Analysis of the characteristics of connotation evolution of agricultural modernization with Chinese characteristics in the 70 years since the founding of New China

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Abstract

Purpose – With the development of social productive forces and the advancement of agricultural practices since the founding of New China, the connotation of agricultural modernization with Chinese characteristics has undergone a process from formation to continuous expansion and deepening.

Design/methodology/approach – Its evolution can be roughly divided into four stages: the exploration stage, the formation stage, the establishment stage and the deepening stage. The historical evolution of the connotation of agricultural modernization with Chinese characteristics demonstrates four typical characteristics, namely increasingly scientific logical premise, continuously diversified orientations, increasingly improved core contents and progressively maturing strategies of development.

Findings – The achievements of agricultural modernization have laid a solid foundation for China’s industrial modernization and the rapid development of the national economy. Meanwhile, the authors have identified through practical exploration a path of agricultural modernization with Chinese characteristics. In recent years, academic research on the connotation of agricultural modernization with Chinese characteristics has gradually heated up, and relevant achievements have emerged constantly.

Originality/value – The Communist Party of China (hereinafter “CPC”) has placed considerable emphasis on agricultural issues and has been committed to promoting agricultural modernization since the founding of New China. Through long-term persistence and unremitting efforts, China has made remarkable achievements in agricultural development: significantly improved agricultural production conditions and agricultural output capacity, constantly optimized agricultural structure and steadily increased the income of farmers.

Keywords Agricultural modernization, Chinese characteristics, Agricultural modernization with Chinese characteristics, Modernization of agriculture and rural areas

Paper type Research paper

The Communist Party of China (hereinafter “CPC”) has placed considerable emphasis on agricultural issues and has been committed to promoting agricultural modernization since the founding of New China. Through long-term persistence and unremitting efforts, China has made remarkable achievements in agricultural development: significantly improved
agricultural production conditions and agricultural output capacity, constantly optimized agricultural structure and steadily increased the income of farmers. The achievements of agricultural modernization have laid a solid foundation for China’s industrial modernization and the rapid development of the national economy. Meanwhile, we have identified through practical exploration a path of agricultural modernization with Chinese characteristics. In recent years, academic research on the connotation of agricultural modernization with Chinese characteristics has gradually heated up, and relevant achievements have emerged constantly. Scholars generally believe that the interpretation of the connotation of agricultural modernization with Chinese characteristics should reflect not only the general prescriptiveness and the universality of agricultural modernization but also the unique mark of “Chinese characteristics” based on China’s national conditions. However, most of the existing literature looks at “agricultural modernization with Chinese characteristics” as a static concept rather than as a historical process of dynamic evolution; even less do researchers analyze the evolution characteristics of such process. This paper attempts to systematically sort out the dynamic development and change of the connotation of “agricultural modernization with Chinese characteristics” over the 70 years since the founding of New China from the historical perspective and deeply study its expansion and evolution characteristics.

1. Evaluation of the connotation of agricultural modernization with Chinese characteristics

With the development of social productive forces and the advancement of agricultural practices in the 70 years since the founding of New China, the CPC has gradually deepened its understanding of agricultural modernization, during which the connotation of agricultural modernization with Chinese characteristics underwent a dynamic evolution process. During the period from the early days of the founding of New China to the convening of the Third Plenary Session of the Eleventh Central Committee of the CPC (1949–1978), under the highly closed planned economy system, agricultural modernization was mainly promoted by input of factors of production and aimed at increasing agriculture output by followed the “technology oriented paradigm.” In terms of understanding, the central government advocated the “learning from the experience and lessons of the Soviet Union,” summarized the features of modern agriculture as “mechanization, electrification, promotion of chemical fertilizer and construction of irrigation infrastructure” and conducted preliminary study of the modernization of agricultural production. During the period from the Third Plenary Session of the Eleventh Central Committee of the CPC to the Sixteenth National Congress of the CPC (1978–2002), in the process of gradual establishment of the socialist market economy system, agricultural modernization was mainly promoted by institutional innovation and aimed at increasing agriculture output and increasing farmers’ income by following the “paradigm of balanced emphasis on technological and institutional changes.” In terms of understanding, the central government advocated the “establishment of a path of socialist agricultural development with Chinese characteristics,” summarized the features of modern agriculture as “scientization, intensification, socialization and industrialization” and conducted in-depth study of the modernization of agricultural production and operation management. During the period from the Sixteenth National Congress of the CPC to the Eighteenth National Congress of the CPC (2002–2012), in the process of gradual improvement of the socialist market economy system, agricultural modernization was mainly promoted by coordinated urban and rural development and aimed at ensuring national food security, increasing farmers’ income and sustainable development of agriculture by following the “system oriented paradigm.” In terms of understanding, the central government advocated the “selection of a path of agricultural modernization with Chinese characteristics,” expanded the contents of agricultural modernization into a complex that includes the strengthening of
modern factors of agricultural production, the construction of agricultural industrial system, the improvement of the forms of agricultural production organization and the transformation of agricultural development mode and conducted comprehensive study of agricultural modernization under the framework of scientific development. During the period from the Eighteenth National Congress of the CPC until present (2012–present), in the process of further improving the socialist market economy system, agricultural modernization was mainly promoted by rural revitalization and urban–rural integration and aimed at ensuring national food security, increasing farmers’ income, sustainable development of agriculture and high-quality agricultural development by following the “system oriented paradigm.” In terms of understanding, the central government advocated the “acceleration of modernization of agriculture and rural areas,” interpreted modern agriculture by using such constructs as “one main line,” “three major systems” and “new development concepts” and conducted systematic study of agricultural modernization under the framework of coordinated development.

