Peasant Household Safety Production Behavior with Quality and Safety, High-quality and Good-price-based on the Micro Data of Farmers from a Village in Heze

Feng Guohong

Postgraduate Student, Majored in Industrial Economy, School of Economics, Beijing Wuzi University, Beijing, China

ABSTRACT

Based on the data of 210 questionnaires from a village in Heze, the relationship between peasant household safety production behavior with quality and safety, high-quality and good-price was studied by descriptive statistical analysis and binary Logistic regression analysis. The results show that the price of high-quality agricultural products and the access threshold of agricultural products market are important factors that affect the peasant household safety production behavior, the quality and safety cognition level of farmers affects their production behavior, high-quality and good-price can promote farmers' safety production. Therefore, it is necessary to strengthen the popularization education of quality and safety and improve farmers' cognition level, perfect the market mechanism of high-quality and good-price and promote the realization of high-quality and goodprice of agricultural products, and perfect the subsidy policy of farmers' safety production and establish a quality and safety-oriented agricultural production subsidy subject.

KEYWORDS: quality and safety; high-quality and good-price; peasant household safety production behavior

How to cite this paper: Feng Guohong "Peasant Household Safety Production Behavior with Quality and Safety, Highquality and Good-price-based on the Micro Data of Farmers from a Village in

Heze" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-6 | Issue-3, April 2022, pp.370-378,



pp.370-378, URL: www.ijtsrd.com/papers/ijtsrd49525.pdf

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INTRODUCTION

With the development of high-quality agricultural products, the relationship between supply and demand of agricultural products in China is gradually relaxed. People pay more attention to the quality and safety of agricultural products than to the quantity. However, in recent years, agricultural product safety incidents such as "poisonous leeks", "cadmium rice" and "dyed navel oranges" have occurred frequently. It makes the society start to think about how to ensure the quality and safety of agricultural products to eliminate the negative externalities of unsafe products, how to achieve high-quality and good-price and promotea win-win situation for both buyers and sellers, and what kind of incentives farmers need to continue to carry out safe production. In the agricultural product supply chain, farmers are the main body of the agricultural product production, the use of agricultural inputs such as pesticides and fertilizers and the implementation of safe production

practices will directly affect the quality and safety of agricultural products at the source of production and throughout the supply chain. At present, in order to standardize the safe production behavior of farmers, the government has issued a series of policies and regulations to strengthen the guidance, supervision and management of small-scale farmers, but the role of close supervision and management is still limited^[1]. It is necessary to give full play to the decisive role of the agricultural product market in the allocation of resources, promote the high-quality and good-price of agricultural products^[2], establish a market price realization mechanism for green agricultural products, and enable farmers to sell high-quality agricultural products at good prices^[3].

It is an effective way to promote the safe production and guarantee the quality and safety of agricultural products^[4]that to carry out the high-quality and goodprice of agricultural products in the market. Moreover, the guaranteed price of agricultural products will promote the adoption of low-carbon agricultural standardized production by farmers^[5], which can significantly improve the quality and safety level of agricultural products and the proportion of branded agricultural products, reduce the lack of enthusiasm for production due to the increased green input costs, and prompt farmers to take the initiative to carry out green and safe production to meet consumer demand^[6]. High-quality and good-price are important factors that affect farmers' safe production for a long time, economic incentive is favorable for farmers to use low toxic pesticides, choose safe production behavior and ensure food safety^[7]. In order to study the relationship between peasant household safety production behavior with quality and safety, high-quality and good-price, this paper takes 210 farmers in a village of Heze as the research object, and analyzes the data obtained through interviews and questionnaires.

