

Advantages, Development Bottleneck and Suggestions of E-commerce Poverty Alleviation--- Case analysis of UNDP, ADB, JD and Tencent

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Abstract—Under the national strategic background of "Internet plus" and the "13th Five-Year Plan" period poverty alleviation program, as an important means of targeted poverty alleviation, e-commerce poverty alleviation has developed rapidly. At present, there are many models of e-commerce poverty alleviation in our country, which have the advantages of promoting sales of agricultural products, helping farmers to change the traditional way of thinking and production capacity, and promoting the industrial development in the surrounding regions, but they are also faced with some challenges such as the lagged information construction, the lack of talents and funds, etc. E-commerce poverty alleviation cases of the four institutions or companies including UNDP ADB, the JD and Tencent, were analyzed in this paper, and some recommendations were proposed for the development of e-commerce poverty alleviation.

Index Terms—e-commerce poverty alleviation, targeted poverty alleviation, case analysis

I. INTRODUCTION

The poverty alleviation and the development have been placed in an important

position of governance by the Party Central Committee with Comrade Xi Jinping as the core since the 18th CPC National Congress. At present, China's poverty alleviation as the key to complete the building of a moderately prosperous society in all respects has entered into the final stage. In recent years, the situation of poverty in China has changed and the original mode of poverty alleviation with features of large scale and large scope has no longer adapted to the current situation of poverty alleviation, while the targeted anti-poverty can be achieved only through targeted poverty alleviation with the methods of precision aiming, adaptation to local conditions, and different strategies in response to different situations. Vigorously implement the targeted anti-poverty and poverty alleviation projects so that the original mode of "flood irrigation" can be transformed into "drip irrigation" so as to improve the utilization rate of poverty alleviation resources and increase the success

rate of poverty alleviation. At the same time, under the background of vigorously promoting the "Internet plus" by the country, the Internet as a powerful tool can be used to provide the help in the fields of sales, information, capital, technology and so on with the farmers to shake off poverty and make a fortune. It can be said that e-commerce poverty alleviation generated from the integration of the two policy background of China's targeted poverty alleviation and "Internet plus" is a new method of poverty alleviation with the adaptation to the actual conditions of China.

As one of the main means of targeted poverty alleviation, e-commerce poverty alleviation has integrated the strategic thought of "Internet plus". With the rapid development of the e-commerce industry in recent years, the Internet technology has been used to realize the docking of agricultural products and market on the e-commerce platform so as to not only help farmers in poor areas to sell agricultural products, but also help farmers to purchase the necessary life and production goods and provide the support of capital, technology and so on for the farmers, thus achieving the purposes of improving farmers' income and reducing the gap between urban and rural residents. At present, many scholars have conducted various researches on e-commerce poverty alleviation, which has become one of the main forms of poverty alleviation. In this paper, the current main modes of poverty alleviation were summarized, while the advantage and disadvantages of e-commerce poverty alleviation were combed on the basis of previous research results of numerous scholars. In addition, the four cases about e-commerce poverty alleviation of UNDP, ADB, JD and Tencent were analyzed to try to provide the new direction of thinking and the corresponding solutions for the difficulty and the bottleneck of the current e-commerce poverty alleviation.

II. ADVANTAGES OF E-COMMERCE POVERTY ALLEVIATION

Because the current situation of poverty in China has changed a lot in comparison with the previous situation and the effect of traditional poverty alleviation model has

been significantly weak, while in this context, the government has attached great importance to e-commerce poverty alleviation that is in line with the current situation of China's poverty alleviation and introduced a series of related policies to encourage all regions to develop e-commerce for poverty alleviation and development, for example, the No.1 Document of Party Central Committee put forward the further enhancement of rural e-commerce deployment in 2017 to pinpoint the promotion of rural e-commerce and the establishment of local e-commerce industrial park. At present, the fixed model of e-commerce poverty alleviation has been established after the attempts by many regions, and according to giving full play to the advantages of e-commerce poverty alleviation, not only has the income of farmers been improved, but also the upgrading and the transformation of local industries have been promoted.

