Scholar Publishing Group
Academic Journal of Agricultural Sciences
https://doi.org/10.38007/AJAS.2022.030405
ISSN 2789-8415 Vol. 3, Issue 4: 60-73

Agriculture - Rural Social Governance Horizon, "Plow Coupon" Rice Scale Cultivation Path

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Keywords: Combined Tillage, Large Scale Ice Planting, Production Function, Rural Social Governance

Abstract: Starting from the rural social governance, the fragmentation of farmland, through the promotion of new technology, new equipment, provided by the agricultural service organization unified, kind of, plant protection, every kind of professional service all the way, to achieve "plow coupon" large-scale cultivation of rice, improve agricultural labor productivity and land benefit, provided a basis for the new rural construction. In this study, rice farmers were taken as the research object. From the perspective of agronomy -- rural social governance, the factor input method of production function was adopted to study the large-scale cultivation of "combined tillage and combined planting" of rice. The input of production factors is mainly divided into technical input, labor input and capital input. Through these three aspects, used to select the area of the middle and lower reaches of the Yangtze river in jiangsu, zhejiang, jiangxi, hunan, hubei and sichuan six provinces of rice planting area of peasant household survey data, combined with the related influence factors of the rural social governance, to explore the production of rice farmers behavior characteristics and its influencing factors, in order to summarize "plow coupon" rice scale cultivation path. Through practice "plow coupon", explore the traditional agriculture to realize the another new way to large-scale planting rice, rice scale planting area yield is about 32% before ascension, make the efficiency increased by more than 60%, make land resources optimization PeiZhiLv increased 20%, 30%, to strengthen the rural organization construction, achieved good results. Through the selection of samples of rice planting area of peasant household survey data, demonstration and promotion of "plow coupon" scale planting rice path, which changes the land management from extensive to scale, promoted the high efficiency, low consumption of large farming equipment utilization, reduce operation cost, realize the straw returning full amount, laid a good foundation for rural social governance.

1. Introduction

As the foundation of a country, agriculture has always been highly valued [1]. However, in

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recent years, with the acceleration of industrialization, China's urban-rural dual economic structure features are increasingly prominent, and the economic gap is constantly widening [2]. A large number of young and middle-aged labor force transferred from the countryside to the city, resulting in the deterioration of the structure of rural left-behind labor force and extremely low land use efficiency in the countryside [3]. The above agricultural basic situation has a very negative impact on the rural social governance in the new era, and also hinders the rural revitalization strategy that is being actively implemented in China [4]. Thus, the combination of tillage and planting formally entered the public view. On the basis of not changing farmers' land management rights, the combination of farming and planting promotes intensive agricultural production and large-scale operation, increases the economic benefits of land, avoids various conflicts and disputes caused by the transfer of management rights, and maximizes the land benefits of farmers [5-6].

Based on the development status of large-scale agricultural operation in China, this paper selected six provinces of JiangSu, ZheJiang, JiangXi, HuNan, HuBei and SiChuan in the middle and lower reaches of the Yangtze river as examples to investigate and analyze the production factor input of current large farmers, and explored the development status, problems and countermeasures of "combined tillage and combined planting" large-scale rice cultivation from the perspective of technical input, capital input and labor input [7-8]. At the same time, starting from the development background of "combined tillage and combined planting", this paper expounds the basic situation of "combined tillage and combined planting" mode and its comparative advantages with other existing land scale operation modes, and highlights the positive significance and feasibility of "combined tillage and combined planting" large-scale rice planting path in the agricultural modernization transformation period [9]. To promote the further development of the "combined tillage and combined planting" mode, so as to reduce the fragmentation of agricultural land and provide a good production basis for orderly, efficient and high-quality rural social governance.

2. Method

2.1. Quantitative Analysis

There are many factors affecting the large-scale planting efficiency of rice, among which fertilizers and pesticides are very important agricultural means of production and play an irreplaceable role in promoting grain production increase and agricultural development [10]. In order to grasp the feasibility path of large-scale rice cultivation with "combined tillage and combined planting" as a whole, this question firstly conducts a quantitative analysis on the research subject of "fertilizer and pesticide use by sample rice farmers" [11]. Using descriptive quantitative analysis, the focus of the study on the use of chemical fertilizers and pesticides by the sample rice farmers mainly focuses on the following three aspects. First, the study on the farmers' behavior of using fertilizers and pesticides, including the measurement of the application amount of fertilizers and pesticides, the behavior of applying fertilizers and pesticides, and the purchase behavior of fertilizers and pesticides; Second, the study on the technologies related to fertilizers and pesticides and their adoption behavior, including the influence of the adoption behavior of soil formula fertilization technology, organic fertilizers, biological pesticides, risk aversion, peasant household characteristics, technical training, industrial organization and other factors on the behavior; Third, the impact analysis of excessive application of fertilizers and pesticides, including non-point source pollution, food safety, ecological environment pollution and other issues [12]. From the perspective of research methods, the commonly used research methods in this field mainly include structural equation model, factor analysis and damage control model.

