Edible fungus industry stimulates rural revitalization in Guiyang

By YUAN SHENGGAO

As a key edible fungus demonstration zone in Guizhou province, Baiyun district in Guiyang city is integrating the industry with modern technologies and boosting the high-quality development of the entire industrial chain through a series of initiatives, said local officials.

Edible fungus is one of Guizhou's 12 major characteristic agricultural industries. In the past four years, the province's edible fungus output has increased by 51.4 percent per year and its value has increased by 60.7 percent per year.

In 2020, the output of edible fungi in Guizhou reached 1.48 million metric tons, with an output value of 18.4 billion yuan (\$2.89 billion).

The growth rate ranks first in the country, and the overall scale pushes it into the top 10 in the country.

As of the end of October, a total of 21 edible fungus bases have been built in Baiyun. Since 2016, 176.9 million fungus sticks have been planted, with an output of 86,700 tons and an output value of 1.02 billion yuan.

The edible fungus in Baiyun is equipped with a full chain tracking management model from the production, cultivation, processing and certification to testing phases.

Liao Yiren, manager of Intelligent Fungus Cloud, an online platform for the entire industry chain of edible fungi, said based on cutting-edge technologies such as big data, the internet of things and artificial intelligence, the platform focuses on areas of production, planting, processing, supply and marketing, certification and testing.

To date, the platform has established 31 data collection points, with 15 edible fungus companies, cooperatives, bases, and large households.

Guizhou Jukong Technology is one of the enterprises on the platform. It has established the first intelligent base for rare edible fungi in Baiyun, which not only improves the standardization and automation of edible fungi production, but also the utilization rate of agricultural resources as well as easing the shortage of land resources.

Zou Liqin, 49, a local villager in Asuo village working at the edible Success of agricultural sector sees output and profits of Guizhou province rise substantially



Clockwise from top left: An edible fungus sprouts at a farm in Guiyang, Guizhou province. A worker picks edible fungus at a factory in Guiyang. A farmer holds a basket of edible fungus ready for selling. PHOTOS PROVIDED TO CHINA DAILY

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Ma Ningyu, deputy Party secretary and acting mayor of Guiyang

bases of edible fungus have been built in Baiyun district, Guiyang fungus base, said she is thankful for the job. "Working eight hours a day, I can earn 4,000 yuan a month. It takes me five minutes to ride an electric bike from home. It is very convenient to take care of my children."

To date, the base has employed more than 50 local farmers.

Guizhou Zhongke Yinong Technology is another edible fungus processing enterprise in this area.

"This is a freeze-dried morel mushroom. Based on the base preharvest period and pre-production data provided by the platform, combining with the actual situation of the edible fungus entering the processing plant to its storage, we reasonably arrange the processing time and processing quantity, and implement planned process

ing," said Zhang Ke, chairman of the company.

"We use the processing workshop module to provide standardized production parameters to ensure that downstream companies' requirements for the production standards of primary processed products are met.

"At the same time, we have gradually formed our own standardized production system. The data and videos of the processing workshop make the processing steps more transparent and help with standardization," he added.

In order-based procurement and sales, the company can sign orderbased production agreements with upstream and downstream companies through the system and implement order-based production and

sales planning arrangements. The production end is only responsible for planting and processing, and the platform is responsible for sales.

In the Guizhou Mushroom Museum, visitors can understand all the information about the entire industrial chain process of the products from rod making, cultivation and processing to sales.

They can also use blockchain technology to ensure the safety and reliability of information and data, and help producers build trust in quality and safety assurance.

Covering a total construction area of nearly 2,000 square meters, the Guizhou Mushroom Museum includes functional areas of science, culture, creativity and research. The museum introduces edible fungi-related knowledge and their development through graphic introductions, specimen displays and taste activities.

Fan Xuanxiang, deputy director of the education bureau of Baiyun, said the district will enhance edible fungus education and launch research activities to boost the local culture.

Last year is the first year of the implementation of the 14th Five-Year Plan period (2021-25) and a crucial year for comprehensively promoting rural revitalization.

Guiyang will strive to make new breakthroughs in rural revitalization and make positive contributions to the construction of a vibrant Guizhou. On Sept 26, Hu Zhongxiong, a member of the Standing Committee of the Guizhou Provincial Party Committee and Party secretary of Guiyang, presided over a special meeting on agricultural modernization in Guiyang. He said that it is necessary to stabilize the basic agricultural market.