1. Data source and basic characteristics of the sample

To reveal the relationship between peasant household safety production behavior with quality and safety, high-quality and good-price, a questionnaire survey was conducted among farmers in a village, Heze, Shandong Province, during the period of 2021 from April to May, a total of 223 questionnaires were obtained, of which 210 were valid, with an effective rate of 94.17%.The questionnaire survey mainly includes three parts: first, the quality and safety control behavior of farmers, including the most concerned matters of farmers when purchasing pesticides and fertilizers, the usage habits of pesticides and fertilizers, the frequency of using organic fertilizers and biological pesticides etc,second, farmers' awareness of quality and safety, including farmers' understanding of agricultural production safety standards, the impact of excessive use of pesticides and fertilizers on the environment and health etc, third, the impact of high-quality and good-price on farmers' safe production, including the impact of government subsidies , the price of agricultural products and the impact of the quality thresholdetc. The characteristics of the sample data are shown in Table 1.

As can be seen from Table 1that the sample has the following characteristics: Among the farmers surveyed, the proportion of women is 52.38%, and the proportion of men is 47.62%, and the proportion of women is slightly higher than that of men. The farmers surveyed are mainly aged 20-65, of which 59.05% are aged 36-65. The vast majority of farmers have a low level of education, with 76.66% of them having an education level of junior high school or below, mainly concentrated in farmers aged 36-65. These farmers are the main force in agricultural production. The vast majority of rural households are poorly educated, with 76.66% of them having a junior high school education or below, mainly among 36-65 year-old who are the main force of agricultural production.47.62% of the peasant households have been engaged in farming for more than 15 years, and their planting scale is small and the average arable land of one household is 4.66 acres. At the same time, 90.00% of the total sample were family-based, and the degree of organization was low.

| feature | | frequency | percentage(%) |
|-----------------|--|-----------|---------------|
| gandar | Male | 100 | 47.62 |
| gender | female | 110 | 52.38 |
| | 20 years old and below | 5 | 2.38 |
| | 21—35 years old | 74 | 35.24 |
| age | 36—50 years old | 77 | 36.67 |
| | 51—65 years old | 47 | 22.38 |
| | over 65 | 7 | 3.33 |
| | Elementary school and below | 54 | 25.71 |
| | junior high school | 107 | 50.95 |
| | high school/secondary school/higher vocational | 27 | 12.86 |
| education level | college/university | 18 | 8.57 |
| | Graduate and above | 4 | 1.90 |
| | 0-5 years | 50 | 13.81 |
| | 6-10 years | 41 | 19.52 |
| Farming years | 11-15 years | 19 | 9.05 |
| | over 15 years | 100 | 47.62 |

 Table 1 Basic information of farmers

2. Farmer's cognition of quality and safety and concern of high-quality and good-price

2.1. Farmer's cognition of quality and safety

Farmers have a low level of understanding of the laws related to the quality and safety of agricultural products, 23.81% of the farmers chose "Do not know" the "Law on quality and safety of agricultural products", "Maximum residue limits of pesticides in food" and other laws and regulations, while 54.29% of the farmers chose "Do not know much". However, farmers have a relatively good understanding of the use and dosage regulations of pesticides and fertilizers. 61.91% of the farmers have a good understanding of the regulations on the use and dosage of pesticides and fertilizers, and only 7.14% of farmers do not know the dosage of that. In addition, farmers have a relatively good understanding of the environment. Most farmers believe that excessive use of fertilizers will affect the land environment, cause environmental pollution and bad for health. Only about 3% of farmers believe that excessive use of pesticides has no impact on the environment and physical health.