2. The first characteristic of evolution of the connotation of agricultural modernization with Chinese characteristics: increasingly scientific logical premise

As the common direction of agricultural development in various countries of the world, the concepts of agricultural modernization share universal connotation and characteristics. However, due to different natural and socioeconomic conditions of agricultural development in different countries, the connotations of the concepts regarding agricultural modernization also reflect differences. To be based on the fundamental realities and specific agricultural conditions of a country is the logical premise for clarifying the connotation of agricultural modernization in this country. Since the founding of New China, while leading the construction of agricultural modernization with Chinese characteristics, the CPC has always stressed that we should combine the Marxist thought regarding agricultural modernization with China’s agricultural practice and adhered to the exploration of “Chinese characteristics.”

2.1 “Learning from the experience and lessons of the Soviet Union”

In the exploration stage of the connotation of agricultural modernization with Chinese characteristics, limited by the understanding of the issue at the time, the CPC Central
Committee did not clearly put forward the very concept of “Chinese characteristics.” However, New China’s agricultural modernization underwent the transformation from a model that simply imitates that of the Soviet Union to one that “learns from the experience and lessons of the Soviet Union,” giving rise to the exploration of Chinese-style agricultural modernization. During the years immediately after the founding of New China, the CPC’s understanding of agricultural modernization was greatly influenced by the Soviet Union. China was facing extremely special internal and external circumstances in the process of agricultural development in those days: first, the CPC Central Committee lacked the experience of socialist construction. Second, China was faced with an overall blockade and embargo by Western capitalist countries. Third, after the October Revolution, highly mechanized collective farms in the Soviet Union made remarkable achievements in terms of agricultural modernization. Fourth, China and the Soviet Union are highly similar in ideology. Against such a backdrop, it was historically inevitable for China to follow the Soviet model and pursue agricultural modernization with mechanization as the core. On the other hand, it was absolutely necessary to copy the practices of the Soviet Union in the absence of experience in socialist construction and this proved effective. However, with the deepening of practice, as the shortcomings and mistakes were gradually exposed in the construction process of the Soviet Union, the CPC Central Committee began to reflect on the Soviet model. Among them, Mao Zedong repeatedly questioned the agriculture model of the Soviet Union. In the article On the Ten Major Relationships published in 1956, Mao Zedong (1988, p. 721) pointed out that “the grain output of the Soviet Union has long been below its pre-revolutionary peak.” Later, in a letter to Liu Shaoqi, he indicated that the agriculture in Soviet Union, although already mechanized, was still in jeopardy and that the Soviet Union’s agricultural policy should be reconsidered. In the meanwhile, Mao Zedong (1988, p. 720) realized that “We should learn from the strengths of all nations and all countries.” This includes “the advanced science and technology of capitalist countries” (Mao, 1988, p. 742).

The pioneering change in the thinking of Mao Zedong created a positive impact on the CPC. Other leaders of the CPC Central Committee began to broaden their horizons and conducted in-depth studies on the agricultural modernization of Western capitalist countries. For example, Zhou Enlai has mentioned the gaps between China’s agricultural modernization and that of Western capitalist countries on many occasions.

2.2 “Establishing a path of socialist agricultural development with Chinese characteristics”

In the formation stage of the connotation of agricultural modernization with Chinese characteristics, the CPC Central Committee gradually realized the urgency and necessity of exploring “Chinese characteristics” while summarizing the experience of agricultural modernization construction during the 30 years since the founding of New China. The Third Plenary Session of the Eleventh Central Committee of the CPC conducted in-depth discussion regarding agricultural problems, stressing the need to “establish a path of agricultural development that suits China’s national condition” based on the main contradictions and basic features of China’s agricultural development, which was the expression of the original form of “establishment of a path of agricultural modernization with Chinese characteristics,” indicating that the CPC Central Committee has realized the significance of understanding China’s basic national conditions and specific agricultural conditions. At the work conference of the CPC Central Committee held two years later, Deng Xiaoping (1994, p. 362) affirmed the statement and further pointed out that “Mechanical application of the practices of western countries or countries like the Soviet Union cannot be inflexibly followed and applied to China’s agricultural modernization. Instead, it is necessary to establish a path that works under a socialist system and is suitable for China’s circumstances.” Under the guidance of the aforementioned thoughts, Central Document No. 1 issued in 1983 made specific arrangements
for China’s agricultural modernization, namely to “establish a path of socialist agricultural development with Chinese characteristics in accordance with China’s national conditions” (CPC Central Committee and State Council, 2011). This arrangement pointed out the direction of China’s agricultural modernization and set the boundaries for the connotation of agricultural modernization: first, China’s agricultural modernization must be socialist agricultural modernization; second, China’s agricultural modernization can only be “Chinese-style” agricultural modernization.

2.3 “Establishing a path of agricultural modernization with Chinese characteristics”

At the establishment stage of the connotation of agricultural modernization with Chinese characteristics, the CPC Central Committee took issues of “agriculture, rural areas, and farmers” as the top priority of the whole Party’s work and first explicitly proposed “establishing a path of agricultural modernization with Chinese characteristics.” In February 2006, in a speech on “construction of new socialist countryside,” Hu Jintao (2011) pointed out that “it is necessary to work to balance relations between humankind and nature and take a path of agricultural modernization with Chinese characteristics according to the requirements of building a resource-conserving and environmentally-friendly society . . . .” This is the first time the expression of “establishing a path of agricultural modernization with Chinese characteristics” emerged in the CPC’s literature. In October 2007, the Seventeenth National Congress of the CPC formally proposed to “establish a path of agricultural modernization with Chinese characteristics” and considered the path of agricultural modernization with Chinese characteristics as an important part of the development path of socialism with Chinese characteristics, which resulted in the formal recognition of “establishment of a path of agricultural modernization with Chinese characteristics” as a national strategy, marking the improvement and maturity of the CPC’s understanding of agricultural modernization. After that, the Third Plenary Session of the Seventeenth Central Committee of the CPC and the Fifth Plenary Session of the Seventeenth Central Committee of the CPC successively emphasized this notion, which means that the connotation of China’s agricultural modernization must be interpreted in the context of national realities and agricultural conditions.

