rural integration.

(3) The impact of the epidemic has promoted the high-quality development of green agriculture. From the micro level, "safety, health, green, ecology and intelligence" has gradually become the rational tendency of people's consumption. National consumption will gradually shift from "fast consumption" to "slow consumption" focusing on high-quality and high-quality while retaining its resilience and wide scope. Judging from China's overall economic situation, China is in a stage of transition from high-speed to high-quality development, which puts forward higher requirements for ecological construction. In addition, the impact of the epidemic has also formed an effective mechanism to speed up green agriculture and promote high-quality development of agriculture in China. In terms of long-term development, under the increasing uncertainties in the international trade environment, more attention should be paid to effectively improve the comprehensive competitiveness and sustainability of China's agriculture by green development.

(4) The explosive growth of fresh products e-suppliers caused by the epidemic has provided distribution channel guarantee for organic agricultural products. In recent years, China's domestic economic operation has remained in a reasonable range, which is manifested in the stability of macroeconomic operation, the development of rural digital economy, the improvement of residents' income level, the transformation and upgrading of residents' consumption, and the release of rural consumer market. All these have created a good environment for the long-term development of rural e-commerce and laid an economic foundation for the sustainable development of rural e-commerce logistics. Influenced by the COVID-19 outbreak, the farmers' markets suspended their services as consumers were quarantined at home to prevent and control the virus, and most of the residents in Chinese cities and towns were closed for more than 60 days in small communities. As a result, a community-based pattern and a "universal food purchase" consumption pattern were formed, which not only brought to the surface a large number of customers with purchasing power but no online consumption habits, but also led to an "explosive" growth in orders for fresh food platforms. Under such circumstances, platforms and enterprises actively stored materials, and offline supermarkets quickly expanded online portals and "home" businesses by operating APP, launching self-run WeChat applets, and actively cooperating with multiple parties, such as JD.COM Home, Duodian, Taoxianda, Youzan, etc. to open more online purchase portals for them.

According to statistics, the total retail sales of social consumer goods in 2020 was 39.2 trillion

yuan, down 3.9% from the previous year, while the national online retail sales increased by 10.9% from the previous year to 11.8 trillion yuan, of which the online retail sales of physical goods was 9.8 trillion yuan, up 14.8% from the previous year on a comparable scale, accounting for 24.9% of the total retail sales of social consumer goods, up 4.0 percentage points from the previous year. During the period from January 27 to February 13, 2020, when the epidemic was most severe, taking JD.COM Home Platform as an example, its overall sales volume increased by 450% year-on-year, grain and oil non-staple food by 540%, meat by 1080%, snack food by 420%, vegetable by 800%, fruit by 350%, supermarket commodity sales volume by 600% year-on-year for the Spring Festival, and pharmaceutical products by 430%. In the first half of 2020, the sales of JD.COM Fresh Food Platform alone increased by 470% compared with the same period of 2019, as did other fresh food e-suppliers. Moreover, the epidemic also makes the "community-based fresh products purchasing" and "community economy" popular, and makes social media such as micro-blog, WeChat, Toutiao and Tik Tok become important channels for residents to understand the epidemic and social interaction, which strengthens the demand for network space and lays a foundation for the further acceleration of the growth of network consumption in the later period.

In a word, fresh products e-commerce industry is facing the test of "danger" and "opportunity" from the entry and attack of the new generation of Internet to the participation of large companies, incubation of various modes, and then to the high frequency and rigid demand of the fresh products e-commerce market triggered by the COVID-19 outbreak. With the significant decline and differentiation of offline entities and online fresh product purchases, the customers obtained can be transformed into online sticky and high-frequency users only by continuous and effective operation. The people's habit of purchasing vegetables will be further transferred to online, and the habits of consumers will also be further deepened. Fresh products e-commerce industry in the rural areas is expected to become an important driving force for rural revitalization and development.

3 Market Potential Analysis of Organic Agricultural Industry in China

The COVID-19 outbreak prompted people to gradually change from pursuing material enjoyment to pursuing physical and mental health and sustainable development. In the post-epidemic era, or the normal epidemic prevention and control period, the implementation of the rural revitalization strategy of the Chinese government is facing a brand-new issue: What kind of institutional construction, technical support and implementation path can be given under the existing urban-rural pattern so as to fully exert the powerful functions of the rural "epidemic buffer zone" and "social safety valve" and meet the common aspiration of urban and rural people for a higher quality and happy life? How to break through the spatial barriers between urban and rural residents through more effective implementation carriers and guiding means, so as to achieve sustainable intercommunication and mutual support between urban and rural areas? Perhaps organic agriculture can bring new direction and inspiration to the innovation of poverty alleviation. ^[1]

