# Discussion on Some Problems of Cultivating New Professional Farmers——A Case Study of F City, Fuzhou City, Jiangxi Province

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#### Abstract

The cultivation of new-type professional farmers is a realistic choice for the successful implementation of the rural revitalization strategy and the only way to achieve the comprehensive building of a well-off society in rural areas. Therefore, it is of great theoretical and practical significance to cultivate new professional farmers who have modern agricultural science and technology knowledge and know how to manage. Taking the cultivation of new professional farmers in F City, Fuzhou city, Jiangxi Province as an example, this paper makes a comprehensive exposition, and puts forward some positive suggestions with strong operability for a considerable period of time in the future.

**Keywords:** rural revitalization; new-type professional farmers; several problems

#### I. Introduction

New-type professional farmers are modern agricultural practitioners whose occupation is agriculture, who have corresponding professional skills and whose income mainly comes from agricultural production and operation. A large number of practices have proved that the cultivation of new-type professional farmers is the key to rural revitalization as well as an effective way to promote the modernization of rural areas. Therefore, it is of great theoretical and practical significance to study the cultivation of new professional farmers for the smooth implementation of rural revitalization strategy.

By studying and sorting out relevant literature on the cultivation of new professional farmers, it is found that the theoretical circle researches on the cultivation of new professional farmers are mostly conducted from the level of government "institutional arrangement". However, studies on the cultivation of new professional farmers from the level of "spontaneous endogenous demand" are relatively scarce. In fact, the "institutional arrangement" of the government and the "spontaneous endogenous demand" of the cultivation of new professional farmers are mutually "interactive integration" and "complementary". Therefore, this paper takes F City, Fuzhou city, Jiangxi Province as the research object, and makes a beneficial discussion on the cultivation of new professional farmers in the rural revitalization strategy from the perspective of "spontaneous endogenous demand" for the cultivation of new professional farmers, and tries to put forward experiences and methods that can be used for reference.

# II. The necessity of cultivating new professional farmers on the implementation of rural vitalization strategy

In order to implement the CPC Central Committee's strategic deployment of "prosperous industries, livable ecology, civilized local customs, effective governance, and rich life," local governments at all levels have always taken fostering new-type professional farmers as an important "starting point" to promote the full implementation of rural revitalization. The cultivation of new-type professional farmers is the key "node" of rural revitalization strategy [1].

2.1 Cultivating new professional farmers is the necessary guarantee for farmers to steadily increase their income

To increase farmers' income, it is necessary to match their professional abilities with modern intensive agriculture. Therefore, focusing on cultivating new professional farmers and comprehensively improving farmers' agricultural skills is conducive to making up the cultural quality of farmers and moderately expanding farmers' business scale, so as to better adapt to the needs of agricultural transformation and upgrading and enable farmers to share various policy "dividends" brought by the integration of primary, secondary and tertiary industries. At the same time, it is necessary to cultivate new professional farmers, enhance their industrial management skills, encourage and guide new professional farmers to actively participate in each link of deep processing of agricultural products, and promote the transformation of traditional agricultural production and operation mode with low added value. In this way, rural areas can retain more agricultural added value, and extend the first industrial chain, to create conditions for farmers to increase their income. Under the new economic situation, many new forms of business have been derived, and the emerging rural service industry has provided more employment and income channels for farmers. However, most of the emerging rural service industry requires higher professional requirements and technical content, traditional farmers cannot participate in it due to the restriction of knowledge level and other conditions. Only through the cultivation of new professional farmers, farmers can master the professional skills under the new form of business, so as to steadily increase their income.

2.2 Cultivating a new type of professional farmers is an inherent requirement for the overall revitalization of rural areas

Rural revitalization is a comprehensive revitalization of human resources, culture, ecology and organizations. In view of the overall development of rural areas, farmers generally have a low level of education, agricultural skills are generally not high, and development ideas and vision need to be improved. Therefore, it is necessary to improve the cultural quality and agricultural skills, and cultivate a large number of new professional farmers as the "basis", improve the scientific and cultural quality and agricultural skills of farmers, broaden their horizons, create a positive and progressive civilization, and ensure the supply of human resources in rural revitalization. In this way, the new professional farmers can play the main role in rural construction. In addition, cultivating new professional farmers helps to improve farmers' awareness of environmental protection and consciously participate in the ecological construction of rural areas. Cultivating new professional farmers can give play to their subjective initiative, effectively promote the overall development of rural society and economy, and continuously inject "source of vitality" for the comprehensive implementation of rural revitalization strategy.

