Potato farming in Wuzhai explodes in profitability

By renting land from local residents, company sets an example by modernizing the industry



By YUAN SHENGGAO

Potatoes have been the staple crop in Wuzhai, a county in the west of Shanxi province, for many years. But it was recently developed into a major source of revenue for its residents because of an agricultural campaign that is dubbed as the "potato revolution" by people in the area.

Officials, agronomists and industry insiders said the campaign is an initiative to modernize the potato industry, which involves breeding research to improve crop yields and quality; modernizing farming by enlarging operational scale; lifting efficiency to produce an increase in added value; and expanding marketing channels by integrating dealership networks with e-commerce tools.

They said the potato revolution campaign is a transformation to nurture a modern industrial chain. This requires the engagement of a full group of stakeholders including farmers, farming companies, research and development entities and agricultural product processing enterprises, as well as dealers both online and offline.

Xu Cunxiao, a farmer in the village of Xiaohetou in Wuzhai, said he doesn't quite understand the "abstract concept of the potato revolution", but he can explicitly tell the difference made by the transformation.

"I used to grow corn on my family farm of about 1.3 hectares," Xu said, adding the annual net income from the farm was about 10,000 yuan (\$1,380).

Now that Xu has leased the farmland to an agricultural company for potato farming, processing and sales, his family is paid a rent of about 16,000 yuan a year.

"I also work for the company's potato processing plant, which pays me about 4,500 yuan a month," Xu said. He said his job in the company has ensured him a stable revenue, which is far better than his situation in the past.

"When I operated my own farm, I was concerned about a lot of things," Xu said. "Many of the things were beyond the limits of my ability, like the unpredictable weather, the fluctuating market and sales."

He said he is happy that the family's income is much higher and more stable thanks to the company that rented his land and hired him.

The company he refers to is Landun Xumei Food, one of Shanxi's



Potato researchers conduct fieldwork on a farm in Wuzhai county. WANG XIUJUAN / FOR CHINA DAILY

leading enterprises in the farming,

deep processing and sales of potatoes. Landun Xumei used to mainly focus on the deep processing of potatoes and sales of finished products. It had suffered from the short supply of potatoes when it began to expand its operations in 2019, company executives said.

The company's management then realized operating its own farms in Shanxi could effectively address the problem of supply. In December 2020, Landun Xumei signed an agreement with the county government of Wuzhai to develop a demonstrative base for potato farming and processing.

The company established its own farms in Wuzhai in 2021 by renting land totaling 2,000 hectares from local farmers.

Since then, the company has set an example by modernizing the potato industry in Wuzhai and its excellent practices have been immediately copied by farmers and other enterprises in the county.

The company's executives said its operational practices involve the training of farmers for better skills, collaborating with agronomists in breeding research to improve the crop's output and quality, launching projects to improve the soil and irrigation of farms and using farming machines on a larger scale.

One of its initiatives that is widely praised by farmers is its skill training program.

Li Meixiao, 64, another resident from Xiaohetou village, also works with the company. "I never expected I could learn so many skills and techniques for modern farming at such an age," Li said. "I realized the simple things like fertilizing, irrigation and crop thinning can make a big difference for crop vields if I do them right."

The farmer added that he can also apply these skills and techniques to his own small farm and he is sure that the yield and quality will improve substantially.

Executives of Landun Xumei explained that such training courses aim to nurture qualified workers to suit the company's demand for modern farming.

Yan Huiping, a crop breeding expert in Shanxi province, is now heading a team of researchers to work with Landun Xumei in research and to promote their joint results to the entire county of Wuzhai.

"We are studying to foster advantageous breeds of potatoes featuring higher quality and output and suitability for mechanized farming and deep processing." Yan said.

deep processing," Yan said. The expert said an extended industrial chain from research, farming and processing to sales can greatly increase the added value of potatoes.

"In the context of modern operations, we expect that the yield from 1 hectare of potatoes can eventually create a value of more than 105,000 yuan (\$14,490) for the whole industrial chain," Yan said. "That's almost five times the revenue generated from conventional farming."

