

Strategy of Internet + Agriculture in Kunming under the One Belt and One Road

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Abstract— “Internet + Agriculture” is a new engine in the development of modern agriculture, the transformation of traditional agriculture to “Internet + Agriculture” is an important measure to promote long-term development of Kunming, is also keep up with the trend of the era of science and technology about “Internet + ”. The strategy of “One Belt And One Road” has important significance to promote the development of Kunming “Internet + Agriculture”. The article analysis of present situation of Kunming agriculture, combined with the strategy background of “One Belt And One Road”, puts forward implementation of Kunming “Internet + Agriculture” from the “Agricultural E-commerce”, “Internet + Village Tourism” and “Internet + Precision Poverty Alleviation” three aspects and a series of specific suggestions.

Keywords—“Internet + Agriculture”; “One Belt And One Road”; Kunming;

I. INTRODUCTION

“The Silk Road Economic Belt” and “the 21st Century Maritime Silk Road” (hereinafter referred to as “One Belt And One Road”) is a major strategic concept which is chairman of the Xi's in 2013 meet at Indonesia and four central Asian states. The third plenary session of 18 promoted the construction of “One Belt And One Road” to national strategy. According to “The Vision and Action of Promote to Build the Silk Road Economic Belt and the 21st Century Marine Silk Road” in March 2015, which pretend to build the “One Belt And One Road”. It also represents the strategy of “One Belt And One Road” which will make a significant influence when China has entered a new stage of the phase of comprehensive development [1].

Agriculture is the important area of strategy of “One Belt And One Road”, which development is the common concern of all countries. According to the vision and action of promote to build the silk road economic belt and the 21st Century Marine Silk Road, which tell us the advantage of our country's strategy-“Go Out” and the main investment pint on

agricultural. In addition, it solved the problems of poor infrastructure and the difficult of financing [2].

During the “Twelfth Five Year Plan” period, Kunming city is the political economic and cultural center, which make full use of its own advantages. Kunming can successfully overcome a series of influence and show a good momentum of development of agricultural economy. In this case, the transformation of traditional agriculture to “Internet + Agriculture” is the most important measures to promote long-term development of Kunming agriculture [3].

On rural reform and innovation efforts to accelerate the implementation of the plateau characteristic agriculture modernization opinions, which published by Kunming municipal government in May 2015, put forward to efforts Kunming into information of agricultural products logistics center, deep processing of agricultural products, agricultural expo exhibition center, popularizing agricultural science and technology research and development center in The province, southwest, China, South Asia and southeast Asia.

II. DEVELOPMENT PRESENT SITUATION OF KUNMING AGRICULTURAL

In recent five years, Kunming plateau characteristic agriculture industrial restructuring has made significant achievements. The whole city area sown to grain stable at more than 3.5 million acres, production stable at more than 0.9 million tons. Rapid development of characteristic economy crops, the vegetables planting area of 1.45 million mu, Production of 2.66 million tons, the output value of 3.4 billion yuan; Flowers gardening planting area of 0.29 mu, Production of branches cut flower about 4.5 billion, flower gardening output value 3.2 billion yuan; Fruit planting area of 0.403 mu, Production of 0.286 tons, the output value of 400 million yuan; Medicinal herbs, edible fungi, such as special biology planting area of 0.028 mu, the output value of 230 million yuan.

Mountain animal husbandry development is rapid, progress was made in freshwater fish, animal husbandry and

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fishery output value of 12.15 billion yuan respectively; Open to speed up the development of agriculture, agricultural exports in 2015 to \$2015, compared with \$2010 in 740 million, an increase of 35.1%.

In 2015, Kunming completed ten-thousand mu of high-yield about 60 slices, demonstration area of 0.65mu. The total production of grain crop is expected to reach more than 1 million tons. Steady development of featured industries, in addition to the traditional vegetable planting, flower garden has a total area of 230000 mu, accounting for 115% of the year plan of 0.2 mu.

At present, the added value of Kunming agricultural Output value, added value and other major indicators in the province remained at about 10%, the proportion of each city in the front row. The city's agricultural output value reached 33 billion in 33 billion, an increase of 13 billion yuan, the average annual growth of 6.5%; The added value of agriculture reached 19.7 billion yuan, 2010 yuan more than in 2010, the average annual growth of 6.2%; Rural residents per capita disposable income reached 11506 yuan, 2010 yuan more than in 2010, the average annual growth of 12%.

III. ORIENTATION

A. "Agricultural E-commerce"

Provide farmers with a professional, authoritative, honest platform to promote their agricultural products, e.g. "Digital Village GIS Service Platform". The service function of agricultural e-commerce should be development professional and thoroughly, infiltrate into the whole process of agricultural production and operation, prompted the production, processing and circulation of agricultural products to realize the refinement, standardization and modernization, promote the level of modern agricultural production and management increasing [4].

The government should, as always, support the development of agricultural e-commerce platform for the majority of farmers and enterprises to build a platform to provide policy and technical support. At the same time, government should research and development the support policy, encourage innovation model to mobilize the enthusiasm of enterprises and farmers.

