

Impact of the COVID-19 on Farmers' Income in Areas Emerging from Poverty

-- Baisha Li Autonomous County, Hainan Province as an Example

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Abstract

This project takes Baisha Li Autonomous County of Hainan Province as an example. Through this project, the changes in the four categories of farmers' income in the areas that have just emerged from poverty in the context of the epidemic are clarified. The causes and results of the changes in farmers' income are also analyzed, and the opportunities and challenges brought by the epidemic to increase farmers' income in the areas that have just emerged from poverty are proposed. Based on this, the paper proposes measures to improve China's rural economic development under the COVID-19 pandemic, so as to better achieve the development goal of building a moderately prosperous society in all respects, and flexibly respond to the income changes brought about by the epidemic. To achieve the purpose of helping farmers in the areas that have just emerged from poverty in the context of the epidemic to better cope with the risks and achieve income growth, and strive to minimize the negative impact of the epidemic on agricultural and rural development.

Keywords

COVID-19; Rural Economy; Areas that have Just Emerged from Poverty; Farmers' Income.

1. Introduction

1.1. Project Research Background

Due to the low quality of agricultural and rural business entities and more potential risks to farmers' income, the epidemic has a more permanent impact on the agricultural sector, especially the weak foundation of rural development in China's areas that have just emerged from poverty, which can easily return to poverty due to the epidemic in the face of such sudden risks.

In order to stop the spread of the COVID-19, China has adopted strict traffic control, restriction on the movement of people, delay in resumption of work and production, and other hard isolation measures for prevention and control, which have led to a series of problems, such as stagnant sales of agricultural products, imbalance between supply and demand of agricultural products, and difficulties in employment of farmers, which have impacted on farmers' income. Therefore, it is necessary to restore the economic order of agriculture and rural areas, stabilize farmers' employment, promote farmers' income, and promote the construction of public services while doing a good job in the prevention and control of the COVID-19 in rural areas.

1.2. Research Review

In studying the impact of the COVID-19 on farmers' income, Cheng (2020) argued that the epidemic caused problems such as distressed agricultural operations and stagnant sales of agricultural products, which hit farmers' operating income. Ren, Zeping (2020) and others argue that the impact of this COVID-19 is widespread, long-lasting, and has a large impact on

the overall agricultural economy. Small and medium-sized enterprises may close down due to the COVID-19 and affect farmers' wage income. Ma and Li (2020) point out that the epidemic has disrupted the work of returning farmers and reduced the benefit of non-returning farmers, resulting in the impact on farmers' wage income. At the same time, farmers' transferable income is divided into two policy non-policy components, pointing out that this income will be affected to some extent, but to a very limited extent. Yang, Haining (2016) et al. argue that farmers' wage income and property income are mutually dependent, and increasing farmers' wage income can promote farmers' property income, so the impact of the COVID-19 on property income can be considered not yet significant.

The current analysis by mainstream scholars is more from the perspective of how the COVID-19 impacted China's rural economy, and lacks a systematic analysis of the changes in farmers' income under the agricultural economy. On this basis, this study integrates the existing literature to explore farmers' operating income, wage income, transferable income and property income in the context of the COVID-19, respectively. Taking Baisha County, Hainan Province, as an example, we specifically analyze the impact of the epidemic on farmers' income in the areas that have just emerged from poverty.

1.3. Purpose and Significance of the Project Research

This project takes Baisha Li Autonomous County of Hainan, which has just been lifted out of poverty, as an example, and takes the change of farmers' income in the initial poverty-removal area as the research object in the context of the epidemic, and analyzes the causes and results of the change after clarifying the change. At the same time, we propose countermeasures and suggestions for optimizing farmers' income structure based on the opportunities and challenges brought by the epidemic to farmers' income growth in the areas that have just emerged from poverty, so as to achieve the purpose of helping farmers in the areas that have just emerged from poverty in the context of the epidemic to better cope with risks and achieve income growth.

Through the survey, understanding the causes of changes in farmers' income changes and the results resulting from the changes has positive implications for improving the agricultural problems under the influence of the epidemic. It helps to improve the economic level of farmers, and the government can adjust the policy of helping farmers and fighting poverty specifically according to the relevant situation. At the same time, understanding the economic situation of farmers' groups in the areas that have just emerged from poverty and increasing support for them can improve the quality of life of our farmers and meet their needs for material culture and a better life.