| Table 2 Farmer's cognition of quanty and safety | | | | |
|--|--------------------|-----------|---------------|--|
| feature | | frequency | percentage(%) | |
| | do not know | 50 | 23.81 | |
| Knowledge of lowe and negations related to | do not know much | 114 | 54.29 | |
| Knowledge of laws and regulations related to planting | know a little | 31 | 14.76 | |
| plaiting | know more | 11 | 5.24 | |
| | Know very well | 4 | 1.90 | |
| 1020 | do not know | 15 | 7.14 | |
| Vnowladge of posticide and fartilizen nee and a SG | do not know much | 65 | 30.95 | |
| Knowledge of pesticide and fertilizer use and so dosage regulations | know a little | 68 | 32.38 | |
| | know more | 51 | 24.29 | |
| | Know very well | 11 | 5.24 | |
| | No effect | 7 | 3.33 | |
| Effects of excessive emplication of effects of excessive emplication | less effect | 33 | 15.71 | |
| Effects of excessive application of pesticides and | a little effect | 51 | 24.29 | |
| chemical fertilizers on health | major effect 📒 🗧 🖉 | 61 | 29.05 | |
| Devel | most influential | 58 | 27.62 | |

Table 2 Farmer's cognition of quality and safety

2.2. Farmers' quality and safety production status 56-6470

The production input of farmers not only directly affects the level of quality and safety of agricultural products, but also directly affects the sale price of agricultural products and the willingness of farmers to produce highquality agricultural products. According to the survey, 57.62% of the farmers are more concerned about whether the yield per acre brought by seeds is high, 67.62% are more concerned about the efficacy of pesticides in killing pests or weeding, and 70.48% are more concerned about the fertility of chemical fertilizers, and farmers pay very little attention to the prices of seeds, pesticides and fertilizers, which means that farmers pay more attention to the effects of inputs than to the cost, but these effects are more related to the quantity rather than the quality of agricultural products, only 37.62% of the farmers are more concerned about the innocuity of the pesticides, 24.29% of farmers are more concerned about the environmental pollution caused by chemical fertilizers.

| Table 3 The basic situation of farmers | purchasing agricultural materials |
|--|---|
| | 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 |

| | feature | frequency | percentage(%) |
|--------------|--|-----------|---------------|
| Top concerns | cheap seeds | 10 | 4.76 |
| when buying | high yield of seeds | 121 | 57.62 |
| seeds | High quality of agricultural products | 79 | 37.62 |
| top concerns | Cheap pesticides | 8 | 3.81 |
| when buying | Pesticides are effective in killing insects or weeding | 142 | 67.62 |
| pesticides | Pesticides are non-toxic and low-polluting | 60 | 28.57 |
| top concerns | cheap fertilizer | 11 | 5.24 |
| when buying | fertilizer is effective | 148 | 70.48 |
| fertilizer | no pollution to the environment | 51 | 24.29 |

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Although about 60% of farmers can use chemical fertilizers and pesticides in strict accordance with the instructions, the use rate of organic fertilizers and biological pesticides is still relatively low. The proportion of farmers who regularly use organic fertilizers is less than 20%, and only 10.95% of the farmers who use green and low-pollution biological control technology or biological pesticides to control pests and regularly use organic fertilizers. Farmers have poor habits in agricultural production and medication records. 72.38% of farmers rely on experience to produce and have no production records. 69.52% of farmers did not standardize the treatment of input packaging, but threw the packaging of pesticides and fertilizers in the fields or directly into the garbage heap, instead of placing them at the recycling point for unified treatment.

| | feature | frequency | percentage(%) |
|--|---|-----------|---------------|
| How to use | apply empirically, and use it multiple times if the pest is serious | 47 | 22.38 |
| agrochemicals such as | depending on the situation, occasionally overuse | 38 | 18.10 |
| pesticides and herbicides | use pesticide doses strictly according to the instructions | 125 | 59.52 |
| Are fertilizers always | apply empirically | 30 | 14.29 |
| applied according to the | depending on the situation, occasionally overuse | 51 | 24.29 |
| instructions | always use fertilizers according to the instructions | 129 | 61.43 |
| Whether biological | never | 56 | 26.67 |
| control techniques or | occasionally | 131 | 62.38 |
| biological pesticides are used to control pests and diseases | frequently Scientific Res | 23 | 10.95 |
| Whether organic | never 2 S I ITSPD | 11 | 5.24 |
| fertilizer is used | occasionally | 158 | 75.24 |
| ierunizer is useu | frequently International Journal | 41 | 19.52 |
| whether there are | produced empirically, no records | 152 | 72.38 |
| production and | record simplely Research and | 39 | 18.57 |
| medication records for the crops produced | recorded in detail | 19 | 9.05 |
| how to deal with the | casually left in the fields $^{2430-0470}$ | 39 | 18.57 |
| | throw in the trash | 107 | 50.95 |
| packaging of fertilizers and pesticides | Placed in the specified point for recycling and unified processing | 64 | 30.48 |