On the basis of the above research, the paper analyzes the technology input, capital input, labor input and other factor input behaviors of rice farmers about fertilizer. According to the production function of colesselgrass, the influencing factors of farmers' agricultural input behavior were analyzed by using multiple linear regression model, and the technical efficiency of farmers' grain planting was analyzed by combining with the model of stochastic frontier production function. Through the use of a variety of statistical and econometric models, further improve the scientific research. Production of rice farmers behavior with capitalist enterprise behavior has a different nature, the aim of capitalist production is to pursue profit maximization, the farmers after the production of agricultural products' aim is to meet their own needs, for certain agricultural products trade, and is different from capitalist production enterprise depends on hiring, peasant household production mainly rely on family free labor resources quantity and fixed number of mechanical technology resources. Therefore, the change of farmer's behavior mainly depends on the change of household consumption demand, climate, market and other external factors. Based on the above analysis, it can be combined with the maximization of farmers' profit and the production theory based on bounded rationality. Therefore, this study can analyze the characteristics of farmers' production behavior on the basis of studying the theory of farmers' economic behavior, analyze the influencing factors of farmers' production process behavior from the perspective of factor supply, propose corresponding countermeasures, and pay attention to the operability in practice.

2.2. Comparative Analysis

Will rice farmers according to the size of the land area are classified and divided into large-scale farmers, farmers and small farmers in scale, the peasant household investment behavior of the three kinds of different scale, technology, comparing the choice behavior, the characteristics of the technical efficiency on this basis, the analysis of the different scale of peasant household behavior and the difference of the influence factors of technical efficiency, increase the depth of the research. The reasons of different operation scale as analysis Angle of view involve many aspects of farmers' land input, labor input, capital input and technology selection behavior, which is a hot topic of agricultural economy research with a wide range and many contents. Therefore, under the overall framework of farmers' production behavior, the selection of an appropriate comparative analysis perspective can better analyze and grasp the main characteristics and related laws of farmers' production behavior.

This paper studies farmers' production behavior and efficiency from the perspective of different scales, mainly based on the following reasons. First, it is a realistic demand for the differentiation of the current operating scale of farmers to study the behavior of sample rice farmers from the perspective of different operating scales. In recent years, with the acceleration of industrialization and urbanization, agricultural labor force has been rapidly transferred to non-agricultural fields, and there are fewer and fewer agricultural labor forces engaged in agricultural production. Therefore, there are still a considerable number of small-scale and medium-scale farmers in the field of agricultural production, and the coexistence of large-scale, medium-scale and small-scale farmers will continue for a long time to come. As land-intensive agricultural products, grain is the crop most affected by the status of cultivated land resources in China. Land segmentation may cause loss of technical efficiency for grain producers and farmers of different scales. Therefore, it is of great practical significance to study farmers' production behavior and technical efficiency from the perspective of different scales. Second, there are differences in grain production behavior and efficiency among farmers of different sizes. Due to the difference in operation scale, farmers have

differences in the price changes of agricultural resources, technical standards of agricultural products production and transaction costs of technology adoption when making factor input and technology selection, and the transaction costs of farmland per unit area Shared by small-scale farmers are relatively high. However, before the research, it cannot be concluded that the agricultural production behaviors of farmers of different sizes are significantly different, such as the farmers' labor input, input input behavior and willingness to choose technology. Whether there are significant differences still needs further empirical comparative analysis.