A. Current Model of E-commerce Poverty Alleviation

According to the research and the summary of e-commerce poverty alleviation models in various regions, the management models of e-commerce poverty alleviation could be divided into several models such as the Longnan model of government leading plus farmers plus e-commerce, the Tongyu model of producer plus e-commerce, the Shaji model of spontaneous entrepreneurship of farmers plus government guidance plus e-commerce, the Beishan model of leading enterprises plus farmers plus government plus e-commerce, the Wugong model of distribution center plus e-commerce, the Qinghe model of traditional industry plus government plus e-commerce and the Ganjie model of e-commerce plus service points of rural e-commerce plus farmers. Among them, the Longnan model, Tongyu model and Qinghe model are established on the basis of connection between the existing products or industry and e-commerce, but the dominant leaders of Longnan and Qinghe models are the government, while the dominant leader of Tongyu model is the e-commerce; the Shaji model, the Beishan model and the Wugong model have created the new industry by making use of "coming out of thin air" of the e-commerce platform without the dependence on agricultural products and traditional industry, while the dominant leaders of the Shaji and the Beishan models are the capable farmers, but the dominant leader of Wugong model is the government; however, the Ganjie model can reduce the consumption cost of farmers to promote the development of the model of agricultural products plus sales of e-commerce to increase farmers' incomes by increasing the scale of online shopping, whose dominant leader is the e-commerce (as shown in table I).

B. Advantages of E-commerce Poverty Alleviation

The development advantages of e-commerce poverty alleviation are mainly embodied in two aspects. One is the endogenous advantage, which means that e-commerce as an emerging industry, its scale of users has continued to increase, at the same time, the private enterprises with the representatives of Suning, Alibaba

and JD have been developed rapidly, thus resulting in the deepening application degree of e-commerce, in addition, the e-commerce has not only become a way of selling, but also is an important strategic move benefiting the people to transform the economy in China; the other aspect is the external advantages, which means that firstly the e-commerce still has larger development space in China's rural areas, beyond that, after the introduction of policy documents about e-commerce poverty alleviation by the central government, governments at all levels have also introduced relevant policies to promote the development of e-commerce according to local characteristics in order to create a favorable external environment for e-commerce poverty alleviation.

From the strategic background of targeted poverty alleviation in China, the e-commerce poverty alleviation can make use of the Internet trading platform and the abilities of the Internet to obtain and process the big data. When the docking of small farmers and the market is achieved, it is necessary to figure out the real needs and the special skills of small peasant households in poor areas in order to provide data support for the targeted poverty alleviation and increase the success rate of poverty alleviation and the stability of anti-poverty. In addition, the e-commerce poverty alleviation has its unique advantages in promoting regional economic development. The e-commerce poverty alleviation can not only improve the rural roads, market environment and other infrastructure, but also promote the upgrading of the agricultural industry so as to achieve the transformation of the mode of organizing production, increase the added value of agricultural products and promote the development of agricultural products processing industry and other related industries by using the production mode of "e-commerce plus cooperatives plus farmers". In addition, e-commerce poverty alleviation often provides the training of e-commerce skills and other agricultural skills for farmers according to the informational educational platform built by the Internet to solve the problems such as the insufficient rural training institutions, lower quality of labor and so on, according to which, the e-commerce poverty alleviation through education will be achieved and the mode of poverty alleviation will be transformed from "blood transfusion" to "blood making", namely, teaching him to fish. Finally, the advantage of e-commerce poverty alleviation also lies in its ability of convenient information acquisition. The "information gap" between the village and the outside world can be broken to a certain extent through the electronic commerce platform and the information obtained from the e-commerce platform can help farmers to get more opportunities for development, at the same time, the e-commerce mostly belongs to the order agriculture, which can help farmers to make more effective arrangements for their own production so as to not only improve the production efficiency but also better predict and resist the impact of market risk.

TABLE I
THE MAIN MODELS OF E-COMMERCE POVERTY ALLEVIATION IN CHINA.