Guiyang's economic growth has increased by 284.3 percent in the past 10 years. In 2020, there are more than 5,000 big data companies in Guiyang and the added value of the digital economy exceeded 160 billion yuan, accounting for more than 38 percent of the region's GDP.

"Big data has become an important engine for Guiyang's highquality development, allowing Guiyang to stand at the forefront of the world to showcase its beauty to all," said Ma Ningyu, deputy Party secretary and acting mayor of Guiyang.

"At present, Guiyang is promoting the deep integration of big data and rural revitalization," Ma said.

During the 14th Five-Year Plan period, Guiyang will promote the construction of optical fiber connections in administrative villages, optimize the extension of the 5G network of administrative villages to natural villages with more than 30 households and increase the scale and functions of radio and television cloud coverage.

Guiyang will build a national digital agriculture and rural innovation center and a digital agriculture application promotion base, develop smart agriculture, and promote the use of information technologies such as IoT, AI, and blockchain in agricultural planting, breeding, processing and logistics.



From left: Students learn to plant edible fungus at an industrial park in Baiyun district, Guiyang. Students visit a package factory at the park. Students look at the displays at the Guizhou Mushroom Museum.

City a combination for natural beauty and modernity

Almost one decade ago, I moved to China. The reason was simple — I followed my heart and attached my life to a girl from Guizhou. For this reason, I have had plenty of time to recognize Guiyang and its life, nature, traditions and technological and economic growth.

As time goes by, I realize more and more that Guiyang is a beautiful place to live in, and I would like to share my reasons why I think this. The first time I came to Guiyang was during Spring Festival in 2010. Honestly speaking, it was not the ideal time to visit because the winter was very cold, and for a foreigner living in an even colder climate where buildings are heated, it was a really "hardship".

Unlike this experience, I found out that the scenery of the mountainous

region is fascinating. In the past years, I had a chance to discover Guiyang city and its surroundings. You can visit exciting places like the famous Jiaxiulou tower, Fengyuqiao bridge and Qingyan, an ancient garrison town in the south of Guiyang. People who like nature can visit Qianling Park in the city center or move to Huaxi district to enjoy a water land park, especially in spring.

Besides these great landmarks, there is also the option to relax with friends and go for a hike, camping close to Guiyang at Hongfeng lake. From this perspective, Guiyang is a place where you can enjoy the natural beauty and spend time away from the stresses of modern life, which is just what we need sometimes.

Guiyang and its surroundings

are not only a place for relaxing and enjoying nature but also for working.

When you live here, you can recognize rapid changes in social development and modernization, and this goes hand in hand with proper care and in symbiosis with the environment. Compared with other provinces, the rapid industrialization in the 1980s and 1990s skipped Guizhou. From my perspective, this was down to logistics.

It is not easy to create dense roads and railway networks in mountainous areas. Now in 2021, we can use highways, high-speed trains and the subway in Guiyang. Technological growth provides new opportunities, and Guiyang has jumped on the chance to generate new industries for the 21st century. That the big data industry is synonymous with Guiyang is well known across China. In daily life, you can see electric vehicles being used as taxis and personal vehicles much more than before.

EVs have been a hot topic in the European Union since A European Green Deal plan was introduced. China's method of spreading EVs throughout its society is unique, using government support and the availability of inexpensive EVs.

Nevertheless, what should be highlighted in Guiyang, as well as Guizhou as a whole, is the local cuisine and ethnic groups.

The number of minorities living in Guizhou is the highest in China, which offers a multicultural society with various traditions. Maybe that is behind the motto "Colorful Guizhou". Not only its colorful nature, but the people who reside here make the land as it is. This all is reflected in the provincial capital.

The level of spice in Guizhou cuisine is so high that it has even made me cry, but a box of tissues will solve this problem, and I can soon go back to enjoying the taste of the meal again. I think nobody would ever forget the taste of spicy chicken, sour fish hotpot by the Miao ethnic group, mushroom hotpot, Huaxi beef noodles, Siwawa, or spring rolls, or even Zheergen vegetable root, which is great roasted with smoked pork meat. These are the reasons that point to Guiyang as a green and ecological city.

A place where nature's protection goes together with modernization, a place with friendly people and delicious meals, and the place where I found my second home



Filip Jordan has taught at Guizhou University for seven years. PROVIDED TO CHINA DAILY

with my wife and daughter.

Filip Jordan, a building services engineering teacher at Guizhou University, provided this story.