

Study on the development strategy of Chinese herbal medicine planting industrialization

Han Chen¹ Zhibo Zhao² Uuganbayar Tumurkhuu¹*The corresponding author*

1. Mongolian University of Science & Technology (MUST), Graduate School of Business, Ulaanbaatar, Mongolia46/520

2. Inner Mongolia Medical University, First School of Clinical Medicine, Inner Mongolia, Hohhot010020

Abstract: As the treasure of Chinese traditional culture, Chinese herbal medicine plays an active role in the prevention and treatment of diseases in the Chinese nation. In recent years, the Chinese herbal medicine planting industry has witnessed vigorous development, and its industrialization has become one of the major research topics. The Chinese herbal medicine planting industry is developing towards industrialization, which can not only drive the rapid development of a series of related industries, especially agriculture, but also increase farmers' income and significantly improve the overall living standard of farmers in China. This paper discusses and studies the significance, current situation, main problems and effective development strategies of the industrialization of Chinese herbal medicine planting in order to find new ideas for the industrialization of Chinese herbal medicine planting in China.

Key words: Chinese herbal medicine planting; Industrialization development; Effective strategy

Introduction

Chinese herbal medicine is taken from nature and has good effects. It has outstanding effects on disease prevention and treatment, especially the relatively affordable and low price, and has little toxic and side effects. Therefore, more and more people are gradually exploring the methods and models of Chinese herbal medicine cultivation. The Chinese herbal medicine cultivation industry will develop rapidly and become one of the industries with great development potential in China and the world. The development of Chinese herbal medicine planting industrialization is a systematic project from a macro perspective. It involves many aspects and covers a wide range of contents. However, from the current situation, the overall development of Chinese herbal medicine planting industry in China is still unsatisfactory and at a low level. Therefore, it is necessary to put forward targeted suggestions for the development of Chinese herbal medicine planting industrialization in order to better serve agriculture, rural areas and farmers, and improve China's overall economic level and comprehensive national strength.

1 The significance of the industrialization of Chinese herbal medicine planting

First, it is conducive to meeting the internal needs of the Chinese people for medical care. The Chinese herbal medicine industry has a history of thousands of years in China. Chinese herbal medicine can play a positive and important role in disease prevention and treatment, and is also conducive to the reproduction and long-term development of the Chinese nation. At the same time, Chinese herbal medicine also has the special effect of prolonging life, nourishing and strengthening the body, and has a unique role in the treatment of special diseases, so it is warmly loved and respected by the people of our country.

[11] Yanhui Cui, Yi Wang Flipped classroom and its application in College English teaching [j]China audio visual education, 2014 (11): 116-121

[12] Mingxing Zeng, Guiping Li, Qingping Zhou, Hongzhi Xu, Jianfeng Dong, Zunyue Qin, Xin Guo Construction of deep learning field based on the integration of MOOC and flipped classroom [j]Research on modern distance education, 2016 (01): 41-49

[13] Haiying Pan, Yue Yuan Problem analysis and Improvement Countermeasures in the exploration of Ideological and political practice of college foreign language course [j]Shandong foreign language teaching, 2021,42 (03): 53-62

[14] Jing Liu, Jiasheng Hu Research on the needs analysis of Ideological and political elements of College English curriculum based on the concept of general education [j]Audio visual teaching of foreign languages, 2021 (03): 24-29+4

[15] Yingqian Wen The theoretical logic and teaching practice of telling Chinese stories well in College English teaching [j]Social scientist, 2022 (08): 148-154

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Author information:

Chenruicong (2002-), female, from Shenyang, Liaoning Province, is a undergraduate student, mainly engaged in English education research.

*Corresponding author: kongningning (1981-), from Shenyang, Liaoning Province, associate professor, mainly engaged in English education research.

Second, it is conducive to meeting the demand of TCM enterprises for the quality and quantity of raw materials. At present, China is facing serious environmental pollution and ecological imbalance, and long-term use of chemical drugs will have obvious toxic and side effects on human body. The toxic and side effects of Chinese herbal medicine are relatively small, which can better ensure human safety. In general, strengthening the industrialization development of Chinese herbal medicine planting can protect the wild medicinal resources of China to some extent, and is conducive to effective adjustment of the local industrial structure, and greatly improve the utilization rate and production capacity of land. Finally, the goal of sustainable development in China can be achieved .

