

# Policy Analysis of new Professional Farmer Cultivation in Sichuan Province Based on Process Model

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## ABSTRACT

The study aims to analyze the policy implementation of the new professional farmer cultivation in Sichuan Province using the method of policy implementation process model. It is pointed that policy within the system and the correlation of integrity is not enough, the coordination of executive organization is not good, the cooperation mechanism of multiple participants is not mature, the target group has different needs, and rural infrastructure and land policy environment needs to be improved. Accordingly, this work put forward some countermeasures, such as constructing a new professional farmer cultivation policy system, overall planning cultivation institution, adopting a more targeted and active cultivation method, and optimizing policy implementation environment.

**Keywords:** new professional farmer cultivation; Policy implementation; Smith model

## 1. INTRODUCTION

In 2012, the General Office of the Ministry of Agriculture formulated the Pilot Work Plan for the Cultivation of new Professional Farmers, which put forward the following proposals: "Accelerate the cultivation of new professional farmers, promote the development of modern agriculture, and ensure the national food security and effective supply of major agricultural products". In 2017, the Ministry of Agriculture issued the 13th Five-Year Plan for The Cultivation and Development of New Professional Farmers, which emphasizes: "Accelerate the construction of new professional farmers, strengthen the supporting role of talents in the development of modern agriculture and the construction of new rural areas". In 2018, the government required "To take the cultivation of new professional farmers as an important way to strengthen the talent support for rural revitalization, promote the comprehensive establishment of the system of professional farmers." It can be seen that the state attaches importance to the cultivation of new professional farmers.

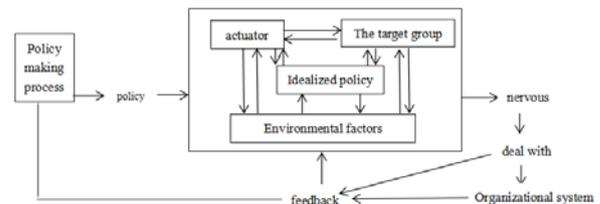
A cross-database search on CNKI shows that from 1987 to 2020, there were 6,098 papers with the theme or title of "new professional farmers". But most of them focus on the development of training content, such as training subject and object, training mode; some of them focus on the external environment analysis of cultivation, such as policy support, publicity means, path selection. These analyses are not systematic enough to cultivate new professional farmers. [1]

Sichuan province is an important agricultural province in western China, and it is a province with large outflow of the rural labor force. The problem of low quality and weak

quality of the agricultural labor force is quite prominent. [2]A large number of rural labors have been transferred to secondary and tertiary industries. The left-behind agricultural population presents some problems, such as insufficient quantity, low overall quality and unreasonable structure. Cultivating new professional farmers not only solves the practical problem of "who will farm", but also solves the deep problem of "how to farm". Moreover, Sichuan province is in a critical period of transformation from traditional agriculture to modern agriculture. Modern agricultural production needs advanced agricultural science and technology, efficient agricultural facilities and equipment, and modern management concept. There is an urgent need for high-quality professional farmers.

This study intends to use Smith policy implementation process model to study the reasons why the development of new professional farmers in Sichuan province cannot meet the current social needs.

Thomas B Smith, an American scholar, is the author of "The Policy Implementation Process". He is the first author to construct the implementation factors and process models that influence policies. The policy execution process model is shown in Fig. 1.



**Figure 1.** T. Smith policy implementation process model

The model of policy implementation process puts forward that the policy formulation process will be influenced by idealized policy, executing agency, target group and environmental factors. The idealized policy refers to the policy itself is reasonable, legal and feasible. The executing agency refers to the organizational characteristics of the government responsible for implementing policies, such as the power structure and personnel composition of the organization. The target group refers to the object of the policy role characteristics, such as leadership cognition, policy experience. The environmental factors refer to the environmental factors that affect or are affected by the implementation of policies. They can be cultural, social, political or economic. Smith model provides a clear idea and method for the analysis of public policy implementation, it is helpful to clarify the factors affecting policy implementation and their interrelations, and guides the improvement of policy implementation.

