MODERN AGRICULTURE AND FARMING STRATEGY

SUGGESTION IN ROMANIA

FROM CHINESE EXPERIENCE

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Abstract

China and Romania were both communist country, after 1979 China applied reform and open policy and become half communist and half capital society, After 1989, Romania become to be a capitalist country, after decades years of development, China make great success on agriculture modernization economy development, replied on strategic management, with the modernization agriculture trend around the world. Romania have the advantage and good history in the agriculture development. From the realistic point of view, the new policies and strategies are suggested from this study paper.

Keywords: agriculture modernization, strategy, Chinese experience.

JEL classification: N50, Q11, Q17

1. Introduction

China and Romania were both communist country, and angriculture industry is the priciaple for two counties as well. After the revolution, each country going fast on the economy development, in agriculture filed, agriculture mondernization becoming the trend and new strategy become more and more important for development. From the defination of the agriculture to Chinese strategic pratice, Romania could make some change

on stragegy and polices to enhance the agriculture.

2. Agriculture Modernization

The characteristics of the agriculture modernization could be stated in following aspects.

- 1) The modernization of agricultural production means. Using advanced equipment instead of manual labor, especially in the before, during and after each link in the large area USES mechanical work, reduce the physical strength of the agricultural laborers, raise labor productivity.
- 2) The scientific technology of agricultural production. The advanced science and technology is widely used in agriculture, improve the technology level of agricultural production and agricultural scientific and technological content, to improve the quality of agricultural products and agricultural products international competitiveness, reduce production cost, and ensure food safety.
- 3) The industrialization of agricultural management way. Transformation of the mode of agricultural growth mainly is to develop the agricultural industrialization, the agricultural products in the production, processing, circulation of organic combine, supply, and several management patterns, improve the management benefit of agriculture, and enhance the agricultural ability to resist natural risk and market risk.
- 4) The agricultural service socialization. Form various forms of agricultural socialized service organizations, in the whole process of agricultural production and operation of each link has a social service organization to provide specialized services.
- 5) The agricultural industry layout regionalization. All geared to the needs of both the international and domestic markets, according to their own resources, geographical and environmental conditions, the development of the distinctive and has a certain scale of agricultural pillar industries and the fist product, form the advantage industry area of agricultural

products, improve the market competitiveness of agricultural products and market share.

- 6) Agricultural infrastructure modernization. Is beneficial to enhance the agricultural ability to resist the various natural disasters, but also to the efficient utilization of agricultural resources, agricultural development greatly enhanced.
- 7) Agricultural ecological environment modernization. Promoting agricultural modernization must use modern means to protect the ecological environment, not only can not destroy the ecological environment in the process of agricultural production, and vigorously develop tourism agriculture, the agricultural ecological environment become better and more beautiful.
- 8) Agricultural laborers to modernization. To improve the comprehensive quality of agricultural laborers, main is to improve the ideological and moral quality of agricultural laborers, and science and technology culture quality, make the agricultural laborer is familiar with the relevant policies of agricultural production and the legal knowledge, master 2-3 new agricultural practical technology, improve labor skills, to meet the need of developing modern agriculture.
- 9) Farmer's life modernization. Increase farmers' income, farmers have a better material life and spiritual life, this is an important goal of agricultural modernization.

3. Chinese agricultural economy development strategy

(1) "introverted" development strategy

The basic features of "introverted" development strategy is: focus on the resource and market or zoom in to the home, in the region is the geographic scope of an economic cycle activity confined to a smaller geographic range, in a sense, this is the small peasant economy to expand. The pattern is "conveniently small" or "a lot". Although in the development strategy of "introverted" can also have some goods to

earn foreign exchange through exports of agricultural products, but not dominant, only a supplementary role. On the economic structure, the closed degree higher only economic exchanges with the nearby towns, formed a small urban and rural areas centered relatively independent closed loops; With low levels of closed with the large and medium-sized cities to establish economic ties, but forage-livestock system is not high also

"Introverted" development strategy of the agricultural economy to form a solid, durable and self-sufficient reproduction of pulmonary circulation closed system, it to outside interference, the international market turmoil has a strong ability to resist, but the restriction of the body "introverted" itself, the slow economic development, realize the process of modernization must continue, particularly in the impact of technological revolution, the world economy is developing rapidly, likely with an increasing gap between the advanced level of world agriculture.

