

# Path Analysis of "Internet + Poverty Alleviation" based on the Smith Model in Changting County, Fujian Province

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## Abstract

*Since the 18th CPC National Congress, General Secretary Xi Jinping has attached great importance to accurate poverty alleviation work and persisted in bringing poverty alleviation work into the "five-in-one" overall layout. This paper takes the poverty alleviation path of Changting County as the research object, and analyzes the defects of the local government in the implementation of poverty alleviation policy from the four elements of idealized policy, implementing agency, target group and policy environment based on Smith Model. By summarizing the implementation experience of poverty alleviation policy, we explore the path suitable for "Internet + Poverty Alleviation", and put forward relevant measures to effectively consolidate the poverty alleviation effect.*

## Keywords

*Internet + Poverty Alleviation; Smith Model; Path analysis; Policy implementation*

## Introduction

In 2013, Xi Jinping formally put forward targeted poverty alleviation during his inspection tour in west Hunan. In 2016, Changting was listed as a provincial poverty-stricken county. Due to the influence of local natural conditions, culture, society and other comprehensive factors in Changting County, the problem of poverty alleviation presents a variety of characteristics, which leads to a single poverty reduction force and measures are often difficult to work in the face of complex problems. With the rapid development of network interconnection, "Internet+" has gradually become a new trend, and it has also provided new ideas for poverty alleviation. Changting County combined various elements of regional culture, industrial characteristics and folk customs with the government's poverty alleviation policy, and on the basis of the "Internet + Poverty Alleviation" model, the title of the poverty-stricken county was removed in 2018. On the premise of preventing poverty and re-poverty in Changting County, this article provides new suggestions and feasible ways to consolidate the effect of "Internet + Poverty Alleviation" in combination with local conditions.

## Poverty Alleviation Status

### Status of poverty alleviation in China

According to UN data reports, among all countries in the world, China is the country with the largest reduction in the number of poor people, and among all developing countries, China is also the first country to complete the UN poverty reduction goal. According to the international poverty standards, the number of people in poverty reduction in China in the past 40 years has reached 850 million. If we calculate according to China's current poverty standards, in the 40 years from 1978 to 2017, the number of rural poor in China has been reduced by 739.54 million, and the incidence of poverty has dropped to 3.1%. The task of getting rid of poverty in an all-round way is still arduous. Yang Junhua and Liu Can draw a conclusion according to the change of the incidence of \$2-a-day poverty in different years: according to the international poverty standard or China's poverty standard, the number and proportion of the poor in China's rural areas are relatively high (Yang & Liu, 2019). The research findings of Wang Sangui and Zeng Xiaoxi show that the number of poor people in rural areas has declined in recent years, and the incidence of rural poverty has dropped to 3.1% between 1978 and 2017 (Wang & Zeng, 2018). According to Chen Zhigang's analysis, the situation of rural poverty alleviation is still severe because of the large scale, deep degree and high cost of poverty reduction of the remaining poor (Chen, Bi, Wu, He & Wangzi, 2019). Xi Jinping once said that in order to achieve targeted poverty alleviation, governments at all levels should strengthen the leadership system and working mechanism, adhere to the large-scale poverty alleviation pattern, and implement the targeted poverty alleviation strategy.

### Status of poverty alleviation in Changting County

Changting County achieved poverty alleviation at the end of 2018, and the effect was very significant. A total of 221 incentive poverty alleviation projects have been implemented in the region, increasing the income of 4,141 families and 14,781 people, and lifting 39 poor villages out of poverty. By the end of 2017, the poverty incidence in Changting County had dropped to 0.028%, and 6199 families and 20696 poor people had been lifted out of poverty. From 2015 to 2018, the per capita disposable income in cities and towns increased significantly, from RMB 19,747 to RMB 25,500.

Figure 1 Per capita disposable income and growth rate of urban residents in 2015-2018