Liu Zhicheng, Party secretary of the county, said he is very optimistic about the potato revolution campaign in Wuzhai.

"Our trials over the past years have yielded satisfactory results," Liu said. "Our initial success is the substantial increase in output."

He noted that per-hectare yield in the county's potato farming modernization pilot zone reached 75 metric tons last year, more than three times that of conventional farms. He added the highest output of a farm there was 97 tons per hectare, a new perunit record in Shanxi.

The official said if these advantageous breeds and new operational models are promoted to all of the county's potato farms totaling 20,000 hectares, "the outcome could be phenomenal".

Based on their success in 2021, Wuzhai's modernized potato farms continued to expand in scale this year. Local statistics show the total area of such farms reached 4,000 hectares this year, doubling the figure posted in 2020.

The successful experience of Wuzhai has also been copied by other regions in Shanxi. The Shanxi Department of Agriculture and Rural Affairs said the potato revolution campaign has been expanded to 11 counties in eight cities, with the total area of modernized potato farms at 7100 hectares.

The department's officials said the province aims for its modernized potato farms to increase to 20,000 hectares by 2025.

Wang Xiujuan contributed to this story.

of PM 2.5 — particulate matter with a diameter of less than 2.5 micrometers — reduced from 55 micrograms per cubic meter to 39 mcg per cu m over the past five years.

There is also a substantial improvement in water quality across rivers and lakes. The ratio of good and excellent levels of water quality increased from 55.2 percent in 2017 to 72.3 percent in 2021.

Wang Yanfeng, head of the department, said during a recent news con-

Shanxi shows business opportunities at CIIE

By YUAN SHENGGAO

The North China province of Shanxi showcased its unique culture, recent development achievements and business opportunities at the fifth China International Import Expo, which was held in Shanghai from Nov 5-10.

One of the eye-catching sections of the Shanxi pavilion at the expo is the area displaying Shanxi's millennia-long culture and history.

Shanxi used to be one of the nation's hubs for opening-up several centuries ago, thanks to the international trade activities by its merchants.

About 600 years ago, Shanxi began to draw worldwide attention for its famed Shanxi merchants, or Jinshang. It is said the merchants dominated the business circles in North China for about five centuries during the Ming (1368-1644) and Qing (1644-1911) dynasties.

Many of these successful merchants started out as small vendors of tea, silk and other goods, who traveled on horses or camels to regions as far as Russia.

Today, the Jinshang spirit of hard work, entrepreneurship and inclusiveness are still highly valued by the people of Shanxi and the rest of the country.

The Shanxi pavilion once again told their stories and advocated the spirit of Jinshang with exhibits and multimedia shows powered by such technologies as 3D, augmented reality and artificial intelligence.

A rich variety of items were on display, mostly tools related to travel, transactions and settlement, like abacuses, scales and ancient maps. The exhibits were housed in a replica of *piaohao*, which is said to be an early version of banks in China. In addition to the culture of Jinshang, handicrafts produced with centuries-old techniques were exhibited, including hand-polished lacquerware from Pingyao, embroidery from Changzhi and *fahua* porcelain ware from Jincheng.

Also on display were time-honored companies that are dedicated to inheriting and protecting these ancient techniques, while contributing efforts to developing these sectors into the characteristic and lucrative industries in Shanxi.

These exhibitors included the Xinghuacun Fenjiu Group, an inheritor of Shanxi's centuries-old tradition in liquor making, producers of mature vinegar from Qingxu county and enterprises engaged in cultural tourism.

An exhibition called "The 10 Years in Shanxi" was dedicated to showcasing the province's development achievements in the past decade, its investment opportunities and key enterprises planning international cooperation.

Shanxi's six national-level development zones and enterprises representing major local industries were present at the exhibition to draw business partners inside the country and from abroad.

There was an exhibition area for the central Shanxi city of Jinzhong, which was the cradle of Jinshang merchants and is now also a hub for Shanxi's opening-up. It showcased its history, culture, advantageous geographical position, business environment and solid industrial foundation to lure investors.

