

Day lilies bring profit growth to farmers

Government's targeted policies for agricultural industries bring prosperity across province



By YUAN SHENGGAO

Day lily harvest season, which runs from July to August, is the busiest time for farmers in Yunzhou, a district in the city of Datong in northern Shanxi province.

Tang Wan, 60, a farmer in the village of Tangjiapu in the district, gets up before sunrise every morning to collect the flowers.

The flowers of day lilies, a profitable product, are also known as "worry-free grass" and are used as a popular food ingredient throughout China.

"The best time to collect day lily flowers is before sunrise, when they are not in full bloom," Tang explained.

Datong has a history of growing day lilies that dates back 600 years. The day lily products from the city are renowned for their quality thanks to local farmers' experience and the unique soil, sunlight and irrigation conditions.

In recent years, the local day lily industry has expanded substantially due to authorities' efforts to drive modernization and standardization.

According to the Datong government, the city's area of the crop has expanded to more than 17,000 hectares, accounting for about one-fourth of the country's total. The revenue from the industry, which includes more than 100 product varieties, reached 1.84 billion yuan (\$284 million) last year.

Yunzhou district is the most important day lily industry base in Datong. It has an extended day lily-related industrial chain that covers plantation, processing, logistics, sales and farming-themed sightseeing.

The potential of the industry has attracted a great number of entrepreneurs to start businesses in Yunzhou. In return, their businesses have further boosted the industry's development.

Cai Jun is a native of the village of Tangjiapu. He used to work as an executive at a company outside Datong. He returned to his home village in 2008 upon hearing the news that Datong planned to grow the day lily industry into an important pillar of its rural economy.

Building on his experience as an operations officer in his former company, Cai started his business as an agent of day lily sales, purchasing local produce and selling it to clients throughout the country. He later expanded his operations to logistics and processing.

"Every July and August, the continuous expanse of blooming day lily flowers make Yunzhou an attractive destination to visitors," said Guo Yuepu, head of Yunzhou district.

He added that farming-themed sightseeing has also brought additional revenue to local farmers.

"The day lily industry is playing an increasingly important role in rural revitalization," the official said.

Like Datong, various regions in Shanxi province have fostered their own characteristic farming industries to boost rural revitalization and help farmers increase revenues.

For instance, more than 15,000 farmers are engaged in the cultivation of edible fungi in Zhongyang county.

The industry generated a total output value of 250 million yuan last year, bringing a per capita net income of about 8,000 yuan to farmers involved, according to the county government.

Supporting the strong growth are various farming cooperatives and farming experts throughout the province.



Agricultural workers collect day lily flowers in the village of Tangjiapu in Datong, Shanxi province. CHAI ZHIGUANG / FOR CHINA DAILY

That income is much higher than growing conventional grain crops like wheat and corn, the farmer noted.

He said many farmers in his village have been lifted out of poverty and live a better life by planting day lilies.

"I still regret that I didn't get involved in the industry several years earlier," Xie said. "Otherwise my daughter could be a university student with the support of the revenue."

The harvest of day lily flowers has also attracted many tourists to the farms.

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Wei Meiling, 41, is a native of the village of Langshuyuan in Pingshuo county.

She returned to her home village in 2015 to start a cooperative for millet farming, processing and sales.

Over the past several years, the cooperative has involved the participation of more than 500 households in Langshuyuan and neighboring villages. And the cooperative's millet plantation area has surpassed 130 hectares.

"Farmers here produce high-quality millet," Wei said. "But they didn't know how to market their produce so they couldn't make much from their farming."

The entrepreneur now uses various online tools, including live-streams, to market millet for farmers.

"We have live-streamed the whole process of millet farming, so customers can better understand the quality of our products and are more willing to buy," Wei said.

Local agronomists have played an important role in helping to improve the quality and yield of crops.

The Shanxi Department of Agriculture and Rural Affairs said it has dispatched a number of expert teams to various areas in Shanxi to guide farmers through farming activities and cultivating new seedlings.

The teams gave about 2,000 lectures to more than 125,000 farmers during the first half of this year. They have also introduced more than 300 higher-quality seedling varieties to farmers during their tours, according to the department.

Chai Zhiguang contributed to this story.

Emission quotas to tackle air pollution

By YUAN SHENGGAO

Gao said carbon trade is a market-based regulating tool to encourage emission reduction among enterprises.

"In carbon trade, each company involved is granted a quota, or a certain number of permits, to emit carbon dioxide up to a certain level," Gao said. "If it does not use up all of its quota, it can sell its unused amount to another company that needs to emit more carbon dioxide than its quota allows."

The national carbon emission exchange marked a concrete step to fulfill China's targets for reaching carbon emissions peak in 2030 and realizing carbon neutrality in 2060.

Insiders

said the exchange is a market-based mechanism to drive decarbonization efforts among enterprises by granting transactional quotas to carbon-emitting companies. The first batch of these companies, about 2,200 in total, are all from the power industry.

To meet the rocketing demands from power generation companies, Lu'an Chemical Machinery's production plant had to introduce a three-shift daily work pattern, according to executives of the company.

"One unit of the latest generation of the boiler, which is known as Jin-hua boiler among insiders, can lead to a reduction of 43,200 metric tons of coal a year and a drop in carbon dioxide emissions of up to 10,760 tons," said Zhang Jiansheng, deputy chief of the Taiyuan-based Shanxi Academy for Clean Energy Research, which is affiliated to Tsinghua University in Beijing.

The Jinhu boiler was developed by the academy and produced by Lu'an.