Actively promote agricultural e-commerce of the whole development, promote the readjustment and optimization of the industrial structure of agriculture, improve the weak link in the production and operation of agriculture, make the original agricultural industrial advantages into full play and disadvantage industry gradually improved, the competitiveness of main agricultural products in the domestic and international market can be greatly improved and enhanced [5].

B. "Internet + Village Tourism"

Launch a website and mobile phone APP about "Internet + Village Tourism" of Kunming surrounding countryside, show some words and illustrations about

farmhouse, orchards, vegetable gardens, aquaculture Park, surrounding traffic and accommodation on the platform.

This mode of tourism can meet more and more city people, they can experience farmhouse, pick fruit, feel the unique folk customs.

In this way, the nature, the national culture and the farming culture are integrated into the traditional tourism culture, which not only enrich the connotation of the tourism industry, but also meet the needs of the people. At the same time, agricultural products can be sales through tourist consumption, experience and purchase. It create a new model of tourism driven rural electricity suppliers [6].

C. "Internet + Precision Poverty Alleviation"

Until the end of 2014, Kunming are still 20.75 million impoverished population, the agricultural is a weak industry, the degree of information is lagging behind, and with small scale production, natural risk and market risk coexist, making development of agricultural e-commerce more twists and turns.

"Internet + Precision Poverty Alleviation" is intended to use Internet technology to make agricultural development and poverty alleviation work together, develop the agricultural e-commerce and promote poverty alleviation work better and faster.

"Internet + Precision Poverty Alleviation" can be achieved through some way, for example, employer paid to poor households to use their land and employ them to plant or breed agricultural products, and pay them salary. Employer can decide plant or breeding species of agricultural products, at any time, they can through the Internet remote to view breeding or planting status of products, remote guidance on product growth condition and the use of chemical fertilizer and pesticide, etc. Finally, the resulting products all belong employer.

IV. SUGGESTIONS

A. Perfect public service system of agricultural internet of things

Construction public service system of the municipal agricultural internet of things, provide data collection, mining analysis, monitoring and early warning, technical guidance, intelligent control and application services for agricultural enterprises, agricultural operators for free.

Actively promote farmland, forest land management geographic information system, plant diseases and insect pest prevention and control of monitoring and prediction system, etc. Make its application in agricultural production, improve service guarantee of agricultural technology expert. Achieve agricultural production intelligent, precise, digital, controlled and regulated.

B. Implement demonstrative project of agricultural iot

Actively promote the application of internet of things and other information technology in agricultural production. Support large scale and strength of the agricultural enterprises

and new agricultural management main body, construct agricultural internet of things application system. Implement accurate operation such as intelligent water-saving irrigation, soil fertilizer, agricultural machine positioning, feed dropping, automatic diagnosis of diseases and so on.

C. Vigorously develop agricultural e-commerce

Actively foster the subject of agricultural e-commerce, promote new agricultural management main body e-commerce application ability. Construct the municipal agricultural e-commerce system of public service to make information sharing and data connectivity, construct the network operating system include agricultural products cold chain logistics, information flow and cash flow, solve the butt crack problems of “small farmers and big market”, improve the efficiency of circulation of agricultural products [7].

D. Implement intelligent engineering of agricultural enterprise

Encourage agricultural enterprise with certain scale using the enterprise management information system, improve informatization level of enterprise management in the purchase, production, sales, marketing, finance and human resources, promote agricultural enterprise operation and management of network and intelligent. Guide farmers’ professional co-operatives, family farms and other new type of agricultural management main body use open business management system based on Internet [8].

To strengthen the production and marketing cohesion, develop “Customized Production” which set online cultivated, intelligent management, e-commerce in the integration, improve agricultural production and operation level of science and technology, organization and the level of refinement.

E. Speed up the agricultural origin market information construction

Make full use of modern information technology, establish agricultural origin market operation management system and customer service system which electronic settlement as the core and set of financial management, security monitoring, personnel management, business management, property management is the integration, realize the online operation, improve the level of modern management and operation efficiency [9].

F. Strengthen the construction of agriculture e-government system

Complete the agriculture e-government management system construction supported by the big data, improve the ability and level of agricultural production decision, resource department, scheduling command, up and down together, information feedback, etc.

To further strengthen the government information publicity, improve the level of agricultural comprehensive law enforcement information, strengthen the quality of agricultural products and safety supervision of animal husbandry, raise the level of supervision, strengthen the ability of prevention and treatment of agricultural public emergency.

G. Sustainable development of agriculture

Carry out Six-Engineering of the agricultural ecological construction, promote the sustainable development of agriculture [10]. Popularize agricultural environment monitoring system based on environmental awareness, real-time monitoring and automatic control of the network, establish system of water resource utilization, agricultural environment bearing capacity evaluation, agricultural waste, livestock and poultry dung pollution monitoring [11].

V. CONCLUSION

The strategy of “One Belt And One Road”, has important significance to promote the development of Kunming “Internet + Agriculture”. Kunming should be as soon as possible the transformation of traditional agriculture to “Internet + Agriculture”, keep up with the trend of the “Internet +” era of science and technology, as early as possible make Kunming into information of agricultural products logistics center, deep processing of agricultural products, agricultural expo exhibition center, popularizing agricultural science and technology research and development center in The province, southwest, China, South Asia and southeast Asia.

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