## 2. POLICY IMPLEMENTATION PROCESS EVALUATION

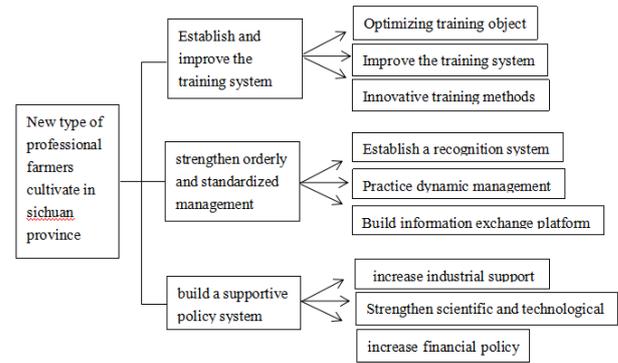
### 2.1. Policy analysis

Sichuan provincial government attaches great importance to the cultivation of new professional farmers. Table 1 is part of the policy documents on the cultivation of new professional farmers issued by Sichuan Provincial government.

**Table 1.** Part of the policy document on the cultivation of new professional farmers

Time	The Units	Post Title
2014	Sichuan Department of Agriculture	Measures of Sichuan Province for the Identification of New Professional Farmers (Interim)
2015	General Office of Sichuan Provincial People's Government	Suggestions on speeding up the Cultivation of New Professional Farmers
2017	Sichuan Department of Agriculture	Notice on the Cultivation of New Professional Farmers in 2017
2018	Sichuan Department of Agriculture	Notice on the Cultivation of New Professional Farmers in 2018
2019	Sichuan Agriculture and Rural Affairs Department	Notice on the Cultivation of New Professional Farmers in 2019
2019	Sichuan Agriculture and Rural Affairs Department	Sichuan new professional farmers management interim measures

By combing the contents of the above documents, the government is speeding up the establishment and improvement of a new training system for professional farmers, which combines education and training. Cultivate new professional farmers with high comprehensive quality, strong production and management ability and obvious main role. Focus on establishing and improving training systems, strengthening orderly and standardized management, and establishing supportive policy systems. The specific content is shown in Fig. 2.



**Figure 2.** The main contents of cultivating new professional farmers in Sichuan Province

According to the standard of Smith model, the idealized policy refers to the policy itself is reasonable, legal and feasible. Legitimacy is not discussed here; reasonable policy objectives can be taken as the premise of analyzing the feasibility of the objectives.

The policy of Sichuan province on the cultivation of new professional farmers is closely related to the purpose and content of the central document. The policy clarifies the purpose and method of cultivating new professional farmers, which is of great guiding significance to the implementation of policies in urban areas. It is a reasonable policy objective. However, progress has generally been slow because of the lack of coherence and integrity within the policy system.

All localities have formulated development and cultivation plans for new professional farmers in light of their actual conditions. But most of the work will be put into practice in a certain, there is no resultant force. If we want to establish an education and training system of "specialized agencies + multi-party resources + market players", the work of cultivating new professional farmers extends to a policy system that involves multiple subjects. To put them into effect, it is necessary to formulate some policies that are more detailed and clear about the tasks of each policy implementation subject and target group, and to speed up the formulation of relevant supporting policies so as to smoothly promote the implementation of the goals.

The investigation found that there is still a gap in the implementation of supporting policies after the identification of new professional farmers in some areas. Through the investigation of 11 pilot counties of the new professional farmers in Sichuan Province, it is found that after two years of implementation of the policy, the pilot

work of the new professional farmers system faces the problem of insufficient follow-up motivation. Guanghan, for example, is one of the 11 pilot counties in Sichuan province to cultivate new professional farmers, in 2017-2019, for more than 230 new vocational certificates of farmers. The government has formulated loan interest discount and social security payment subsidy policies, but only a few have enjoyed the policy. In Guanghan, there is 367,000 agricultural population, of which only 230 have been certified as professional farmers, and only 50 have finally been supported by the policy. In addition, a county with a population of one million in southeastern Sichuan has identified only 58 new professional farmers. The reason is the lack of top-level design and policy support of special funds.

## **2.2. Actuator analysis**

At present, there is no uniform and clear definition of public policy execution ability in China, but the basic meaning of the concept has slowly taken shape. Zhou Guoxiong believes that "public policy execution ability" refers to the total ability of policy executors to effectively implement public policies and achieve policy objectives through various methods. The execution of policies are affected by the division of labor of executing agencies, the communication of executing organizations and the cooperation mechanism of multiple subjects. The cultivation of new professional farmers is a huge livelihood project. The government is the most active and dominant one, and the multi-party cooperation of the society are indispensable.

