

Study on the mechanism of rural education for income generation of poor households

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Abstract. Since the poverty eradication campaign in 2013, from education for poverty alleviation to the talent revitalization strategy, education has played an important role in helping poor families out of their plight and promoting family income generation. This study compares the income-enhancing effects of rural vocational education and basic education through the literature review method and comparative analysis method, and draws the following conclusions: (1) Vocational education is an educational tool centered on skills training, which enhances market competitiveness and obtains non-farm income by directly improving the quality of laborers, expanding the breadth of their employment, as well as improving their ability to use resources. (2) Basic education is a means of education centered on the cultivation of viable abilities, which improves social status and income by increasing the accumulation of human capital and improving viable abilities, and breaks through the limitations of social structures such as household registration restrictions. (3) In terms of quantitative relationships, education and income are not simply linear, and education for rural household growth requires certain preconditions. The income-enhancing effect of vocational education on rural families is not significantly higher or lower than that of compulsory education.

Keywords: Basic Education, Vocational Education, Household Income Increase.

1. Introduction

Education for poverty alleviation is an effective way to improve the quality and sustainability of poverty alleviation. Education is not only a right, but also an investment in people's capacity for sustainable development. It is undeniable that, by relying on external investment in material resources, poor families can achieve a certain degree of economic income growth within a certain period of time; however, if no attention is paid to investment in human resources, the level of human capital will not be raised, and the phenomenon of "returning to poverty" is very likely to occur after the withdrawal of external forces, which will affect the quality of poverty alleviation and poverty eradication. Therefore, education is an inevitable choice for families to increase their income.

In February 2022, the central government issued the "Opinions of the Central Committee of the Communist Party of China and the State Council on Doing a Good Job in Comprehensively Promoting Rural Revitalization in 2022", which puts forward the "implementation of the program of cultivating high-quality farmers, the project of cultivating "head geese" to be the leader of rural industrial revitalization, the action of building up the strength of youth for rural revitalization, and the action of women for rural revitalization". Women's Action for Rural Revitalization. Improve the education system of farming and reading. Optimize the structure of academic disciplines and specialties, and support the establishment of agricultural-related higher education institutions and vocational education. Cultivate rural planning, design, construction, management professionals and native talents." It is clear from the official document that at this stage, China is gradually shifting from education for poverty alleviation to talent revitalization, paying more attention to the long-term value of education for the development of individuals, families, and society.

In terms of human capital, although education requires more investment, such investment can bring more benefits and repay the investment in education in the future. Li Yining, a famous Chinese economist, believes that low-income farmers should be provided with more quality education and technical training, so that they can continuously increase their employment and income-generating capacity with the development of society and the expansion of various businesses. Realistically,

since 2012, a cumulative total of 5,140,500 documented poor students in China have been enrolled in higher education, and millions of poor families have had first-generation college students. At the end of 2013-2020, out of 145 million students, the number of dropouts dropped from more than 600,000 to 682, and the average annual growth in disposable income per capita of rural residents in poor areas was 11.6%. Education is of great significance for poor families to get out of poverty and move towards a prosperous life.

2. Vocational education and family income

Vocational education (vocational education) refers to the education that allows the educated person to obtain the vocational knowledge, skills and professional ethics required for a certain occupation or productive labor, including primary vocational education, secondary vocational education, higher vocational education (specialized level vocational education, undergraduate level vocational education, graduate level vocational education). Education and income are not simply linearly related, and human capital is an important threshold variable for farmers to increase their income [1]. After transforming the content taught in vocational education into their own skills, they can increase their human capital. Individuals can compete in the market for jobs through skills, specialized knowledge, and other human capital, thus increasing household income.

Vocational education has two advantages. On the one hand, compulsory education invests more time cost than vocational education, vocational skills are easy to acquire, shorter learning time, and earlier employment. Compulsory education is a basic general education, which does not have the effect of imparting vocational skills, and in addition, low-level education itself has a limited impact on income growth. On the other hand, the biggest advantage of vocational education lies in its low threshold, which can absorb students who are unable to enter general education, and increase the wage level in the labor market and improve the quality of life by giving the educated people knowledge and skills with strong practicality and high market adaptability.

