Investigation on Targeted Poverty Alleviation of Wuwei Based on Internet+Agriculture Strategy

Wenjuan Pan[1,a] and Haiying Ma [1,b*]

[1]School of Economics, Northwest Minzu University, Lanzhou, Gansu, China

[a] Email: 2663502252 @qq.com, [* b] Email:lxmahaiying8888@163.com

[*]corresponding author

Keywords: Internet + Agriculture; Targeted Poverty Alleviation; Wuwei

Abstract: The introduction of the internet into the development of traditional agriculture will give birth to new development momentum, which is conducive to the promotion of targeted poverty alleviation. Based on the research of internet plus agriculture, this paper analysed the poverty situation of Wuwei Gansu, which has the arduous task of poverty alleviation, and on the basis of analysing the current situation of agricultural development, we conduct out SWOT for the implementation of Internet plus agriculture targeted poverty alleviation. This paper expounds that it is necessary to strengthen the network infrastructure construction in order to promote the construction of internet plus agriculture, and puts forward targeted poverty alleviation strategies.

1. Introduction

Targeted poverty alleviation (hereinafter known as TPA) was proposed by General Secretary Xi in 2013. Compared with the extensive way of poverty alleviation, precision poverty alleviation refers to a way that, according to the environment of the poor and their own actual situation, the identification, assistance and management of the poverty alleviation objects are carried out under the standard and effective procedures, and finally the poor are lifted out of poverty and managed [1]. Internet plus TPA is to introduce Internet technology on the basis of traditional poverty alleviation, innovate the operation mode, organization and service system of TPA, realize the mutual integration of the two national strategies of internet plus strategy and TPA strategy, open a new technological revolution in the field of poverty alleviation [2], and make poverty alleviation identify with the help of network and related technologies Accuracy, assistance and management. Internet plus agriculture is a new type of Internet agriculture formed by integrating Internet technology into the preparation of means of production, production and sales of agricultural products in the agricultural industrial chain, upgrading the industrial chain, changing the industrial structure and making full use of various resources. It will make the whole industrial chain symbiotic, mutually beneficial and win-win, change the mode of agricultural economic development, expand the way of poverty alleviation, improve the income of farmers, improve the rural economic living conditions, and helping TPA.

Wuwei is located in middle regions. At the end of 2016, there were 91100 remaining poor people in Wuwei, with a poverty incidence of 6.32%. There are two villages and 115 villages with deep poverty approved by Gansu province, involving 49000 poor people. The high and deep Qilian mountain area, the arid shallow mountain area and the northern desert edge are the poverty-stricken areas. The contradiction between them is prominent. Ecological poverty affects the development of local economy and society, and at the same time, it has become a hindrance to building a well-off society in an all-round way [3]. In order to achieve a well-off society in the poor areas in 2020, the country has a long-term vision and puts forward a TPA strategy, which is precise and accurate in proportion to the traditional poverty alleviation, so as to help the poor areas get rid of poverty and finally achieve a well-off society.

2. Development of Internet plus Agriculture

2.1 Poverty in Wuwei

The Tianzhu county is a poverty-stricken area county of four provinces, Tibetan areas and a deep poverty county of three regions and three prefectures designated by the state, Gulang county is a poverty-stricken area county of Liupanshan Mountain and a deep poverty county designated by the province, Minqin County and Liangzhou District are poverty-stricken counties of flower arrangement type designated by the province, and 322 poverty-stricken villages have been established in the city. Through the effective implementation of various Poverty Alleviation Policies, such as industrial cultivation, project support, migration and relocation, and poverty alleviation through science and technology, Wuwei has significantly increased the income of the poor and significantly reduced the number of the poor. The number of poor people decreased from 560700 in 2011 to 91100 at the end of 2016, and the poverty level decreased from 35.44% in 2011 to 6.32% at the end of 2016. Although some achievements have been made in poverty alleviation, some difficulties still exist [4].

2.1.1 The Arduous Task of Poverty Alleviation

The remaining poor are mainly distributed in the high and deep mountainous areas, the shallow arid areas and the sand areas. The elderly, the weak, the sick and the widowed are relatively high, the causes of poverty are complex, and it is difficult to get rid of poverty. They are the most difficult hard bones to chew. At the same time, the poverty-stricken families return to poverty due to disasters, diseases, school, marriage and lack of technical ability.