2.4 “Accelerating the modernization of agriculture and rural areas”

At the stage of deepening the connotation of agricultural modernization with Chinese characteristics, the CPC Central Committee proactively adapted itself to the new normal of economy, unswervingly took the path of new agricultural modernization with Chinese characteristics and first proposed the implementation of the rural revitalization strategy. In November 2012, the Eighteenth National Congress of the CPC first advocated the adherence to the path of new industrialization, informatization, urbanization and agricultural modernization with Chinese characteristics. Central Document No. 1 issued in 2014 further clarified that “We shall strive to find a new path of agricultural modernization with Chinese characteristics featuring advanced production technology, moderate business scale, strong market competitiveness and sustainable ecological environment” (CPC Central Committee and State Council, 2014). This was the strategic choice made by the CPC Central Committee in accordance with the current changes of environmental conditions at home and abroad, and it made new requests on the connotation of agricultural modernization from two dimensions, namely “Chinese characteristics” and “new modes.” “Chinese characteristics,” the horizontal dimension, demands that agricultural development shall be based on agricultural and national conditions while remaining consistent with China’s economic and social system and taking advantage of China’s strength in resource and environment. “New modes,” the vertical dimension, demands that agricultural development shall comply with the requirements of the
times, focus on the stage of China’s economic and social development and obey the dictation of the overall goal of socialist modernization. With the deepening of agricultural modernization, the CPC Central Committee has gradually deepened its understanding of the connotations of these constructs. At the fifth meeting of the Central Leading Group for Comprehensively Continuing Reform held in September 2014, Xi Jinping (cited in People’s Daily, 2014) pointed out that “For deepening the reform of rural land system at the present stage, more consideration should be given to the promotion of China’s agricultural modernization. We should solve agricultural problems as well as problems of farmers and take the path of agricultural modernization with Chinese characteristics.” In October 2017, the Nineteenth National Congress of the CPC first proposed the implementation of the rural revitalization strategy and “acceleration of the modernization of agriculture and rural areas” based on continued promotion of agricultural modernization. This marks the further expansion of the connotation of agricultural modernization into modernization of agriculture and rural areas with the realization that to grasp the development and change in problems of “agriculture, rural areas, and farmers,” the study of agricultural modernization must be combined with rural modernization.

3. The second characteristic of evolution of the connotation of agricultural modernization with Chinese characteristics: continuously diversified goal orientation

Ultimately, the goal orientation of agricultural modernization reflects the demand of economic and social development for agriculture in a certain period and is the basis for accurately summarizing the connotation of agricultural modernization. The change of social and economic environment will inevitably lead to the change of social demand, thereby resulting in the change in agricultural modernization goal orientation. Impressive results had been achieved in socialist construction with Chinese characteristics after the founding of New China, especially since the reform and opening-up and the level of people’s demand for agricultural development had gradually increased. In the evolution of the connotation of agricultural modernization with Chinese characteristics, its goal orientation was continuously diversified, including the deepening and extension of the initial goal, as well as the new goals generated by the economic and social development.

3.1 Single goal orientation: increasing agriculture output

In the early years of New China, with its agricultural production having been devastated in the internal and external wars, the level of agricultural production was extremely low, and the output of main agricultural products had been significantly reduced compared with the annual average levels before the wars. The new government established on the foundation of a traditional agricultural society is faced with the challenge of quickly restoring agricultural production and addressing the problem of food and clothing undersupply for the whole nation. After three years of recovery, at the end of 1952, China’s grain output and the per-capita share of grain increased significantly compared with 1949. The nations’ grain output increased by 44.8%, and the per-capita share of grain increased by 37.9% [1]. However, the foundation of agriculture production capacity was still extremely low, with the grain production per capita as low as 285 kg. Also, as China had entered a period of large-scale economic construction since 1953, in which the dual factors of rapid industrialization and rapid population growth led to a continuously growing demand for grain and further the severely insufficient supply of agricultural products. Against this backdrop, Mao Zedong advocated the agricultural production policy of “taking grain as the top priority and ensuring all-round development” in 1958. The essence of this policy is striving for the rapid growth of
agricultural products, especially the total amount of grain, to alleviate the pressure of grain supply shortage. Under this goal orientation, the grain output of the whole country increased rapidly at a rate of 41.4% during the period from 1958 to 1977. However, due to the faster population growth rate of 43.9% in the same period, the per-capita grain share remained at around 300 kg for a long time, and the problem of food and clothing undersupply of the entire country awaited a reliable solution.

3.2 Dual goal orientation: increasing both agriculture output and farmers’ income

By 1978, China’s agriculture as a whole was still a fragile sector, and the severe shortage of agricultural products remained a challenge. There are still 250m people in the countryside that did not have enough food and clothing. Therefore, the primary goal of agricultural modernization at that stage was to increase agriculture output in an attempt to leap over the “Malthusian trap.” Compared with the period before the reform, the direction regarding increasing agriculture output was deepened and transited from “taking grain as the top priority” into “actively developing diversified operations while remaining adherent to grain production as the foundation.” In 1987, the Thirteenth National Congress of the CPC officially announced that the strategic goal of solving the problem of food and clothing for the people had been generally realized. At this stage, China’s agricultural productivity and supply capacity were being continuously improved, and the total agricultural output value and the output of major agricultural products significantly increased. In 2000, the national agricultural output value reached 2,491.58bn yuan, and the grain output reached 462.175m tons. The industrial structure was also optimized and adjusted, with a decreased proportion of planting industry and continuously increased proportion of forestry, animal husbandry and fishery.

Meanwhile, the CPC Central Committee was paying more attention to the improvement of farmers’ living standards and income and made it an important goal of agricultural modernization to increase farmers’ income. Before the reform, the growth of farmers’ income was extremely slow under the planned economy and traditional industrialization strategy. In 1978, the per-capita net income of farmers in China was as low as CNY 133.6, making it a constant difficulty for the countryside to get rid of poverty. To change this situation, the Third Plenary Session of the Eleventh Central Committee of the CPC introduced 25 policies and measures related to agricultural development revolving around the idea of “reducing the burden on farmers and increasing their income.” Since then, increasing farmers’ income has become a long-term concern of the CPC Central Committee. From the 1980s to the 1990s, the central government’s focus on increasing farmers’ income was to ensure social stability and industrial development. After the 1990s, the central government began focusing on solving problems of “agriculture, rural areas, and farmers” and promoting the development of the overall national economy. Based on this goal orientation, the per-capita net income of Chinese farmers increased year by year from 1978 to 2001, with an average annual actual growth rate of approximately 7.4%.