2.3 Cultivating a new type of professional farmers is an important support for promoting agricultural modernization

As the primary industry, agriculture is the foundation of the development of the second and third industries, and agricultural economy is also an important part of the economic development of modern society. First, with the acceleration of urbanization, it has become a common trend for young and middle-aged rural workers to go out for business and work. The loss of rural labor force makes rural areas gradually become "shell villages". This is bound to accelerate the rural demand for new professional farmers, attracting young and middle-aged farmers to return to the countryside to work in order to ensure the sustainable development of agriculture. Second, it is helpful to solve the problem of "how to do farm work excellently". Modern agriculture requires higher quality of labor force, but at present, the development level of agricultural modernization in China is greatly restricted by human resources. Therefore, the cultivation of new professional farmers can effectively solve the problem of low labor quality in rural industrial development. Third, it is beneficial to guide extensive agricultural production mode to intensive transformation. The traditional extensive agricultural production mode has caused the bad effect of poor ecological benefit and low economic benefit on agricultural development. Therefore, we should start from changing the idea of agricultural production and management subject, cultivate new professional farmers to promote the transformation of traditional agricultural production mode, and gradually realize the transformation from traditional agriculture to green and efficient intensive modern agriculture.

# III. Analysis on the present situation of cultivating new professional farmers in F City, Fuzhou city, Jiangxi Province

F city, Fuzhou city, Jiangxi Province, is located in the east of Jiangxi Province, with a total population of 4,047,200, among which the rural population is 2,392,000, accounting for 59.1% of the total population of the city . F city is a typical agricultural city in Jiangxi province and an important supply base for high-quality agricultural products in Fujian Delta areas. The city is dominated by hills, with the terrain high in the south and low in the north. Hills and valley plains below 500 meters above sea level account for 70% of the total area. F city is rich in agricultural resources, and its agricultural and rural reform ranks among the best in the province. In 2017, F city was awarded the National Agricultural and Rural Informatization Demonstration Base, and the cultivation mechanism of new professional farmers in F city is mature and perfect. Therefore, selecting F City, Fuzhou city, Jiangxi Province as the research sample is representative to a certain extent. In order to more accurately grasp and understand the status quo of new professional farmer cultivation in F City, the research team of Jiangxi Provincial social science planning project "Research on the cultivation mechanism of new professional farmer in the rural revitalization strategy" conducted an investigation on the overall status quo of new professional farmer cultivation in F City from July to October 2019. The research group randomly selected 50 new-type professional farmers (aged 18-65) from 100 villages in 10 counties of F city, Fuzhou (that is, 15 villages in each county were randomly selected), and distributed 5000 questionnaires. 4785 questionnaires were collected in this survey, including 4762 valid questionnaires, with the recovery rate of 95.24%. A general survey of the statistical data shows that the new professional farmers in F City of Fuzhou present the following main characteristics:

- 3.1 in terms of age structure, the new-type professional farmers in F City of Fuzhou show an inverted "pyramidal" aging structure. In the survey sample, new professional farmers aged 18-29 account for only 7.3% of the total; those aged 30-35 accounted for 8.7% of the total; those aged 36-40 accounted for 10.7% of the total; those aged between 41 and 45 accounted for 16.9% of the total; those aged 46 to 51 accounted for 21.6% of the total; and those aged 52-60 accounted for 34.8% of the total. At present, the problem of "who will farm the land" is an important issue to be solved urgently in the cultivation of new professional farmers, unfortunately there are fewer and fewer young new professional farmers, and the aging phenomenon of new professional farmers is more and more serious. Studies have shown that when farmers are over 50 years old, the area of crops they manage is inversely proportional to their age. Although the level of agricultural modernization has been improved year by year and the development of agricultural science and technology has made great progress compared with before, the physical requirements of agricultural production for farmers are still relatively high. The elderly labor force can only engage in small-scale agricultural production, and there is a big gap in energy and physical strength compared with the young and middle-aged.
- 3.2 the educational structure: the overall educational level of the new professional farmers needs to be improved. Survey sample statistics show that the new professional farmers with a bachelor's degree or college education only account for 4.3% of the total; those with high school level (technical secondary school) account for 24.5% of the total; those with junior middle school level account for 32.2% of the total; and those with primary school level account for 39% of the total. In terms of the proportion of graduates from undergraduate, junior college, senior high school (technical secondary school), junior high school and primary school, there is an obvious increasing trend, that is, the educational level of most new professional farmers is concentrated in junior high school and primary school. The key to the development of modern agriculture lies in talents. Although Jiangxi province launched the "One College Student per Village Project" in 2018, college students engaged in agricultural production are still relatively scarce.
- 3.3 agricultural skill training: The training mechanism of new-type professional farmers is relatively weak in F City, Fuzhou city. The sample data showed that up to 76% of new professional farmers had never participated in any form of short-term or long-term agricultural skills training; those who attended only one training in the past five years account for 13.1% of the total, and those who attended more than two (including two) training account for only 9.9% of the total.

