

# An Exemplary Base of Rural Popular Science is the Effective Method of Spreading Agricultural Science and Technology

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## Abstract

**An exemplary centre of science and technology of vegetable in Guiyang municipality (following called Centre), set up by vegetable affairs office of Guiyang, which is the only unit that was named the national exemplary base of rural popular science. The centre is intended for peasants in Guiyang area, leaders are in charge of district, county and countryside of Guizhou province and technical staffs, utilizing its functions of exemplary experiment and scientific and technical exploitation, technical popularization and radiate promotion, scientific and technical training and popular science education etc. And adopting many kinds of methods of demonstration and technical popularization to help peasants grasp the advanced technology of planting vegetables, to show and popularize the advanced agricultural science and technology, to provide the chance to visit and train for varying fields and to guide peasants from poor to rich with science and technology.**

## Key Words

**Exemplary base of rural popular science; spread agricultural**

**science and technology; exemplary experiment; technical popularization**

## **Introduction**

**Guizhou is the minority nationality region, located in a western mountain area. Owing to vast area and large population, and the limit of economic and traffic conditions, the rural population has less chance of accepting scientific and technical knowledge than that of people in city and other areas. Which affects straightly the understanding and application of agricultural advanced technology of rural peasants. That's also the one of reasons that peasants of our province have lower per capita income than average standard of western area. To counter this situation, departments concerned taking varied measures to spread science and technology. Among of them, compared with the activities of great mammoth but short time as that science and technology, culture and hygiene goes to countryside, popular science propaganda car and working force of minority nationalities entered every households in village, exemplary base of rural popular science has its special functions and actions on the side of popularizing the rural advanced technology and new achievements and varieties of agriculture, spreading information of rural scientific and technical and method of advanced management, and bringing along rural masses are rich with science and technology. An exemplary centre of science and technology of vegetable in Guiyang municipality**

**(following called Centre), set up by vegetable affairs office of Guiyang, which is the only unit that was named the national exemplary base of rural popular science. The centre is intended for peasants in Guiyang area, leaders are in charge of district, county and countryside of Guizhou province and technical staffs, utilizing its functions of exemplary experiment and scientific and technical exploitation, technical popularization and radiate promotion, scientific and technical training and popular science education etc. And adopting many kinds of methods of demonstration and technical popularization to help peasants grasp the advanced technology of planting vegetables, to show and popularize the advanced agricultural science and technology, to provide the chance to visit and train for varying fields and to guide peasants from poor to rich with science and technology. The centre plays an important part in the field of guiding peasants separate themselves from poor and increase their income with science and technology, adjusting the economic structure of agriculture in countryside etc. Which shows good social and economic benefit and proves an exemplary base of rural popular science is the effective method of spreading agricultural science and technology.**

### **Process of Scientific Popularization**

**Spreading job worked by the team consists of technical staffs, scientific and technical households in the spreading area, emphasized training households and governmental leaders in the form of market.**

**That uses the peasants' demand for economic benefit to bring along the demand for advanced technology. The basic route of "Centre" in the course of scientific and technical popularization: new technology—demonstration—train—organization and popularization—collecting fees—realizing profits. The detailed spreading course as following:**

### **1. Exemplary experiment and exploitation of science and technology**

**As the base of exemplar, it should possess the advancement, adaptability and technology of satisfying market demand firstly. The centre, through setting up, importing and exploiting the concerned technology, and at the same time establishing emphasized training households and exemplary households of scientific and technical, showing and demonstrating really the advanced agricultural technology in the form of good material objects and fine profits and arousing the demands of science and technology of peasants with using good results.**

#### **1.1 Set up and import the advanced technology**

**Importing and improving the advanced technology as the basic content of "Centre" demonstrating. One is the system of elevated computer automatic mini-sprinkling irrigation, which is the important project of centre irrigation system of economizing on water. That came into being on the basis of learning, importing, accepting and creative improving, according to the characteristics of climate and vegetable growth, and through a long-term practice and**

experiment repeatedly on vegetable crops' irrigation of economizing on water and on water and on completing varied factor supply(mainly including manure, water, medicine, plant growth regulator, weed killer etc.) through irrigation equipment. Two is setting up many kinds of cultivated means of shack that consists of grow seedlings' production shack (adopting plat grow seedlings of box soil-less gene, necessary facilities of slight spraying atomize), appreciate shack(according to the educated function of centre popular science, the special fruits and vegetables' appreciate shack was designed painstakingly, which integrates science and technology, gardens, art, culture and variety of vegetables, and also integrates knowledge, interest, sightseeing, playing.), water culture shack(the horizontal cultivation paired up with vertical pillar cultivation to realize the product of six-seasons clean vegetables in a year), cultivate shack(taking concave organic matters to cultivate and plant the king of boundlessly growing eggplants and fruits).