Table 4 Farmers' quality and safety production behavior

2.3. The influence of high-quality and good-price on farmers' safety production behavior

The government's financial subsidy and support is the incentive to farmers, if the financial subsidy and support are sufficient, farmers are more likely to choose green and pollution-free pesticides and fertilizers for production, which is conducive to improving the quality and safety of agricultural products. The survey shows that 46.67% of farmers believe that the government's financial subsidies and support are more conducive to the safe production.67.14% of farmers believe that high-quality agricultural products with sufficient price will increase their enthusiasm for safe production. Raising the entry threshold of agricultural products in the market is another economic incentive for farmers, relying on market forces to control the quality of agricultural products and allow high-quality agricultural products to the market.60.96% of the farmers think that raising the market access threshold of agricultural products can promote their safety production behavior.

Table 5 high-quality and good-price related to farmers' safety production behavior

| feature | | frequency | percentage(%) |
|--|------------------|-----------|---------------|
| | do not know | 28 | 13.33 |
| | less effect | 84 | 40.00 |
| The impact of government subsidies and support for safe production of agricultural products | a little effect | 66 | 31.43 |
| | major effect | 22 | 10.48 |
| | most influential | 10 | 4.76 |

| | No effect | 11 | 5.24 |
|---|------------------|----|-------|
| The impact of raising the price of high-quality | less effect | 58 | 27.62 |
| agricultural products on safe production of | a little effect | 87 | 41.43 |
| agricultural products | major effect | 42 | 20.00 |
| | most influential | 12 | 5.71 |
| | No effect | 15 | 7.14 |
| The impact of the market reising the entry threshold | less effect | 67 | 31.90 |
| The impact of the market raising the entry threshold of agricultural products on safety production | a little effect | 57 | 27.14 |
| | major effect | 44 | 20.95 |
| | most influential | 27 | 12.86 |

3. Empirical Analysis

3.1. Model selection

What this paper examines is whether farmers take safe production behaviors, and there are only two results: farmers carry out safe production or do not carry out safe production. Therefore, the binary Logistic model is used for empirical analysis, and the model structure is as follows:

$$ln(\frac{p_1}{p_0}) = \partial + \beta_1 X_1 + \beta_2 X_{2+} \dots \beta_q X_q$$

 p_1 is the probability of Y=1, that is, the farmer carries out safeproduction, p_0 is the probability of Y=0, that is, the probability that the farmer does not carry out safe production, ∂ is a random error term.

3.2. Variable setting

3.2.1. Y value meaning and assignment description

Y in the model is the explained variable, indicating whether the farmers conduct safe production behaviors. With reference to the existing literature, the production behavior of farmers in Table 6 is used to judge whether farmers are carrying out safe production. The total score of each option is 27 points, and the cumulative score of the nine items is greater than 20, which is recorded as Y=1, that is, the farmer conducts safe production; otherwise, Y=0, that is, the farmer does not conduct safe production^[8]. The specific independent variable settings are as follows:

| | Table 6 Independent variab | le setting | G |
|--------------------------------------|--|------------|--|
| Dependent variable | Evaluation Index of safety production | code | assignment |
| | main concern when buying seeds | Y1 | Seeds price=1 Yield of seeds=2 High quality of agricultural products=3 |
| | main concern when buying pesticide | Y2 | pesticideprice=1 efficiency of pesticide=2 safety, no residue=3 |
| Production behavior of peasant | Whether biological control techniques or biopesticides are used to control pests and diseases | Y3 | Fertilizer price=1 efficiency of fertilizer=2 safety, nopollution=3 |
| household | How do you use agricultural chemicals such as pesticides and herbicides | Y4 | casually=1 empirically=2 according to the instructions=3 |
| | Do you consider the safe interval of pesticides in the process of planting agricultural products | Y5 | never=1 sometimes=2 always=3 |
| | Do you always apply fertilizers according to the instructions | Y6 | empirically=1 sometimes overdose=2 always according to the instructions=3 |