2. Income Status of Farmers in Baisha Li Autonomous County

2.1. Introduction to the Economic Development of Baisha Li Autonomous County

Baisha County is a key county in Hainan Province for poverty alleviation and development, and was named a national poverty-stricken county in 2002. In 2020, Baisha County will fully implement all policies, successfully complete the census task of poverty alleviation, and remove the "hat" of the poor county with high quality, and the highest satisfaction of the masses in the province.

2.2. Analysis of the Current Situation of Farmers' Income in Baisha Li Autonomous County

The National Bureau of Statistics released data showing that in 2022, China's rural residents per capita disposable income of 20,133 yuan, urban and rural income times the difference

narrowed to 2.45. But the current growth rate of farmers' income has slowed, the momentum of income growth has weakened, the high cost of agricultural production, farmers employment pressure, income situation is not optimistic.

According to the data of the first three quarters of 2022 released by Baisha County Government, the per capita disposable income of rural residents in the first three quarters was 11,207 yuan, an increase of 6.6% over the same period of the previous year, with a three-year average growth rate of 8.9% compared to the first three quarters of 2019, which is higher than the three-year average growth rate of the province (7.4%). In terms of income level, the income level of rural residents is 11,207 yuan, ranking 15th in the province, the same ranking as the previous year. In terms of income growth, the income of rural residents increased by 694 yuan, ranking 7th in the province, which is 5 places higher than the previous year. From the income growth rate, rural residents income growth rate of 6.6%, 1.4% higher than the province's rural growth rate, ranked 1st in the province, 1 place higher than the previous year.

2.3. Analysis of Farmers' Income Structure in Baisha Li Autonomous County

2.3.1. Operating Income

Operating income refers to the income earned by rural households from production and management, production planning and management. 2022 first three quarters, Baisha Li Autonomous County hair operating net income of 2,422 yuan, down 5.2%, accounting for 21.6% of disposable income. Baisha County vigorously develops industries with special advantages, actively transforms the traditional agricultural development pattern, and the agricultural industry structure adjustment is effective. Vigorously promote the construction of affordable vegetable outlets and vegetable price index insurance work, effectively releasing the production capacity of vegetables. In addition, affected by the epidemic, income from forestry and animal husbandry were reduced to different degrees.

2.3.2. Wage Income

Wage income refers to the income earned by rural household members who are employed to sell their labor to units or individuals. In the first three quarters, wage income is still the most important source of income for rural residents. As a result of the epidemic in Hainan, the local rural labor force was hindered from going out for employment. The county government developed temporary public service jobs for the prevention and control of the epidemic on the basis of grasping the epidemic prevention and control work, and according to the data of the Labor and Employment Service Center, the number of people involved in the prevention and control of the epidemic in each township in the first three quarters was 2,540, which effectively solved the problem of the local rural labor force being hindered from going out for employment due to the epidemic and boosted the wage income by 3.5% year-on-year. The growth of wage income was 3.5%.

2.3.3. Transferable Income

Transferable income refers to goods, services and ownership of funds or assets that rural households and their members obtain without paying any price. The county government has increased the efforts of various subsidies to benefit farmers and issued all subsidies in full and on time, pulling the net Transferable income up 8.9% year-on-year. According to the data provided by the Bureau of Finance, as of August 31, 2022, the total amount of Huimin One Card issued was 225.19 million yuan, an increase of 72.8% year-on-year.

2.3.4. Property Income

Property income refers to the financial assets or tangible non-productive assets owners to other institutions and units to provide funds or tangible non-productive nature of the assets at their disposal, in return for the income received from it. Influenced by the factors of individual land rental and transfer and industrial dividends from various township governments, Baisha

County's property income in the first half of the year was 443 yuan, up 1065.8% year-on-year, accounting for 18.8% of disposable income.

3. The impact of the COVID-19 on Farmers' Income in Baisha Li Autonomous County

3.1. Factors Contributing to Changes in Farmers' Income in the Epidemic

3.1.1. Operating Income

Farmers' operating income comes mainly from the sale of agricultural products, which have been hit in terms of supply, production and marketing under the impact of the COVID-19.

(1) Impact on the supply chain of agricultural products

There are problems with the supply of raw materials for agricultural production. Traffic control and market closure prevent the timely replenishment of raw materials needed for the production of some agricultural products, and agricultural production activities cannot be carried out in a timely manner, resulting in a decrease in the productivity of agricultural products. In addition, as transportation becomes more difficult, agricultural products that have already been produced cannot be supplied to the market in time, and they miss the best golden sales period, reducing their value and affecting farmers' income.