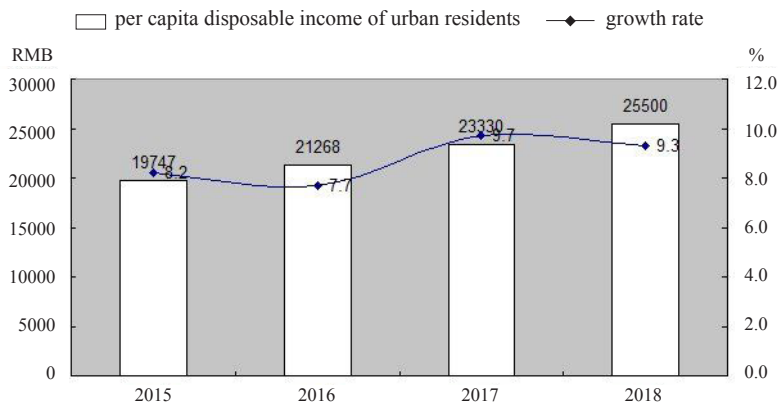
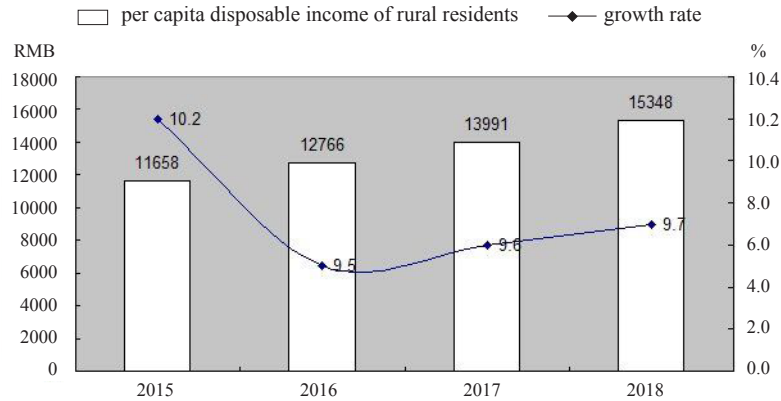


Figure 2 Per capita disposable income and growth rate of rural residents in 2015-2018



In 2018, a total of 1,035 residents were included in the city's minimum living security system, a decrease of 87 people; 6,779 residents were included in the rural minimum living security system, a decrease of 167, and a total of 1,498 people were provided for special poverty-stricken. It can be seen that strengthening the efficiency of policy implementation can provide timely and effective assistance to those who return to poverty and those who are newly born in poverty. However, for Changting County, "Internet + Poverty Alleviation" lacks innovation, and the three-dimensional system of this model needs to be further improved.

## International Poverty Alleviation Research

### China studies

According to Zou Lei and Xu Ce, the development of Internet technology has brought new technical means and better implementation effects to poverty alleviation. The construction of Internet platform has helped to improve the ability of vulnerable members (Zou & Xu, 2015). Based on the background of the Internet, compared with the traditional way in the past, the effect of poverty alleviation work carried out by big data information will be greatly enhanced. Chen Wenhao believes that as an unconventional measure of poverty alleviation and development under the background of Internet informatization, e-commerce poverty alleviation has led to the effective development of "Internet + Enterprises" and "Internet + Peasant". Relying on the Internet, the logistics system is improved to drive the development of regional economy, so as to realize the scale operation mode of "Enterprise + Peasant + Cooperative" (Chen, 2016). Wang Xiaolin summarized the concept, evolution and poverty reduction policy tools of poverty. The public's cognition of poverty has been changing gradually with the development of human beings, but the emergence of poverty is mainly due to the lack of basic feasible ability of individuals. Based on this, the core of poverty alleviation policy is to improve the feasible ability of individuals or families from a multi-dimensional perspective (Wang, 2012). Chen Fei, Lu Jianci, Cheng Mingwang and other scholars learned from the "Poverty Trap" that for poor families, the higher the education level of the head of household, the lower the probability of falling into poverty (Chen & Lu, 2014).

## Research abroad

The Asian Development Bank points out that anti-poverty measures need to be taken differently in different periods: short-term measures are the provision of goods and services directly to the most vulnerable members of society; medium-term measures are the reform and innovation of national education, hygiene medical treatment system, social security system, etc.; long-term measures are anti-poverty interventions. Harvey Leibenstein believes that in the process of economic growth, there is a conflict in which the two forces of raising income and depressing income oppose and restrict each other. Only when the power of raising income is greater than that of depressing income, will the per capita income increase by a large margin and achieve a stable balance of high income. Therefore, the government should create a suitable investment and profit environment, cultivate an atmosphere for economic growth, vigorously develop and apply new technologies, and stimulate people's motivation for economic growth (Jie, 2017). Theodore W. Schultz found that the ways of anti-poverty intervention are: wage minimization and agricultural product price support; implementation of progressive taxes; intervention in economic growth and social employment; appropriate public investment targeting the poor (Schulz, 1990). In the study of anti-poverty, Gunnar Myrdal believes that it is mainly the "co-wave effect" in the process of economic growth expands inequality (Myrdal, 1992). The World Bank has put forward a government intervention strategy, on the one hand, to strengthen the demand for social labor, implement the development model of labor-intensive industries, provide jobs and ways to make a living, and provide social services for the poor. In the work of getting rid of poverty, we must adhere to and give full play to the main body and leading role of the government (2018).

