

## On farmers' educational problem in the construction of beautiful village -- A case study of Jinjiang City

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**ABSTRACT:** Farmers are the main objects of beautiful village construction, and their education levels greatly determine the pace of agricultural construction and rural areas' modernization. Based on it, this paper demonstrates the present situation and reasons of farmers' education in Jinjiang City which is in Fujian province, and analyses the necessity of farmers' education. Finally, this paper puts forward some feasible suggestions on expanding the scale of compulsory education, organizing rural vocational lectures, increasing public cultural input and strengthening the construction of science and technology.

**Keywords:** beautiful village; farmers' education; education

### 1 INTRODUCTION

According to the decision of the 18th national congress of CPC report, the beautiful country road construction of China officially entered the national guidelines. This report shows the main direction of construction about people's subsistence and development, civilization, village rectification, management and democracy and so on. Farmers are the biggest beneficiaries who directly promote the development of rural construction. Farmers' quality has a decisive influence on rural productivity. In addition, the development of rural productivity plays a decisive role in rural construction. Therefore, cultivating a new type of farmers with culture and scientific technology is an indispensable measure to agricultural development and industrialization.

### 2 IMPROVEMENT OF FARMERS' EDUCATIONAL LEVEL IN BEAUTIFUL VILLAGE CONSTRUCTION

The re-educating and re-cultivating is an effective way to nurture a new type of high-quality farmers who are well-educated and specialized in techniques and management, which is also a necessity to build beautiful village areas. According to the definition given by the state, beautiful village construction not only requires farmers to improve their own cultural quality, but also

to transfer from the traditional manual labor to intellectual labor. It reflects in three aspects as follows. The first one is cultural quality. Through the acceptance of reeducating and retraining, farmers should improve various cognitive abilities about agricultural knowledge. The second aspect is agricultural technology. Farmers should enhance their abilities of dealing with agricultural problems encountered in the daily life through the training of modern agricultural technology and skills. The last one is about production and management. By delivering marketing knowledge and production management to farmers, it can effectively improve their levels of production and management. Only when the educational level of farmers is increased can the production of rural areas have a better development, then the farmers will raise their living standard with a more civilized atmosphere, beautiful environment and democratic management. It is necessary to improve the farmers' educational levels, because farmers are major impetus of the rural construction. Without high-quality farmers, the traditional agriculture cannot be changed quickly, and the agricultural structure cannot be optimized. As a result, the paces of the development of rural economy and the process of agricultural modernization will be slowed down. After all, it is indispensable to depend on the farmers with major status to achieve these tasks, which is the starting point and standing point of beautiful village construction. It is necessary to adhere to the principle of people first.

Table 1. Cultural status of rural labor

Time	Less than primary education	Primary education	Junior high school	Senior high school	Vocational secondary schools	College education or above	Above primary education
1990	20.70%	38.90%	32.80%	7.00%	0.50%	0.10%	40.40%
1995	13.50%	36.60%	40.10%	8.60%	1.00%	0.20%	49.90%
2000	8.10%	32.20%	48.10%	9.30%	1.80%	0.50%	59.70%
2005	6.90%	27.20%	52.20%	10.30%	2.40%	1.10%	65.90%
2010	5.70%	24.40%	52.40%	12.10%	2.90%	2.40%	69.80%
2012	5.30%	26.10%	53.00%	10.00%	2.70%	2.90%	68.60%
Research area	54.20%	32.50%	12.50%		7.50%	1.70%	21.70%

Data source: Statistical Yearbook of China Rural in 2003, survey data collation

### 3 THE CURRENT SITUATION OF THE QUALITY OF JINJIANG FARMERS

#### 3.1 Statistical results of the questionnaire

The survey is carried out by random sampling including 120 farmers in Jinjiang with 64 males and 56 females respectively. Most of the respondents which are illiterate and semi-literate are 55 people (male: 12, female: 43), accounting for 45.8%. The overall level of education is strikingly low. The number of people with a primary education is 39 (male: 30, female: 9), which accounts for 32.5% and ranks the second. There are 15 (male: 12, female: 3) people with the degree of junior high school, accounting for 12.5%. People with the certification of high school education or secondary vocational and technical education are least, containing only 9 people (male: 8, female: 1), with 7.8%. While people who are college graduates or above are two males only, accounting for 1.7% (for details, see the Figure 1).