2 Current situation and existing main problems of industrialization of Chinese herbal medicine planting

1. Lack of talents in Chinese herbal medicine planting industry

The industrialization of Chinese herbal medicine planting is the premise of the development of the Chinese herbal medicine industry, and the talent of Chinese herbal medicine planting industry is an important guarantee to ensure the innovation and sustainable development of the overall planting industry. At present, Chinese herbal medicine planting industry talents in China are mainly farmers. The number of talents with professional planting technology and ability is small, the quality is not high, and formal training and guidance are also lacking. The cultivation technology of farmers only depends on personal planting experience. In short, the primary problem facing the development of the industrialization of Chinese herbal medicine planting is the lack of relevant talents, which can not keep up with the actual needs of industrial development .

2. The planting method of Chinese herbal medicine is not advanced enough

In the Research on Countermeasures for the Industrialization Development of Chinese Herbal Medicine Planting, Li pointed out that from the perspective of the current situation of the production and processing industry of Chinese herbal medicine, most of the farmers who plant Chinese herbal medicine still use traditional planting methods, which are not guided by scientific and effective methods, and the production is not standardized, resulting in the final part of the quality of medicinal materials not meeting the specified standards, which directly affects the steady development of the industrialization of Chinese herbal medicine planting .

3. The planting scale of Chinese herbal medicine is small

Astragalus, cistanche, licorice and other traditional Chinese medicines have a good reputation in the southern market, especially in the Yangtze River Delta and Pearl River Delta regions, and become the leading brands in the “Mongolia” food and medicine health care market. These traditional Chinese medicines have become the main force driving the local industry to alleviate poverty. However, due to the large area of traditional Chinese medicine resources and the status quo of sporadic cultivation, the local planting industry industrialization development level is low, and it is difficult to benefit the local people’s economy, Finally, it is difficult for the planting industry to achieve large-scale and standardized development.

4. Lack of perfect industrial chain support

Generally, the industrial chain is mainly divided into three main links: upper, middle and lower. Chinese herbal medicine planting belongs to the upstream industry, but at present, China lacks the cooperation of the relevant industries in the middle and lower reaches. The imperfect industrial chain will also affect the industrialization development of Chinese herbal medicine planting industry. All links are closely linked, and problems in any link will affect the effective operation of the whole chain, and it is difficult to form a strong economic pulling force.

3 Effective strategies for the industrialization of Chinese herbal medicine planting

1. Strengthen talent introduction and training

From a macro perspective, in order to effectively promote the industrialization of Chinese herbal medicine planting, the talents needed to be introduced in the industry are mainly concentrated in four categories. The first category is Chinese herbal medicine resource protection talents, whose main responsibility is to protect wild Chinese herbal medicine, especially to monitor the endangered wild Chinese herbal medicine resources in real time, and finally achieve the purpose of protecting high-quality Chinese herbal medicine resources. The second type of talents are Chinese herbal medicine cultivation management and harvesting talents. Such talents are mainly responsible for the irrigation, fertilization, weeding and harvesting of Chinese herbal medicine in the field. Each link directly affects the final quality of Chinese herbal medicine. The third category of talents is technical guidance and promotion talents. The development of the industrialization of Chinese herbal medicine planting requires professionals to provide farmers with on-site guidance on the science and technology of Chinese herbal medicine planting and the planting technology of pharmaceutical farmers, and strive to make the Chinese herbal medicine planting industry more standardized and large-scale, and constantly expand the planting scale to ensure the quality of Chinese herbal medicine from the source. The fourth category of talents is Chinese herbal medicine planting industry management and operation talents. The main responsibilities of such talents are to establish good cooperative relations with enterprises and governments, and promote the integrated development of Chinese herbal medicine planting industry .

In order to fully introduce the above four types of talents and realize the development goal of the industrialization of Chinese herbal medicine cultivation in the shortest time, on the one hand, the government should strengthen policy support, such as improving the attractiveness of salary treatment for professional talents, optimizing and improving relevant systems, so as to fundamentally protect the rights and interests of technical talents, broaden the learning and promotion channels of professional talents, and carry out targeted and

planned training for relevant talents, It can even train talents jointly with local colleges and universities to truly meet the internal demand of advanced talents for the development of Chinese herbal medicine planting industrialization. On the other hand, strengthen the training of talents, take local schools and medical colleges as important incubation bases, open disciplines related to Chinese herbal medicine cultivation, develop professional talent training methods, and develop personalized talent training programs based on local actual conditions, aiming at effectively solving local practical problems, and reserve more talents for the development of Chinese herbal medicine cultivation industrialization . In addition, local schools should establish stable and long-term cooperative relations with agricultural extension departments, agricultural science institutes, etc., conduct regular and systematic training for professionals, promote the in-depth integration of production, education and research, provide a broad space for professional practice, and enrich professional practice experience.