2.1.2 Weak Driving Capacity

The overall development level of county economy is relatively low, the total economic volume is small, the financial income is low, and the investment capacity for poverty alleviation is insufficient. Industrial and agricultural enterprises are small in scale and weak in strength, which have little driving force for the development of modern agriculture and the transfer of farmers' employment. The development level of farmers' professional cooperative organizations is low, the operation is not standardized, the interests of farmers are not close, the new agricultural service organizations are still in the initial stage, the agricultural production scale is small, the degree of organization is low, and the ability to deal with market risks is weak.

2.1.3 Lack of Endogenous Motivation

At present, most of the poor people are located in the high and deep mountainous areas and along the sand areas, with inconvenient transportation, blocked information, backward ideas, generally low cultural quality and relatively weak self-development ability. At the same time, some of the poor people lack the spirit of self-reliance and hard work. They are content with the current situation and rely solely on the help of the outside world to lift them out of poverty passively. They are waiting for help and lying on their back. They are reluctant to lift themselves out of poverty by relying on policies.

2.2 Development Status of Internet plus Agriculture

2.2.1 Rural Information Infrastructure Construction

By the end of the 12th Five Year Plan period, the total length of optical cable in Wuwei was 31200 km, the access rate of optical cable in villages and towns was 100%, the access rate of broadband in administrative villages was 93.66%, 5671 communication base stations had been built, the network coverage rate was over 98%, and the broadband access capacity of rural households was basically 4Mbps or above [5]. The whole coverage of 2G signal is realized in poor villages, and the full coverage of fixed and mobile broadband in poor villages reaches 70.8%. The logistics distribution and broadband network in pilot towns and villages are fully covered. Based on big data technology and mobile terminal application, Wuwei carries out agricultural information service and agricultural monitoring and early warning analysis, so as to improve the level of agricultural production informatization. E-commerce will be infiltrated into all aspects of agricultural

production and operation, information sharing in all aspects of agricultural production, logistics distribution, market management and trading will be strengthened, intelligent monitoring and tracking of agricultural product quality will be carried out, and the level of agricultural operation informatization will be improved. Establish a public information service system for agriculture, rural areas and farmers, innovate the construction mode of rural information service stations, strengthen the training of rural informants, and improve the ability of rural comprehensive information service. We will improve the management and dynamic tracking of information on the rural poor; strengthen the active promotion of information on getting rid of poverty and getting rich, and help rural poverty alleviation.

2.2.2 Smart Agriculture

Wuwei actively promotes the Internet plus modern agriculture, builds the agricultural product marketing information service platform, builds the whole industrial chain big data platform including agricultural production guidance, market supply and demand early warning, quality traceability system, and promotes the whole process of information technology in the production, processing and circulation of agricultural products. Around the promotion and development of modern agriculture, the intelligent breeding and sowing, fertilization and irrigation, soil moisture monitoring, pest and crop growth monitoring and other operational means are developed and promoted in large-scale agricultural production areas, and the intelligent management of intensive breeding farms is promoted. Promote the application of internet of things technology in facility agriculture, such as automatic rolling curtain, production environment monitoring in greenhouse, some intelligent control technology and advanced equipment, intelligent irrigation, precise feeding of animals, intelligent milking and egg picking, etc. have been applied.

2.2.3 E-commerce Agriculture

Minqin County has become a national comprehensive demonstration county of e-commerce in rural areas. It has established five e-commerce associations, four e-commerce service centers, four Jingdong specialty+Wuwei Museum, four Taobao Minqin Museum, Tianzhu Museum, Gulang Museum, 33 township service stations, 335 village level service points and 573 rural online stores There are [6], and the coverage of postal outlets in villages and towns is full, and the coverage of express outlets in villages and towns is 70%. 236 poverty alleviation online stores have been built, and more than 990 online stores have been opened on famous platforms such as Taobao, Jingdong, and Suning e-shopping and three-dimensional shopping mall [7]. More than 360 agricultural products, such as Minqin mutton, honeydew melon, shallot, ginseng fruit, Cistanche and Suoyang, are sold on the Internet, and the online brands focusing on ginseng fruit, wine, waxy corn, wolfberry, lamb and white yak meat have been formed.