Land is the most important factor of agricultural production. In recent years, China has innovated the land transfer mechanism and mode, actively guided the land resources to flow to the agricultural operation subject with stronger comprehensive production capacity, and developed the moderate scale agricultural operation. In to select the area of the middle and lower reaches of the Yangtze river in JiangSu, ZheJiang, JiangXi, HuNan, HuBei and SiChuan in the six provinces rice farmers research found that from the view point of farmers, farmers for a long time to land the factors of production as the carrier of survival and guarantee, "land", three kinds of farmers, there are quite a number of small-scale farmers don't want to go out to land circulation. Even if they go out to work or do business, they are not willing to transfer their land to farmers' professional cooperatives or large family farmers. Some middle-scale farmers entrust their land to their relatives or neighbors, which leads to the outstanding status of farmland fragmentation. Middle-sized farmers generally have uneven cultivated land scale and specialized planting level, which leads to waste of land resources and huge space for improvement of resource allocation efficiency. In addition, there are still some large-scale farmers who continue to choose rice cultivation and are willing to continue to expand the planting area. Finally, it is found that a considerable number of farmers who are willing to continue to expand the planting scale are willing to try the large-scale rice planting of "combined tillage and combined planting". The benefit of grain cultivation per unit area of cultivated land is limited. Expanding the scale of operation can reduce the transaction cost of cultivated land per unit area, improve the bargaining power of rice grain market, and improve the economic benefit of rice farmers.

In this study, three types of rice farmers were further classified according to gender, age, education level of the head of the household and the status of both household and farm. Rice farmers with different characteristics will make different agricultural production activities in rice planting practice. According to the statistics of the ministry of agriculture, by the end of 2016, the contracted farmland area of Chinese households reached 467 million mu, accounting for 36.1% of the contracted farmland area. In the practice of promoting moderate scale operation in various regions, a number of large grain farmers and family farms with large scale of operation and good overall economic benefits have emerged, and a number of grain farmers with moderate scale of operation and good development situation have also developed, and some small and micro farmers with small scale of operation have been left behind. With different operation scale, farmers will have different abilities and negotiating positions to participate in market competition and different costs when purchasing inputs such as pesticides and fertilizers, employing labor force, purchasing and renting agricultural machinery. Therefore, the scale of operation is related to the behavior of farmers' capital investment and their willingness to choose technology, which will affect their agricultural production behavior.

2.3. Case Study Method

Case study method is one of the basic methods of organizing management research. Through the

promotion of anthropology and sociology, case study has become one of the important orientations of humanities and social science research, such as management. Case studies focus on answering explanatory questions such as "how" and "why." Based on the research conducted to select the area of the middle and lower reaches of the Yangtze river in jiangsu, zhejiang, jiangxi, hunan, hubei and sichuan province of six provinces rice planting large household surveys, large-scale use of large sample of peasant household survey data, using the method of case study analysis of rice farmers to extreme climate change, rice quality fit and unfit quality, cultivation of other factors such as cognitive and adaptive behavior, on the basis of cognitive horizon, find out in the agriculture, the rural social governance effect implement "plow coupon" scale of rice planting and take an important factor of adaptive behavior, lay a foundation for further research and analysis.

3. Experiment

3.1. Sample Selection and Classification

Six provinces of JiangSu, ZheJiang, JiangXi, HuNan, HuBei and SiChuan in the middle and lower reaches of the Yangtze river were selected as the sample areas. Survey data of rice farmers production situation in used for rice farmers fertilizer based on the analysis of the pesticide reduction potential, designed the rice farmers fertilizer, pesticide reduction efficiency technology adopt investigation, and the farmers in zhejiang province and jiangsu province as an example, fertilizers and pesticides to rice farmers to adopt further reduction of synergistic technology for further investigation. Multi-layer sampling method was used to select samples. Firstly, according to the construction of the demonstration areas of rice fertilizer and pesticide reduction and efficiency improvement technology in zhejiang and jiangsu provinces, 5 counties and 4 counties were selected in the two provinces to pilot and popularize these technologies. Then, according to the list of demonstration sites provided by each county government, villages containing demonstration sites are randomly selected in each county by means of random sampling. The paper points out the contradiction between the high efficiency of fertilizer and the high complexity of the technology of reducing the quantity and increasing the efficiency in a certain period of rice growth. Of synergistic technology supporting service reducing household by identifying the strength and its influencing factors, demand analysis and the government and the new operators in the role of division of labor and cooperation mechanism, technology popularization system for chemical fertilizers synergistic technology provides the basis for the promotion path of innovation, reducing agricultural producer services for how to achieve breakthrough in the field of green, high efficient production technology provides a train of thought. Sample selection is shown in table 1 below.

