Discussion on Ways of Economic Development in Rural Areas of Anhui Province Based on Cooperatives

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Abstract Taking Xuancheng City in southern Anhui and Fuyang City in northern Anhui as the examples, the economic development status in rural areas of Anhui Province was introduced. Four development modes of rural cooperative economic organizations were analyzed. The main form of "agents leading mode" was "professional cooperative + farmers" and the products were purchased by protective price. The main forms of "leading enterprises driving mode" were "corporation + farmers" or "corporation + association + farmers". "Leading industry pushing mode" could help to increase the income of farmers by developing leading industry. "Folk forces pushing mode" could help to improve the systematization degree of farmers by folk forces. Two ways were put forward on the economic development in rural areas of Anhui Province. The combination of "folk forces pushing mode" and "agents leading mode" was applicable to the depressed areas in northern Anhui, while the combination of "leading enterprises driving mode" and "leading industry pushing mode" was applicable to developed areas in southern Anhui.

Key words Anhui Province; Rural cooperatives; Regional economy; China

With 30 years of reform and opening-up, Chinese agriculture has entered into the stage with structural, periodical and regional surplus after experiencing an era of agricultural goods shortage(1). At present, the focus of agricultural development lies on the transformation from traditional agriculture to modern agriculture. Industrialization management is the effective means of realizing agricultural modernization, the way of rural economic development and the key points of solving the problems of "agriculture, rural areas and farmers". Anhui is a typical agricultural province and its rural population accounts for two-thirds. Problems of "agriculture, rural areas and farmers" are always the fundamental issue of reform, development and stability in Anhui (2). Due to the regional differences of natural resources, industrial level, social culture and economic conditions, the development status of southern Anhui is different from that of northern Anhui and the two parts have their own distinctive modes of rural cooperative economic organizations. According to the field survey on rural economic development in Xuancheng City of southern Anhui and Fuyang City of northern Anhui, this paper tries to discuss the development ways of rural economy based on cooperatives so as to provide basis for the relevant decision making.

1 Economic development status of rural areas in Anhui Province

Agricultural industrialization management in Anhui Province has been fruitful since recent years. Leading enterprises and rural cooperative economic organizations developed rapidly. Especially after the publication of cooperative law in 2007, rural cooperatives have made a great progress. At present, there are 433 leading enterprises of agricultural industrialization with provincial level, 10 demonstration counties of agricultural industrialization and about 6000 professional cooperative associations of farmers. Leading industries include grain industry, animal husbandry, tea industry, aquaculture, traditional Chinese medicine industry and so on. Developing "a village with a characteristic product" has become an important way in promoting the income increase of farmers. Focusing on "a village with a characteristic product", various professional cooperative organizations of farmers provide better and better conditions for farmer's income increase.

1.1 Rural economic development of Xuancheng City in southern Anhui

Based on the 3 comparative advantages of economic zone bit, natural conditions and cultural origin, new agriculture with "characteristic, scale and brand" is formed in Xuancheng City which is the representative of southern Anhui. There are 3 economic plates of poultry industry, bamboo industry and high-quality rice industry, and 6 characteristic bases of forest food with hickory as the main, tea, silk and ramie, tobacco leaf of south Anhui, characteristic vegetable and aquatic products of Nanyi Lake. Scale of bases is enlarging and regional layout has become obvious gradually. 25 towns with characteristic agricultural products and more than 200 characteristic villages are emerged. High-scale development of industrial base promotes the rapid development of leading enterprises. There are 440 enterprises with a respective annual sales income of 5 million yuan or more, among which that of 32 enterprises is over 100 million yuan and that of 3 enterprises is over 1 billion yuan. There are more than 200 professional cooperative organizations of farmers, the development of which promotes the agricultural industrialization(3).
munity and waterfowl cultivation have not only become the well-known characteristic industries and highlights of new countryside construction in Shuangqiao Street of Xuancheng, but also become the role boosters of local farmers' income increase. The urbanization of Shuangqiao in recent years has developed rapidly, its agricultural structure has been optimized, and the living level of farmers has been improved obviously. In some well-off demonstration villages, the construction of village-level infrastructure is funded by farmers and government, which has made remarkable achievements.

1.2 **Rural economic development of Fuyang City in northern Anhui Province** Fuyang City in northern Anhui is a large but not a developed agricultural city. Agricultural industrialization of the city is still at the beginning. There are some prominent problems with agricultural industrialization such as low-level management, low technical content, short industrial chain, intensive processing, a lot of primary products and less intensive processing. The scale of leading industries is small. There are only 16 enterprises with a respective annual sales income of 100 million yuan or more. What's more, the quality of products is low without market competitiveness. Leading industries of agricultural industrialization in Fuyang have begun to set up and amplify benefit affiliating mechanism with the modes such as "cooperative + farmers", "corporation + association + farmers" and "corporation + base + farmers", and the forms such as contract farming, purchasing at protective prices, stock bonus and profit returning.