Types	Name of Models	Chains	Brief introduction of models	Main ways of poverty alleviation
Those living on a mountain live off the mountain	Longnan model	government leading plus farmers plus e-commerce	On the basis of original agricultural product(walnut) with the government leading, the characteristic products are connected with the e-commerce platform according to the double micro and e-government. The key lies in the infrastructure construction, multiple publicity, the cooperation with e-commerce giant and the training of relevant personnel.	1.agricultural products sales through online store started by farmer 2.employment driven by development of industrial chain
	Tongyu model	producer plus e-commerce	An ecommerce company named “ Cloud Flying Crane Dancing” was established with public investment, which carries out the integration of producers (production base, farmers, cooperatives or agricultural products processing enterprises) and simultaneously sells products (millet, mung bean, oats and bean etc.)on platforms like the Taobao and others.	1.agricultural products sales by farmers through ecommerce company
	Qinghe model	traditional industry plus government plus e-commerce	After the global financial crisis in 2008, the government had been making great efforts to develop e-commerce with the development ideas of “interaction between online and offline, complementation between tangible and intangible markets” after the decline of the export amount of Qinghe cashmere. By the end of 2014, the employees had reached 60 thousand people, and the annual retail sales had amounted to more than 3 billion yuan.	1.Products sales of traditional industry at ecommerce platform
Come out of thin air	Shaji model	spontaneous entrepreneurship of farmers plus government guidance plus e-commerce	Online store started by farmer spontaneously →copying in way of cell fission →industry driven by sales on net →follow-up of other industrial elements →inspiration of innovation by farmer network operator →constant expansion of industrial chain/rapid expansion of scale/development of economy and society.	1.agricultural products sales at online store started by farmer 2.employment driven by development of industrial chain
	Beishan model	leading enterprises plus farmers plus government plus e-commerce	The "North wolf" company established by capable entrepreneurs only sells outdoor goods on the Internet. The villagers in the surrounding villages who had studied the technology provided by the company of starting the online store can sell the products provided by the company of "North Wolf" on the Internet. At the same time, with the help of the government, the "North wolf" company not only stimulated the economic development of the surrounding villages, but also ushered in the own growth of "North wolf" company.	1.enterprise products sales at online store started by farmer
	Wugong model	distribution center plus e-commerce	Wugong County based on its own favorable advantages of location and transportation put forward the strategic planning of “purchasing from the northwest and selling to the whole country” through the electronic commerce, namely, the distribution center of western goods entering to eastern region”. Years of economic development result in the good foundation in logistics and cold chain, which is the powerful support for the supply chain that is the core point of competition of e-commerce, thus enhancing the overall competitiveness of local e-commerce.	1.employment driven by distribution center of goods 2.overflow effect
Others	Ganjie model	e-commerce plus service points of rural e-commerce plus farmers	“Ganjie network” has integrated a large number of commodities including means of agricultural products according to the needs of rural production and life. One purchasing point is established in each village with configuration of computers and broadband. Purchasing point is responsible for helping farmers to purchase, and deducts the percentage about 10% from the reached transaction as their reward. In March 2013, Zhejiang Ganjie Ecommerce Co., Ltd was set up to achieve one-stop processing in the village such as shopping, selling goods, payment and others for rural residents.	1.Increase of online shopping scale and reduce of consumption cost of farmers 2.agricultural products driven by online shopping plus ecommerce sales to increase farmers' income

It is concluded that the advantages of the e-commerce poverty alleviation are mainly embodied in three aspects. The first embodiment is that the e-commerce platform based on Internet as a powerful tool of information acquisition, can help farmers to change their traditional way of thinking and production mode, while some scholars believe that one of the reasons of poverty in rural areas lies in the backward consciousness and thought, and a large amount of information obtained through the Internet, can alleviate the problem of information asymmetry between village and city to effectively help farmers to achieve the docking with city in ideology so as to get more opportunities for development; the second is embodied in the ability of e-commerce platform to sell agricultural products, which means the use of the Internet can enhance the diffusion of agricultural products' information to the external market to attract the external enterprises through electronic business platform so as to obtain better development opportunities for local agriculture, reduce transaction costs and improve farmers' income; the third is reflected in the ability of the Internet in driving the development of other local industries, which means the models such as the "Internet plus professional cooperatives plus farmers", the "Internet plus e-commerce park plus farmers", etc., can be used to promote only the local agriculture but also other related industries so as to help with the local industrial upgrading and transformation, and carry out the ability training with farmers, thus forming a good circulation and improving the stability of shaking off poverty.

III. OBSTACLES AND DEVELOPMENT BOTTLENECK OF E-COMMERCE POVERTY ALLEVIATION

Although e-commerce poverty alleviation has been one of the major national strategies for poverty alleviation, and various regions have done many explorations, but from China's actual situation, the implementation of e-commerce poverty alleviation still exist many obstacles. At present, the main challenges faced by e-commerce poverty alleviation are mainly as the following aspects.