Development Sable 6 Independent variable setting

| Do you use organic fertilizer in production | Y7 | never=1 sometimes=2 always=3 |
|---|----|--|
| How do you handle fertilizer and pesticide packaging | Y8 | casually left in the fields=1 throw in the trash=2 Placed in the specified point=3 |
| Do you have production and medication records for the crops | Y9 | No record =1 record simplely=2 recorded in detail=3 |

3.2.2. X value meaning and assignment description

Factors such as high quality and good price, farmers' own characteristics, government policy support, economic expectation and farmers' cognition of quality and safety are included in the factors affecting farmers' safety production behavior, and the specific settings are as follows (Table 7):

| feature | Independent variable | code | assignment |
|---|--|---|---|
| | gender | X1 | female=0; male=1 |
| | | | 20years old and below=1;21—35 years |
| | age | X2 | old=2;36—50 years old=3;51—65 years |
| | | m | old=4; over 65=5 |
| | Education level | X3 | Elementary school and below=1; junior high school=2; high school/secondary school/higher vocational=3; college/university=4; Graduate and above=5 |
| | total household population | X4 | actual value 🗿 🚺 |
| characteristics of farmers | mode of production of local of | rnatio 1 <mark>x5</mark> d i Resea Devel | Family unit = 1; leading enterprises + farmers = 2; farmers cooperatives + leading enterprises + farmers = 3; agricultural cooperatives + farmers = 4; family farms = 5 |
| | Family's main source of income | X6 | Pure farming households = 1; Mainly farming, working in spare time, family income mainly comes from agricultural production = 2; Mainly working outside, also engaged in agriculture, family income mainly comes from outside agriculture = 3 |
| Farmers' | What is your understanding of pesticide and fertilizer useand dosage regulations? | X7 | don't know = 1; don't know much = 2; generally know = 3; know more = 4; know very well = 5 |
| cognition of quality and safety | Do you know about planting related laws and regulations? | X8 | don't know = 1; don't know much = 2; generally know = 3; know more = 4; know very well = 5 |
| Government | Government subsidies and technical support for agricultural production | X9 | don't know = 1; not very good = 2; fair = 3; good = 4; very good = 5 |
| policy | How many times have you attended production training? | X10 | never = 1; occasionally = 2; generally= 3; frequently = 4; always = 5 |
| High-quality and good- | Does raising the price of high-quality agricultural products affect safe production behavior? | X11 | do not know=1;less effect=2;a little effect=3;major effect=4;most influential=5 |
| price and farmers' economic expectations | The impact of the market raising the entry threshold of agricultural products on productionbehavior? | X12 | No effect=1 ; less effect=2 ; a little effect=3 ; major effect=4 ; most influential=5 |

Table 7 Independent variable setting

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| Is increased agricultural product safety necessarily good for income? | | Not at all favorable = 1; somewhat favorable = 2; generally favorable; = 3 more favorable = 4; very favorable = 5 |
|---|--|---|
|---|--|---|