(2) Impact on the production chain of agricultural products

Difficulties in the supply of materials for agricultural production have hampered the production activities of agricultural products. The epidemic has limited aggregation activities, resulting in a certain lag in the production of agricultural products. The labor force needed by enterprises with large-scale agricultural production was lacking because employees could not return to work in time, and the production capacity of enterprises was reduced and production was delayed. The production of some crops plummeted due to missing the optimal production period, and the production of agricultural products was cut back.

(3) Impact on the marketing chain of agricultural products

Traffic control increases the probability of agricultural products becoming stale during transportation. Farmers have to bear the risk of transportation, and the high transportation costs make some self-employed households unable to bear, leading to a series of problems such as the backlog of agricultural products and blocked export sales. In addition, the epidemic has led people to choose frozen foods that can be kept for a long time, and the demand for agricultural products decreases. In terms of export, the sales channel of agricultural products has narrowed, the increase of export difficulty reduces the export volume accordingly, the foreign markets and channels have been reduced, and the sales of agricultural products have also been impacted.

3.1.2. Wage Income

(1) Impact on outbound workers

The 2020 National Economic and Social Development Statistical Bulletin shows that in 2020, the proportion of migrant workers employed outside their home country accounts for 60% of the total number of migrant workers nationwide. After the epidemic, traffic control and movement of people were restricted, making it more difficult for farmers to return to work. Outworkers who have already returned home tend to choose to stay in their hometowns to look for job opportunities and reduce the risks associated with working outside the country, but the lower local wage levels and fewer positions to choose from lead to lower wages. Temporary workers who have not returned to their hometowns are affected by the development of the industry and face the risk of being laid off or having their salaries reduced, resulting in a more difficult road for farmers working outside. In general, the wage income of outworkers shows a decreasing trend.

(2) Impact on local workers

The local employment of farmers depends on the recovery of local industries. The outbreak had a big impact on the cultural tourism industry, and the impact from the epidemic was more prominent in areas with better rural tourism development such as Baisha Li Autonomous County in Hainan. Poverty alleviation projects such as industrial poverty alleviation workshops, which are the main means of income generation for farmers in poor areas, were affected by the epidemic and could not resume work on time, affecting the employment period of laborers in poor areas and leading to a decline in farmers' wage income.

3.1.3. Transferable Income

Policy income in transferable income mainly refers to the amount of farmers' low income insurance, pension and related policy subsidies, which are provided by the government and have strong stability and are hardly affected by the COVID-19. Non-policy income, on the other hand, mainly comes from the transfer of income from other household members and will be indirectly affected by changes in other incomes. Overall, the impact of the epidemic on the transferable income of farmers in the areas that have just emerged from poverty is limited.

3.1.4. Property Income

Farmers have relatively few sources of property income, the most important being income from contracting land or renting out houses. As a result of the epidemic, the demand for land contracting and housing rental has been relatively reduced, resulting in a decrease in farmers' property income in this area. In addition, some smaller property incomes, such as stocks, funds, bonds, etc., fluctuate due to the indirect impact of the epidemic, which also affects farmers' property incomes.

3.2. Consequences of Changes in Farmers' Income

3.2.1. Wide Range of Impact of Changes in Operating Income

(1) The epidemic will lead to a decline in the per capita disposable income of rural residents. Operating income is the main source of the material basis of farmers' life. The decrease of income will lead to the dissatisfaction of the basic materials needed by farmers, affect the consumption level of rural residents and reduce their quality of life.

(2) Due to the impact of traffic and personnel control, there are fewer buyers of agricultural products, and agricultural products are not sold in all areas. Fresh agricultural products cannot be sold in time for the marketing season, resulting in direct losses to producers. Farmers experience lower returns and reduce crop cultivation accordingly, leading to a vicious cycle in which the overall supply of agricultural products to society is reduced and the demand for crops is not met.

(3) When farmers are not satisfied with the ideal income status when they are engaged in agricultural production, they will seek other industries that can earn more income, such as some secondary or tertiary jobs, thus, the reduction of farmers' income will change the type of industrial structure of society.

3.2.2. High Pressure to Sustain Wage Income Increase

With a low level of education, farmers often can only choose manual labor positions with relatively low wages in the employment market, and a large number of them are concentrated in individual and private enterprises, with low employment benefits and treatment, making it more difficult for rural laborers to transfer and steeply increasing the pressure to improve their wages. Due to the high cost of living and lack of motivation to go out to work, it is common that farmers in some areas are reluctant to go out to work. Combined with the impact brought by the COVID-19, it further increases the pressure on wage income.