A. Lag of Information Construction

Although the pace of information construction in rural areas in recent years has been accelerated, but the rural information construction system is still not perfect due to the too much lag and there is still a big gap in comparison with the city. According to the "2016 Survey Report on the Internet Utilization in Chinese Village" released by CNNIC, until June 2016, there were 710 million Internet users in China, among which, there were 519 million users in cities and towns, accounting for 73.1%, but there were only 191 million users in rural areas, accounting for only 26.9%. The Internet penetration rate in rural area was 31.7%, which indicated a slight improvement in comparison with 30.1% in June 2015, but there was still a huge gap in comparison with 67.2% of the urban Internet penetration rate. The lack of information facilities must be one of the main obstacles of rural information

construction, but according to the CNNIC survey, the lack of knowledge of the Internet is also the main reason why the rural non Internet users do not access the Internet. The data show that the number of non internet users who do not access the Internet because they do not understand computer accounts for 68%. Therefore, when promoting the popularization of information technology facilities, how to improve the awareness of the Internet of the rural non Internet users is also the problem that needs to be considered in information construction.

B. Lack of Professionals of E-commerce

For the development of e-commerce, it is necessary to formulate the unified product standards and construct the corresponding service systems including production, marketing, post-sale service and so on, and the activities in the online business platform also require the professional technology to prevent online fraud and other security risks. The development of these tasks requires some technical requirements, that is to say, a group of high-quality ecommerce inter-disciplinary talents is crucial to the development of e-commerce poverty alleviation. However, at present, there is a serious lack of relevant talents in China. Due to their own conditions and the poor autonomous learning ability, it is difficult for the farmers in poor areas to grow into professional e-commerce talents with the perfect skills in e-commerce operation through their own efforts. On the other hand, it is difficult for the poor areas to attract professional talents from the outside due to their poor ability to attract talent, while the local knowledge talents will flow to the outside world due to their pursuit of better development opportunities, thus causing the serious shortage of e-commerce professionals in poor areas. In addition, due to the poor e-commerce infrastructure environment in rural areas, even if there are a certain number of e-commerce professionals, it is also difficult for farmers to carry out effective training, thus resulting in the more difficult cultivation of e-commerce professionals in poor rural areas.

C. Lack of financial support

The funds have always been the main problem for farmers in poor areas, and it must require the adequate financial support in terms of poverty alleviation. As a new model of poverty alleviation in China, e-commerce poverty alleviation has received enough attention, but the special funds are still not in place. In addition, the shortage of funds is just one aspect, while the insufficient mechanism of funds' integrated management by government is also an important reason for the low utilization rate of the limited funds, and coupled with the occurrence of corruption, all these reasons have hindered the effective use of funds. At the same time, the policy system construction of micro credit for farmers in our country is still not perfect, so it is difficult for farmers to obtain loans from banks because of the lack of collateral, credit and other reasons, especially for the farmers in poor areas. In recent years, with the rapid development of Internet finance, there are a lot of microfinance for farmers in the Internet, and the new micro credit mode

has its own advantages in solving farmers' funds and alleviating rural poverty, but because the pattern is still very new without the necessary supervision and market guidance, the development of the micro credit model is still faced with many difficulties, which means the shortage of funds for farmers will continue to exist.

D. Poor Logistics System

The operation mode of electronic commerce is "seller plus logistics plus buyer", but the construction of logistics system in rural areas is not perfect. Electronic commerce mostly uses the express way to transport goods, but in the vast central and western regions of China, the coverage area of express delivery mostly can only reach the township level, and some can only reach the county level, while even the postal department also rarely set up a fixed site in the village, and the distance of the "last mile" from the village led to the increase of logistics cost, the extension of delivery time and the severe compression of the profit margins of agricultural products, which is more evident in fresh agricultural products. In addition to the insufficient coverage of express, the development of rural roads is relatively backward with the uneven standards of road construction, and the insufficient coverage. Moreover, in mountainous areas of Yunnan, Guizhou, Sichuan and other provinces, the countryside with multiple winding roads is far away from the city, which increases more difficulties in logistics system construction.

IV. CASE INTRODUCTION

For the current various problems of e-commerce poverty alleviation, Chinese Academy of Agricultural Sciences Agricultural Information Institute invited four institutions or companies including UNDP, ADB, Jingdong and Tencent on January 23, 2017 to communicate with each other to share their respective cases of e-commerce poverty alleviation.