1. The existing organic agriculture industry in China is relatively mature and in the stage of rapid development. Organic agriculture, as defined by the FAO, is a production management system that utilizes biological cycles and soil biological activity to improve and enhance ecosystem health. ^[2] Globally, China's land organic area declined continuously in the three years from 2013 to 2015, and its share in the world declined continuously in the five years from 2011 to 2015, and showed an overall downward trend in the eight years from 2008 to 2015, followed by an increase. ^[2,3] During the observation period from 2013 to 2018, the development of organic agriculture in China showed a rapid increase in terms of both planting and breeding scale and production: the planting scale increased from 1.287 million hectares in 2013 to 3.135 million hectares in 2018; the planting output increased from 7.068 million tons in 2013 to 12.986 million tons in 2018; the total output of livestock and poultry also increased from 1.06 million tons in 2013 to 5.182 million tons in 2018. ^[2]

2. Consumption potential of organic agriculture in China remains strong. In 2020, China's economic scale exceeded 100 trillion yuan for the first time, accounting for more than 17% of the world, equivalent to about 70% of the United States, ^[4] indicating that the economic scale of China and the United States is rapidly approaching. In addition, China has the world's

largest unified market (1.4 billion people) and the world's largest middle-income group (400 million people). China's urbanization process is still about 20% away from developed countries. All the above determines that China will remain one of the largest consumer markets in the world in the next decade.

A huge market means a huge opportunity. In view of China's existing industrial basis of high-quality organic agriculture and the realistic basis of China's national consumption of "strong rigidity and sufficient toughness", a series of new consumption trends such as consumption upgrading, stratification and sinking market are constantly emerging. With the rise of the rural market, the continuous expansion of the middle-income population, and the influence of consumption differences among groups of different ages, different regions and different cultures, the consumption classification will become more obvious,^[5] and the characteristics of consumption reticulation will gradually become the norm, which will further promote the upgrading of service formats and the emergence of new channels.

China's consumer market in the post-COVID-19 era is likely to usher in a shift in consumer preferences that will continue once formed, differentiating into a group of people who pay more attention to health and are willing to pay higher prices, pay for a safer supply chain, and get more assured food.^[6] The demand of consumers with high willingness to pay for safer, controllable and traceable fresh products will give birth to a new industrial chain,^[7,8] and businesses that can seize the opportunity can achieve leap-forward development.^[9] What kind of supply chain model will be formed in the end still needs constant adjustment and turbulence in the market? In to the demand for safer, controllable and traceable organic fresh products, consumers with high willingness to pay will also have a relatively high degree of acceptance of eco-agriculture, and have doubled their willingness and opportunities to participate in agricultural work and leisure agricultural tourism, which will provide a new opportunity for the development of organic agriculture.

4 Conclusions

The International Federation of Organic Farm Movements (IFOAM) expressed the concept of organic agriculture as "the combination of traditional agriculture, innovative thinking and science and technology". Therefore, to develop organic agriculture industry in China, it is necessary not only to take advantage of the market opportunity brought by the COVID-19 outbreak, but also to break the traditional dualistic thinking between urban and rural areas and make full use of digital economic means to carry out a series of policy reforms:

(1) Develop short-chain circulation mode of organic agricultural products. Originally, fresh products e-commerce industry has long industrial chain, high cost of warehousing performance in supply chain,^[10,11] low industry permeability, multiple intermediate links to solve the problems of information flow, logistics and capital flow, and difficulty in fine operation and allocation of outlets, which have been constraining its rapid development. Influenced by the epidemic, fresh products e-commerce industry is under increasing pressure in terms of timely delivery, goods guarantee, front-end and back-end collaborative supply, security measures and other aspects, and also exposes the difficulties and shortcomings of front-end and back-end collaboration, which in turn will force it to improve in the whole field.

(2) The government should provide the appropriate system environment and guarantee for the development of organic farmers and organic agricultural services in the direction of mutual promotion, healthy interaction and reciprocal coexistence. Taking organic agriculture in Europe and the United States as an example, Denmark is the first country in the world to legislate and regulate organic products. It legislated for ecological organic products from the national level in 1987 and established the first national certification mark of organic food in 1989.^[12,13] At the same time, the government issued a policy to upgrade the canteens of public institutions such as kindergartens, schools, hospitals and nursing homes into "organic canteens"^[14], thus activating the organic awareness in the whole society and stimulating the demand for organic agricultural products, and cooperating with measures such as organic farm subsidies, tax incentives and farmer training to stimulate and promote the rapid development

of the organic agriculture industry in the country. Therefore, the Chinese government should also consider creating an advantageous environment for the co-existence of the farmers and the rural service owners by providing the organic agriculture subsidy and adjusting legal policy at an appropriate opportunity.