Table 1. Sample selection table

State Values	Areas	Eiffient Values	City And Country
Production Status	Jiangsu Zhejiang Hunan Hubei Jiangxi Sichuan	632	5
Technology Adoption Survey	Jiangsu Zhejiang	386	4

3.2. Data Source Classification

In this study, the rice growing areas in the middle and lower reaches of the Yangtze river were used as the sample areas for the extension of the technology of reducing the amount and increasing the efficiency of fertilizer and pesticide in rice. First of all, the middle and lower reaches of the Yangtze river basin have a long history of rice cultivation, which is an important producing area of single and double cropping rice cultivation area in central China. With abundant rainfall and sufficient light, the chengdu plain, jianghan plain, dongting lake area and taihu lake area in the basin are all important commercial grain bases in China. Secondly, the economic and social development of the Yangtze river economic belt must follow the road of ecological priority and green development, which has the urgent need to popularize the technology of reducing the amount and increasing the efficiency of chemical fertilizers and pesticides.

The research mainly comes from two parts: one is the control group data used for the control study, and the other is the production survey data of rice growers in the national rice industry and technology system. The control data mainly included rice farmers' rice production and technology, rice input and output, rice management and management, and basic situation of rice farmers' families. The second part is the sample data. The sample experimental data are mainly taken from the 6 provinces of jiangsu, zhejiang, jiangxi, hunan, hubei and sichuan in the middle and lower reaches of the Yangtze river. Investigation on the adoption of fertilizer and pesticide reduction and synergistic techniques by rice growers in six provinces. Survey data of rice farmers production situation in used for rice farmers fertilizer based on the analysis of the pesticide reduction potential, the design of rice farmers fertilizer, pesticide reduction efficiency technology adopt investigation, and the farmers in zhejiang province and jiangsu province as an example, fertilizers and pesticides to rice farmers to adopt further reduction of synergistic technology for further investigation.

4. Results and Discussions

Land scale management is an important means to optimize the allocation of land resources, improve the intensive use of land and improve farmers' income, and is one of the most effective ways to achieve sustainable agricultural development. In view of the problems of high degree of decentralization and small scale in China's traditional economic model, the government implements land circulation policy in order to comply with the trend of agricultural structure reform, and tries to achieve the goal of rationalizing the scale of land operation. After the implementation of this policy, the theory has been developed, and the practical activities have achieved considerable results. Through the above experimental analysis, the analysis results of various elements of the implementation path of "combined tillage and combined planting" for large-scale rice cultivation are shown in table 2 below.

Table 2. Analysis results of various elements of the implementation path of "combined tillage and combined planting" for large-scale rice cultivation

Group	Gender	Age	Course of the Disease	Common Bile Duct	Number of Stones	Stone Size
	(Male/Female)	(Years Old)	(Month)	Diameter (mm)	Gold	(mm)
Minimally Invasive Group	40/45	46.2	4.5	12.07	2.13	9.88±0.38
laparotomy Group	62/66	48.3	4.3	12.16	2.12	9.86±0.35
P	0.893	0.79	0.895	0.773	0.936	0.954

4.1. Input Results of Each Factor

(1) Total investment amount per unit area

From the perspective of the total investment amount per unit area, the investment amount per unit area gradually decreases with the expansion of the scale. The detailed data is shown in figure 1 below.