3.3 Three-dimensional goal orientation: ensuring national food security, the increase of farmers’ income and the sustainable development of agriculture

In the 21st century, with the continuous growth of agricultural production, the supply and demand pattern of agricultural products in China began to reverse from long-term shortage to gross balance and abundance in bumper harvest years. However, the CPC Central Committee made the sensible judgment that agriculture was still a weak link in the national economy, and the long-term mechanism for increasing grain production had yet to be established. In this context, ensuring national food security and the sufficient supply of major agricultural products remains a significant goal of agricultural modernization. Since the
The convening of the Sixteenth National Congress of the CPC, the subsequent No. 1 Central Documents have continuously focused on problems of “agriculture, rural areas, and farmers” and stressed the importance of food security. Meanwhile, with the development of economy and society and the improvement of people’s demand for quality, the connotation of food security has been expanded from focusing solely on quantity security to focusing on both quantity and quality security, that is, to improve the quality while increasing the per unit yield.

The transformation of the supply and demand pattern of agricultural products completely solved the problem of food shortage. However, a negative impact began to emerge: the growth of farmers’ income has slowed down, and the income gap between urban and rural residents has been rapidly widened. Since 1996, the growth rate of Chinese farmers’ income has been continuously decreasing, and it dropped to 2.1% in 2000, the lowest level since 1991. To alleviate this phenomenon and realize a sustained and rapid growth in farmers’ income, the central government has listed the increase of farmers’ income as the core goal of “agriculture, rural areas, and farmers” policies as a result of the guideline of “Let urban areas support rural development and let industry promote agriculture” since the convening of the Sixteenth National Congress of the CPC. Central Documents No. 1 issued in 2004, 2008 and 2009 focused on the issue of increasing farmers’ income and were committed to forming a positive interactive pattern to increase agricultural efficiency and farmers’ income. Improving farmers’ income and living standards and meeting their increasing material and cultural needs would remain significant goals of agricultural modernization at this stage.

Although China’s agricultural development has made gratifying progress, it is also facing increasingly severe problems of resources and environment. For example, the constraints on agricultural resources increase due to the fundamental national reality of large population within relatively little land; the production mode of “high input and high yield” in petroleum agriculture leads to the degradation of the agricultural ecosystem; the fast promotion of industrialization and rapid urbanization results in serious agricultural environment pollution. To cope with such challenges, China needs to explore new ideas for developing agriculture and transform the mode of agricultural development. Sustainable agricultural development model, one that seeks coordinated development of economy, society, technology and environment, has been identified as the ideal and feasible model of agricultural development in the 21st century (Jiang, 1999). Since the convening of the Sixteenth National Congress of the CPC, the CPC Central Committee had attached great importance to the conservation of agricultural resources and the protection of the agricultural environment and listed the sustainable development of agriculture as a goal on the same level as increasing agriculture output and farmers’ income. The Seventeenth National Congress of the CPC pointed out that a prominent place shall be given to the construction of a resource-conserving and environment-friendly society. In response to this request, Central Documents No. 1 issued in 2007 and 2008 successively proposed to improve the sustainable development capacity of agriculture and actively explore ecological agriculture, circular agriculture and low-carbon agriculture, thereby establishing and maintaining the goal of sustainable agricultural development.

3.4 Multiple goal orientation: ensuring food security, continuous increase in farmers’ income, sustainable development of agriculture and high-quality development of agriculture

In the new era, China’s agricultural production capacity continuously increases, and income from food production also increases year after year. However, given the complex global economic situation and increasing downward pressure on the domestic economy, it is particularly crucial to firmly hold the bottom line of food security and supply of key agricultural products, strengthen the basic position of agriculture and ensure the stable
development of the economy and society. Since the convening of the Eighteenth National Congress of the CPC, with the introduction and implementation of a series of important strategies, the goals of ensuring food security and the supply of key agricultural products have been upheld and continually enhanced. The Third Plenary Session of the Eighteenth Central Committee of the CPC held in 2013 proposed the implementation of the national food security strategy. Central Document No. 1 issued in 2014 stressed that “the bowls of Chinese people must always be tightly held in their own hands.” Central Document No. 1 issued in 2016 pointed out the implementation of the strategy of increasing grain production by preserving farmlands and developing technologies. Central Document No. 1 issued in 2019 proposed to implement the strategy of securing the supply of key agricultural products and accelerate the legislative process of grain security. It can be seen that China always attaches great importance to grain security and securing the supply of key agricultural products.

The steady development of agriculture has brought about the continuous increase in farmers’ income, and the income gap between urban and rural residents has been narrowed year by year. However, in the context of decelerated economic growth, there are still difficulties in ensuring the increase of farmers’ income in successive years. The Eighteenth National Congress of the CPC convened in 2012 put forward the goal of doubling the per-capita income of urban and rural residents in 2020 compared with that in 2010. Central Documents No. 1 issued in 2012, 2015, 2016, 2017 and 2018 all emphasized the importance of increasing farmers’ income and promoting the sustained and relatively rapid growth of farmers’ income. Central Document No. 1 issued in 2019 proposed to expand the channels for increasing farmers’ income and focus on goals of both the speed and modes of income boosts. Meanwhile, with the change of major social contradictions and the development of agricultural modernization with Chinese characteristics, China should not only safeguard the interests of farmers and achieve the goal of increasing farmers’ income but also constantly satisfy the growing needs of farmers for a better life and promote the common prosperity of urban and rural residents.