For current China's agricultural production, the imbalance of labor force structure is still serious, not undertaking structural adjustment is bound to restrict agricultural modernization process. According to the statistical data of fostering new professional farmers in F City of Fuzhou in 2019, we found the following three main problems:

First, the motivation of new professional farmers in farming needs to be strengthened. First, the economic benefits obtained by agriculture are lower than those of non-agricultural industries. Traditional agriculture is far less attractive to farmers, especially young farmers, than non-agricultural industries. Young labor force is more willing to go out of the countryside to "work and do business", while young labor force with higher education is less willing to return to rural areas to engage in agricultural production. Second, urbanization will inevitably push and pull the continuous rise of young and middle-aged rural labor force "out-migrating for work", resulting in the aging of the agricultural industry population and the overall quality of agricultural labor force in a structural decline. Third, due to the long-term existence of the "dual" economic structure between urban and rural areas, that is, there is an obvious disparity and insufficiency between urban and rural areas in education, medical care, social security and other public service resources. Engaging in agricultural production in rural areas can not obtain relatively fair social public services, which will inevitably lead to more rapid "outflow" of the rural young and middle-aged labor force.

Second, the cultivation effect of new professional farmers needs to be improved. First, the positioning of cultivation objectives is not accurate, and there is a lack of long-term and constant cultivation planning and target system. In the survey, it was found that F city of Fuzhou only took short-term training and surprise training in accordance with the annual task targets issued by the Department of Agriculture of Jiangxi Province, and directly issued the certificate of completion after the training. Second, according to the survey, 65.8% of the training institutions for new professional farmers have problems such as poor educational facilities, nonqualified teachers and single training methods. The training courses cannot fit in with the actual situation of regional agricultural industry, and cannot meet the individualized and diversified needs of farmers in agricultural production. Third, the phenomenon of excessive number of training objects is serious, and the construction of networked and information-based management system for new professional farmers is "lagging behind". There are no quantifiable data evaluation criteria on the effectiveness of the new professional farmers' education and training, and the follow-up service for the later stage of training is weak, and there is no corresponding talent incentive system and supporting information service.

Third, the cultivation system of new professional farmers needs to be deepened. First, the breeding system is too "narrow". According to the survey, on the one hand, F City of Fuzhou had 15 new professional farmer cultivation institutions in 2017, including 2 agricultural science and technology institutes, 10 agricultural technology extension centers, and 3 middle and higher vocational colleges. These cultivation institutions are far from meeting the internal needs of modern agricultural development for new professional farmers. On the other hand, professional technical associations, agricultural cooperatives and agricultural leading enterprises are excluded from the new professional farmer cultivation system. Second, the cultivation system lacks evaluation mechanism. On the one hand, it is difficult for the government to evaluate the quality of teacher as market-oriented training subject, and there is a lack of standards and requirements for relevant training subjects. On the other hand, it will take quite a long time even if the government issues relevant standards and requirements to conduct evaluation of market-oriented training subjects. Third, the cultivation system lacks compensation mechanism. Since leading agricultural enterprises, professional technical associations, cooperatives and family farms can not get economic compensation, the willingness to take the initiative to be included in the new professional farmer cultivation system is generally not high [2].

# IV. The strategic choice for cultivating new professional farmers in the strategy of rural revitalization

The cultivation of new professional farmers is the only way to realize the overall revitalization of rural areas. Only by cultivating more and more new professional farmers, improving their scientific and cultural literacy and modern

management and operation skills, can rural revitalization be realized in an all-round way.

#### 4.1 Improve the cultural quality of farmers

First, with the training of agricultural planting and breeding skills as the guidance, improve the enthusiasm of farmers to participate in learning, and attract farmers with lower educational levels to participate in middle and higher agricultural vocational education. Taking the middle and higher agricultural vocational education for new-type professional farmers as a government public service, and provide talent guarantee for agricultural modernization and the implementation of rural revitalization strategy [3].

Second, actively explore the effective connection among agricultural broadcasting and TV schools, middle and higher vocational colleges and new professional farmer training bases, and establish credit recognition platform, that is, establish theoretical teaching with agricultural broadcasting and TV schools as the main body, practice teaching with middle and higher vocational colleges as the main body, and implement credit recognition mechanism of practical training bases.

Third, the cultivation of new professional farmers should be combined with the specific production practice of farmers, and explore the mode of running school in field and classroom, so as not to miss the farming time. For instance, carry out face to face teaching when slack off, and crack the technical problem in agricultural production at the right time. In addition, we should make full use of the network teaching platform set up by agricultural broadcasting and TV schools and agricultural science institutes, invite "grain farmers" and "breeding experts" to record network courses together, highlight practical teaching, and do the training on the agricultural industry.