3.2.3. Restricted Space to Improve Transferable Income and Property Income

The epidemic has increased the pressure of social security on the government in the areas that have just emerged from poverty, and the financial pressure in terms of low income security has increased. Farmers who are not able to meet their basic consumption of subsistence materials with the income they earn from agricultural production need government support and assistance, for example, through financial support from the low income guarantee to ensure their survival. The decrease in farmers' income increases the pressure on the government for social security. However, the transferable income and property income are limited in the context of the epidemic, as they are affected by government policy subsidies and other two types of income, so there is limited room for improvement.

4. Opportunities and Challenges for Farmers to Increase Income under the Influence of the COVID-19

4.1. Opportunities for Agricultural Development under the Impact of the COVID-19

4.1.1. The Combination of Rural Industry and New Media Industry, the Rise of More New Ways to Sell Agricultural Products

The offline sales channels of agricultural products have been impacted, and some sellers of agricultural products have seized the opportunity to use new media for online sales, packing and shipping directly to customers according to the bill of goods. This effectively reduces the flow of agricultural products and reduces the loss of freshness of agricultural products in the transportation process.

4.1.2. The Return of Foreign Workers to Their Hometowns has Increased the Utilization Rate of Land and Increased the Labor Force for Agricultural Production

The choice to return to their hometowns after lower incomes of workers outside the country has led to a partial return of the rural population. To a certain extent, it can make the land in the countryside to be used effectively again. In addition, the increase in the number of people carrying out agricultural production is also conducive to increasing the production and variety of agricultural products, as well as the construction and development of the countryside.

4.2. Challenges of Agricultural Development under the Impact of the COVID-19

4.2.1. Weakening of Farmers' Production Motivation

The epidemic has produced the contradiction of imbalance between supply and demand of agricultural products, increasing the degree of difficulty in agricultural production, making the growth rate of China's farmers' income level in a downward trend, and to a certain extent, discouraging farmers from carrying out agricultural production. The return of migrant workers to their jobs is hampered and the pressure of unemployment increases, and the enthusiasm of farmers to work outside the country will suffer a blow against the background of difficulties in returning to work.

4.2.2. Lower Consumption Level of Farmers

The risk of declining growth in farmers' income and reduced agricultural farm production has reduced farmers' consumption levels. Farmers' daily consumption needs are suppressed, and the gap between urban and rural residents in terms of income and consumption is widening. Farmers will spend significantly less on entertainment and improving their living standards, and may even fall into a difficult living situation with food shortage.

4.2.3. Major Challenges to Poverty Eradication

At present, the development level of China's rural social security system is still in a backward state, and a large number of areas out of poverty have not yet established mechanisms for farmers to increase their income steadily. The situation of large rural population, low income level and poor self-security ability has not been improved, and a large number of people out of poverty are still at the edge of the critical line. Limited by the pressure of local finance, the sustainable development of rural social security is difficult to achieve; at the same time, farmers' awareness of social security participation is weak and their motivation to participate in insurance on their own is not high, which is not conducive to the development of rural social security. In addition, the infrastructure system of rural medical and health care is not perfect enough to cope with the impact brought by the epidemic. Thus, it creates a challenge to consolidate the fight against poverty.

5. Measures to Increase Farmers' Income under the Background of the COVID-19

5.1. Utilize the Advantages of Industry to Alleviate Poverty and Ensure the Stability of Operating Income

(1) Supply of agricultural products

Local enterprises can strengthen cooperation with e-commerce platforms or live video platforms, and innovate the sales industry through live streaming and other channels, so that agricultural products can achieve diversified and efficient sales. It also improves the supply chain of agricultural products, optimizes the structure of agriculture and creates well-known local brands of agricultural products in order to enhance the operational efficiency of farmers. The local government has introduced relevant policies to assist enterprises in achieving comprehensive integration of agricultural production and sales.

(2) Production of agricultural products

Agriculture can be encouraged to carry out production by reducing agricultural taxes and fees, etc. to guarantee the demand for agricultural products supply in the context of the epidemic. Meanwhile, to improve the quality of agricultural products supply and further refine the supply-side structural reform of agriculture, the prices of agricultural products can be reasonably increased to increase farmers' income. Create agricultural industries with distinctive characteristics, such as self-employed farms and agricultural cooperatives, and integrate individual farmers into the entire agricultural industry chain.