A. UNDP Case Introduction

UNDP(United Nations Development Programme) analyzed the application of big data to the field of poverty alleviation from the perspective of multidimensional poverty. 2284 counties were selected as samples for observation according to the cooperation with Baidu big data laboratory, and then a set of indexes which can replace the traditional method of defining poverty was established according to the observation data. Finally, eight indexes including three penetration rates of hygienic toilet, indoor kitchen and tap water, four coverage rates of mobile Internet, production facilities, road infrastructure and financial facilities, and the density of night light were selected as a beneficial supplement to the traditional poverty measurement method based on the income. In addition, UNDP also focus on cross-border cooperation in poverty alleviation, for example, in the past four years, UNDP had been helping the local women in Yunnan Yi district based on local women's embroidery industry to establish the embroidery cooperatives and promote the market development of minority handicraft

products by making use of ADB global propaganda resources, distribution channels of e-commerce and the appointment of stars as publicity ambassador. At the same time, the cooperation with various public platforms not only helped to raise their own funds, but also played a certain role in the promotion of public welfare, thus achieving a win-win situation.

B. ADB Case Introduction

ADB mainly introduced that "inclusive business" to illustrate the important role of "Internet plus" in promoting agricultural transformation and upgrading, and described how to effectively make use of the Internet technology by enterprises so as to generate the better social effect with the Guo Xingnong modern agriculture as an example. Guo Xingnong based on agricultural modernization is a Four-New company with the dependence on agricultural science and technology innovation and the practice of "Internet plus agriculture" to provide the whole process of agricultural production with the solutions of whole industry chain through the "five-linkage business" (GAP planting standard scheme, intelligent agricultural system, traceability system, e-commerce platform for brand planning and e-commerce trading platform for agricultural products). The deeper integration of the Internet information technology and agricultural industry with the industry chain opened up by information flow can promote the integration of the three industries and realize the development of the "sixth industry", thus creating the ecosystem of "Internet plus agriculture" running through the whole industry chain. Moreover, Guo Xingnong also focuses on agriculture planting and the two ends of "Smiling Curve", respectively as the R&D of ecological planting technology and the construction of marketing system so as to effectively solve the "production problem of the first kilometer" and the "sales problem of the last kilometer". The transaction cost and the loss of agricultural products are decreased due to the reduction of intermediate transaction links, and the asymmetric information problem is effectively solved through the integration of Internet information technology and industry chain to achieve yield increase for farmers and provide agricultural products with higher quality.

C. JD Case Introduction

Jingdong launched the project of "Jingdong running chicken paradise" for poverty alleviation of poor families. Take Wuyi County, Hengshui City, Hebei Province for example, Jingdong directly contacted the cooperatives with more poor households in county to provide the chicks for poor households with the guarantee from local government rather than the farmers' mortgage, and Jingdong regularly provided feed, grain and other means of production, while after 160 days of breeding by farmers, each chicken would be repurchased with the price of 100 yuan or more. The selling price of the chicken with original large-scale breeding mode is only 30 yuan, now each chicken can be sold to 128, 168 to 188 yuan through the green ecological production mode stressed by e-commerce, that is to say, farmers can

averagely earn 30 yuan more for each chicken. Moreover, after the pilot survey, Jingdong has expanded the scope of the project to the planting and other livestock production. The stable relationship of supply and marketing between the consumers in city and the farmers in poor areas is established with Jingdong as the bridge to not only create the Jingdong brand, but also achieve industrial upgrading in rural areas and farmers' stable income. In addition, Jingdong carries out the recruitment of employees in poor counties and provides the ecommerce training for the ecommerce employees through county economic class, Jingdong Business School and other forms. Now there are 16 thousand employees and 60 thousand rural promoters in poor counties.

D. Tencent Case Introduction

Tencent for the village as a project of poverty alleviation is to conduct information links, emotional connection and the final wealth connection by using two social software of Tencent including WeChat and QQ. A young man who knows the project very well with enthusiasm and is recognized by local villagers will be selected as the administrator of the village platform. Each village platform has its own two-dimensional code so that people can enter the public account by scanning the two-dimensional code with the function of business card to obtain a series of information about local agricultural products, tourism and so on. In addition, the Tencent can also add convenience services based on the needs of farmers in the village platform, such as the introduction of guidance services of rural production by expert and online solution to the problem of production in rural areas; legal aid services also can be added, which means that the university students majoring in law could provide the advice for the most rural disputes based on the aspects of the problem according to data analysis of the Tencent, and there is no need to seek professional help provided by lawyer, which can not only alleviate the rural disputes, but also avoid the high cost and time cost brought by a lawsuit; in addition, the Tencent also launched rural crowd-funding to integrate the fragmented capital of the entire village so as to improve the utilization rate of funds and provide a certain financial support for poor farmers.