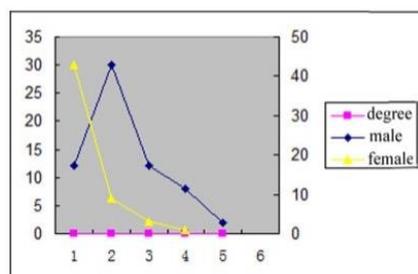


Figure 1. A sample survey of farmers' education. (Data sources: field survey data)

According to the contrast of educational situation of rural labors made by the National Bureau of Statistics, we found that sample of farmers' educational level in Jinjiang City is significantly lower than that of national average level (see Table 1), especially the major farmers who engage in the agriculture are illiterate or semi-illiterate, which occupies 50% of the sample. It is 10 times higher than the national data. Obviously, farmers' education in Jinjiang City still needs to be improved.

#### 3.2 The model analysis of the influence of farmers' education level on agricultural modernization and the development of rural construction

Based on the complexity of data acquisition and the authenticity of the data, cross-section data is used to analyze the effect that the degree of farmers' education has on agricultural modernization and the beautiful village construction. The specific computational model is  $f = \beta_1 am + \beta_2 edu + \beta_3 bv + aX + \xi$ . Among this model,  $f$  is modifying factor;  $am$  is the situation of agricultural modernization;  $edu$  is educational background of farmers;  $bv$  is the beautiful village construction;  $\beta$  is constant;  $X$  is controlled variables;  $a$  is the coefficient vector of  $X$ ;  $\xi$  is deviation.

The objective of the study is to evaluate the impact of farmers' education on agricultural modernization and beautiful village construction. Therefore, controlled variables of this calculating model are respectively the agricultural production structure (APS), the inland management scale (INLANS), the well-off life (LIFEW), the fragrant environment (EF), the mechanical use proportion (mup), the chemical proportion (inchf), the proportion of income (income), the afforestation rate (affor), the clean roads (roadc) and the kind and friendly (friendly). It was estimated by using robust standard deviation, and its model estimates is shown in Table 2.

From Table 2, it can be seen that the structure of agricultural industry has a positive effect on the proportion of the machine at 1%, and the proportion of chemical pesticides is affected by the negative effect at 10%, which suggested that when the structure of agricultural industry adjustment increases one percentage point, the machine used will increase by 0.8% and, the chemicals used will fall by 1.4%. The relationship between the other controlled variables and the dependent variables and the index are also in the same way. The calculation results in the Table 2 show that the degree of farmers' education is very significant to the agricultural modernization and beautiful village construction. Therefore, in order to promote the development of agricultural modernization and rural construction, the quality of farmers should be improved through strengthening the agricultural vocational education and other complementary policies and effective measures.

Table 2. Model estimates of robust standard deviation

variable	mup	inchf	income	affor	roadc	friendly
APS	0.767* (-1.632)	-1.415*** (-2.978)	0.341 (1.07)	-0.435 (-0.704)	0.554 (0.466)	1.026 (0.671)
EDU	0.763*** (2.911)	0.724*** (3.098)	0.188 (1.218)	0.979** (2.537)	0.48 (0.963)	0.729 (0.699)
LIFEW	2.932** (2.330)	2.103** (2.230)	2.255** (2.370)	0.656 (0.453)	4.161* (2.060)	-0.545 (-0.141)
INLANS	0.257*** (3.000)	0.228** (2.594)	0.109* (2.018)	-0.288*** (-3.045)	-0.730*** (-4.630)	0.198 (0.705)
EF	0.306** (2.074)	0.152 (1.214)	0.085 (0.861)	0.453** (2.723)	1.095*** (2.862)	0.294 (0.670)
AM	0.001 (0.004)	0.149 (0.655)	-0.025 (-0.169)	0.106 (0.517)	-0.663 (-1.378)	-0.071 (-0.190)
BV	0.267 (0.350)	-0.869 (-0.419)	1.405 (1.437)	0.109 (0.115)	1.372 (1.525)	2.960 (1.591)
R <sup>2</sup>	0.574	0.525	0.370	0.561	0.64	0.33
F inspect	6.045 (0.000)	5.146 (0.001)	3.199 (0.015)	5.797 (0.0005)	7.665 (0.000)	2.846 (0.025)

Notes: 1. \* indicates a significant level at 1%, \*\* indicates a significant level at 5%, \*\*\* indicates a significant level at 10%;  
2. The values in parentheses are statistics.