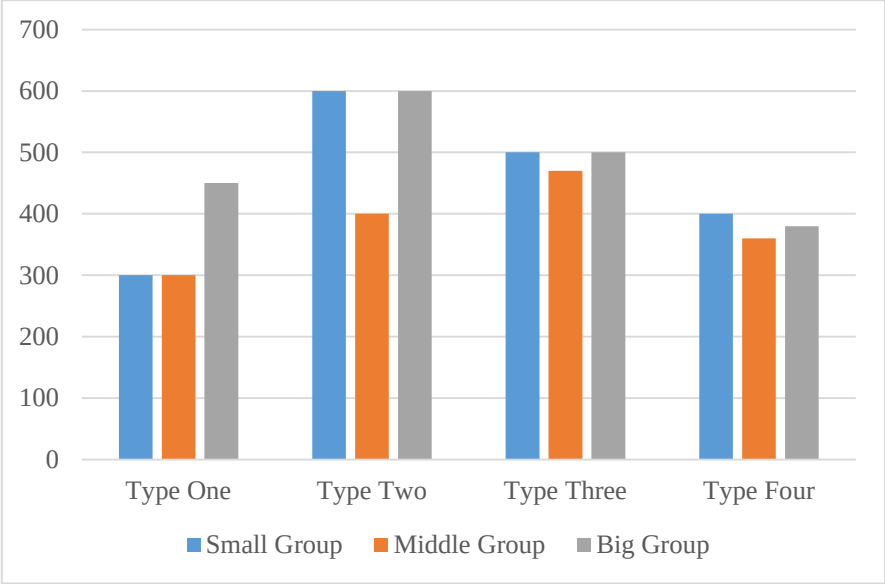

Figure 1. Detailed data of investment amount per unit area

The mean population input of rice sample households was 790 yuan/mu, that of small sample households was 968 yuan/mu, that of medium sample households was 763 yuan/mu, and that of large sample households was 615 yuan/mu. As the scale increases, the total investment decreases. The total investment per unit area of the large-scale sample households is 352 yuan lower than that of the small-scale sample households.

(2) Composition of input elements per unit area

In terms of the composition of input factors, the proportion of each input in different scale ranges is also quite different. The detailed data is shown in figure 2 below.