Under the increasingly tight constraints of resources and the environment, China must adhere to the goal of sustainable agricultural development. The Eighteenth National Congress of the CPC in 2012 first proposed the promotion of ecological civilization construction. It stressed the importance of leaving more fertile land for agriculture, building a scientific and reasonable agricultural development pattern and organically combining the goal of sustainable agricultural development with the construction of ecological civilization. Central Document No. 1 issued in 2014 proposed to achieve environmental sustainability; Central Document No. 1 issued in 2015 proposed resource conservation and environmental friendliness; Central Document No. 1 issued in 2016 proposed to achieve efficiency in resource utilization, stability of ecosystem and desirable production environment; Central Document No. 1 issued in 2017 proposed to pursue green ecology and sustainability; Central Document No. 1 issued in 2018 proposed to boost green development of agriculture; and Central Document No. 1 issued in 2019 proposed to promote the green development of agriculture and rural areas. The goal of sustainable agricultural development has been expanded from a single aspect to multiple aspects, from a micro level to a macro level and from preliminary efforts to deepened commitment.

While the focus on agricultural contradictions has shifted from one derived from insufficient total capacity to structural contradictions, the goal of agricultural modernization is also changing, resulting in the setting of more goals regarding high-quality agricultural development. The first goal is the shift from the pursuit of quantity to the pursuit of quality in agricultural product supply. Central Document No. 1 issued in 2014 indicated the need to pay more attention to quality and safety. Central Document No. 1 issued in 2015 proposed to pay equal attention to quantity, quality and efficiency. The Central Rural Work Conference held in 2015 emphasized the need to improve the quality and efficiency of the agricultural supply...
system. The Central Work Conference held in 2017 emphasized the need to take the path of boosting agriculture through high-quality development. Central Document No. 1 issued in 2019 indicated the need to promote the transition of agriculture from production orientation to quality orientation and continued to clarify the goal of paying more attention to quality while ensuring the quantity in agricultural production and supply of agricultural products. The second goal is the transformation of the mode of agricultural production and operation from large-scale, extensive production and operation to intensive, efficient production and operation. Central Document No. 1 issued in 2015 clearly emphasized the need to focus on improving competitiveness and agricultural science and technology innovation. Central Document No. 1 issued in 2016 emphasized the need to improve agricultural quality, efficiency and competitiveness. Central Document No. 1 issued in 2018 emphasized the need to improve agricultural innovation, competitiveness and total factor productivity to gradually solve the outstanding problems in agricultural development, such as large-scale businesses’ failure to obtain competitiveness and quality at the sacrifice of quantity.

4. The third characteristic of evolution of the connotation of agricultural modernization with Chinese characteristics: increasingly improved core contents
Promoting the transformation of agriculture from traditional form to modern form is undoubtedly the eternal goal in the course of any agricultural modernization. However, the modern form of agriculture is a relative concept, and its connotation will continue to evolve with economic and social development. While promoting the progression of agricultural modernization, all countries need to not only clarify their current development stage but also refer to the existing modernization achievements of contemporary developed countries. As the goals of agricultural modernization in different historical stages since the founding of New China vary, the approaches and paradigms adopted by the CPC to lead the construction of agricultural modernization with Chinese characteristics had demonstrated different focuses accordingly. On the other hand, the development of social productive forces and the progression of science and technology have made it possible to improve the core contents of agricultural modernization.

4.1 Promotion of “mechanization, electrification, promotion of chemical fertilizer, and construction of irrigation infrastructure” in agriculture with mechanization as the core
In the stage of exploring the connotation of agricultural modernization with Chinese characteristics, the launch of the national industrialization strategy provided modern factors of production for agricultural development, and the CPC Central Committee interpreted agricultural modernization from the perspective of production. In the process of agricultural socialist transformation, the CPC formed a preliminary understanding of agricultural modernization. Judging from historical documents, the CPC Central Committee, influenced by the Soviet Union during this period, basically summed up the connotation of agricultural modernization with “mechanization.” In the campaign of agricultural cooperation, Mao Zedong (1999) believed that the purpose of cooperation was to better promote mechanization and pointed out that “China can only complete socioeconomic status transformation after it completes socialist transformation thoroughly in terms of social and economic system and applies machine operation in terms of technology, in all departments and places where machine operation can be used.” Based on this understanding, the CPC Central Committee set a long-term goal for agricultural development in January 1956, namely “to gradually implement agricultural mechanization with the development of national industry” (Political Bureau of the CPC Central Committee, 2011). In April 1959, Mao Zedong formally put forward
the famous conclusion that “the fundamental way out for agriculture lies in mechanization.” In the late 1950s and early 1960s, the CPC Central Committee began to attach importance to and learn from the experience of Western developed countries and deepened its understanding of agricultural modernization. The connotation of agricultural modernization at that time was summarized as “mechanization, electrification, promotion of chemical fertilizer, and construction of irrigation infrastructure.” In October 1959, in the report approved and transmitted to the Ministry of Agricultural Machinery, the central government clearly equated agricultural modernization with agricultural mechanization, electrification, promotion of chemical fertilizer and construction of irrigation infrastructure. In March 1961, Zhou Enlai made clear the connotation of agricultural modernization at the Central Economic Work Conference. He pointed out that “…We must support agriculture from all aspects and realize the mechanization, adequate irrigation, extensive use of chemical fertilizer and electrification of agriculture step by step” (cited in Cao, 2006). In specific implementation of this technical route, mechanization is still the core. The essence of this concept is to put industrial products into the field of agricultural production and promote the improvement of agricultural labor productivity. Under the guidance of this understanding, in the first 30 years after the founding of New China, modern factors of agricultural production such as machinery, chemical fertilizer and electricity and electrically powered equipment were widely used, and farmland water conservancy facilities were significantly improved, laying a certain foundation for agricultural modernization.