(2) "multi-directional" development strategy

Focus is on "multi-directional" development strategy, vigorously develop agricultural industrialization, and actively adjust the structure of agricultural production, agricultural economic development in the direction of diversification. Constraints, therefore, should break through the closed framework to strengthen the urban industry diffusion absorption ability, enhance their awareness of the importance of commodity, market concept, attaches great importance to the development of characteristic agriculture and agricultural products export goods production. Development strategy of "multi-directional" compared with "introverted" development strategy, a big step forward, but its focus is mainly in the domestic, in some areas as a transitional strategy still has important significance, especially in the low level of economic development in the region, is necessary and feasible.

(3) The development of "export-oriented" strategy

The characteristics of "export-oriented" development strategy, actively

seeking international market, participate in and promote the international economic circulation, in an effort to attract foreign investment, introduce and absorb foreign advanced technology and management experience, on the basis of international labor service cooperation, constantly enhance capacity to earn foreign exchange through exports in the international market, make oneself become an important part of international trade organizations and activities. Area on the southeastern coast of China, the rapid development of economy, high level of the region's agriculture has begun to enter the export-oriented economy, its characteristic is based on the international market needs to determine or adjust their production direction.

The main content of the agricultural economy development strategy, the agricultural economy development strategic target

Agricultural economy development strategic target is to point to in certain conditions, through the forecast on the outlook for the agricultural economy and hope to achieve the expected results; it is the main content of the agricultural economic development strategy and the primary link. Strategic objectives are put forward strategic starting point, in complete strategy, and become the final results of strategy implementation. Target is the soul of the strategy, there is no clear goal, and strategy of other content doesn't make any sense. The strategic target is wrong, will be wrong.

The agricultural economy development strategic target generally should include three aspects of content.

a) The economic growth target

This is a development strategy is an important part of the overall goal. Due to the basic role economic goals, it largely determines the target formulation in other fields. Therefore, formulate correct economic growth target has special important significance: economic growth target generally includes the total amount of economic growth and per capita, economic benefits, etc. The total economic growth usually adopt gross domestic product (GDP), gross national product (GNP), industrial and agricultural output value and added value of agricultural output and index to reflect; Average per capita is

included in the main natural crystal amount and currency, the per capita annual net income, etc.; Economic benefits including labor productivity, capital profit margin products rate, material consumption and input output, etc., from different angles reflect the benefit of the agricultural economic levels.

b) The farmers' living standards improve the goal

This is also an important part of the agricultural economy development strategic target, increase the farmers' living standard and quality of life closely linked with the economic development of countries and regions, is helpful to arouse the enthusiasm of the farmers work hard to achieve the strategic goal and active spirit, which is a socialist country fundamental purpose of economic development and making development strategy. It includes rural per capita annual income per capita, food composition, food demand structure, the total import and export of agricultural products, etc.

c) The social environment stable equilibrium

Population, resources, ecological environment is an organic connection as a whole, is the premise of economic development, all countries in the world today this content as an important part of economic development strategic target. No stable balance of the social environment is impossible to have the stability of the continuous economic development and people's living standards continue to improve. Therefore, in the strategic goals for the rural population in net rate, degree of rural culture, forest coverage, pasture yield and grazing capacity, water quantity, soil and water conservation, the environmental pollution and other rules clear after efforts to achieve its goals.

4. Romania agriculture overview

Agriculture is the Romanian traditional sectors of the economy. Romania has long been is Europe's main grain producer and exporter, have "European granary" of reputation. Historically, agricultural production has played the role of main force of economic development. Year, the highest 40% of national income from agriculture and forestry, agricultural products is the

main export commodities.

Traditional socialist period, due to the Romanian more emphasis on industrial development, investment in agriculture and technical transformation have been ignored, production is not stable. The late 1970 s, for carry out the policy according to export products to repay the debt, there is a shortage of agricultural products in the domestic, and throughout the 80 s. Economic transitions in 1990, through measures such as returning land, relatively full use of the land resources, agricultural production gradually restored.