# 4.2 Optimize the structure of farmers' employment

First, introduce preferential policies and measures to encourage graduates of middle and higher education institutions, agricultural scientists and technicians and other skilled labor to go to rural areas to start their own businesses and work in agriculture, so as to enhance the endogenous impetus for agricultural production entities. Let the young and middle-aged rural labor force to meet the expectations of farming, and become a favorite career choice, so as to achieve the rejuvenation and upgrading of the new professional farmers.

Second, actively create various favorable conditions to optimize the age structure of employees, that is, to attract young labor force under the age of 45, who have received vocational education, higher scientific and cultural literacy and a certain sense of modern management and operation to join the agricultural workforce. Appropriately extend the agricultural industry chain in light of local conditions, increase the added value of agricultural products, and effectively increase farmers' income.

Third, ensure the stability of agricultural prices, reduce the cost of agricultural production and operation, and promote supply-side structural adjustment in agriculture. Step up infrastructure development in rural areas, increase the supply of public services in rural areas, attract young and middle-aged agricultural workers to return home, strengthen the ranks of agricultural workers, and improve the overall structure of rural agricultural human resources.

#### 4.3 Activate the farmer cultivation mechanism

First, establish a new professional farmer training system of "one main body and multiple elements". "One main body" refers to the new professional farmer training specialized institutions as the main body. "Multiple elements" refers to relying on agricultural colleges and universities, agricultural research institutes and agricultural technology extension service institutions to meet the internal requirements of multi-level, multi-form, wide coverage, normalization and institutionalization of the cultivation of new professional farmers.

Second, the cultivation of new professional farmers should be effectively connected with school education and social education. The government must improve the relevant training mechanism, and integrate agricultural leading enterprises, cooperatives, family farms into the training system of new professional farmers through government compensation, policy support and other ways, which serves as an important supplement to the implementation of new professional farmers training.

Third, the agricultural sector should focus on supporting the development of a number of leading agricultural enterprises, cooperatives and family farms with large industrial scale, good economic benefits and high level of science and technology, and finally establish practice and training bases for the cultivation of new professional farmers on the basis of agricultural cooperatives. On the one hand, the establishment of new professional farmer training base can improve the level of science and technology of farmers, on the other hand, it can improve the quality of training.

#### 4.4 Strengthen farmers' professional identity

First, establish and improve the database and information files of new professional farmers, explore the establishment of professional title evaluation system and professional title evaluation system for new professional farmers, smooth the application channels for professional title, reform the professional title evaluation system, and build the "focus" for the development of agricultural industry and policy support.

Second, improve the social security system for new professional farmers, clarify their roles, status, obligations and rights, and enhance their sense of gain and happiness. Establish a recognition and evaluation mechanism for new-type professional farmers, set up entry thresholds, take the lead in ensuring that high-quality agricultural resources are managed by high-quality new-type professional farmers, and improve agricultural production efficiency [4].

Third, the government should provide necessary fiscal and financial policy support for new professional farmers in agricultural industry, innovation and entrepreneurship, and provide certain interest subsidies and guarantees for entrepreneurship loans. The new-type professional farmers will be integrated into the urban social security system, breaking the "boundary" of their professional identity, and giving them professional identity and social respect [5].

#### V. Conclusion

Aimed at improving farmers cultural quality, optimizing farmers employment structure, activating farmers cultivation mechanism and strengthening farmers professional identity, to solve the three main problems of the new-type professional farmers, which are the lack of motivation, the poor cultivation effect and the imperfect training system. In addition, when carrying out the questionnaire, the less educated peasants completed the questionnaire by the way of asking and filling in, which may have a small impact on the overall objectivity.

### References

- [1] The Strategic Plan for Rural Revitalization (2018-2022) issued by the CPC Central Committee and The State Council. People's Daily, 2018-09-27(001).
- [2] Cui Hongzhi. The present situation and thinking on cultivating new professional farmers. Rural Economy, 2017(09):1-7.
- [3] Strengthening the development of agricultural broadcasting and TV schools for the construction of education and training system for new-type professional farmers. Farmer science and technology training, 2013(10): 8-9.
- [4] Wang Rongzhen, Jiao Xiuwei. Improving the system for a new-type professional farmers and strengthening the support of qualified personnel for rural revitalization. Farmer science and technology training, 2018(09): 15-17.

[5] Jiangxi: encouraging new-type professional farmers to participate in the evaluation of professional titles. China Farmers' Cooperatives, 2018(07): 6.