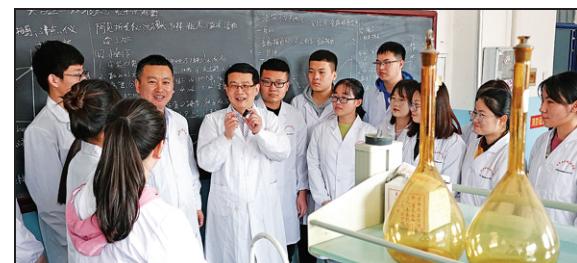
Gao Jian, a researcher at the Shanxi Academy of Social Sciences, explained the reasons behind the growing demand for emission-reducing products and solutions from power generation enterprises by analyzing the operations of the emerging carbon trading sector.

Wang said Shanxi Equity Trading Center is now cooperating with several other organizations in the province to help the 119 companies prepare for their transactions at the national carbon emission exchange.

Their current focus is to appraise the emission data and production capacity of each company through a unified, unbiased monitoring platform. "The appraisal will be crucial for the national center to decide the amount of quota to give each company," Gao said.

The national center will release its emission quota for each company on Sept 30.

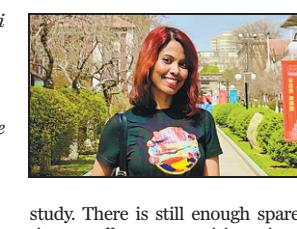
Wang Pei contributed to this story.



Teachers and students from Shanxi Datong University exchange ideas about emission reduction technologies with business representatives. WANG ZHONGXUN / FOR CHINA DAILY

Student explores city's attractions by bicycle

Many overseas students in Shanxi province have gained a better understanding of the province and China. This section named *Shanxi in the Eyes of Foreign Students* will tell their stories from the province and share what Shanxi looks like from their perspectives, giving accounts of the local environment, customs and culture, as well as their personal experiences.



study. There is still enough spare time to allow me to visit various parts of Taiyuan and Shanxi and to make friends with locals.

My favorite sport is cycling and I find China is very cyclist-friendly because it is convenient to hire bicycles in every city in the country. I like to cycle on the streets in Taiyuan and visit places I encounter randomly. The cycling tours helped to deepen my understanding of the city.

In my eyes, Taiyuan is a city with both history and modernity.

The city has a history of more than 2,500 years, among the longest among all cities in China. An abundance of well-preserved ancient structures, like the temples in Jinci, the double pagodas in Yongzuo Temple, are the material evidence to help you get a glimpse into what ancient China looked like.

Taiyuan is also a fast-growing modern city. It is ranked among the world's top 500 cities in terms of scientific research according to a recent Nature Index rating.

I hope more international students come to study in Shanxi University and to live and work in China as the country is full of opportunities.

The author is a student from Bangladesh who studies at the School of International Education and Exchange at Shanxi University.

Ancient site takes tourists back in time

By YUAN SHENGGAO

When listing the top attractions in the renowned Chinese historic city of Datong in the north of Shanxi province, tourists immediately think of Yungang Grottoes.

Yungang Grottoes in the western suburbs of Datong is a treasure trove of Buddhist art created during the Northern Wei Dynasty (386-534) when Datong served as a national capital.

At the center of Datong, there is another historic site with similar significance. This is Huayan Temple, a Buddhist temple built during the Liao Dynasty (916-1125).

The temple got its name from *Huayanjing*, or *Avatamsaka Sutra*, one of the most important sutras in Buddhism, particularly the Mahayana Buddhism that is still popular in China.

Huayan is currently one of China's largest Buddhist temples built during the Liao and Jin (1115-1234) dynasties.

There are still a number of well-preserved remains of the Liao and Jin dynasties, including buildings, statues and decorated ceilings, showing Buddhist art of that period.



Huayan Temple in Datong, built during the Liao Dynasty (916-1125), houses ancient art treasures of statues and murals. HAN JIANJUN / FOR CHINA DAILY

Reputed as an "art museum of Liao and Jin dynasties", the temple holds an important position in the history of Chinese culture and architecture. It is made of upper and lower temples.

The Grand Hall of Sakyamuni in the upper temple is the remains of both Liao and Jin dynasties, with a preserved foundation built in Liao and the main structure built in Jin.

Researchers said it is the largest preserved singular Buddhist temple hall of the Jin Dynasty in China.

Inside the hall, a golden statue of the Buddha of Five Directions, which was erected in the Ming Dynasty (1368-1644), and the huge mural showing the life stories of Sakyamuni, which was created during the Qing Dynasty (1644-1911), are also representatives of

Buddhist artistic achievements of their corresponding periods.

The Grand Hall of Sakyamuni of the lower temple, built in the Liao Dynasty, is the oldest preserved structure in Huayan.

The statues, including three Buddhas of the Past, Present and Future, and 28 renowned followers of the Buddha, represent the high level of statue art of that period.

Among the 28 followers, a Bodhisattva with an appearance of a young woman, was called by Chinese historian Zheng Zhenduo as the "Oriental Venus".

The highest structure in Huayan Temple is the 43-meter Huayan Pagoda, which is a contemporary structure in ancient style.

The pagoda can give visitors a panoramic view of Datong; its ancient streets and old buildings inside the old urban area are surrounded by a city wall, moat and a modern Datong outside the wall with skyscrapers and booming commerce.

That's why many tourists say the temple takes them on a time warp to the ancient and modern city of Datong.

Peng Ke'er contributed to this story.