2. Optimize the planting industry model

The industrialization of Chinese herbal medicine planting cannot be developed without the support of a systematic and professional industrial model, which is conducive to achieving the goal of sustainable development as soon as possible.

First of all, effectively integrate the Chinese herbal medicine planting industry to promote its steady development towards the goal of enterprise. Throughout the current Chinese herbal medicine planting industry in China, both planting and sales have strong localization characteristics, and the business scale is relatively small. The Chinese herbal medicine planting technology needs to be further improved, resulting in the slow development of related industries. In order to effectively change this situation, we can adopt the mode of “company+farmer” to plant Chinese herbal medicine. The company provides the technology and varieties, and the company signs the purchase order contract of Chinese herbal medicine with the farmers. This can greatly reduce the planting risk of farmers, fully mobilize the enthusiasm and initiative of farmers in planting, and on the other hand, it is conducive to the continuous development of Chinese herbal medicine planting towards scale, It is more convenient for unified management, which is conducive to achieving win-win benefits for both the company and farmers, and ultimately promoting the rapid development of local agriculture.

Secondly, improve the relevant industrial chain. Chinese herbal medicine planting belongs to the upstream stage of the entire industrial chain. Only by forming a matching midstream and downstream industrial chain can it be more conducive to promoting the industrialization of the entire Chinese herbal medicine planting. In this regard, China can develop the industry of deep processing of Chinese herbal medicine, and process Chinese herbal medicine into products more conducive to export, significantly improving the value of Chinese herbal medicine. For example, a pharmaceutical factory can process a single Chinese herbal medicine into two types: sugar-containing and sugar-free, and then enter the subsequent sales link, which can effectively form a complete industrial chain, which has positive practical significance for the development of upstream, midstream and downstream industries .

3. Expand the scope of planting scale

In order to promote the industrialization of Chinese herbal medicine planting to scale and intensive, the local government should actively carry out cooperative planting modes such as “cooperatives+bases+farmers” and “enterprises+bases+farmers” to achieve the effect of “1+1>2”. On the one hand, it is beneficial to fundamentally avoid resource waste, on the other hand, it can significantly improve the income of farmers and improve the market competitiveness of Chinese herbal medicine as a whole, which is an effective way to ensure the quality of Chinese herbal medicine .

In addition, the establishment of seedling breeding base of Chinese herbal medicine can fundamentally solve the main problem of the continuous reduction of Chinese herbal medicine resources, especially the breeding and protection of endangered Chinese herbal medicine resources. The specific approach is to select the best breeding base to carry out the improved variety project, and introduce a series of high-quality science and technology such as genetic engineering, modern biology, etc. to conduct in-depth research on the excellent varieties, and innovate on the original basis, so as to bring a broader market for Chinese herbal medicine and bring greater profit space for enterprises and farmers .

Finally, adhere to the concept of green development and take the road of “green Chinese medicine” development. China should establish green organic farms to produce green organic food, especially the traditional methods of pesticide control of diseases and pests should be effectively abandoned and replaced by gene control technology. Only in this way can we ensure that the cultivation of Chinese herbal medicine in China continues to develop in the direction of green and harmless, and we can also establish the planting mode of green organic food as soon as possible .

4. Improve agricultural production mode

Effective improvement of agricultural production mode is conducive to fundamentally improving the quality and output of Chinese herbal medicine planting, thus creating favorable conditions for the development of China’s traditional Chinese medicine industry, and promoting the realization of its industrialization development goal as soon as possible.

First of all, we should attach importance to the development of Chinese herbal medicine planting technology to create favorable opportunities for the industrialization development of China’s agriculture. For example, the planting of Chinese herbal medicine should adopt soilless cultivation technology, and scientific researchers should cultivate more medicinal plants with the support of soilless technology, so that the planting technology will continue to develop towards industrialization. In addition to soilless cultivation technology, in the process of industrialization of Chinese herbal medicine planting, relevant personnel should also strengthen the application of other advanced technologies to promote the industrialization of Chinese herbal medicine planting to face the world and to the world .

Secondly, increase the research and application of drip irrigation technology. Drip irrigation technology has obvious advantages. It can effectively save water and promote the efficient development of agriculture. This technology has been successfully applied to the Chinese

herbal medicine planting industry in many countries, which deserves the attention of Chinese researchers .