## **1.2 Exploitation on science and technology**

On the basis of setting up and importing, making use of technical advantages of "Centre" to exploit the technology that can fit and meet the local demand of market. Which lays a foundation of technical popularization and radiate promotion. First is the import of new assortment, through experimental sifting to choose about 50 kinds of breeds that are suitable for local cultivation and structure

**adjustment. Meanwhile, popularizing the improved varieties and good methods with necessary rules of concerned cultivated technology. Second is anti-seasonal cultivation in outdoor. In accordance with the areas in which both the high temperature of national summer sweltering heat and typhoon and rainstorm occurred frequently, the kind of green leaves anti-seasonal vegetables are produced, mainly including celery, heart of spinach, coriander, Shanghai cabbage, romaine lettuce, bean seedling, black cabbage and milk Chinese cabbage etc. We have summarized a whole set of cultivated technology regulations gropingly. Third is cultivating a series kind of Chinese cabbage that has strong winter hardiness. At present, two kinds of good varieties have made up hybrid generations by selection. Cultivating the hybrid varieties of chilli that is suitable for chilli processing industry of Guizhou. Now that two kinds of hybrid varieties have been bred by selection.**

### **1.3 Setting up an exemplary household of agricultural science and technology**

**Through the aim and train of several people in the village, setting up an exemplary household of agricultural science and technology. Under their demonstrating effects, bringing along and affecting other peasants effectively.**

## **2. Technology Popularization and Radiate Promotion**

### **2.1 Going on varied levels popularization**

**Guizhou has the characteristics of karst landforms and varied nationalities, which leads to the objects of scientific and technological popularization are widely dispersed and causes uneven in quality of science, technology and culture. To counter this situation, the “centre” taking the method of varied levels spreading during the course of popularization of new variety and setting up the product base of non-environmental polluted vegetables for export. Firstly going on spreading on exemplary households of science and technology to let common peasants see the profits of them, then to arouse their demand for advanced science and technology. To promote the spread of advanced agricultural technology and enlargements of spreading the results through their mutual interchange between peasants. There have had about 20 kinds of varieties are popularized in the market among the 50 or so new varieties that had been imported by “Centre”. That popularized area exceeds 10000 mu, benefited peasants exceed about 3000 families, about 10000 people, playing a vigorous effect on adjusting the plant structure of vegetables variety and on increasing income for peasants.**

## **2.2 Train simultaneously on technology and consciousness**

**Adopting advanced product technology of vegetable requires be trained. Meanwhile also help peasants set up concerned consciousness: market consciousness, quantity consciousness, scale consciousness and sincere consciousness through train. To let them become producers**

that can satisfy market demand, fit market and can control market. Therefore, Centre develops train of varied levels and styles to train about 20000 cadres of villages and towns, peasants and technical staffs. It also provides the chance of practice and popular science education to students, to let 2000 colleges and polytechnic school students practice and let 15000 students of middle school and primary schools join the educational activities of popular science.

### **2.3 Both government and medium organization join it**

Both government and medium organization is the organizer, also the force of promoting and guaranteeing for promoting the popularization makes achievements. During the course of popularization of new variety and setting up the product base of non-environmental polluted vegetables for export, excepting the leadership of local government, also setting up vegetable research committee, which develops spreading activities through attracting members, introducing and spreading new technology, new variety and new product among members and exchanging information of supply and demand etc. That brings actual effects to peasants and let them have higher profits.

### **2.4 Develop agricultural order forms**

The final aim of popularization of advanced agriculture technology is to meet market requirement and peasants' increased income. To take new technology as starting points and to take

peasants' increased income as terminal points. The key to popularization of advanced agriculture technology is the realization of profits. Centre connects peasants and market with the link of technology, developing agricultural order forms vigorously on the basis of market, quantity, scale and sincerity and letting peasants develop from every family product to scope product. That improves economic benefits with satisfying and fitting market requirements. "Centre" has built up 3000 mu. non-environmental polluted vegetables for export which have been exported to Japan, Hongkong and Zhujiang River Delta. So the average income of peasants on the base is 591.6 yuan.

## Results and Comments

### 1. Results

Through the demonstrated popularization of "Centre", planting structure of vegetables varieties of Guiyang municipality has been adjusted. To strengthen the market consciousness, quantity consciousness, scale consciousness and sincere consciousness of peasants. To taking these four points as training content improves quality of peasants greatly and strengthens the consciousness of peasants as the main body of market. This is the key to help peasants regain the initiative. That shows the advanced proper agricultural science and technology that plays a very important role in increasing

peasants' income.

## **2. Comments**

- 2.1 Helping peasants of Guiyang area grasp the advanced technology of vegetable plant and set up modern consciousness**
- 2.2 Showing and popularizing the advanced agricultural science and technology to people**
- 2.3 Proving the chance of visit and train to people of varied levels**
- 2.4 Guiding peasants separate from, poor and increase their income with science and technology**

## **Discussion**

**Qwing to the small and scattered area under cultivation, peasants distribute extensively and their uneven qualities, the profits of spreading is imbalance. The same technology and the same spreading method, for peasants understand differently about technology, the produced profits are also different. How to let imbalance become relative balance is the challenge to theory and practice of scientific and technological popularization. Interaction is the one of important characteristics of modern spreading. Create on interaction is the key to solving the profits of scientific and technological popularization from imbalance to balance, especially the creation of the interactions between spreading main body and accepted audiences and the interactions between colony of accepted audiences.**

## Conclusion

**As exemplary base of rural popular science, “Centre” takes economic benefits as centre and integrates the technical and economic benefits closely during the course of spreading science. This is the key to success of spreading. Meanwhile, the technology of spreading has feasibility, adaptability and characteristics of meeting demands. Its spreading method conforms to the general laws of scientific and technological popularization and letting popularization has better results.**

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## References

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