## Analysis of the Model of Targeted Poverty Alleviation in Changting County

### **"Government + Cooperative + Poverty-stricken Peasant" poverty alleviation model**

This model is funded by the government to entrust operators to help poor households increase production and income by means of transferring land and providing seedlings. By signing a tripartite agreement to clarify the rights and responsibilities of all parties during the operation of the incentive poverty alleviation project, and set up an evaluation team to track the policy participation of poor households throughout the process. Finally, according to the situation that the poor households participate in the training, implement the evaluation mechanism, and then promote the poor households to develop the industry. For example, the poverty alleviation project of Hetian chicken farming, a leading industry with agricultural characteristics in Changting County, has driven 1735 poor households since the incentive industrial poverty alleviation policy in 2018, when the total annual output value of Hetian chickens reached 415 million yuan, bringing peasants an income of 60 million yuan.

### **"Cooperatives + Party Members + Peasants (Poor Households) + Forest Industry" poverty alleviation model**

This model encourages some new business entities, such as rural cooperatives and large farmers, to guide

poor households to learn agricultural technology and the seed distribution. At the same time, it encourages the adoption of order assistance mode to provide the whole industry chain service for poverty-stricken households, to help them develop production and plant cash crops, so as to increase their income and get rid of poverty. Changting County Yuanshi Flower Professional Cooperative absorbs as many as 45 poverty-stricken households, which promotes the process of accurate poverty alleviation through the development of under-forest economy. As of 2019, the economic planting area of orchids under the forest reached 17.5 hectares. In 2017, Changting County achieved great results in the management of forest economy, with an output value of 2.7 billion yuan, benefiting 21300 farmers with a scale of 113 thousand hectares.

### **"Internet + Ecological Management + Rural Tourism + Farmhouse" poverty alleviation model**

On the basis of controlling soil erosion, building ecological civilization, inheriting Hakka culture and ecological culture, we adopt the "Internet + Tourism" model, integrate all kinds of tourism resources, and build the brand of Changting's exclusive famous tourist city. form a new multi-tourism model that integrates "ecology + culture + countryside + shopping". In addition, through the river head system to form Changting experience, vigorously control soil erosion, create a "good-looking" ecological environment, and develop sustainable tourism. In 2018, Changting Ecological Farm received more than 30,000 tourists, with a turnover of nearly 350,000 yuan. At the same time, Changting County also promotes the development of tourism industry in an all-round way with the help of the three major characteristics of "green development, employment absorption and information sharing" of the tourism industry.

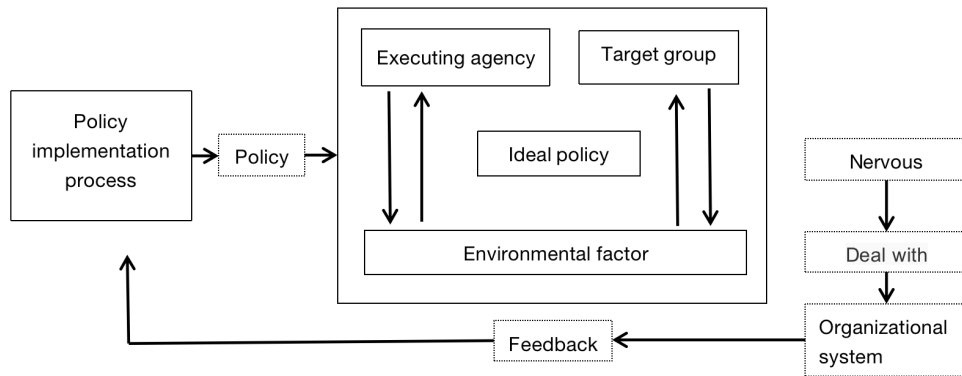
### **"Internet + E-commerce + Agricultural Products + Industrial Products" poverty alleviation model**

Based on this model, a bidirectional circulation service network of agricultural products to cities and industrial products to the countryside is formed. The superior geographical location of Changting County, the abundant characteristic agricultural products, and the high local network utilization rate have laid the foundation for the development of the county's e-commerce industry. According to local e-commerce data, the number of village-level e-commerce service sites in Changting County in 2018 was 393, including 53 rural Taobao service sites of Alibaba, 261 mailing service sites, 79 integrated supply and marketing service sites. In addition, 175 enterprises have settled in the ESS (E-commerce and Service Outsourcing Statistics Public Service Platform), and a total of 932 e-commerce personnel training have been completed. According to statistics, agricultural products in Changting County rose to 2.52 billion yuan in 2018, and the volume of e-commerce transactions reached 8.126 billion yuan.