Finally, promote the informatization construction of Chinese herbal medicine planting industry and give full play to the advantages of e-commerce. E-commerce is an advanced trade mode based on the effective development and application of information technology and science and technology. Its biggest advantages are low cost, high efficiency and convenience . Especially for remote areas, if they want to realize the industrialization of Chinese herbal medicine planting, they must not leave the role of e-commerce. It is suggested that the industrialization of Chinese herbal medicine planting can be developed synchronously in the direction of information flow, logistics and capital flow based on e-commerce.

Epilogue

In short, with the rapid development of China's traditional Chinese medicine industry, the advantages and models of the industrialization of Chinese herbal medicine planting are becoming more and more obvious. After entering the 21st century, China's agricultural sector has developed rapidly, and the price of Chinese herbal medicine has also increased significantly. The difference between the prices of food and medicine is extremely obvious. Local governments, enterprises and farmers should seize the opportunity to expand the planting base of Chinese herbal medicine, improve the agricultural ecological environment, promote rural development, and optimize the economic structure by scientifically and reasonably using local cultivated land, mountain and other land resources, Substantially increase the economic income of farmers. From this point of view, the practical significance of the industrialization of Chinese herbal medicine planting is prominent. With the gradual increase of demand for Chinese herbal medicine in the traditional Chinese medicine market, Chinese herbal medicine should attract the attention of the industry in view of its obvious advantages of quick effect, small investment and high income. In the future, the industry will usher in huge development opportunities.

Reference:

- [1] Huang Chaohua, Xia Junwei, Hu Songyan, et al. The current situation of the industrialization of Chinese herbal medicine cultivation in Guangdong Province [J]. *China Hi-Tech*, 2018 (20): 3-5
- [2] Liu Qingju. Research on the important value of aconite planting in agricultural planting [J]. *Agriculture and Technology*, 2017,37 (13): 125-126
- [3] Min Hang, Mao Xiangliang, Zhan Guiqiu. Development status and suggestions of *Houttuynia cordata* planting industry in Zhejue Town, Weining County [J]. *Agricultural Technology Service*, 2018,35 (4): 103-104
- [4] Li Tongyi. Research on the countermeasures for the industrialization of Chinese herbal medicine planting [J]. *Seed Science and Technology*, 2022,40 (9): 133-135
- [5] Song Shaoxian. Suggestions on the planting and industrialization of Chinese herbal medicine in Dongying saline-alkali land [J]. *Rural Science Experiment*, 2020 (11): 22-24
- [6] Fan Qizhi. Overview of the development of Chinese herbal medicine cultivation in Xing'an League [J]. *Special economic animals and plants*, 2021,24 (2): 35-36
- [7] Fan Xiaoyan. Development and trend of Chinese herbal medicine raw materials in China [J]. *Electronic Journal of Clinical Medicine Literature*, 2018,5 (96): 176
- [8] Luan Ling, Zhao Baoyuan, Li Xiang, et al. Introduction to the compound management technology of improved varieties of beans and pears and Chinese herbal medicine in Taizhou [J]. *Southern Agriculture*, 2022,16 (3): 51-56
- [9] Zeng Jikai, Gao Ming. Necessity of industrialization development of genuine Chinese medicine tangerine peel [C]// *Proceedings of the 3rd Annual Academic Conference of Lingnan Chinese Herbal Medicine Resources Professional Committee of Guangdong Pharmaceutical Association in 2018*. 2018: 43-87
- [10] Xin Yanmei, Fu Wei, Wang Qinglei. Analysis of the current situation of Chinese herbal medicine planting industry in China [J]. *China High-tech Zone*, 2018 (24): 228
- [11] Yu Lihong. Planting Technology of Chinese Herbal Medicine in Fuyu County [J]. *Friends of Farmers to Get Rich*, 2020 (13): 91
- [12] Peng Xin1, Ji Qingyong 2, Wang Ruwei 3, et al. Technical innovation and industrialization of the whole industrial chain of Clover germplasm and ecological planting mode and product R&D [Z]. *Zhejiang Medical College*. 2018
- [13] Xin Yanmei. Research and development of common Chinese herbal medicine planting information service platform based on Android [D]. *Shandong: Shandong Agricultural University*, 2018
- [14] Ying Jianping. Chinese herbal medicine Longyou bamboo forest is growing under the forest [J]. *Zhejiang Forestry*, 2018 (5): 22-23
- [15] Wang Jidong. Current situation and analysis of the industrialization of traditional Chinese medicine in Yanqing District [J]. *Agricultural Science and Technology Communication*, 2018 (3): 16-17