The cultivation of new professional farmers includes six links: absorption, cultivation, assessment, recognition, support and management. From a horizontal point of view, Government departments need to take the lead in the organization of the agricultural sector, and cooperate with the departments of education, finance, human resources and social security. From a vertical perspective, this requires the active cooperation of administrative organs at the provincial, municipal, district, county and township levels. At the same time, it also needs the third party such as training schools and talent market to actively participate.

First, the execution organization has poor coordination. From the administrative level, the department of agriculture and the education, finance, human resources departments belong to the same rank. It is difficult to track progress and make demands on other departments. It is easy to form the "island phenomenon" of policy implementation. For example, in terms of policy support, the policy process of each department is slow. Some financial policy support did not formulate relevant implementation plans in time, such as small loan mechanism, agricultural insurance policy and guarantee system; Talent incentive measures have not been implemented in place, such as grading identification and professional skills identification, are mostly in the exploration stage.

Second, the multi-participant cooperation mechanism is not mature. The new professional farmers training can be roughly divided into academic education, continuing education, professional and technical training. Education departments, such as higher agriculture-related colleges, middle and higher agricultural vocational colleges, mainly lead the first two aspects. On the latter hand, agricultural departments, such as agricultural extension schools and promotion stations, mainly lead it. In addition, the government can purchase third-party services to provide technical training. [3]At present, the cultivation of new professional farmers is mainly led by the agricultural sector, which is slightly inadequate in terms of obtaining support from the education sector such as teachers, facilities and equipment.

## **2.3. Target group analysis**

Public policy is an authoritative redistribution of public resources according to public interests and needs. As a public policy, the cultivation of new professional farmers is to allocate educational resources and financial resources to agricultural practitioners according to public demands, to improve their working ability and develop agricultural modernization. When analyzing the target group, it is necessary to consider whether the target group understands and supports the public policy, as well as the needs of the target group itself.

According to the results of a survey conducted by Sichuan Provincial School of Agriculture and General Education on the willingness of new professional farmers to participate in training and learning: "The new professional farmers play an obvious role in developing moderate scale agricultural operations and establishing new types of agricultural operators. They hope to improve themselves through training and learning." Among the interviewees, 76 percent want to get a degree in agricultural vocational education through vocational education. This shows that the new professional farmers generally realize that it is an effective way for government agencies. From the perspective of investment products, agricultural practitioners participate in the cultivation of new professional farmers because they expect that participation in this activity can improve their abilities, and thus obtain higher agricultural income. However, at the same time, there are also costs involved in agriculture, such as money and time. On the one hand, agricultural practitioners should pay a part of the cultivation funds. On the other hand, most agricultural practitioners have a low level of education and may have to participate in training many times to achieve the desired results. [4]

Therefore, according to the different needs of the target group, the cultivation method closer to the needs of the target group should be adopted. The clearer the needs of the target group are, the more targeted the cultivation will be and the better the effect will be.

## 2.4. Policy environmental analysis

The environment of policy implementation is the most easily ignored and the most difficult factor to consider in the process. A good policy environment plays an important role in the implementation of the policy.

First, under the strategic background of the synchronous development of industrialization, urbanization, agricultural modernization and informatization in modern society, the development of agricultural modernization is seriously lagging. One of the important reasons for the constant outflow of rural human resources is the weak construction of agriculture and rural infrastructure. Therefore, strengthening rural infrastructure construction is an important guarantee to retain new professional farmers. The imperfect infrastructure refers not only to transportation and water conservancy, but also to educational facilities, medical and health facilities and environmental facilities in rural areas. [5]

Secondly, the establishment of the "three rights division" system provides an opportunity for the cultivation of new professional farmers. In 2016, the government issued the *Opinions on Improving the Measures for The Separation of Contracted Rights and Management rights of Rural Land Ownership*. This paper puts forward a system in which the ownership, contract and management rights of land are divided and the management rights can be transferred. As the most basic means of agricultural production, land is the resource base for new professional farmers to engage in agriculture. New agricultural entities, such as family farms, agricultural cooperatives and large family farmers, need large-scale, continuous and stable land circulation operations to meet the needs of market-oriented, specialized and socialized production. Therefore, it is necessary to make good use of the policy environment of the "three rights division" system to solve the management obstacles for the new professional farmers in land circulation, and to give preferential policy support to enhance the vitality and attraction of engaging in agriculture.