#### 4 ANALYSIS ON THE REASON OF LOW QUALITY OF FARMERS IN JINJIANG CITY

##### 4.1 *Strong traditional conservative idea and low rural productivity*

Traditional agricultural tillage mode of China had continued for thousands of years which never had great changes, especially in rural areas where agriculture is not vitally concerned about. They basically maintain the form to work from sun rising to sun setting. Their thought is deeply limited by traditional concept, including the farmers in Jinjiang City. The development of agricultural productivity is relatively low due to the little attention of local government. It is such productivity that determines most of the local farmers' conspicuous concept of small peasant economy. They are unwilling to spend more time, energy or money on technological innovation in agriculture. Conversely, they pay extreme attention to the immediate and personal interests without overviews, long-term vision and cognitive ability of the market economy.

##### 4.2 *Imbalanced resource distribution of education and a few ways of receiving education*

Farmers receive short length of education and lack of opportunities to be reeducated. The huge income gap between urban and rural areas, relatively low income of farmers, asymmetric distribution of education resources in urban and rural area, insufficient role of relevant educational departments and institutions are all the reasons for that. To make the matter worse, some of the farmers who are better educated have left the rural areas which made the rest of farmers lost the the consultation object, therefore they have less ways to receive reeducation and retraining

##### 4.3 *Weak sense of responsibility and faint consciousness of reeducation*

With the development of economy in recent years, the improvement of the living standards and the farmer's mental laziness have been gradually increased. They are careless about their responsibility and obligation in rural construction. They think the responsibilities for transportation construction, environmental protection, education and other public utilities belong to the governments, and they only care about things related to their families.

#### 5 WAYS TO IMPROVE THE FARMERS' EDUCATION IN THE RURAL AREAS

Nowadays, the enhancement of the standards of education must closely revolve around the theme of beautiful village construction, and effectively stimulate the farmers' enthusiasm to participate in their own initiative. However, farmers must have a completely new transformation in ideas and modes of thinking from the long-term perspective of beautiful village construction. Only by learning the knowledge, technology, laws and regulations, management, production and development, market development and other aspects of knowledge can they make contributions to the development of beautiful village construction as a host. All above requires farmers to get the basic education.

##### 5.1 *Value the guidance of the farmers' independent consciousness*

###### 5.1.1 *Publicize the importance of cultural quality in beautiful village construction by media*

Recently, the power of media is great. People can report the deed of rural areas through television, radio,

Internet or other means. Although the government attaches great importance to the problems about agriculture, rural areas and farmers, there are still a lot of farmers didn't understand it, especially when it comes to reeducating and training farmers. Their first reaction is always that the government disguises its intention to take money from them, which arouses the farmer's aversion toward the government's behaviors. Some farmers even stage protests and have other crazy moves. Therefore, government or educational institutions must firstly completely convince farmers of the importance of education by various propaganda methods so that farmers can better understand the benefits and significance of learning.

#### 5.1.2 *Encourage farmers to work in cities, and cultivate their consciousness of self-quality*

First, farmers can improve their awareness of self-education when they work in cities. After that, they will know the gap between themselves and the city dwellers and realize that their skills are difficult to meet the needs of urban life, which makes them recognize their own shortcomings, especially the mental deficiency. And then, they will pay attention to the education of themselves. The desire to get their own reeducation will become stronger, or they will put more of their expectations on their children, so it can indirectly upgrade the cultural level of next generation. Second, farmers can develop their economic awareness of the market. Farmers will find it difficult to find a job in the city and the income is low. Such experience will force farmers to enhance their own competitiveness. Only when they improved their ability can they survive the fierce competition. In addition, the farmers will gradually realize how much attention has been given to the rural construction by the government, and improve the ability of understanding the laws and regulations and the policies of supporting the development of rural construction. When they are in the condition of city, they will also be aware of the country's supportive policies of rural envelopment from the city life. The government believes that propaganda techniques are easily acquired in the city. After a period of time in the city, their own knowledge and the ability to recognize things will be greatly improved, and soon the farmers will have a new comprehension on their own rights and obligations.

#### 5.2 *Pay attention to the educational project that meet the actual need of farmers*

##### 5.2.1 *Pay attention to the satisfaction of farmers' interests and needs in the first place*

In order to organize educational training for farmers, the government must understand the real needs of farmers, but not take it as government's achievements projects. What's more, it must be practical in increasing farmers' income and improving their living standards and further improving the teaching resources, such as supportive policies and modern techniques in agriculture, new types of ecological fertilizers and

pesticides and other relevant knowledge.