"Shanxi is now developing itself into a highland for opening-up in inland China," said an official from the Shanxi Department of Commerce. "It wants to display its business opportunities to the world through the CIIE platform."



piaohao during the fifth CIIE. SUN RONGXIANG / FOR CHINA DAILY

Village in Xinzhou city hosts harvest festival

By YUAN SHENGGAO

When farmers were celebrating the fifth Chinese Farmers' Harvest Festival with laborious harvesting work at the end of September, residents in the city of Xinzhou already had a taste of the new yields and finished food products

The village of Xiaotan in Xinzhou city was the main venue for the Shanxi subevent of the national farmers' festival, which was held on Sept 23.

In Xiaotan, hundreds of agriculture-related companies from across Shanxi showed the products at an exhibition in the village.

Coarse cereals were highlighted at the exhibition. On display were more than 300 coarse cereal products made by 200-plus companies,

passing 3 million yuan

There were also activities in various cities in Shanxi province for the farmers' harvest festival.

In front of the Desheng fortress gate of the Great Wall in the northern Shanxi city of Datong, a trade show was held to showcase specialty produce in the city. The trade show was accompanied by a tourist festival featuring a rich variety of folk performances to entertain visitors.

In the city of Jinzhong, a farm produce show was held alongside an exhibition of farming machines, with the latter attracting special attention from the farmers.

In Shanxi, modernization featuring the wide use of farming machines and new digital technologies is now seen as a major driving force for agricultural development and rural vitalization, according to local officials.



The scenic Fenhe Park in Taiyuan is an epitome of Shanxi's improving ecosystem. LIU TONG / FOR CHINA DAILY

Natural beauty on full display thanks to efforts in environmental protection

By YUAN SHENGGAO

On one late-autumn day, Wang Ting, a resident in the Shanxi provincial capital of Taiyuan, took his family to the Jueweishan Mountain in the city's northwestern suburbs.

"In this season, the mountain is a huge palette of red, yellow and green," Wang said. "I took hundreds of pictures in one day, to record the most beautiful sights of Taiyuan." Traditionally, autumn is the best season for Taiyuan, Wang said. "But that was not necessarily true in the past, when the city was plagued with pollution as a result of uncurbed emissions from heavy industry enterprises."

A change for the better, not only in Taiyuan but the entire Shanxi province, has taken place over the past few years thanks to the local government's and people's relentless efforts in environmental protection.

The transformation has been manifested in both the eyes of residents and the data released by the local government.

Statistics from the Shanxi Department of Ecology and Environment show that Shanxi had 72.1 percent of its days with an air quality reaching good and excellent levels in 2021, compared with 65.7 percent in 2017. The average annual concentration ference that Shanxi has adhered to the principle of "green mountains and clear waters are as good as mountains of gold and silver" to achieve a balance between the environment and socioeconomic development over the past few years.

"Our initiatives include upgrading local industries to clean production, developing clean energy resources, reducing pollution and emissions, and fostering environmentally friendly industries as new growth drivers," Wang said.

After the industrial upgrades, Shanxi, traditionally a coal-producing province, is seeing 75 percent of its coal output generated from advanced and clean production facilities. In the power industry, 34.3 percent of the electricity in Shanxi now comes from new and renewable energy resources, according to Wang. He added that 78 percent of Shanxi's GDP came from industries without direct connections to coal.

Cheng Guoyuan contributed to this story.

which were shown in the forms of grains, beverages and healthy food.

Data from the exhibition's organizers showed that on-site retail sales amounted to 741,000 yuan (\$102,400) and the value of agreements for wholesale deals totaled 216.44 million yuan.

There were also culinary shows on-site, allowing visitors to taste various foods from across Shanxi. The shows attracted more than 200,000 visits with sales value surBranding was also highlighted during this year's harvest festival. At the main venue in Xinzhou, a total of 66 renowned Shanxi agricultural brands were unveiled, with products ranging from cereals, meats, fruits, meals and beverages to medical herbs.

Wang Xiujuan contributed to this story.



A farmer in Xinjiang county dries persimmons after a bumper harvest. GAO XINSHENG / FOR CHINA DAILY