V. RECOMMENDATIONS AND ENLIGHTENMENT

In this paper, the existing models, the advantages and the development bottleneck of ecommerce poverty alleviation were summarized on the basis of the summary of previous studies, in addition, the ecommerce poverty alleviation cases of the four constitutions or companies including UNDP, ADB, Jingdong and Tencent were introduced and analyzed in this paper, and the main recommendations and enlightenment are as follows.

First, the current poverty identification model based on the income to indentify the poor households in many poor areas is still relatively backward in comparison with the requirements of the current targeted poverty alleviation. In the identification and the backing out of poor households, the multidimensional nature of poverty should be considered more as well as the factors such as

food safety, education, health, production and living conditions, social capital and so on, in addition, even in terms of income, the income level should not be solely considered as the standard, while the factor that whether the income structure is pluralistic and stable should also be incorporated into the measurement system.

Secondly, multilateral cooperation should be strengthened. Poverty alleviation should not only depend on government participation, but should make use of the social forces to encourage private enterprises to cooperate with government departments, and the government can take advantages of private enterprises in the private business platform, logistics, etc., and supply the government support and subsidies for private enterprises so that the income and the consumption capacity of poor households could be improved through the development of poor areas, which makes the private enterprises be profitable in poor rural areas, thus achieving the win-win-win situation of government, enterprises and farmers.

Thirdly, construct the industrial integration strategy with enterprises and cooperatives as bridge to build stable product distribution channels between villages and cities. The long-standing urban-rural dual structure has caused great obstacles for China's rural economic development, and the city has a huge demand for rural green health products, but there is no good guidance and circulation mechanism which can result in the large scale and the standardization of the rural products so as to enter into the urban market. With the background of national e-commerce poverty alleviation, The Internet giants like Jingdong, Alibaba and so on can be encouraged to enter into villages to cooperate with local cooperatives by providing production guidance and production subsidies for the whole stages of production, making the local villages become their own supply bases of agricultural products, which will be transported to cities for sale by using their own logistics system, and then guide the farmers to carry out the next round of production according to the large data analysis of sales so as to not only reduce the risk of investment by farmers but also cater to the consumption preferences of urban populations, which is conducive to the sale of products and form a good circulation.

Fourthly, focus on training local talents. The main reason of difficult implementation of ecommerce poverty alleviation in villages is that there is no e-commerce professionals to manage the operation, but labor costs are too high to hire professional personnel, while actually the local young people with certain ability are more suitable for local e-commerce management in comparison with the professional ecommerce talents. The practice of the Jingdong and Tencent has proved it is feasible to search for personnel to be trained in local villages, and the personnel trained in this way know more about the local customs and communicate with the local residents more easily, in addition, for the different models of ecommerce poverty alleviation in different regions, the enterprise can carry out professional education for the local model, which not only can reduce cost, but also is more suitable

for the local poverty alleviation mechanism.

Fifthly, pay attention to the development of mobile phone electricity supplier. In poor mountainous areas, many farmers do not have the ability to buy a computer and other basic equipments, and many areas can not connect cable, hindering the development of e-commerce. But at present the infrastructure construction of mobile phone communication industry in China is relatively perfect, and a large number of manufacturing led to the popularity of smart mobile phone charged thousand yuan, in addition, the promotion of mobile applications has also forced the application of intelligent machines, and with these reasons, the Chinese mobile internet users accounts for more than 95% of the number of internet users, moreover, according to the data of Chinese Internet Network Information Center (CNNIC), the scale of mobile users of online shopping is growing rapidly, and as of June 2015, China's mobile users of online shopping had reached 270 million with semi annual growth rate of 14.5%, which shows that the mobile phone online shopping has become an important trend and the simple online transactions can be completely realized by using mobile phone, so the development of mobile phone e-commerce also should be taken seriously.

Sixthly, develop the diversified financing channels to provide start-up funds for poor farmers. The problem of difficult financing has always been one of the main problems that bedeviled the goal of anti-poverty in China. Therefore, how to broaden the financing channels in rural areas should also be the problem that needs be solved by e-commerce. The rural crowd-funding of the Tencent is worth learning as a form of mutual assistances, at the same time, there have been numerous types of micro loans on the Internet with the advent of network era, which alleviated the difficulty of farmers in getting loans to some extent, but the perfect effective supervision mechanism and guidance measures are still not established because the industry has just started with good and bad mixed together. Therefore, we should encourage the development of microfinance in this industry, but more importantly, prior to its development, a series of government supervision system needs to be introduced by the government before its development to regulate microfinance market, thus ensuring that it can really help farmers to solve the problem of financing.

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