In 1978, the total power of agricultural machinery was 117.496m kilowatts, the rural power consumption was 25.31bn kilowatt-h, the fertilizer application was 8.84m tons and the effective irrigation area of farmland was 4,4970,000 hectares. However, it is worth noting that such an understanding of basically equating agricultural modernization with agricultural mechanization is biased and here are the reasons. First, from the perspective of agricultural modernization practice all over the world, a sparsely populated country usually chooses the “labor-saving” mode, that is, to increase the per-capita cultivated land area through the use of agricultural machinery, while a densely populated country usually chooses the “land-saving” mode, that is, to increase the output of each hectare of land through the use of biotechnology. In New China, there is a very prominent contradiction between population and land. It is obviously unreasonable to rely solely on mechanization to promote agricultural modernization. Second, there is an associated relationship between agricultural mechanization and industrial modernization, which is the natural result of industrialization at a certain stage of development. New China started agricultural mechanization on a full scale at the early stage of industrialization, which was rather divorced from reality.

4.2 Promotion of “scientization, intensification, socialization, and industrialization” in agriculture with scientization as the core
At the formation stage of the connotation of agricultural modernization with Chinese characteristics, the progress of agricultural science and technology led to a breakthrough in the understanding of modern agriculture, and rural reform has extended the connotation of agricultural modernization to the management level. As early as the 1970s, Deng Xiaoping had a profound reflection on the agricultural modernization, which focused on mechanization. On the basis of accurately grasping China’s national conditions and agricultural conditions, Deng pointed out that to produce more agricultural products with a tremendous population but comparatively little land, mechanization is not enough, and more scientific work is needed. Therefore, “agricultural modernization involves not only mechanization, but also the application and development of science and technology” (Deng, 1994, p. 28). The development of biotechnology and information technology in the world since the middle of the 20th century
has provided the possibility for the integration of agriculture and science and technology. Western developed countries have thus embarked on the path of “agricultural scientization.” After visiting the United States, Japan and other countries in the late 1970s and early 1980s, Deng Xiaoping grasped the new trend of world agricultural development in time and deepened his understanding of the importance of science. Deng Xiaoping (1993) pointed out incisively that “the problem of agriculture . . . may ultimately be solved through scientific approaches,” which marks that the CPC has clearly taken scientization as the core of agricultural modernization and kept up with the pace of world agricultural modernization in time. The discussion of the CPC Central Committee on “scientization, intensification, socialization and industrialization” of agriculture began at the Third Plenary Session of the Eleventh Central Committee of the CPC, which first made a comprehensive arrangement for the construction of agricultural modernization, covering various aspects in the process of agricultural production and operation. This arrangement broke through the limitation of the originally prescribed connotation of agricultural modernization as “mechanization, electrification, promotion of chemical fertilizer and construction of irrigation infrastructure” and enriched the connotation of agricultural modernization. Two years later, when talking about rural policies, Deng Xiaoping (1994, pp. 315–316) pointed out that four conditions need to be met for realizing high-level agricultural collectivization: “first, the level of mechanization is developed . . . second, the management level is improved . . . third, diversified operation is developed . . . so that the rural commodity economy is rapidly developed, and fourth, collective income as well as its proportion in the total income are increased.” The first three conditions are respectively related to the modernization of agricultural production, the modernization of agricultural management and the optimization of agricultural resources, laying a solid ideological foundation for comprehensively summarizing the connotation of agricultural modernization. In the 1990s, Chinese communists, with Jiang Zemin as the core, developed Deng Xiaoping’s exposition on agricultural modernization under the background of marketization. In April 1992, the Fifth Plenary Session of the Seventh National People’s Congress first proposed to “vigorously develop high-yield, high-quality, and high-efficiency agriculture.” In September of the same year, the Decision of the State Council on the Development of High-yield, High-quality and High-efficiency Agriculture further pointed out that “in the 1990s, China’s agriculture should continue to pay attention to the quantity of products and turn into a new stage that places equal emphasis on high quality and high yield and strives to improve efficiency” (State Council, 2011), which marks that China’s agricultural modernization has entered an important period of historical transition. The essence of developing high-yield, high-quality and high-efficiency agriculture was to focus on marketization and promote industrialization of agricultural management, production intensification and service socialization with scientization as the core. As such, the CPC Central Committee’s understanding of agricultural modernization in this period can be summarized as “scientization, intensification, socialization, and industrialization” with scientization as the core. The essence of this concept is to combine agriculture with science and develop agriculture with modern equipment, technology and management. It should be said that “scientization, intensification, socialization, and industrialization” of agriculture is a complete summary of the connotation of agricultural modernization. Based on this understanding, the agricultural modernization practice in China has made a leap forward and the agricultural output has grown rapidly.

4.3 Agricultural modernization with complexity as the core

At the establishment stage of the connotation of agricultural modernization with Chinese characteristics, the connotation of agricultural modernization can be fully explained under the framework of scientific development. During this period, the CPC Central Committee
made a series of discussions and work arrangements for the construction of agricultural modernization from the perspective of urban and rural overall planning and the coordinated development of industry and agriculture. Based on the aforementioned condition, Central Document No. 1 issued in 2007 provided the most comprehensive elaboration of the connotation of agricultural modernization with Chinese characteristics so far with the theme of “developing modern agriculture,” covering the strengthening of factors of modern agricultural production, the construction of agricultural industry system, the improvement of agricultural production organization form and the transformation of agricultural development mode. This document indicated that agricultural modernization is a complex composed of multifaceted reform and a combination of productivity development and adjustment of production relationship. In the promotion of agricultural modernization, in addition to focusing on all-round development, the core contents should be different based on the specific development situation of different stages. With the theme of “water conservancy reform and development,” Central Document No. 1 issued in 2011 was the first document specialized in water conservancy since the founding of New China. The document highlighted the importance of agricultural water conservancy in this period and indicated the need to accelerate the construction of farmland water conservancy facilities and change the lagging construction of water conservancy works. With the theme of “agricultural science and technology innovation,” the No. 1 Central Document issued in 2012 is the first programmatic document on agricultural science and technology innovation promulgated by the CPC Central Committee since the founding of New China. The document highlighted the importance of focusing on agricultural science and technology innovation and indicated the need to clarify the direction of agricultural science and technology innovation and improve the ability of agricultural science and technology innovation. “Agriculture, rural areas, and farmers” entered another golden period based on the improvement of our understanding. Grain production, as well as farmers’ income, continued to increase.