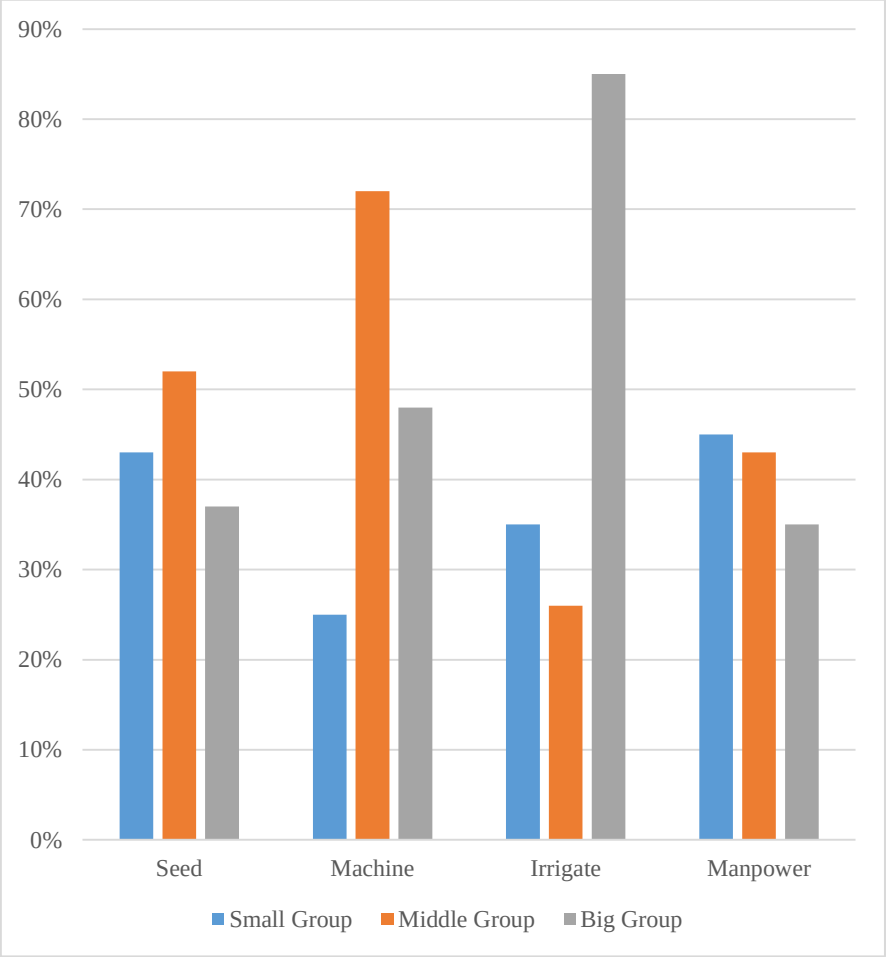

Figure 2. Detailed data graph of input factors per unit area

Farmers' inputs of production factors include seeds, fertilizers, pesticides and machinery. Among all the sample households, labor cost accounted for the largest proportion of total input, reaching 32.34%, followed by agricultural machinery cost, accounting for 21.91%, fertilizer cost ranked third, accounting for 22.15% of total input, and agricultural film cost accounted for the smallest, only 1.11%. In the small-scale sample households, the labor cost accounted for a large proportion of the total input, which was 45.36%, almost half of the total input. The second place was fertilizer cost, which accounted for 18.62%, and the third place was agricultural machinery cost, which accounted for 16.49%. In the size of the sample households, artificial cost and machine cost basic quite, artificial cost proportion still is the largest, at 27.61%, agricultural machinery cost 23.76%, came in third place was cost of drainage and irrigation, fertilizer costs than all sample and small sample order in advance, accounted for 22.36%, ranked third, with the bottom of a few of drainage and irrigation, pesticides, the hardiest and polluting plastics, accounted for 12.09%, 8.20%, 4.99% and 1.21% respectively; Among the large-scale sample households, the fertilizer input accounted for the highest proportion of the total input, reaching 29.10%. The second largest input was agricultural machinery expense, accounting for 27.85%. The third largest input was labor expense, accounting for 18.94%.

(3) Single factor input per unit area

From the perspective of single factor input, the variation trend of different scale interval is

different. The detailed data is shown in figure 3 below.

Figure 3. Detailed data of single element per unit area

With the expansion of the scale, the seed input first increased and then decreased. The seed input per unit area of small-scale rice sample households was 36.04 yuan/mu, the seed input per unit area of medium-sized rice sample households increased to 38.14 yuan/mu, and the seed input of large-scale farmers decreased to 21.54 yuan/mu. With the expansion of the scale, the fertilizer input first decreased and then increased, from RMB 180.22 / mu for small-scale rice farmers to RMB 170.75 / mu for medium-scale farmers, and from RMB 179.09 / mu for large-scale farmers. The input of pesticides and herbicides was 52.70 yuan/mu for small-scale rice growers, 62.65 yuan/mu for medium-scale rice growers, and 33.34 yuan/mu for large-scale rice growers. Rice seedlings were raised with mulch arch frame. Some of the farmers in the sample plots raised seedlings by themselves or in combination to raise seedlings centrally. Therefore, the investment was quite different

(4) Irrigation input per unit area

The irrigation input per unit area is decreasing with the scale. The detailed data is shown in figure 4 below.

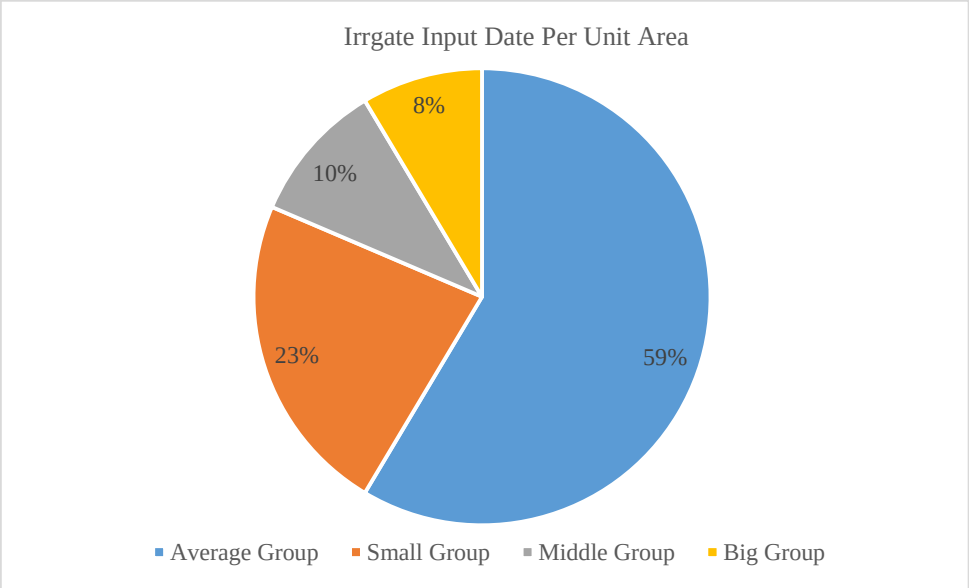

Figure 4. Detailed data of irrigation input per unit area

The average irrigation input of rice planting was 100.23 yuan/mu, accounting for 58% of the total irrigation input of small-scale rice sample households, 93.01 yuan/mu, accounting for 9%. The medium scale investment is 92.36 yuan/mu, accounting for 10%. The irrigation input of large-scale sample households was the lowest, 88.82 yuan/mu, accounting for 23%. The mechanical input also showed a trend of increasing first and then decreasing with the scale. The mechanical input of small-scale sample households was 159.60 yuan/mu, and the mechanical input of large-scale sample households was 171.38 yuan/mu. The human input difference is very obvious. The artificial input of small-scale rice growers was the largest, reaching 439.12 yuan/mu, while the medium scale was reduced to 210.81 yuan/mu, and the large scale was less than 150.00 yuan/mu, only 116.56 yuan/mu.