Rural economic development in Fuyang City of northern Anhui is slow due to low-level urbanization, obvious dualistic structure, lots of migrant workers and low-degree systematization.

2 **Analysis on the development modes of cooperative economic organization of farmers in Anhui Province**

According to the field survey in Xuancheng City of southern Anhui and Fuyang City of northern Anhui, the paper concludes some development modes of rural cooperative economic organizations in Anhui.

2.1 **"Agents leading mode"** Main form of this mode is "professional cooperative + farmers" which purchases agricultural products at protective prices. This mode always operates with one or several capable farmers as agents, and professional cooperative organization of farmers is set up based on corporation. Xingyu Poultry Professional Cooperative in Xuancheng has adopted this form.

This cooperative is funded in partnership by 5 people including Liu Deyi who is the secretary of CPC General Branch in the village. Its primary services are processing, transporting and selling agricultural products of poultry industry as well as ordering contracting duck from local villagers in the form of contract farming. Purchasing the meat duck from farmers at the fixed price of contract could avoid market risks to some extent. Farmers could determine their scale of cultivation after analyzing their costs and benefits according to the prices of duckling and fodder. Under the conditions of underproduction and low quality, business scope of the cooperative will expand to other villages while meat duck could be purchased at a low price from villagers there. The meat ducks will be frozen uniformly after processing into semi-finished or finished products. And they could be sold well at the proper season. The products of the cooperative were mainly transported to other places including Jiangsu, Zhejiang, Shanghai and Shandong. The ducks are not sold at local areas due to low consumption and many individual households who have monopolized the whole market in Xuancheng and set up their mature commercial networks with powerful competitiveness.

Xingyu Poultry Professional Cooperative in Xuancheng was founded according to the new cooperative law in October, 2007. Farmers who pay the membership fee could take part in it. The fee is 200 yuan per capita, and the maximum should be below 0.3 million yuan. If one or a collective organization wants to become a shareholder, their stock capital should be below 0.3 million yuan. The ratio of stockholding from other sources except the cooperative to total stockholding should be lower than 20%. Membership fee can not be taken as stockholding, so members can't acquire bonus, but they can get interest return twice. The first part is from the earnings of finished duck according to the trading volume of villagers. At the second time, the cooperative buys ducklings and fodder uniformly and then sells it to farmers. They will deduct relevant expenses when they purchase finished ducks. Farmers only need to pay a margin of 8 yuan for each duck, which could reduce lots of liquid capital and interest cost for farmers.

This type of cooperative has some characteristics. Rural households have formed a benefit alliance with agents, and they could get the profit return. The cooperatives provide the services such as technique and information for rural households and organize trained trainings for members. In addition, they offer many job opportunities for farmers in the links of processing and selling of agricultural products, which could help to transfer rural surplus labors successfully.

2.2 **"Leading enterprises driving mode"** The primary forms are "corporation + farmers" and "corporation + association + farmers". These cooperations are township enterprises for intensive processing based on local resources, which requires abundant agricultural resources, developed urbanization and convenient transportation.

Dongxing Poultry Co., Ltd. is located in Shuncun Town, i.e., the "land of milk and honey", which is near Shuangxi Town of Xuancheng. The town has a convenient transportation, 318 national highway, Xuancheng-Hangzhou railway and Xuancheng-Nanjing-Tongling highway go through the town. The corporation was funded by 21 individual duck-breeding households in October, 2006, and each one invested 0.2 million yuan to founded a large-scale private enterprise. The corporation has become the excellent leading enterprise of agricultural industrialization in Xuancheng City at present. The corporation brings along 20 to 30 rural households to develop agricultural products such as ducks. There is a fixed contract between corporation and farmers. The meat ducks of rural households can be pur-
chased at a protective price by ordering contracting duck. Although farmers can’t take part in other links of management as the primary participants, enterprises will employ some healthy farmers to involve them in slaughtering and processing meat duck.

The corporation operates with the objective of self-interest maximization, so the interest of farmers could only realize limited maximization. There is a game between corporation and farmers, which may lead to moral hazard. For one thing, if the market price is higher than contract price, some farmers won’t fulfill the contract. They can falsely declare that the ducks were dead and then sell it to other buyers at a higher price. The corporation can’t obtain any compensation for breach of contract. For another thing, the corporation requires farmers to buy its ducklings and fodder, which is the premise of purchasing farmers’ ducks at a protective price. However, the prices of ducklings and fodder are always higher than market price so as to ensure the benefit of corporation.