4.4 Agricultural modernization with systematization as the core
When any kind of understanding develops to a certain stage, it will produce requirements of systematization, that is, to adopt logical means to endow discrete concepts with a systematic form. At the deepening stage of the connotation of agricultural modernization with Chinese characteristics, the CPC Central Committee attempted to interpret the connotation of the agricultural modernization systematically. Striving to build a modern agricultural industrial system, production system and management system is the CPC’s important thought on agricultural modernization at a new starting point and a new stage. Since the Eighteenth National Congress of the CPC, Xi Jinping emphasized on different occasions that the construction of the “three major systems” should be taken as the starting point to promote the development of modern agriculture actively. At the Fifth Plenary Session of the Eighteenth Central Committee of the CPC, the theory of “three major systems” was formally introduced into the CPC’s literature. Modern agricultural industry system, production system and management system are an organic and unified whole and together constitute the framework of the connotation of agricultural modernization. Among them, the modern agricultural industry system and production system belong to the category of productivity, and the modern agricultural management system belongs to the category of production relations. The main features of the modern agricultural industry system are marketization, integration and upgrading. The main features of the modern agricultural production system are science and technicalization, mechanization and green. The main features of the modern agricultural management system are intensification, socialization and systematization (Jiang, 2018). The theory of “three major systems” was put forward to systematize the comprehensive understanding of the CPC Central Committee on agricultural modernization in the previous period.
The CPC Central Committee’s systematic interpretation of agricultural modernization is highly open and inclusive. It puts forward not only “three systems” based on the development framework but also “one main line” from the perspective of development direction, that is, the structural reform of the agricultural supply side. The “new development concept” was put forward based on development ideas. Core contents of agricultural modernization can be summarized as “one main line,” “three major systems” and “new development concept.” The Central Rural Work Conference held in 2015 put forward the concept of agricultural supply-side structural reform for the first time, pointing out the need to strengthen the agricultural supply-side structural reform. With the theme of “implementing the new ideas of development and accelerating agricultural modernization,” Central Document No. 1 issued in 2016 pointed out the need to implement the development concept of innovation, coordination, green development, openness and sharing, promote agricultural modernization with new development concept and solve the development problems of “agriculture, rural areas, and farmers.” With the theme of “agricultural supply-side structural reform,” Central Document No. 1 issued in 2017 emphasized that the further promotion of agricultural supply-side structural reform should be taken as the main task for the work related to agriculture, rural areas and farmers at present and in the future and indicated that agricultural supply-side structural reform was a long-term process. In this respect, agricultural supply-side structural reform would play a long-term role in the development of agricultural modernization. The proposal and implementation of new development ideas and the agricultural supply-side structural reform are conducive to the continuous enrichment and development of the connotation of agricultural modernization with the deepening of practices.

5. The fourth characteristic of evolution of the connotation of agricultural modernization with Chinese characteristics: progressively maturing strategies of development
Agricultural modernization, as a significant part of national modernization, cannot exist in isolation. It is directly or indirectly linked with other sectors of the national economy. All parties influence, depend on and promote each other to form a complete development support system. The history of world agricultural development shows that agricultural modernization is not only a process of technological change but also a process of institutional change as well as a process of coordinated development with other sectors of the national economy. Since the founding of the New China 70 years ago, with the deepening of agricultural practice, the systematic understanding of the CPC Central Committee on agricultural development has continuously been improved, and the development strategy has become mature gradually.

5.1 Considering agriculture in the field of production
The agricultural modernization of Western developed countries arose in the 1950s and 1960s when the market economy was highly developed and had been in the institutional environment of the market economy since then. In contrast, the historical process of New China’s agricultural modernization has experienced a transition from a planned economy to a socialist market economy. Under different system environments, the development of agricultural modernization showed different characteristics in the aspects of technology selection subject and its behavior characteristics, technology selection mode, system arrangement and government function (Zhu and Feng, 1994). Thus, the development strategy of agricultural modernization with Chinese characteristics in different periods will be significantly affected by the economic system. In the exploration stage of the connotation of
agricultural modernization with Chinese characteristics, China has chosen the strategy of giving priority to the development of industry, especially the heavy industry. Under the planned economic system, the central government, on the one hand, adopted the unified distribution system of agricultural products for strict planned regulation in the field of agricultural circulation. On the other hand, the central government relied on the people's commune system featuring high centralization and unified management to concentrate human, financial and material resources and promote agricultural modernization through constant input of factors. Under the combined action of the aforementioned factors, the dual structures of the industry and agriculture and the urban and rural areas have been formed. Agricultural modernization was not only limited to the traditional agricultural sector but also limited to the field of agricultural production.

5.2 Considering agriculture solely
At the forming stage of the connotation of agricultural modernization with Chinese characteristics, the implementation of the household contract management system and a series of institutional changes thus triggered enabled the CPC to extend its understanding of agricultural modernization from the field of production to the field of circulation. However, it should be noted that the agricultural development strategy of the central government at this stage was still confined to the closed circle of rural and agricultural internal circulation. After the Third Plenary Session of the Eleventh Central Committee of the CPC, the central government implemented a series of policies and measures in the agricultural and rural areas, aiming to break through the highly centralized planned economic system. Five No. 1 Central Documents were successively promulgated from 1982 to 1986, aiming to solve the drawbacks of systems such as people's communes and unified distribution of agricultural products. After 1985, the focus of reform and opening-up gradually shifted to cities and industries. From the perspective of policy, the central government carried out reforms in rural and urban areas, agriculture and industry respectively in different periods and did not plan for agricultural modernization from the perspective of urban–rural integration. Due to such a tendency of considering solely on agriculture, the level of agricultural modernization in China was always in the stage of primary development – China's grain yield per unit area has reached the average level of developed countries, but agricultural labor productivity is far from the world average level. The reason is that though China has realized the rapid growth of agricultural output through system innovation and scientific and technological progress after the reform and opening-up, the situation of labor surplus in agriculture has not been solved for a long time due to uncoordinated development of industry and agriculture and the low level of urbanization.