## 3. OPTIMIZED CULTIVATION METHOD

### 3.1. Construction of policy system

Strengthen the top-level design, build new professional farmers cultivate policy system. According to the six links of cultivating new professional farmers, the following countermeasures are put forward: first, precisely attract the cultivating objects. Focus on the investigation of potential cultivation objects, and organize willing and demanding agricultural practitioners to actively participate in the cultivation. Second, make a scientific training plan. Analyze the differences in the needs of the training subjects, and carry out training in different levels, categories and periods. Thirdly, we should clarify evaluation institutions and methods, accelerate the

construction of new vocational competence system for farmers, and carry out research on vocational competence training and evaluation system. Fourthly, improve the measures for accreditation and management, and formulate a unified professional title evaluation system for professional farmers in Sichuan Province. Fifth, the government provides policy support. Expand the scope of policy support and lower the standard of support. Sixth, strengthen management. Using blockchain technology and other information means to improve the new professional farmers' information management system and file management system. [6]

### 3.2. Improving execution and integrate resources

First, improve the execution of the mechanism. Promote the work of community-level governments at the highest level. Provincial-level governments should give full play to their leading role, integrate institutional resources, clarify institutional responsibilities, and strengthen supervision and assessment of executing agencies. To promote cooperation between government departments at the same level. It is necessary to form a working pattern with agricultural administrative departments as the main part and other administrative departments as the auxiliary, so as to realize effective cooperation among multiple departments. Second, make overall plans for training institutions. Integration of government agencies and social education of third-party service resources. On the academic education and continuing education, the education administrative department to give the new professional farmers more preferential policies, such as the lower application standard, simplify the process of examination, tuition waivers. Make effective use of high-quality resources such as teachers, facilities and equipment in education departments to improve the basic education level of new professional farmers. In professional technical training, attract social capital, implement government procurement services, encourage the active participation of industry associations and intermediary institutions.

### 3.3. Optimized cultivation method

Adopt more targeted and active cultivation methods to meet the differentiated needs of target groups. First, select the training object accurately, and conduct an in-depth investigation and understanding of agricultural practitioners. Using big data technology, analyze the cultural level and industry characteristics of the cultivated objects, and the cultivation is carried out by classification and stratification. On the basis of industry research, it puts forward requirements for the ability and quality of new professional farmers. Focus on the key links of prenatal, intrapartum and postpartum education and training. Combines theory with practice and combine production

with learning to cultivate professional farmers. Second, on the basis of the analysis of training needs and combining with the characteristics of agricultural development in Sichuan Province, to compile training materials for new professional farmers at the provincial level, which also puts forward higher requirements for the quality of new professional farmer cultivators. [7]

### **3.4. Improving the policy environment**

First, improve the rural infrastructure and environment. Increase the intensity of investment in infrastructure, carry out water conservancy project construction, optimize rural transportation network, accelerate the construction of communication. Provide convenience for the production and life of professional farmers; Second, stable professional farmers team. To develop professional farmers security system, to provide public services such as health care, education, culture. Establish new professional farmers minimum living security system, improve the production support, financial support and policy support, for the agricultural community to provide more and more high-quality life safeguard; Third, improve the supporting policies for the land circulation and operation of professional farmers, encourage them to transfer land in a long-term, stable and contiguous manner, improve the efficiency of land circulation and operation, and provide strong support for the practical needs of the new professional farmers to expand the scale of land production.

## **4. CONCLUSION**

Based on Smith's policy implementation model, this paper analyzes the existing problems in the process of policy implementation, including the lack of system within the policy, ineffective coordination among executing agencies, differentiated demands of target groups, and the need to improve the policy environment. In order to solve the above problems, the following four aspects should be taken into consideration: first, to strengthen the top-level design and construct the policy system of cultivating new professional farmers. The second is to improve the executive force of institutions and make overall plans for the cultivation of institutions. Third, according to the different needs of the target group, adopt more targeted

and active training methods. Fourth, we will optimize the environment for policy implementation, improve the rural infrastructure environment, stabilize the ranks of professional farmers, and improve policies supporting their land transfer and operation.

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