## **Overview of the Smith Model**

Combined with the Smith policy implementation process model, this paper will analyze the accurate poverty alleviation policy in Changting County from the four elements of idealized policy, implementing agency, target group and policy environment.

Figure 3 Schematic diagram of Smith's policy implementation process model



### Targeted poverty alleviation policy

The precise poverty alleviation policy mainly has the following deficiencies: First, it lacks sufficient legal support. Expanding the "Internet + Law" new poverty alleviation path can not only grasp the legal needs of the poverty-stricken villages of the county, but also achieve full coverage of legal aid in the poverty-stricken villages, so that legal poverty alleviation can be accurately achieved. However, most of Changting County's policies on targeted poverty alleviation were issued by the government from top to bottom, lacking the support of corresponding laws. Second, the design of targeted poverty alleviation system is lack of foresight. Accurate poverty alleviation requires system guarantees, and more importantly, a comprehensive assessment mechanism, which is mainly reflected in the assessment of the completion of the targeted tasks of the designated poverty alleviation units and poverty alleviation units, including the recognition and criticism of units and individuals. Through the adoption of multi-dimensional poverty standards to improve the targeting efficiency, so as to achieve the long-term and institutionalization of the village assistance work. Although Changting County has improved the evaluation mechanism, it lacks long-term consideration in the system design. Third, the targeted poverty alleviation model lacks innovation. In order to consolidate the foundation for vulnerable groups to get rid of poverty and prevent marginal people from falling into poverty, we need to innovate new ways to help the poor, take "Internet +" as a tractor of poverty alleviation reform, and build a cloud platform system for poverty alleviation reform, so as to achieve the accuracy of poverty alleviation resource allocation, fund project management and poverty alleviation work. However, due to the lack of innovation, Changting County has failed to effectively use Internet thinking to achieve the goal of poverty alleviation.

### "Internet + Targeted Poverty Alleviation" policy implementation agency

Policy enforcement agencies have deficiencies in two aspects: on the one hand, the main body of poverty alleviation is not diverse enough. Targeted poverty alleviation needs the joint participation of the government, the public and other organizations, while the main body of poverty alleviation in Changting County is too single, and most of the funds and project support are undertaken by the local government. The public and social organizations which play a supporting role are basically in a state of "absence" in the early stage. At present, the "Internet + Poverty Alleviation" system in Changting County has not yet been built, so

this poverty alleviation model has not been implemented. On the other hand, there is a lack of Internet professionals among the executives, so it is difficult for most staff to use Internet technology skillfully by virtue of their own level of knowledge. Based on the shortcomings of the above two aspects, it is particularly important to strengthen the cooperation among multi-agents and increase the investment of funds and talents. In recent years, Changting county government has made great efforts to promote incentive poverty alleviation projects, but the village assistance departments are unable to confirm whether poor households have the corresponding knowledge and education level, and whether they have the willingness to participate in poverty alleviation projects.

### **Target groups for targeted poverty alleviation**

The target group refers to the direct beneficiaries of poverty alleviation policies. There is a problem that "the Internet awareness of the target groups is not strong and the degree of participation is not high" in Changting County: first, most of the poor people in Changting County belong to special vulnerable groups, such as the elderly, who have conservative ideas and are unwilling to participate in the "Internet +" plan. And their learning ability is weak, so it is difficult to understand the policy. Second, the target group has a low level of education. As the poor groups are mainly farmers, their knowledge level is limited, the overall education level is low. Some of them are more selfish and often enjoy preferential treatment by concealing their income. Third, the propaganda and explanation of policies are insufficient. Changting county government's explanation and propaganda on "Internet plus poverty alleviation" policy is not in place, which leads to poor participation of poor groups. The target group lacks motivation and enthusiasm. Therefore, it is necessary to mobilize its internal motivation and to improve their level of thought and knowledge while getting rid of poverty.