5.3 Considering agriculture by jumping out of it
At the establishment stage of the connotation of agricultural modernization with Chinese characteristics, the CPC Central Committee stood at a new height and gained a better understanding of agricultural modernization as follows. First, agriculture has the characteristics of intertwining the natural reproduction process with the economic reproduction process and is affected by both natural risks and market risks, which is a weak industry. Second, agricultural development is a systematic problem, and multilateral cooperation is required to promote agricultural modernization effectively. The Sixteenth National Congress of the CPC proposed to “balance the urban and rural economic and social development” and plan and deploy agricultural modernization in the overall context of the national economy. On this basis, Central Document No. 1 issued in 2004 put forward the policy of “taking more, giving less and relaxing control,” marking the initial formation of the central government’s strategic thinking of “jumping out of agriculture for considering it.”
Since then, based on the important judgment of “two trends” made at the Fourth Plenary Session of the Sixteenth Central Committee of the CPC, the central government gradually clarified the policy to “nurture agriculture with industry and encourage urban areas to support rural areas” and introduced a series of policies and measures to support and benefit rural areas, farmers and agriculture and make them stronger. Since the Seventeenth National Congress of the CPC, the CPC Central Committee further provided a specific way to realize the strategic thinking of “jumping out of agriculture for considering it,” that is, to establish a long-term mechanism that “industry promotes agriculture and urban areas support rural development” in the process of coordinating urban and rural development, thereby forming a new integrated pattern of urban and rural economic and social development.

5.4 Considering agriculture from both rural and urban perspectives

In the deepening stage of the connotation of agricultural modernization with Chinese characteristics, the CPC Central Committee has a deeper understanding of agricultural modernization. First of all, besides adhering to the strategic thinking of “jumping out of agriculture for considering it,” it put forward the strategy of synchronous development of “industrialization, informatization, urbanization, and agricultural modernization,” which was formally requested in the report of the Eighteenth National Congress of the CPC. This strategy emphasized the close relationship between agriculture and other sectors of the national economy. Its essence was to strengthen the reaction capacity of the secondary and the tertiary industries to the primary industry (Han and Sun, 2015) and remove constraints in agricultural modernization. In this strategy, industrialization provides agriculture with modern material and equipment, informatization adds new power to agriculture and urbanization creates conditions for the transfer of agricultural labor force and the expansion of agricultural operation scale.

Then, in light of the development of agriculture and rural areas, to strengthen weak points in agricultural and rural development, the CPC Central Committee proposed to adhere to the strategy of giving priority to agricultural and rural development as well as urban–rural integration development. The Nineteenth National Congress of the CPC not only first put forward the strategy of rural revitalization but also proposed to give priority to the development of agriculture and rural areas and establish and improve the system and policy system of urban–rural integration development. Among the conference resolutions, the rural revitalization strategy is an overall and comprehensive strategy to promote modernization of agriculture and rural areas and reflects the overall strategic thinking of the CPC Central Committee. The adherence to giving priority to agricultural and rural development reflects the “top priority” thinking of the CPC Central Committee and its strategic idea of relying on agricultural and rural areas to solve problems of agriculture, rural areas and farmers. Urban–rural integrative development reflects the development and improvement made by the CPC Central Committee to the strategy of balancing urban and rural development. All the said strategies and the synchronous development strategy of “industrialization, informatization, urbanization, and agricultural modernization” focus on driving the development of agriculture and the countryside through external coordination and development. The Central Rural Work Conference held in 2017 first proposed to establish a path of socialist rural revitalization with Chinese characteristics, stressing the need to reshape the relationship between urban and rural areas and establish a path of integrated urban and rural development. With the theme of “rural revitalization,” the No. 1 Central Document issued in 2018 proposed to accelerate the formation of a new type of industrial–agricultural and urban–rural relation to facilitate mutual promotion between industry and agriculture, complementation between urban and rural areas, comprehensive integration and common prosperity. With the theme of “giving priority to the development of agriculture and rural
areas,” Central Document No. 1 issued in 2019 defined the general policy of giving priority to the development of agriculture and rural areas. In this document, the development requirements of the “four priorities” fully embodied the strategic thinking of the CPC Central Committee to “connect the interior with the exterior for considering agriculture” and created favorable internal and external environments for modernization of agriculture and rural areas.

6. Conclusion
Since the founding of New China, the CPC’s understanding of agricultural modernization with Chinese characteristics has followed the general law of Marxist epistemology, that is, knowledge comes from practice, services practice, develops with practice and accepts the test of practice. In the process of the dialectical movement of “practice, cognition, re-practice, and re-cognition,” the CPC’s understanding of agricultural modernization has been continuously improved and breakthroughs and innovations have been achieved on several major theoretical issues. The formation and improvement of the connotation of agricultural modernization with Chinese characteristics are the result of various influencing factors, for example, the guidance of Marxist agricultural modernization thoughts, the combination of China’s fundamental realities and specific agricultural conditions and the influence of the development trend of agricultural modernization in the world. Summarizing the practices and theoretical innovation in the past 70 years, the evolution of the connotation of agricultural modernization with Chinese characteristics is toward a scientific, comprehensive and systematic direction and was fundamentally the result of adherence to the development path with Chinese characteristics, active liberation and development of agricultural productivity, adjustment and improvement of agricultural production relations, continuous exploration and development of the path of agricultural modernization with Chinese characteristics, as well as continuous enrichment and development of the connotation of agricultural modernization with Chinese characteristics under the strong leadership of the CPC.

Note
1. Data source: the National Bureau of Statistics. Unless otherwise specified herein, all the data is collected from the National Bureau of Statistics or calculated based on China Statistical Yearbook, China Rural Statistical Yearbook and China Agriculture Statistical Report of the corresponding year.

References


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