

## BUILDING A TERRITORIAL INDUSTRIAL CHAIN OF DENDROBIUM USING VOLCANIC ROCKS IN CHINA

[The Shicha Village in China's Hainan Province](#) implemented with great success an innovative way to boost economic development by enhancing local resources. It consists in using the volcanic rocks that characterize the area to grow dendrobium, a type of orchid which has many commercial uses in China.

Starting in 2015, the village managed to build a whole sustainable chain of Dendrobium for industrial purposes.

The Shicha Village is located at the foot of an inactive volcano and the surrounding landscape is scattered with volcanic rocks generated by the eruptions that occurred millennia ago. Local people traditionally use these volcanic rocks for building houses. However, from the point of view of agricultural production this volcanic lava area, with more rocks that soil, with an undulating terrain where water storage is difficult, has been used to only cultivate drought-tolerant crops to ensure subsistence feed.

Looking for new ways to improve local economy and curb emigration by taking advantage of the resources of the territory, after years of research and experimentation, it was discovered that volcanic rocks could be an excellent substratum for growing Dendrobium plants. The porous surface of the volcanic stone helps Dendrobium to stabilize and develop its root system. The volcanic stone also maximize the absorption of selenium, magnesium and other trace elements to provide valuable nutrients for the growth of the orchids.

Based on these studies, in 2015 the Shicha Village began to develop a new economic project to promote the Dendrobium cultivation adopting a management model composed by an enterprise, a professional cooperative and local farmers. The cooperative was set up to ensure the cooperation between the enterprise and the villagers. Farmers and villagers participate in the project through their lands and their work. The enterprise is responsible for the management of capital contribution, seedlings and technology.

Dendrobium gardens have been built in the forests surrounding the village, where the farmers insert Dendrobium sprigs into the many porous holes that make the surface of volcanic rocks and take care of their cultivation. These gardens have been providing jobs for hundreds of villagers. The planting area of Dendrobium in Shicha Village has exceeded 500 mu, and it is expected that the final planting area will reach 1,000 mu.

The project has ensured important results producing and selling Dendrobium plants, used in China as bonsai for ornamental purposes for their beauty, but also as a basis for traditional medicine products.





Dendrobium also can be further processed into decoctions, wine, cosmetics and other products. Through Internet platforms, the Village of Shicha continues to expand sales of Dendrobium products.

In addition, the Shicha Village was able to develop the tourism sector, driving more tourists at climbing the volcano slopes and visiting the wonderful orchid gardens. The beautiful images of the *alamy stock photo* available by internet and showing the gardens also contribute to the success of the initiative. The Dendrobium Conservation Centers, breeding labs for Dendrobium plantlets, have been converted into scenic spots and the lava stone constructions have been enhanced to accommodate tourists in their stay.

In the Village a number of restaurants featuring Shishan cuisine and new volcano coffee houses have been opened. The Village organizes excursions to ancient places. A new farmer's market was also set up, where farms can promote their food products during the visits and sell them to the tourists.

Now, the village has become a popular tourism destination, lifting local villagers out of poverty. The village's annual income per person grew from 3,600 yuan (about 508 U.S. dollars) in 2013 to 24,000 yuan (about 3,386 U.S. dollars) in 2019.

Another result of great impact is that Shicha Village has attracted more than 30 college students to return to their hometowns to start businesses, injecting new vitality into the development of the village and new source of villagers' income.

The results of the Shicha Village are published by the website presenting the ongoing initiatives within the framework of the [strategy launched in 2013 by the Government of China for poverty alleviation](#). The website tells the stories of many local communities that have managed to implement initiatives investing in the specific resources of the territory and in its typical products.

### To know more

[Video in Facebook - chinaplusnews](#)

[Video in Facebook - chinaplusnews](#)

[Article and video in global.chinadaily.com](#)

[Article in chinanews.com](#)

[Article in globaltimes.cn](#)

[Article in gameapt.com](#)

[News and photos in p.china.org](#)

[China's Poverty Reduction Online - china.org.com](#)