(3) Marketing of agricultural products

Broaden the sales channels to solve the problem of product stagnation, for example, prioritize the supply of "food basket" products to poor areas during the epidemic, and purchase and sell agricultural products from these areas. Special platforms, such as poverty alleviation points, can also be provided for poor areas to ensure that agricultural products from the initial poverty-stricken areas can be sold in a timely manner without loss.

5.2. Implement Precise Help to Promote Wage Income Growth

(1) Foreign workers

Ensure smooth roads to the city, achieve stable employment of farmers, and strongly support eligible people to return to work as soon as possible. At the same time, actively carry out knowledge propaganda on epidemic protection to eliminate the psychological panic of farmers working outside. For farmers who are willing to go out to work, all places should actively encourage and appropriately subsidize certain transportation costs caused by farmers

returning to work, and all departments should do a good job in cooperation to ensure the safety of farmers going out to work and to prepare farmers to go out to work for the docking.

(2) Local workers

Actively arrange for people who cannot return to work in time due to different factors to solve work problems nearby, and coordinate the industries in areas less affected by the epidemic to resume work and production as soon as possible. Develop urban employment positions and guide farmers to enter local or nearby areas to work in enterprises and construction projects. Provide farmers with partial job information for selection and skills training to enhance the efficiency of rural residents in transferring employment. Provide bottom-up resettlement for groups with special difficulties to ensure their basic livelihood.

5.3. Reasonable Increase in Transferable Income and Property Income

(1) Transferable income

Policy subsidies for transferable income are a guaranteed and stable source of farmers' income. For the special groups in the areas where it is difficult to improve their income by their own ability, the standard of subsidy payment can be appropriately increased, and relief funds can be issued according to the different degrees of family difficulties to ensure the normal living standard needs of rural residents.

In terms of non-policy income, the areas that have just emerged from poverty should further improve the level of social security in rural areas, ensure that all kinds of subsidies for agricultural benefits are issued in a timely manner, speed up the process of integrating urban and rural social security, and further expand the scope and coverage of the policy.

(2) Property income

Property income requires further improvement of the basic rural management system and encouragement of multiple business models. Promote the reform of the rural collective property rights system to improve farmers' ability to obtain property income and accelerate the release of farmers' potential in increasing property income. The management of rural collective construction land allows farmers to meet the demand for land for agricultural development through shareholding and leasing.

6. Conclusion

In general, the epidemic is prominent in the reduction of farmers' operating income and wage income, especially for farmers in the initial poverty-stricken areas, the impact of the change in income is deeper and more widespread, and some unstable initial poverty-stricken farmers face the risk of returning to poverty.

Agricultural products have been impacted in terms of supply, production and marketing, leading to an impact on farmers' operating income. Traffic control and movement of people are restricted, making it more difficult for both outworkers and local workers to return to work, and the wage income situation is threatened. Farmers have fewer channels for transfer and property income, which will fluctuate due to the indirect impact of the epidemic, with limited overall impact.

The changes that occur in farmers' incomes lead to different consequences. Changes in operating income have a wide range of impacts, affecting the consumption level and quality of life of rural residents, the overall supply of agricultural products and demand for crops in society, and the type of industrial structure of society. Wage income is under pressure to continue to increase, and the reluctance to work outside the home is more common in rural areas, increasing the pressure on wage income. Transferable income and property income are limited in terms of room for improvement, and the epidemic has increased the pressure on social security for governments in areas first emerging from poverty.

The COVID-19 brings opportunities for farmers to increase their income. First, the combination of rural industries and the new media industry has led to the rise of more new ways to sell agricultural products. In addition, the return of migrant workers to their hometowns has led to increased land utilization and more labor for agricultural production. However, the epidemic has also created challenges for farmers to increase their incomes. Lower income levels have weakened farmers' incentives to produce and led to lower consumption levels. The task of fighting poverty is made difficult by the lack of sound protection policies in rural areas to face the major impact of the epidemic on agricultural production and livelihood.

Therefore, this project proposes countermeasures to increase farmers' income in the context of the COVID-19. In terms of operating income, suggestions are made in three aspects of supply, production and sales of agricultural products, respectively, to bring into play the advantages of industrial poverty alleviation and guarantee its stability. In terms of wage income, countermeasures are proposed from the two main bodies of foreign workers and local workers to implement precise assistance and promote the growth of wage income. In addition, it should appropriately increase transferable income and property income, further improve the level of social security in rural areas to ensure the normal living needs of rural residents in areas that first emerged from poverty, and continue to improve the basic rural business system and encourage the development of various forms of moderate scale operations.

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