##### 5.2.2 *Regard it as a guide to meet the needs of modern education project in the market*

Under beautiful village construction, farmers' education program should be based on the trend of the market economy development in modern rural areas and farmers' willingness to learn. First, the problems of food and clothing should be solved and the income and viability should be improved so that farmers' productivity can be enhanced. For instance, the projects of the agricultural technology training, the scientific planting, the rural labor and non-agricultural industries transfers and the income increase should be carried out. Second, the government should actively enrich farmers' amateur life and raise their interests on educational training. Finally, educational programs to meet the farmers' needs in the city should be actively carried out, such as farmers' non-agricultural education, public legal education and civilized education.

#### 5.3 *More efforts should be made by government to support the related projects of rural education*

##### 5.3.1 *Government must play its leading role in constructing the beautiful countryside*

Beautiful village construction is the basic task and great mission of the era, which will increase farmers' income and improve their living standards. The construction of civilization, harmony, legal system and stability in the new rural areas is the goal of this time. Primarily, governments at all levels should formulate relevant rules and regulations or make effective measures to support the development of farmers' education, and further clarify the system of responsibility division, so as to ensure that the responsibility is up to its place. Then, the investment of farmers' education project should be increased. According to the requirements of Party Central Committee in the beautiful village construction, the quality of farmers should be relatively high. It costs lots of money and time to train the farmers due to the number of farmers is large. There are some projects needed to be developed as follows: First, the government at all levels should add annual training funds in the budget of department, and promptly appropriate in place. All funds should be used for specified purposes only. Second, social organizations and individuals should be encouraged to give funds support to farmers' education and training, especially local enterprises, and as far as possible to directly link with the employing unit and training project. Third, the government should be in charge of training fee according to farmers' need. With the development of rural construction, farmers' income will gradually increase, and social supports will also increase so that the proportion can be gradually adjusted. Finally, the enhancement of farmers' education and the promotion of construction call for the integration of local resources. The government should lead and unify leadership and coordinate various educational

resources such as government units, primary schools, secondary schools, vocational schools, vocational schools, training centers of farmers, township agricultural centers, adult education centers and so on, so as to ensure that all resources like the required fields, equipment and teachers can be made full use. Fourth, a stable team of teachers should be formed.

### 5.3.2 *Government should increase the investment toward workers in farmers' education*

In order to promote rural construction, the government should give a platform for the majority of farmer educators to display their skills so that they can take full advantage of opportunities to explore the work and make contributions to the construction. First, farmer educators should actively carry out self-work because high quality of rural construction requires high quality of farmers, and it has a great distance between current farmers. Therefore, farmers' education is bound to be a complicated and difficult work so that farmer educators should work actively to find out the basic situation of the local farmers, and carry out education and training courses based on local conditions. Second, they should be encouraged to innovate. Because the qualities and understanding abilities of farmer's are different, training ways of farmers' education should be easy to be accepted, and should be based on their actual situation.

### 5.3.3 *Government should strengthen the construction of the leaders*

A good rural construction leader would select people in the rural areas who have new concepts and new ideas, as well as good views of beautiful village construction. They should take advantage of leaders to develop the advanced education and innovative talent training mode, so farmers can ask leader for advice when they encounter problems of production, and farmers can be better guided to take the road of common prosperity.

### 5.3.4 *Government should strengthen the investment of public cultural construction in rural areas*

At present, most of the rural cultural life is very simple. Many villages even have no cultural life. Except watching television, gambling is their basic activity. The social atmosphere becomes more and more complex, which makes the rural civilization become more difficult to achieve. Therefore, the government should strengthen the investment of rural public cultural con-

struction and purify the rural atmosphere. First of all, the government should strengthen the construction of rural cultural infrastructure and make full use of vacant buildings of primary school or public places in rural areas to carry out a new reform so as to better serve the rural cultural activities. Second, multi-form cultural activities should be carried out. Farmers' leisure time can be utilized to organize the activities such as literature and art performance, competition of labor skills and other public activities, which can enrich the spiritual civilization of farmers, guide them to believe science and upgrade their moral level.

The farmer is the main body of the beautiful village construction. The level of the farmers' education is the essence to determine the speed of the beautiful village construction. It also determines the pace of agricultural and rural modernization. The improvement of farmers' quality is an important measurement to speed up the rural construction and agricultural industrialization, and it is the core content of the beautiful village construction.

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