The operation efficiency of this mode is higher and the supervision cost is lower. This mode can provide all-round services for pre-production, mid-production and post-production, which promotes agricultural industrialization. What’s more, it can improve the standardization and commercialization of agricultural products, realize brand operation, and sell products at a high price with brand recognition, so as to realize mutual benefits of corporation and farmers. As the bridge between cities and rural areas, leading enterprises are favorable for breaking urban-rural dualistic structure and realizing single economy.

2.3 "Leading industry pushing mode" Leading industry plays a decisive role in national economy, the output of which accounts for a large proportion of gross national product. It has made a great contribution to the improvement of industrial structure and people’s living standard as well as the aspects such as additional value, tax, profit and employment. The concrete practices of "leading industry pushing mode" are developing local famous, special and excellent products with market as the orientation and local advantages as the support based on developing commodity economy.

Huiyun Jujube Professional Cooperative and Shangzhuang Tea Professional Cooperative in Xuancheng City are the typical representatives of promoting the income increase of farmers through developing local famous, special and excellent products based on local resources. Huiyun Jujube Professional Cooperative is organized by 8 core members, involving more than 300 members. According to the regulations, the cooperative provides services of information, jujube tree planting and marketing, meanwhile, it carries out independent management, self service as well as benefit and risks sharing. The primary products are high-quality products such as "Shuidong Candied Jujube" and the series of low-sugar preserved jujube. The foundation of the cooperative has further promoted the production mode of "farmers + cooperative" in Shuidong Town, and provided coordinated services in the process of pre-production, mid-production and post-production, which improves the sci-tech content of jujube products and their market competitiveness.

Shangzhuang Tea Professional Cooperative, which is made up of Shangzhuang Tea Factory for Primary Processing and 52 professional tea farmers, is located in Jixi County of Xuan Cheng City. It is founded in February, 2007, and has 122 members at present. The area of standardized organic tea base and production department amounts to 1500 m², and the products of which include Maofeng Tea, Jinshan Minwu Tea, Shangzhuang Shiyu Tea and Oulung. The tea of the cooperative has passed QS Certificate in 2007 and Organic Tea Certificate of Minister of Agriculture in 2008. The cooperative is awarded as one of "Top Ten" agricultural cooperatives by Xuan Cheng City. The professional tea team for providing integrative services of production, supply and marketing is formed.

Cooperatives which are competitive and developing based on leading industries require high-quality regional resources. It unites dispersive farmers with local characteristic products to produce, process, transport and market uniformly. For one thing, it could realize scale economy which is favorable for adopting mechanization and advanced technologies as well as saving cost. For another thing, it could bring about the integration of production, supply and marketing as well as the integration of trade, industry and business, which increases the value of agricultural products in processing and makes for the formation of brand effect so as to increase farmers’ income.

2.4 "Folk forces pushing mode" It’s a common mode in poor and backward areas. The folk forces include external forces and internal forces. External forces involve NGO, schools of new countryside construction and college student volunteers. Internal forces are the strong cooperative consciousness of farmers. The systematization of farmers is formed with the help of external forces based on farmers’ mental motivation.

Nantang Xingnong Cooperative in Fuyang City of Anhui Province is the typical one, which experiences the transition from cooperative organizations such as elderly association and literature team to rural cooperative economic organization. It’s only an organization for safeguarding rights initially, but the thoughts of scholars such as Liu Laoshi influences villagers in Nantang. Liu Laoshi reminded villagers that agricultural production should not be delayed for appealing, and suggested them joining together to do works. In August, 2003, Liu Laoshi led college students from many universities such as China Agricultural University to help villagers of Nantang with the establishment of the elderly association, so as to realize "being guaranteed, happy and progressive in the old age". Farmers could live in a healthy and interesting surrounding of collective culture. Under the premise of advocating the construction of socialist harmonious society and the development of cooperative economy, Yang Yunbiao led 24 farmers to find Nantang Xingnong Cooperative in April, 2004 based on the original association and propaganda team. Taking " servicing, facilitating and benefiting farmers" as the goal, the cooperative cultivates farmers’ sense of ownership, unifies value orientation of members and guides common participations with the spirits of "equality, widely participation, cooperation and mutual aid,
democratic governance, fairness and openness", so as to alter the situations of low benefit, high cost, high risk and weak market position of self-employed farmer, and open up a new way for rural economic development.

The cooperative has developed rapidly and expanded to other villages. The number of its members has increased from the original 40 to more than 600 at present. The cooperative mainly provides services of purchasing and selling uniformly as well as technical information for villagers, and pursues the maximization of member’s interest and social benefits. It has got help from the public in recent years and possessed its own production base of organic vegetable.

3 Analysis of economic development ways in rural areas of Anhui Province

Comparing the rural economic status and development of cooperatives in southern Anhui with that in northern Anhui, this paper considers that the economic development mode in rural areas of Anhui is closely related to regional development. There are two development modes being concluded as follows.