In the 1770s, the theory of diminishing returns was put forward by durgo, a famous physiocratic figure in France. This view is divided into three levels. First, the thinking mode of "marginal" research can be shown through the study of "diminishing returns". Second, it emphasizes the interrelation between "total production" and "marginal product" in the change, and not only that, but also analyzes the difference between "total production" and "marginal product"; At the end of the theory, emphasizes the product the MPP presented after the first gradually increase gradually reduce the trend of comprehensive tells the story of the change about the remuneration, is to gradually increase until a maximum and then gradually reduced, eventually goes to zero as a result, so far further strengthen land management pattern and the use of land input and output relationship of basic credential is a law of diminishing returns of land use.

This is the first stage of investment when both average and total returns show a trend of gradual increase. In order to improve the efficiency of agricultural production work must expand labor input. With the increase of the input, the marginal return of land decreases until the marginal return is zero, which is the second stage of the input and the best stage. When the total compensation is gradually reduced and the marginal compensation is also less than zero, it is very unscientific to choose investment at this time, which is in the third stage of investment. The theory of diminishing returns in land use can guide the development of moderate scale land management. In land revenue scale or is put into use of land resources on the way there will be the only one of the best point, the point is

called land moderate scale of land compensation, located at that point, showed a trend of gradually increase the remuneration, located at that point, and presents the tendency of decrease, thus it can be seen that land scale is not unlimited increase.

4.2. Advantages of Combined Tillage and Planting Mode

(1) Comparative analysis of farmers' production behavior input of "combined tillage and combined planting"

According to the previous research data, Logit analysis and TOBIT analysis were conducted on the fixed productive capital investment of farmers by using STATA software, and the comparative analysis results of farmers' production behavior investment were shown in table 3.

Table 3. Results of comparative analysis of farmers' production behavior input

Factors	Coeiffient	Z Values	Coeiffient	β Values
Family Size	1.25	2.8	10.34	2.75
Employ Rate	-14.43	-3.65	447.12	12.79
Average Level	5.25	3.98	-14.25	-2.56
Squares	0.67	2.41	2.76	3.14
Family Income	0.22	4.33	0.63	9.87

From the running results of the model, the overall fitting degree is good, which is basically consistent with the theoretical expectation. According to the estimation results of the model, the main influencing factors and influencing degree of whether rice growers make fixed productive capital investment and rice growers' productive investment scale are summarized as follows:

First, from the perspective of the basic characteristics of farmers, family size, non-farm employment ratio and average family education level have a significant impact on the fixed productive capital input behavior of farmers. The household size is significant at the credible level of 00.1, and the coefficient is positive, indicating that under other conditions unchanged, the larger the family population is, the greater the possibility for farmers to invest fixed production capital. The non-farm employment ratio is significant at the credible level of 00.1, and the coefficient is negative, indicating that the higher the non-farm employment ratio is, the less likely it is for farmers to invest fixed productive capital. The average family education level is significant at the credible level of 00.1, and the coefficient is positive, indicating that under other conditions unchanged, the higher the average family education level is, the greater the possibility for farmers to invest fixed productive capital.

Second, from the perspective of household wealth, the cultivated land area, household operating income and credit level have a significant impact on whether farmers invest fixed productive capital. The cultivated land area is significant at the credible level of 0.05, and the coefficient is negative, indicating that under other conditions unchanged, the more cultivated land area a family has, the less likely it is to invest fixed production capital.

The operating income was significant at the credible level of 0.01, and the coefficient was positive, indicating that under other conditions unchanged, the greater the net income of the previous year, the greater the possibility of fixed production capital investment, but the influence coefficient was small. Whether the loan is significant at the credible level of 0.1, and the coefficient is positive, indicates that under other conditions unchanged, the farmers with high loan level are

less likely to make fixed productive investment. This shows that it is unlikely for farmers to invest fixed productive capital through loan fund.

Thirdly, from the perspective of price, the expectation degree of farmers on the minimum purchase price of rice has a significant influence on whether to invest in fixed production, which is significant at the credible level of 0.01 with a positive coefficient, indicating that raising the minimum purchase price of rice plays a significant role in promoting farmers to invest in fixed production capital.

