



The Ximazhai sorghum farming base in Shanxi's Fenyang city is called the "first workshop of Fenjiu". PHOTOS PROVIDED BY HAO SHENGYU / FOR CHINA DAILY

By YUAN SHENGGAO

Xinghuacun Fenjiu, the renowned Shanxi white liquor company based in the city of Fenyang, is contributing to rural vitalization by developing large-scale sorghum farms throughout the North China province, as well as other regions in the country.

According to the company's executives, sorghum is the major ingredient for the production of its white liquor, which is also known as *baijiu* in China. It is now supplied by sorghum farms in Shanxi, Inner Mongolia, Gansu, Hebei and even Northeast China, with a combined area of nearly 90,000 hectares.

"The areas between 36 and 45 degrees north latitude are the most suitable for sorghum farming," said a company executive. "So we are developing sorghum supplying bases in this belt stretching several thousand kilometers."

The county of Yanggao in northern Shanxi, for instance, is located at the heart of this belt.

The sorghum farms in this county, which are part of the supply bases for Xinghuacun Fenjiu, are managed by the Yanggao branch of Shanxi AMP Group, one of the leading farming-related companies in Shanxi.

At his office in Yanggao's Longquan township, Chen Jun, general manager of the branch company, said sorghum farming is quite different from what it looked like in the past.

"Farming here has become smarter," Chen said, showing an app on his smartphone. "On the phone, we have

all the information relating to sorghum farming on our farms that span more than 20 km, like conditions of weather, soil and nutrition, and crop growth dynamics."

He explained that the smartphone is just one end of an intelligent farming platform that is composed of a central operational system and a far-reaching network. At the other end of the network are numerous sensors for weather, soil, pest and crop growth monitoring.

The platform's function is not limited to crop monitoring, the central operational system can also complete data analysis to help managers in decision making, according to Chen.

Chen noted that under a new operational model that involves the close partnership between Xinghuacun Fenjiu Group, farming companies, local rural cooperatives and individual farmers, the crop growth data are accessible to every stakeholder.

As the platform in Yanggao county is part of a wider network system managed by the Xinghuacun Group, it allows the *baijiu* producer to track the whole process of sorghum growth, helping it in quality control at the supply side.

"Individual farmers are also using the system to improve farming efficiency," Chen said.

Song Guijun is a farmer in Yanggao's Gucheng township. He is a contracted supplier to Shanxi AMP Group, with a dedicated farm of about 0.35 hectares.

"In the past, the farm's annual sorghum output was about 2,000 kilograms, using traditional farming techniques," Song said.

The farmer said since he signed a supply contract with Shanxi AMP, he has received regular training at the com-



Visitors taste Xinghuacun Fenjiu's liquor at the company's museum.



Xinghuacun Fenjiu's liquor varieties are on display at the company's showroom.



Above: A poster shows the grain ingredients for making Fenjiu liquor. **Below:** The Fenjiu Museum is based at the company's old distillery.



pany's Yanggao branch, learning modern farming skills.

He noted that the smartphone app for farming is the most useful, helping him improve every link of sorghum farming.

"We are now selecting seeds, planting and making farm management according to the green farming standards set by Xinghuacun Fenjiu and other requirements by Shanxi AMP," Song said. "Sorghum now grows better and the annual output has increased about 25 percent from that in the past," Song said.

The farmer added his revenue is growing steadily as a result of a stable sales channel — sorghum is directly sold to Shanxi AMP after harvesting and eventually supplied to Xinghuacun Fenjiu.

According to Chen, as a major supplier to Xinghuacun Fenjiu, Shanxi AMP has established partnerships with 12 rural cooperatives and a great number of farmers in eight townships to develop sorghum farming bases for the distillery company.

"We have signed purchase contracts with farmers in Yanggao, agreeing to buy their produce with guaranteed prices. And the farmers can collect their payment upon delivery," Chen said.

The manager said that, in addition to purchasing deals, Shanxi AMP also offers farmers training, farming machine leasing, as well as other technical services relating to soil improvement, crop disease control and crop growth monitoring.

Driven by the demand from Xinghuacun Fenjiu, the sorghum farming industry in regions other than Shanxi also grow substantially.

Lishu county in Northeast China's Jilin province, for instance, is another major sorghum supplier to the Shanxi distillery company. The county now has more than 6,000 hectares of farms to produce sorghum for Xinghuacun Fenjiu.

According to Wu Tianpeng, general manager of Xinghuacun Fenjiu's supply base in Lishu, the county is among the highest-quality sorghum production sites in China because of its fertile black soil and adequate sunlight and water supply. He added that Lishu-produced sorghum features a high content of starch, which is conducive to improving the quality of the company's white liquor.

The executive added that the Lishu supply base is promoting farming modernization to improve efficiency, quality and output.

"We are using China's most advanced agricultural machines for sorghum farming, from spring sowing to autumn harvesting," Wu said. He added that intelligent technologies are also used in the full process of crop growth.

To improve crop quality, the supply base has cooperated with the Jilin Academy of Agricultural Sciences, the Shanxi Academy of Agricultural

Sciences and similar research institutes in Liaoning and Heilongjiang provinces to breed high-quality sorghum varieties.

The collaborations have helped to cultivate two excellent sorghum varieties fitting in the natural environment of Lishu. And the grains have been recognized by Xinghuacun Fenjiu as a high-quality ingredient for *baijiu* production.

"The advanced farming machines, the modernized operations and the enhanced investment in research have made the Lishu supply base a benchmark supplier for Xinghuacun Fenjiu," Wu said.

Yuan Qingmao, board chairman of Xinghuacun Fenjiu Group, said developing sorghum farming is an important part of the company's branding strategy.

"Our branding strategy is implemented in the entire industry chain — from sorghum farming and supply to liquor production and sales," Yuan said. "The strategy aims to lift the brand profile of our company by implementing higher quality standards in every link of the chain."

This year, the company has made ingredient grain farming a priority in its branding strategy. Through applying the "Fenjiu" brand to the farming industry, the company aims to offer crucial support for its high-quality development.

Xinghuacun Fenjiu is applying for three ingredient grain trademarks to promote the brand building of its farming sector.

According to a company executive, the farming sector brand-building initiative will include efforts like strengthened investment in seed cultivation, farming standardization, intelligent platform construction, as well as in other areas like standardized logistic operations and consolidated collaborations with farming companies and farmers.

The executive noted that Xinghuacun Fenjiu has made some breakthrough achievements in farming modernization, which include the use of molecular-marking technology and other genetic technologies in sorghum seed cultivation and the promotion of advanced machines and digital technologies in farming.

The company has also strengthened cooperation with the government in promoting sorghum farming.

For instance, Xinghuacun Fenjiu has collaborated with the government of Fenyang city to develop a high-standard sorghum base of nearly 7,000 hectares. The farms are located in Ximazhai, a village near the headquarters of the company. Due to its proximity to the company, the farming base is always referred to by locals as the "first workshop of Fenjiu".

Hao Hong contributed to this story.