Vocational education contributes to improving the quality of workers. Vocational education improves the comprehensive quality of laborers by teaching science and technology and specific vocational skills, superimposes dry secondary schools in the production process, and promotes process upgrading and industrial upgrading. Underpinning the impact of vocational education on changing the type of employment of migrant workers, government-provided training and enterprise-led training play an important role; the former facilitates the transformation of farm households from agricultural practitioners to skilled workers by conferring specific vocational skills, while the latter facilitates the labor force in continuously adapting to the upgrading of craftsmanship and improves employment stability.

Vocational education broadens the breadth of employment for the recipients. Relative to the rural society, it helps its employed to achieve a wider range of career choices. Specialized industry-education integration practical training combines the school's practical curriculum with the needs of enterprises to help workers enter non-agricultural fields, technology-intensive industries or services, and obtain high returns relative to agriculture. Relative to the city, the most basic thing is to improve the skill level of the individual, to ensure that the individual can find suitable employment, and from a broader perspective vocational education is conducive to maintaining the stability of urban society.

Vocational education helps educated people to improve their ability to use and allocate resources in systematic learning. Resource allocation ability is a comprehensive ability to obtain a variety of information and resources, master complex relationships, adapt to changes in market demand, and maximize output. The steadily improving quality and continuously optimized performance of workers is precisely the positive impact of vocational education on workers.

The lack of vocational education makes the labor force lack a skill in migrating for employment, coupled with the existence of technical thresholds in the manufacturing industry, these factors limit the income increase of rural surplus labor [2]. Vocational skills education is conducive to upgrading the personal quality of workers, improving the ability to use and allocate resources, and broadening

the breadth of employment for the educated. A study by Luo Feng and Huang Li using regional microdata from China agrees, with data on more than 900 new-generation migrant workers in the Pearl River Delta states showing that the income obtained from professional and technical training is about 10% higher than that obtained from formal education[3].

3. Basic education and family income generation

Looking at the relative earnings of workers with different levels of education in OECD countries, in 2007 workers with tertiary education earned 1.51 and 1.93 times as much as workers with secondary and primary education, respectively. Psacharopoulos & Patrinos have shown that an additional year of primary, secondary, and tertiary education for individuals in developing countries leads to an average increase of 23.0%, 17.9%, and 21.1%, respectively, in private returns to education by an average of 23.0%, 17.9% and 21.1% respectively[4]. Therefore, increasing the educational attainment of children from poor families is not only conducive to realizing rapid growth in personal income, but also effective in reducing the incidence of poverty.

From the viewpoint of viable ability theory, basic education can improve the viable ability of poor groups and fulfill their developmental needs for basic abilities. Amartya Sen's discussion on this is richer, viable capacity refers to a kind of freedom and rights to meet the needs of life, including nutritional access, avoiding disease and premature death, acquiring the written word, and enjoying the right to basic participation in politics, and so on. In terms of the private returns to educational development, increasing the level of education of individuals leads to the rapid accumulation of human capital, providing an important safeguard and a necessary means of boosting individual or household incomes.

Basic education is conducive to improving the cultivation of human capital. Knowledge and technology are regarded as important factors of production in this day and age, and an increase in the level of education can help to improve the knowledge and technology of individuals and make them more competitive in the job market, thus improving the social status of poor individuals and enabling them to earn more non-farm income, which is conducive to helping families escape from poverty.

While accumulating human capital to improve employment, basic education can also help poor groups break through the household registration restriction, reduce employment discrimination, and enhance social security. In their study of urban migrants, Chen Chun-geun and Zhiting Jin found that raising the level of education has a significant positive effect on alleviating the risk of relative poverty among migrants in each urban cluster, with higher education having a better effect on improving poverty than high school and secondary education, and that higher education facilitates migrants' entry into the professional and technical sectors and breaks through the household registration restriction[5].