3. SWOT analysis of Internet plus agriculture TPA in

3.1 Advantages

3.1.1 Transportation Location

Wuwei is the gateway of Eurasian Continental Bridge, located in the center of Lanzhou Xining Yinchuan urban economic circle, the important node city and regional center city of the Silk Road Economic Belt, the core area of the new Eurasian Continental Bridge International logistics channel built by the logistics development plan of Gansu Province, and the fastest channel from the inland area to the European market. Wuwei is located in the center of Gansu section of Xilong Hailan new line [8]. Lanxin railway, Gansu railway, 312 national highways, G30 Lianyungang Huozhou expressway, Dingwu Jinwu expressway, the west adjacent Expressway under construction and the proposed Lanzhou Zhangjiakou high speed railway run through the whole area. Unique location advantages and convenient transportation create favorable conditions for the development of Internet plus agriculture in Wuwei.

3.1.2Agricultural Resources

Wuwei is the most advantageous production base of natural green food and famous special agricultural products in Gansu Province. At present, 800000 Mu processing corn base, 500000 Mu breeding and seed production base, 400000 Mu pollution-free vegetable base, 300000 Mu high-quality melon base, 300000 Mu cotton base, 150000 Mu beer barley base, 10 The construction of agricultural industrialization bases, such as ten thousand mu brewing grape base, microalgae production demonstration base, ginseng fruit base, animal husbandry base, flower base, edible fungus base, potato base and traditional Chinese medicine base, has formed a batch of regional landmark industries, such as wine, flour, black melon seed, yellow melon, pollution-free vegetables, starch series products and white yak series products Brand and local characteristics of agricultural and sideline products [9].

3.1.3 Advantages of Industrial Development

Wuwei is rich in agricultural products. It is the production base of various fruits, vegetables and meat. By the end of 2016, the city had more than 900000 mu of facility agriculture and animal husbandry, more than 1.685 million mu of featured forest and fruit industry, 197000 mu of greenhouse, 2.456 million mu of featured and advantageous agricultural products, and more than 300000 farmers of the same scale, which had formed a base production and operation mode, mainly producing vegetables and melons, For example, pepper, tomato, ginseng fruit, red grape, edible fungus, etc., livestock products include native chicken, mutton sheep, beef cattle, etc., and characteristic fruit products include grape, crown pear, red dates, walnuts, Lycium, etc [10].

3.2 Disadvantage

3.2.1 Weak construction of agricultural information infrastructure

The agricultural information infrastructure in Wuwei has developed to some extent, but it still has Insufficient, mainly reflected in the lagging construction of agricultural service platform, the lack of project introduction and capital investment in information network construction, the relatively low correlation between information service platform and leading enterprises, markets, bases, etc., the lack of scientific and technological information available to farmers, the lack of guidance of useful information, the lack of professional scientific and technological personnel and information in both the breeding of farmers and the production and operation of enterprises The function of the platform is not perfect.

3.2.2 The industry of enriching the people in rural areas has scale but lacks advantages

The local facility agriculture and animal husbandry have developed to a certain extent, but some characteristic agricultural products, such as white yak meat and red grapes, have not yet established the standardization system in terms of production quality and production technology, especially the gap with the standards of e-commerce operation, the industry has scale advantages, but the overall competitiveness is not strong. The industrial chain of enriching the people has been formed, including the effective connection of energy conservation in the supply of raw materials, product production, finished product storage and sales, but the horizontal extension is weak. Product certification, such as origin certification, quality certification, and green product certification and so on, lags behind.

3.2.3 Lack of Talents for Internet plus Agriculture

Only with the Internet as the carrier can we develop Internet plus agriculture, use Internet of things, big data, cloud computing and other technologies, and build websites and design networks The level of farmers' knowledge is low, and the network knowledge is limited, so in the field of web page design, data analysis, product sales and other more professional areas will face greater talent challenges.

3.3 Opportunities

3.3.1 The number of Internet users in the world and China is growing rapidly

Relevant data shows that in 2017, there were more than 3.4 billion internet users in the world. In June 2017, China had 751 million Internet users, one fifth of the world's Internet users. China's Internet penetration rate has reached 54.3%, and the number of people using mobile phones to access the Internet has reached 724 million, an increase of 1.3% compared with 2016, which is still rising; the number of people using mobile phones to shop online in China has reached 514 million, of which 480 million people use mobile phones to shop. The rapid increase in the number of Internet users in the world and China has provided good external conditions for the development of Internet plus agriculture in Wuwei, especially for the e-commerce of agricultural products.