3.3. Model estimation result analysis

Using spss25.0 software to carry out logistic linear regression analysis on farmers' safety production behavior, the model estimation results are as follows (Table 8):

| Table 8 Results of model | | | | | | |
|--------------------------|----------|----------|--------|--|--|--|
| Independent variable | B | salience | Exp(B) | | | |
| X1 | -0.026 | 0.948 | 0.975 | | | |
| X2 | -0.635** | 0.018 | 0.530 | | | |
| X3 | -0.213 | 0.385 | 0.808 | | | |
| X4 | 0.153 | 0.302 | 1.166 | | | |
| X5 | 0.250 | 0.128 | 1.284 | | | |
| X6 | -0.760* | 0.055 | 0.468 | | | |
| X7 | -0.544** | 0.028 | 0.580 | | | |
| X8 | 0.734** | 0.006 | 2.084 | | | |
| X9 | -0.098 | 0.675 | 0.907 | | | |
| X10 | 0.359* | 0.078 | 1.432 | | | |
| X11 | 0.465** | 0.031 | 1.593 | | | |
| X12 | 0.360** | 0.039 | 1.433 | | | |
| X13 | 0.216 | 0.196 | 1.241 | | | |
| constant | -2.299 | 0.174 | 0.100 | | | |

Note: *, **, *** represent the significance level of 10%, 5%, and 1%, respectively

Among the 13 variables selected, the two variables, the main source of household economy and the number of productive training, passed the 10% significant level test, the 5 variables of farmers' age, their knowledge of the use of pesticide and fertilizer, lo their knowledge of the relevant laws and regulations, the price of high-quality agricultural products and the threshold of market entry of agricultural products passed the 5% significance level test. The results show that the above 7 variables have a significant impact on the safety production behavior of farmers.

Farmer's age has a significant impact on farmer's safety production behavior. The older the farmers are, the lower the possibility of safe production, because compared with the young, the older farmers have limited acceptance of advanced and scientific production methods, and are more inclined to the original extensive production methods, which is not conducive to improving the quality and safety level of agricultural products.

The main source of the farmer's family economy has a significant impact on the farmers' safe production behavior. It shows that pure peasant households pay more attention to the safety of their production, followed by peasant households whose family income is mainly from agricultural production, and peasant households whose family income mainly comes from going out to work has the lowest production safety. This is due to the fact that the main labour

force of part-time farm households tends to work outside the home or engage in other business activities, that it is often the elderly and women who work in the household, and that in the case of a labour shortage, farm households tend to pay more attention to efficacy and fertility when buying pesticides and chemical fertilizers, and farmers pay significantly less attention to quality and related factors than those that affect quantity.

The cognitive level of farmers has a significant impact on the safety production behavior of farmers. Farmers' perception of pesticide and fertilizer use and dosage regulations has a negative impact on farmers' safe production behavior, indicating that the more farmers know about pesticide and fertilizer application dosage, the more likely they are to use excessive amounts of pesticides and fertilizers and not carry out safe production, because farmers want to increase the efficiency of pesticides and fertilizers, excessive amounts of pesticides and chemical fertilizers are often used on the basis of understanding the dosage of chemical fertilizers and pesticides required for the cultivation of agricultural products. Farmers' awareness of agricultural production-related laws and regulations has a positive impact on farmers' safety production behavior, because farmers with higher awareness of agricultural production-related laws and regulations are more willing to participate in cooperatives or agricultural production skills training, so as to carry out safe production.

The price of agricultural products has a significant impact on the safety production behavior of farmers. The OR value of the market increasing the selling price of high-quality agricultural products is 1.593, indicating that when other variables remain unchanged, for each unit of increase in the price of high-quality agricultural products, the safe production of farmers will increase by 1.593 times. It shows that the higher the sales price of high-quality agricultural products, the more farmers are inclined to adopt safe production methods to ensure the quality and safety of the agricultural products produced, so as to obtain higher prices; when the sales price of agricultural products is low, the farmers will obtain low profit. The enthusiasm for production is subsequently reduced, resulting in farmers not carrying out safe production.