### **Policy environment**

Policy environment refers to the environment in the process of policy implementation, including political environment, economic environment, cultural environment, social environment and so on. In terms of economic environment, the economic development of Changting County is slow, and the industrial structure is relatively simple. Changting County was affected by the war in the early stage, which led to the local industrial structure dominated by traditional textile industry and planting industry. In 2017, the e-commerce industry entered Changting County, but the speed of development is slow, which is not conducive to the implementation of the policy of "Internet + Poverty Alleviation". In terms of social environment, Changting County is limited by resources and transportation. The cost of logistics and transportation is quite high, and the logistics system has just started, which increase the difficulty of the development of e-commerce and "Internet + tourism". In addition, the "Internet + Targeted Poverty Alleviation" model in Changting County is lack of executives with professional knowledge, and there have long been some problems, such as lack of in-depth policy propaganda, tedious implementation process, imperfect supervision system, lack of sense of security and identity of poor households, and so on.



## **Analysis on the Sustainability of Poverty Alleviation Effect in Changting County**

At present, Changting County is mainly faced with four development difficulties in accurate poverty alleviation. The first is the lack of professional and technical personnel in rural areas. Peasants have a low level of education, it is difficult for them to use Internet technology skillfully by virtue of their own quality, and the management of agriculture is more traditional. Second, the development level of characteristic industries is low. Although Changting County is rich in characteristic resources, the degree of integration of agriculture with tourism, education, culture, health and other industries is low, and the transformation of "Internet +" is difficult. Third, there is a lack of rural autonomy mechanisms. The consciousness of farmers' self-management, self-service, self-education, and self-supervision in Changting County has not been formed, making it difficult to inspire farmers' own internal motivation. Fourth, the awareness of "Internet + poverty alleviation" is not obvious. The low education level in rural areas, limited Internet training, brain drain and aging in rural areas have led to the slow development of the "Internet + poverty alleviation" model. To get rid of poverty, we must give full play to the strength of the government and society, mobilize the enthusiasm of all subjects, and achieve the sustainable poverty alleviation of the poor.

## **The Path Selection of Changting County's Targeted Poverty Alleviation and Sustainable Development**

### **Strengthen talent reserve**

First, establish a perfect new type of cultivation system. Cultivate a new generation of new farmers who are proficient in agriculture, technology and management, and make them the main force for poverty alleviation. In terms of new-type agricultural business entities, we must learn to use the Internet to achieve economic growth. Second, build a team of rural professionals. Poverty alleviation requires professionals in all fields, and we can fully learn from the development experience of "Internet + agricultural technology" in successful regions. The third is to promote the return of talents and revitalize the flow of rural talents. In this way, on the one hand, it can promote the development of the rural economy, on the other hand, the introduction of new management methods can add vitality to agricultural development.

### **Promote the upgrading of industrial structure**

Adopt a new management system with the integration of modern planting industry, aquaculture industry and modern Internet science and technology to broaden the market of products. We can make use of the local advantages of Changting County, such as unique Hakka folk culture, architectural culture, and food culture, on this basis, combined with the Internet platform to promote the development of high-quality projects such as farm music and rural accommodation, to achieve rural economic sharing and agricultural innovation.



## Improve the mechanism of autonomy

Consolidate and strengthen the structure of rural grass-roots organizations and promote the building of rural autonomy in an all-round way. We can improve the executive ability of farmers by establishing the system of villagers' meetings and formulating rules for villagers' autonomy. By conducting villagers' discussions, we can stimulate the endogenous power of farmers and form a spontaneous development mechanism. We should give full play to the main role of farmers and the function of mass autonomy of villagers' committees, guide them to carry out self-management, self-service, self-education and self-supervision.

## Cultivate Internet awareness

Raising the awareness of the Internet can not only transform the industrial structure with an intelligent path, but also enhance the innovation and productivity of the real economy, and promote coordinated development. Training a new type of professional farmers and professionals can help Internet + to help poverty alleviation more accurately and smoothly. For example, we should build a training group composed of agronomic experts and scholars, planting experts and leaders of e-commerce enterprises, strengthen communication with local farmers, and organically combine the Internet with the actual needs of farmers.

## Conclusion

The new model of "Internet + Poverty Alleviation" closely strengthens the effect of policy implementation around the four factors of the Smith Model: idealized policy, implementing agencies, target groups and policy environment. Stimulate the endogenous motivation of the poor people, take various measures to mobilize the initiative, enthusiasm and consciousness of the poor people, and strengthen the ideological mobilization of the poor people. By investing in the construction of talent team, upgrading the industrial structure, perfecting the autonomy mechanism and cultivating Internet awareness, the government can accurately and effectively solve the poverty problem in Changting County, consolidate the existing poverty alleviation effect, and realize the sustainable development of the local economy.

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