3.3.2 Strategic Opportunities of One Belt One Road

One belt, one road one belt, one road, connects more than 30 countries and regions, covering almost 3 billion of the population. Wuwei, with its unique geographical position and distinctive agricultural advantages, will surely increase the export of agricultural products through the strategic opportunity of one belt and one road and expand the trade space for the development of agriculture in poor areas of Wuwei. Through the construction of the golden node of the Silk Road Economic Belt, Wuwei has developed into a leader in the province's export-oriented economic development, and built an international land port in Gansu, and this series of measures will greatly promote the development of Internet plus agriculture.

3.4 Challenge

3.4.1 Imperfect Aspects of Platform on E-commerce

The main performance is: first, the rural e-commerce operation mode is relatively single. Only a few leading enterprises adopt the self-supporting B2C mode. Most agricultural products are sold on the e-commerce platform of Jingdong and Taobao, adopting the B2C mode. Secondly, Wuwei lacks the leading enterprises with large scale, full functions and strong leading and demonstration functions, especially the e-commerce leading enterprises that can promote the online sales of characteristic products through e-commerce and online marketing, and gradually form the network brand and enhance the brand influence.

3.4.2 The Logistics Construction

First, the storage and sales of agricultural products depend on cold chain logistics, while the number, scale, facilities and equipment, technology and other aspects of the cold storage in Wuwei are low, which can not meet the requirements of modern agriculture. Second, the application of agricultural logistics information is low, the logistics information center has not been established, and the logistics big data has not been formed, which leads to the logistics information can not be effectively collected and shared. Third, the concept of modern agricultural logistics has not been formed; farmers and operators can not realize the importance of agricultural products logistics, the low utilization rate of cold chain logistics, leading to more losses in the logistics link of agricultural products.

4. TPA Strategy of Internet plus Agriculture

4.1 Strengthening Network Infrastructure and Construction of intelligent system

To carry out Internet plus agriculture TPA, we should take the perfect network infrastructure construction as the premise and guarantee. At present, Wuwei has some development in network foundation, but to build internet plus agriculture intelligent system, we need to further consolidate. Therefore, we should take various measures to strengthen the construction of agricultural and rural informatization, carry out agricultural production and operation under the effective guidance of information, further improve the popularization rate of rural broadband, improve the network speed, and build a smart agricultural system based on Internet, cloud computing and Internet of things technology (as shown in the figure 1 below). With the perfect information network foundation and the construction of intelligent agriculture system, and the integration of intelligent system and

intelligent agriculture, Wuwei has entered the information era of Internet plus agriculture. With the Internet as the carrier, the intelligent agricultural production management and consumption are effectively linked.