4.1 The situation of Romania farming and animal husbandry

(1) The planting industry

Planting is the most important part of Romania in agriculture, the output value of the total agricultural output value of more than 1/2.Planting industry including food crops, cash crops, and a variety of fruits and vegetables, etc. The main food crops are wheat, rye, barley, oats, corn, etc. The main economic crops are sugar beets, sunflower, flax, rapeseed, soybean and tobacco, etc. The main vegetable crops are tomatoes, Onions, potatoes, cabbage and green peppers, etc.

Romania melon and fruit production has an important influence in the world. The main crops are plum, apple, pear, watermelon, cherries, apricots, strawberries, etc. According to the report, Romania plum production accounted for the third world.

Romania's grape harvest, rich varieties of high quality, all over the country with numerous grape plantation, many roads lead to well-known plantations or wine cellar. Romanian state as a self-styled "wine land", is one of the top ten wine country in the world.

(2) Animal husbandry and aquaculture

Livestock production is widely dispersed in Romania. Common poultry breeds include cattle, pigs, sheep, horse, chicken, Turkey, duck, goose, etc. In addition to the large-scale professional breeding, membership before many residents on the outskirts of the rural residents and even some cities in their courtyard in some animals, this kind of situation will be restricted until

completely disappear after accession.

Romania's main fishery production of freshwater aquaculture, natural lakes, fishing, the Black Sea and the Atlantic Ocean fishing. Peaked in the late 1980 s and early 90 s, 1990 fish production is 63000 tons, and then declined obviously, at present only 20000 tons.

(3) Forestry

Romania's forest area of 6.4 million hectares, the forest coverage rate of about 28%. Main variety of wood is pine, beech and oak, etc. Timber supply about 15 million cubic meters, of which about 5 million cubic meters, ju wood pine 4.5 million cubic meters of soft, hard miscellaneous wood 1.7 million cubic meters, miscellaneous wood 1.3 million cubic meters.

4.2 The foreign trade situation of agricultural products

Romania history is important exporter of agricultural products in Europe, but because of declining competitiveness, has become a net importer. According to the Romanian data released by the agriculture, forestry and rural development, agricultural products and food imports more than 2005 Romania 2 billion Euro, the trade deficit of 1.34 billion euro, year-on-year growth of 27%. November 1, 2006, agricultural products and food export 764 million Euro, imported 2.1 billion Euro, the trade deficit of 1.4 billion euro, year-on-year growth of 19.1%.

Due to domestic production is difficult to self-sufficiency, Romania needs to import a lot of pigs, pork, malt, protein feed, and other products, become a cause of agricultural products and food large trade deficit is the main reason. First 11 months of 2006, Romania's commodities imported agricultural products from abroad for pork, cigarettes, tobacco and sugar, which accounts for about a third of the total amount of imports, including import a pork alone accounted for a quarter of the total amount of agricultural products and food imports, imports of 300 million euro, more than the same period in 2005 of 269 million euro, while chicken imports fell, import from the same period in 2005 fell to 83.1 million euro 100 million euro.

Agricultural products Exports more than imports include: wheat, corn,

barley, sunflower, live animals (cattle, sheep and horses), soybean oil, honey, canned meat and walnuts. One of the live animals, wheat, and sunflower exports accounted for about nearly half of all exports during the same period. First 11 months of 2006, Romania the wheat exports by 24.2 million euro to 24.2 million euro a year earlier; Sunflower surge in exports by 42.2 million euro to 42.2 million euro.

Romania are the most important trading partner for the EU agricultural trade, exports to the EU countries and the European Union imports 480 million euro and 1.19 billion euro respectively.

According to Romania, in 2005, China and Romania for \$46.29 million total agricultural and food trade; First 11 months of 2006, to \$54.77 million, above the 2005 level, the Romanian exports of \$428700, imported us \$54.37 million, \$53.94 million deficit.