Basic education is conducive to breaking the culture of poverty and hindering the intergenerational transmission of poverty. The social, economic and cultural livelihood capital of families has a significant effect on the impact of children's education, but the impact of cultural capital is more important. The popularization of basic education policies in poor areas can effectively prevent school dropout, increase the enrolment rate of poor individuals, and eliminate poverty caused by illness. Improved education improves individuals' cognitive concepts and expands their social horizons, eliminating the conservative concept of conformity, stimulating individuals' willingness and initiative to escape poverty, and promoting the endogenous development of poor families.

4. Comparison of the income-generating effects of basic and vocational education

Hou Fengyun obtained rural micro-data from 15 provinces in China through questionnaires, and the results of the study show that traditional formal education, including general education and vocational and technical education, does not have a significant effect on the increase of farmers'

incomes through non-agricultural employment, while short-term skills training has a faster effect and increases incomes more directly[6]. A study by Luo Feng and Huang Li (2011) using regional microdata from China agrees, with data on more than 900 new-generation migrant workers in the Pearl River Delta states showing that income earned from professional and technical training is about 10% higher than that earned from formal education[7].

George Psacharopoulo (1994) studied the rate of return to general education and the rate of return to vocational education in secondary education in several countries, assigned certain weights to measure the global average rate of return, and the comparative analysis found that, both in terms of the social rate of return and the individual rate of return, the general secondary education outperforms the vocational secondary education[8]. G Kahyarara and F Tea (2008) utilizing the Tanzanian education data to show that returns to general and vocational education diverge with the level of education, with returns to general education outperforming those to vocational education at higher levels of education, and vocational education at the same level of education leading to greater earnings when the level of education is lower[9].

By combing the relevant literature, this study draws the first conclusion: the income-generating effect of vocational education on rural households is not significantly higher or lower than that of compulsory education, and each of them has its own advantages. From the viewpoint of vocational education, the biggest advantage of vocational education is that it has a low threshold, which can absorb students who cannot enter general education, and increase the wage level in the labor market and improve the quality of life by giving the educated people knowledge and skills with strong practicality and high market adaptability. However, its disadvantages are also more obvious, with more limited income increases for rural households, for example, wage levels hardly exceeding middle-income levels. In terms of basic education, secondary education is basic general education and does not have the effect of imparting vocational skills, and in addition, low-level education itself has a limited impact on income growth. However, in the long run, as the level of education continues to rise, higher education above secondary education can bring more long-term benefits to poor families, such as breaking the culture of poverty and crossing social classes.

The second conclusion is that education and income are not simply linear, and education for rural household growth requires certain preconditions. Specifically, in the early period, as the number of years of education rises, the level of income increases significantly, and after reaching a certain inflection point, the level of education rises and the opportunity cost increases, which in turn lowers the level of income. The reason for this is that the main role of vocational and basic education is to improve human capital, but there is a threshold effect between human capital and poverty alleviation and farmers' income growth, and human capital can only contribute to economic growth if certain conditions are met, such as the structure of the economy and the strengthening of technological attraction.

5. Conclusions and reflections

Education has always been an effective way for poor groups to escape from the poverty trap. The significance of basic education and vocational education for increasing family income has been demonstrated in the previous article, and like most research results, basic education and vocational education have different mechanisms and paths for increasing the income of poor families, and through the method of literature review and comparative analysis, the present study draws the following conclusions.

First, vocational education is an educational tool centered on skills training, with the advantages of low cost, low learning difficulty and low economic threshold, which improves market competitiveness and non-farm income by directly improving the quality of workers, expanding the breadth of their employment, and improving their ability to use resources.

Second, basic education is a means of education centered on the cultivation of viable abilities, and is characterized by long-term, cumulative, and sustainable development. By increasing the

accumulation of human capital and improving viable abilities, it increases individual competitiveness, improves social status and income, and breaks through the restrictions of the social structure, such as the restrictions on household registration.

Finally, from the viewpoint of the income-generating effect of basic education and vocational education, the income-generating effect of vocational education on rural households is not significantly higher or lower than that of compulsory education, and each has its own advantages. From the point of view of quantitative relationships, education and income are not simply linear, and certain preconditions are needed for education to promote rural household growth.

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