3.1 Combination of "folk forces pushing mode" and "agents leading mode". The combination mode of "folk forces pushing mode" and "agents leading mode" for rural economic development is applicable to less developed rural areas which has no characteristic agricultural products and competitive industries. For instance, there is a difference between rural areas and cities in Fuyang City of northern Anhui. Social culture and economic level are less developed in rural areas. Many migrant workers are youths. The cooperative with "folk forces pushing mode" is the sustenance for the remaining elderly and children. However, this mode of cooperative may lead to some problems such as irregular organizational structure and indefinite bonus mechanism. Stand aridization of the organizational structure, operation mechanism and the distribution way of bonus of cooperatives is the key to the improvement of efficiency.

3.2 Combination of "leading enterprises driving mode" and "leading industry pushing mode". This mode is applicable to developed areas of southern Anhui which has high-level urbanization and industrial cluster. Professional cooperative is developed for realizing agricultural industrialization, extending industrial chain, improving added value of agriculture and increasing farmers’ income. Regional economic development with the combination of "leading enterprises driving mode" and "leading industry pushing mode" has some key points. Cooperatives are strengthened and expanded with market orientation and their own brands are set up. "A village with a characteristic product" and characteristic agriculture such as Shuidong Candied Jujube of Xuancheng, Ningguo Hickory and poultry of Shuangxi Town are developed. In searching of government funds and technical support, government should respect farmers’ wills without excessively interrupting the selection of industrial structure. The advantages of villages and towns should be developed according to actual circumstances, so as to enable farmers to create their own roads for achieving prosperity.

4 Conclusions

There are some problems of different degrees with farmers in rural areas such as discrete and less-organized households, low educational level of farmers and management difficulties. Hence, developing rural regional economy is a long process. Rural cooperative economic organization is the key to promoting agricultural industrialization and the effective way for the development of rural economy. As a large agricultural province, Anhui’s development in northern and southern part is not balanced, which requires the definition of development ways based on local resources, development status and urbanization level. The combination of "folk forces pushing mode" and "agents leading mode" is applicable to the depressed areas in northern Anhui, while the combination of "leading enterprises driving mode" and "leading industry pushing mode" is applicable to developed areas in southern Anhui.

References


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生态城市可持续发展差异分析——甘肃省14个市州为例

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摘要 以中国甘肃省14个市州为研究对象，在生态城市和可持续发展理论的基础上，运用主成分分析方法和聚类分析方法，选取2007年甘肃省生态城市可持续发展指标因子36项。通过建立可持续发展生态城市的评价指标体系分析了甘肃省生态城市可持续发展水平。研究结果表明：通过主成分分析，甘肃省生态城市可持续发展存在明显的地域差异，其影响因子可以将36项指标因子概括为综合经济因素、工业发展因素、土地利用因素、环境质量因素、基础设施因素、人口因素6个方面，其中8项指标决定综合经济因素，8项指标决定工业发展因素，6项指标决定土地利用因素，4项指标决定环境质量因素，7项指标决定基础设施因素，4项指标决定人口因素，其累积贡献率达到92.398%。通过Q型聚类分析，绘制出甘肃省生态城市可持续发展聚类图系，将甘肃省14个可持续发展生态城市划分为3个等级：较强区、欠发达区和落后区。其中，前三个等级中城市，较发达区6个城市，欠发达区5个城市，落后区2个城市，并针对这4种区域类型分别提出了相应的建议。可持续发展生态城市的对策建议，为可持续发展生态城市建设的总体战略目标和分阶段目标的制定，建设的原则与实施步骤、评价指标体系与评价方法的研究提供理论依据。

关键词 可持续发展；生态城市；主成分分析；聚类分析；甘肃省

基于合作社的安徽农村区域经济发展的途径探析

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摘要 以中国皖南区域和皖北区域为例，介绍了安徽农村区域的经济发展现状。区域经济发展水平、自然条件、文化因素3大比较优势，形成了“特色+规模+品牌”的新型农业发展模式。农业生产发展迅速，工业发展水平提高，科技含量高，龙头企业规模小，市场竞争能力不高。分析了安徽农村合作经济组织的4种发展路径及其特点。经济人领导型：其主要形式是“专业合作社+农户”，采用合作化的经营模式，体现了“经济人”领导型。创业型企业：其主要形式是“公司+农户”或“总部+合作社+农户”，这些公司一般均具有产品产地、原材料供给单位、加工服务中心等优势。企业家创新型企业：其主要形式是“公司+农户”或“总部+合作社+农户”，这些公司一般均具有产品产地、原材料供给单位、加工服务中心等优势。 Fouquet企业：其主要形式是“公司+农户”或“总部+合作社+农户”，这些公司一般均具有产品产地、原材料供给单位、加工服务中心等优势。