5. Romania development policies and strategy suggestion for encouraging agriculture.

Romania after economic transition, successive governments have farm has been committed to the state-owned capital is given priority to agricultural enterprise privatization reform. In addition, in order to ensure the needs of sustainable development of agriculture and Romania to adapt to the new situation after joining the European Union, Romanian government main measures include:

5.1 Formulate preferential policies to ensure that rural labor is enough.

Romanian rural residents accounted for about 45.6% of the population, the proportion is significantly higher than other European countries, the level of urbanization is still very low, because Romania income level is low, the rural residents income of a single, most young adults generally choose the migrant workers or to developed countries such as Britain, Germany, Spain or Italy, engaged in grape or strawberry picking, building and health care services, such as Romania rural actual engaged in agricultural production in general as "sick" and "women and children", in 2002, 24% in agricultural producers age more than 65 years, the majority of farmers engaged in traditional agriculture. In order to guarantee the sustainable development of agriculture and labor is

sufficient, the Romanian government policies, to encourage young people to settle down and work in the countryside city, and to give a one-time 25 ~ 40 000 leu 000 subsidies. To encourage the elderly retired from the agriculture, Romania, the ministry of agriculture in 2003 to develop a plan, to the rural elderly pensions, amount to \$750 to \$1000 a year, to make them able to normal life after retirement. In addition, the Romanian government regulation, ranging in age from 62 years of age or older, have at least 10 hectares of land and rent the land for a living natural person can enjoy lifelong rents. Lifelong rent is varies according to rent or sell land, the land lesser rent is 50 euro per hectare a year, and sold for 100 euro per hectare per year. To agricultural land rent is to provide a lifetime of rent shall be paid by the seat of local finance. To this end, the local public administration set up specialized agencies, on the basis of agricultural land rent rent/sell certificate issued.

5.2 Adjust the agricultural structure, to implement diversification.

Romania, though vast, fertile land, superior natural conditions, suitable for agriculture, but since 1990, but have not been able to make full use of the potential, products variety and structure of the single. In recent years, the Romanian government in accordance with requirements of the European Union, promote agricultural diversification, promote the farmers' income, through loans or subsidies, encourage the development of various related service industry and agriculture, such as agricultural and sideline products processing industry, rural tourism, the characteristics of traditional food production, and high technical content of the mode of production, such as greenhouse cultivation, animal husbandry and vegetable production, a lot of places to make full use of natural conditions, the development of rural tourism and hot spring tourism projects, Romania government is using EU funds to support new and improve the tourism infrastructure.

5.3 The "farmer" plan, give play to the scale benefit.

After 1990, Romania, the privatization of state-owned and collective land, because basically carried out in accordance with the equalitarianism distribution, cause of agricultural land is too scattered,

size is too small, the vast majority of farm as small farms in the area under 10 hectares, the lack of farm "middle class", it is difficult to implement mechanized farming, agricultural production efficiency is not high, many farms need government subsidies can barely sustain. For the integration of resources, to join the competition from other member states, the Romanian government away for a rainy day, and in 2005 launched the "farmers" program, designed to encourage farmers by buying or leasing way to build a batch of appropriate scale, suitable for modern farm mechanization of operations, strengthen the intensive and scale efficiency of agriculture.

5.4 Use natural endowments, development of ecological agriculture.

Romania legend believes that the country is "butt sitting on the place where god", mostly black soil, soil rich in humus, suitable climate, four seasons, the river within the territory, abundant water resources, with superior natural conditions, and the ecological agriculture in developing traditional Chinese medicine is the most potential developing green agriculture in Europe one of the countries. In addition, farmers have always been less use of chemical fertilizers and pesticides in agriculture, for the most part the national farmland have been without the dangers of chemical fertilizer. For the development of ecological agriculture, the Romanian government according to its comparative advantage, using existing production capacity and the European Union aid, set up a relatively complete system of ecological agriculture and large-scale ecological agriculture demonstration area; Encourage the relevant academic institutions and enterprises to carry out ecological agricultural research and application; Set up specialized agencies, such as in the department of agriculture bureau set up a national ecological products, dedicated to ecological agricultural development. Discussed in Romania newly released government and submitted to the public after the membership development guidelines, development of ecological agriculture and establishing production base of green food as target in Romania in the European Union and one of the direction of the government's efforts to.