Fourth, the impact of other variables, whether the occurrence of disasters has no significant impact on the productive investment scale of farmers.

(2) Advantages of "combined tillage and combined planting" in practice

Land scale management is an important means to optimize the allocation of land resources, improve the intensive use of land and improve farmers' income, and is one of the most effective ways to achieve sustainable agricultural development. In view of the problems of high degree of decentralization and small scale in China's traditional economic model, the government implements land circulation policy in order to comply with the trend of agricultural structure reform, and tries to achieve the goal of rationalizing the scale of land operation. After the implementation of this policy, the theory has been developed and the results obtained in practice have been considerable, but there are many problems in the practice of large-scale agricultural land management. At present, the main forms of land transfer in yancheng are: subcontract, lease, exchange, transfer and share. Among them, subcontract, lease and exchange of the three modes in the process of the transfer of land contract rights did not change, change is the management of the land and the right to use; In essence, land transfer means that farmers give up part or all of their contracted land management rights in rural areas, and farmers will permanently lose part or all of their contracting rights. Joint management joint venture, as the highest form of "joint tillage joint planting", is actually the external manifestation of the form of shareholding, which is intended to change the mode of production cooperation and achieve business cooperation. "Combined tillage and combined planting" is another effective form of large-scale planting beyond land transfer. The advantages of this model are as follows.

First, we have not changed farmers' land contract right and management right, and maintained the basic status of family operation. There are mainly differences in the following aspects: in the way of land centralization, the rural households contract the land in the land transfer through formal channels, farmers retain the contracting right, transfer the management right to their farmers or economic organizations, farmers get the transfer income and the state policy farmland subsidy. The land scope of peasant household circulation has certain limitations and the scale intensification level is not high. However, the mode of "joint tillage and joint planting" adopts the cooperation between farmers' families, breaks the ridge between farmland by piling and other forms according to the voluntary principle of farmers, and gathers fragmented land to realize joint tillage, which provides a practical reference for promoting large-scale land management.

Second, the standard level in the process of land circulation problems such as audio, a lot, and oral folk widespread, because in the process, both sides sign a written contract, rarely most oral agreement, without the consent of the contractor and the administrative departments for the record just, sign a written contract, even if its content is not complete, is not standard, the two sides has no clear pass, is easy to trigger some contradictions and hidden trouble, lead to hard to dispute. On the other hand, "combined tillage and planting", through the combination between farmers and farmers, implements continuous operation on the premise of respecting and protecting farmers' land contracting rights and management rights, takes the form of "farmers + farmers + cooperatives"

with the government as the leading role, omits circulation steps and avoids the irregularity of land circulation.

Third, there is a huge difference between the income subject of "joint tillage and joint planting" and the income subject of land transfer. The former benefits every household and is the defender of the interests of the general public, while the latter benefits the large individual growers or the industrial and commercial capital. As the main body of land circulation, professional investors, family farms and agricultural enterprises with its advantages on the scale of land operation and production to obtain benefits, the benefit main body with form is varied, and the farmer would get only land circulation of the cost of land and state aid, and this money is limited and fixed, this makes the land circulation of the assignee income limits; "Farming couplet coupon" is farmers as the main body, in accordance with the principle of voluntary farmers, the model, not only reduces the cost of agricultural production, but also increase the efficiency of farmland and productivity, significantly enhance quality of agricultural products, during the value-added benefits belong to participate in all farmers, the farmers' income index range is larger, and is on the rise, farmers living standards further improved.

5. Conclusion

Promoting the large-scale rice planting with "combined tillage and combined planting" is a great practical matter that brings multiple benefits and win-win results to all parties. It effectively improves the integrity of rural land, improves the level of production factors in all aspects, and promotes the increase of land input-output ratio, which is beneficial to the environment

Environmental protection improves the flexibility of agricultural productivity and enables farmers to develop and progress together with professional cooperative organizations. Based on the above research, its implementation path mainly includes the following aspects: first, strengthen the professional service subject; The second is to connect scattered smallholders with socialized services, new equipment and technologies, and national resources to the countryside. Third, supporting farmland infrastructure; Fourth, the interests of the injured main body. In order to do a better job in rural social governance work to lay a good foundation for agriculture, we still need to continue to explore and improve in the process of promoting the "joint tillage and joint planting" model.

Funding

This article is not supported by any foundation.

Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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