The market access threshold of agricultural products has a significant impact on the safety production behavior of farmers. The OR value of the market raising the sales threshold of agricultural products is 1.433, which means that when other variables remain unchanged, if the market access threshold for agricultural products is raised by one unit, the safe production of farmers will increase by 1.433 times. It shows that the higher the market access threshold of agricultural products, the stricter the control over the quality and safety of agricultural products, and the more inclined the farmers are to carry out safe production, which is conducive to the realization of high-quality and high-quality agricultural products. Selection behavior, low-quality agricultural products will push high-quality agricultural products out of the market, making it difficult to achieve high-quality and good-price products.

Increasing the number of production training has a significant impact on farmers' safety production behavior. Farmers who have participated in more production technology training are more likely to adopt safe production behaviors, because farmers can acquire more professional theoretical knowledge and advanced production technology, thereby improving safety production awareness and paying more safety production. While attention to the government's financial subsidies and support to farmers' safety production behavior have no significant impact, the main reason may be that although the government's financial subsidies reduce production costs to a certain extent, however, if highquality agricultural products are not sold well in the market or the prices are not different with ordinary agricultural products, it will reduce the inherent motivation of farmers to produce safely.

4. Research Conclusions and policy implications Based on the data of 210 questionnaires from a village in Heze, the relationship between peasant household safety production behavior with quality and safety, high-quality and good-price was analysed by using binary Logistic equation model, and further explains the relationship among them, the conclusions are as follows: first, the selling price of high-quality agricultural products and the access threshold of the agricultural product market are important factors that affect farmers' safety production behavior. If the quality advantage of high-quality agricultural products can reflect the price advantage, and the cost increases within the acceptable range of farmers, it will increase the enthusiasm of farmers for safe production. Second, farmers' quality and safety cognition level affects farmers' production behavior choices. Farmers' low-level cognition of pesticides and fertilizer use and dosage regulations hinders farmers' safe production behavior, while farmers' high-level cognition of agricultural production-related laws and regulations promotes farmers' safe production behavior. Under the restriction of education level and age, farmers have insufficient awareness of professional and technical knowledge in agricultural production. Third, give full play to the role of the high-quality and good-price mechanism in promoting the safe production of farmers, strengthen government subsidies, and improve the market mechanism for agricultural products, so as to stimulate the endogenous motivation of farmers for safe production. Based on the above conclusions, the following policy implications are drawn:

First, strengthen the popularization education of quality and safety related knowledge, and improve farmers' awareness level. Taking a combination of online and offline methods, on the one hand, relevant government departments create interesting and popular science videos to popularize safety production-related knowledge to farmers by establishing short video accounts. On the other hand, encourage grass-roots agricultural production safety knowledge dissemination activities, popularize agricultural production knowledge to farmers, improve farmers' awareness, encourage farmers to scientifically use agricultural inputs such as pesticides and fertilizers, and improve the quality and safety of agricultural products.

Second, improve the market mechanism of highquality and good-price. In order to achieve highquality and good-price in the agricultural product market and increase farmers' enthusiasm for safe production, on the one hand, it is necessary to strengthen market supervision, raise the threshold for agricultural product market access, implement a highstandard agricultural product market access system, and expel agricultural products that do not meet standards from the market. In order to control the whole process of agricultural products from "field to table" and ensure the quality and safety of agricultural products, on the other hand, to strengthen the management of agricultural products quality grades in the agricultural products market, we will promote the quality standardization of agricultural products, increase their added value, guarantee their highquality and good-price, increase farmers' enthusiasm in producing high-quality agricultural products, and promote farmers' safety production behavior.

Third, perfect the subsidy policy for farmers in safe production. The current policy makes farmers who produce high-quality agricultural products unable to obtain reasonable returns, which seriously affects the enthusiasm of farmers for safe production. Therefore, quality and safety-oriented agricultural production subsidies should be established, including the introduction of subsidies for the use of organic fertilizers, subsidies for the use of biological pesticides, subsidies for the recycling of agricultural input packaging etc., to encourage farmers to adopt safe production methods and produce high-quality agricultural products.

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