5.5 Set up professional association and the interest of the farmers.

The Romanian government support for farmers was established according to the voluntary principle of various kinds of professional associations, such as grain food association, the association of economic crops, cattle and pig association, the association of chickens, apiculture association, etc., on the one hand can communicate through holding all kinds of lectures, BBS and other activities related to agricultural technology and experience, improve the efficiency of agricultural production and the organizational degree, guide farmers to timely adjust the cultivation according to the market and the EU requirement and business strategy, on the other hand can also on behalf of farmers to negotiate with the government, improve the farmers' rights consciousness and ability, protect the legitimate rights and interests of farmers. As according to the regulations of the European Union, Romania join after traditional shepherd stragglers type of the production of wool, lamb and other products without strict sanitary inspection may not be sold in other counties, affect their livelihood, Romania to negotiate with the government, the shepherd association requirements by setting up a transitional period and compensate and provide free training to properly solve.

5.6 Increase the degree of agricultural modernization and anti-risk ability; narrow the gap between with the European Union countries.

For a long time, due to the small scale and low mechanization degree, Romanian agriculture is difficult to get rid of the situation of "weather", affected by the weather, anti-risk ability is low, agricultural output fluctuation is frequent, volatile. According to the requirement of the accession treaties signed with the European Union, Romania, in addition to the original radical changes to the agricultural structure, but also greatly improve the level of agricultural modernization, to promote and popularize thoroughbred coverage of crops and animals and plants. At the same time, the agricultural administrative agency must also make significant reform. To this end, make full use of the technical and financial assistance of the European Union, Romania will SAPARD (supporting the new accession countries agricultural and

rural development project plan), PHARE (central and eastern European economic reconstruction program) and the ISPA

6. Conclusions

Romania should take some new strategies to enhance the development of the agriculture and to fasten the poistion as the "European granary" and to support economy development. All the policy and strategy suggested are based on Romania realistic situation.

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8. References

- 1. Huang, Jikun and Christina C. David. 1995. "Price Policy and Agricultural Protection in China," A report to FAO.
- 2. Huang, Jikun and Ruifa Hu. 1988. "Agricultural Research and Extension Policies in China." Edited (in Chinese), forthcoming.
- 3. Huang, Jikun, Hengyun Ma, and Scott Rozelle. "Rural Poverty and Investment Policy in the Poor Area in China," Reform, forthcoming (1998). In Chinese.
- Huang, Jikun, Mark Rosegrant, and Scott Rozelle. 1996. "Public Investment, Technological Change and Agricultural Growth in China." IFPRI 2020 Discussion Paper, 1996, IFPRI, Washington D.C.
- 5. Huang, Jikun and Scott Rozelle. 1995. "Environmental Stress and Grain Yields in China." *American Journal of Agricultural Economics*. 77(1995):853-864.
- 6. Huang, Jikun and Scott Rozelle. 1996. "Technological Change: Rediscovering the Engine of Productivity Growth in China's

- Agricultural Economy." *Journal of Development Economics* 49(1996):337-369.
- Huang, Jikun, Scott Rozelle and Mark Rosegrant. 1996. "China's Food Economy to the 21th Century: Supply, Demand, and Trade", *IFPRI* 2020 Discussion Paper, 1996, International Food Policy Research Institute, Washington D.C.
- 8. Li Peng, 1996. guanyu guominjinji he shehui fazhan jiuwu jihu he 2010 nian yuanjing mubiao gangyao de baogao [A Report of National Economy and Social Development for the Ninth Five-Year Plan and 2010 Long Term Goals], People's Press, Beijing.
- 9. Lin, Justin Yifu. 1992. "Rural Reforms and Agricultural Growth in China." *American Economic Review*, 82(1992):34-51.
- 10. Lu, Feng. 1996. "China's Grain Trade Policy and Food Trade Pattern" A paper presented in Conference on Food and Agricultural Policy Challenges for the Asia-Pacific and APEC, October 1-3, 1996, Manila, the Philippines.
- 11. McMillan, J. J. Walley and L. Zhu. 1989. "The Impact of China's Economic Reforms on Agricultural Productivity Growth." *Journal of Political Economy*. 97(1989):781-807.MOA. China's Agricultural Development Report, 1995, 1996, and 1997.
- 12. http://e-nw.shac.gov.cn/wmfw/hwzc/sjnygl/200805/t20080530_749971. htm
- 13. China's Ongoing Agricultural Modernization Remain After 30 Years of Reform / EIB-51 Economic Research Service/USDA\
- 14. http://globserver.cn/romania/agriculture