(3) With the opportunity of the development of smart economy, the transformation of the marketing ideas of "relational" organic agricultural products can be realized. In the post-epidemic era, the demand for high-quality agricultural and sideline products and low-density ecological lifestyle produced in rural areas will continue to increase. From the perspective of the development of human civilization, strategic emerging industries will get explosive development after a major crisis^[5]. Under the impact of the COVID-19 outbreak and the support of 5G technology, digital economy, as a new pillar economic form and a core engine to promote high-quality development of China's economy and society, has greatly promoted the comprehensive transformation of the form of intelligent economy through the "window period" of the epidemic. In this context, local governments should gradually get rid of the dependence on traditional Internet business platforms, make full use of the relationship between continuous operation from the media e-commerce platform and end consumers, and explore how to use organic agricultural products as carriers to meet the consumption needs of consumers with high willingness to pay for organic fresh food, farming work and leisure farm tours, and how to connect urban and rural communities with the design of products and experiential services, so as to fully embody the design from "products" to "relationships" to realize personal values and improve the relationship between urban and rural communities.

"Food is the first policy". Food security, food quality, especially the development of ecological agriculture will be the top priority of national economic development. The COVID-19 outbreak may be regarded as a catalyst for the adjustment of new agricultural formats, which will bring forward the shape of the future agriculture, reflect the "local feelings" shared by the urban and rural people with the rich social functions of agriculture as the carrier, and promote and realize the organic connection between small farmers and modern agriculture.

Acknowledgments

This work was supported by the Scientific R&D programs of universities in Shandong under Grant No. J18RA086 and Shandong Higher Education "Youth Innovation S&T plan" team under Grant No. 2020RWG008& 2019RWG032.

References

- [1] Zhou Feiyue, Sun Haobo. Construction of trust mechanism for Chinese community-supported agriculture (CSA). *Journal of Agro technical Economics*, 2020 (05): 32-44.
- [2] BL-IFOAM. *The World of Organic Agriculture: Statistics & Emerging Trends.2011-2018*.
- [3] Galayda J. *Community supported agriculture, economic preference theory and subjective well-being*. Rensselaer Polytechnic Institute, 2016.
- [4] Barton Gregory A, *The global history of organic farming*. Oxford University Catherine Greene, *ORGANIC FOOD-Consumers' Choices and Farmers' Opportunities*, New York, Springer-Verlag, 2007.
- [5] Obach K. Brian, *Organic struggle: the movement for sustainable agriculture in the United States*, Cambridge, The MIT Press, 2015.
- [6] Sanders R. *A Market Road to Sustainable Agriculture? Ecological Agriculture, Green Food and Organic Agriculture in China*. *Development & Change*, 2010, 37(1).
- [7] Oelofse M, Hogh-Jensen H, Abreu L S, et al. *Certified organic agriculture in China and Brazil*:

Market accessibility and outcomes following adoption. *Ecological Economics*, 2010, 69(9):1785-1793.

[8] Hamm U, Michelsen J. *Organic agriculture in a market economy. Perspectives from Germany and Denmark*. 1996.

[9] Yussefi M, Sang M S. *Worldwide Organic Agriculture and Market Development*. *Food Science and Industry*, 2006(09):52-72.

[10] HF Alrøe, Noe E. What makes organic agriculture move - protest, meaning or market? A polyocular approach. *Research Methodology & Philosophy*, 2009(07):5-22.

[11] Antonenko L A, Zobenko N G, Wang Q. Impact of Ecological and Energetic Factors on the Market of Organic Agriculture Products. *Business Inform*, 2013(7):170-175.

[12] Alr, Hfnoe E E. What makes organic agriculture move: protest, meaning or market? A polyocular approach to the dynamics and governance of organic agriculture. (Special Issue: Continuity and change in organic farming - philosophy, policy and practice.). *International Journal of Agricultural Resources Governance & Ecology*, 2008, 7(2):5-22.

[13] Dimitri C, Oberholtzer L, States U. Market-Led Versus Government-Facilitated Growth Development of the U.S. and EU Organic Agricultural Sectors. *Organic Agriculture in the U S*, 2005(09):54-61.

[14] Jin Y J, Sang M S, Ho K Y. Participation of Community and Citizen for CSA Movement and Development of Organic Agriculture. *Korean Journal of Organic Agriculture*, 2001(04):44-53.