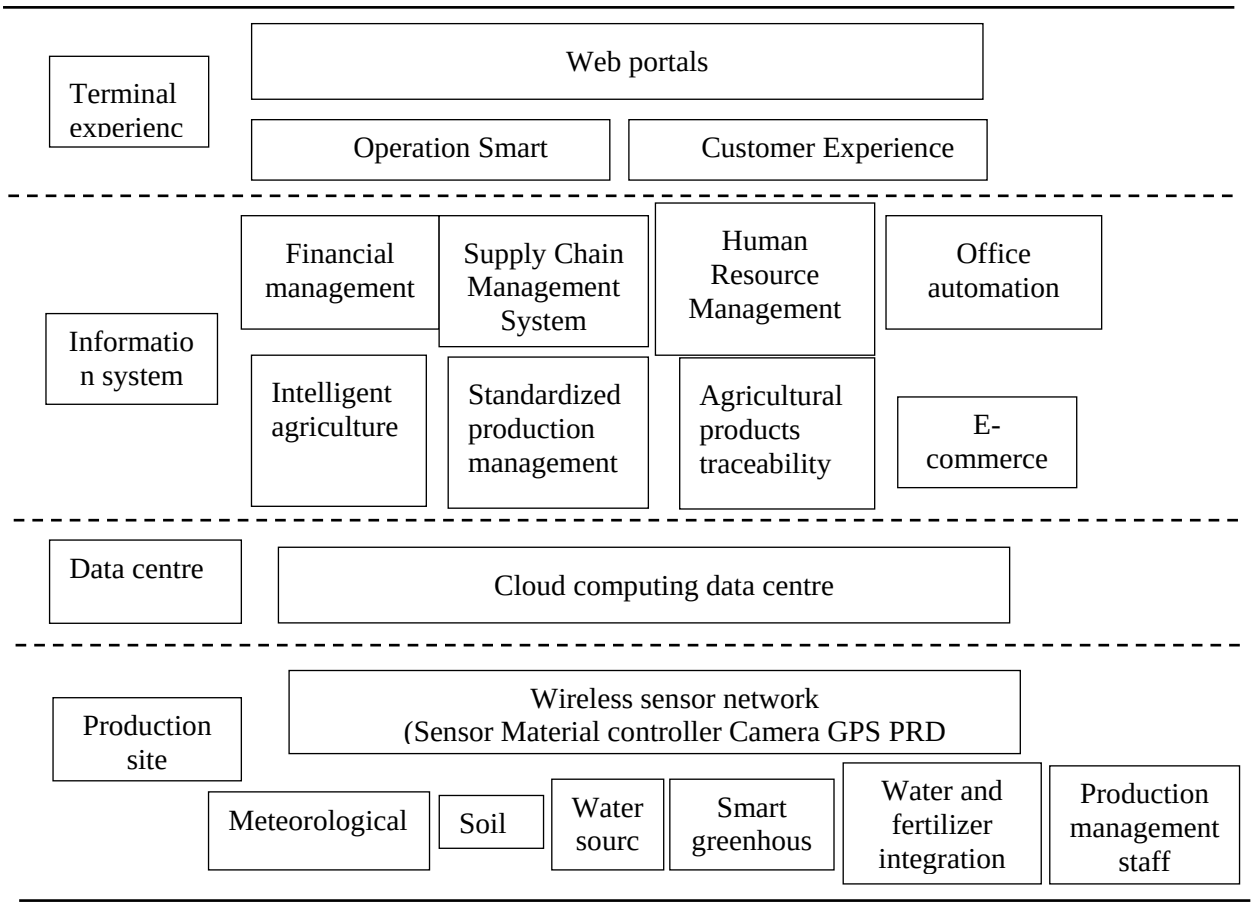

Figure 1. Internet plus agricultural intelligence system.

4.2 E-commerce TPA

In order to increase the development of e-commerce in the poverty-stricken areas of Wuwei, the construction of basic security should be carried out first, the roads in the poverty-stricken areas should be constructed and rectified, the popularity and speed of the network should be improved, the investment in hydropower construction should be increased, and the rural logistics construction should be carried out. According to the information of poverty-stricken villages and poverty-stricken households with accurate identification and filing, and in combination with agricultural resources, it is necessary to define the characteristic industries and leading products to be developed, create famous, special, excellent and new agricultural products, develop leisure agriculture, and carry out online marketing. Supporting e-commerce enterprises to actively promote and publicize the special products and handicrafts in poor areas with the help of unique online shopping activities such as festival marketing, anti-season marketing and special price activities, so as to let more consumers conduct online shopping and create a good atmosphere for consumer poverty alleviation.

4.3 Micro-Blog and We-chat

In modern society, the Internet is everywhere, and the popularity of computers and mobile phones is getting higher and higher. With the help of modern Internet products, such as micro blog and We-chat, the farmers can promote the marketing of agricultural products, rural inns and leisure farms with local characteristics of Wuwei by providing training on relevant skills to the producers in poor areas and their own learning and mastering. Those farmers can broadcast the planting and breeding of agricultural products live at any time; with the help of We-chat, farmers can publish products and services through photos, videos, etc. and sell products on Weibo and We-chat; develop

professional APP The platform.

4.4 Internet plus Rural Tourism

Wuwei is building a famous city of cultural tourism and an Innovation zone of Chinese civilization inheritance, taking this opportunity to use Internet plus to achieve TPA. Build an intelligent rural tourism information system to provide technical support for TPA. The rural tourism information is shared with the information of transportation department, public security department and medical institution, so as to provide various guarantees for tourists. By using advanced technologies such as cloud computing, Internet of things, radio frequency technology, 3G Internet, GPS positioning, etc., the information of Wuwei featured food, accommodation, itinerary, scenic spots, entertainment, shopping, etc. will be timely pushed to tourists.

Conclusions

Wuwei poverty-stricken areas have poor natural conditions, deep mountains and ditches, and fragile ecological environment. It is necessary to carry out ecological protection and governance, but also to get rid of poverty and become rich. The effect of general poverty alleviation methods is not obvious. The Internet wave helps Wuwei Poverty alleviation brings new opportunities. Through the combination of Internet, e-commerce and TPA in Wuwei, the characteristic products will be promoted to the whole country and even the world to achieve TPA through intelligence.

Acknowledgements

This work was supported by the Fundamental Research Funds for the Central Universities (Grant No: 31920190123) and by the Gansu Provincial Key Laboratory of E-commerce of Ethnic Information of Northwest Minzu University.

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