

100 PATH TO GLORY

SHANXI

Editor's note: This year, the Communist Party of China is celebrating the 100th anniversary of its founding. China Daily is publishing a series of stories looking at the tremendous changes that have occurred in provinces, autonomous regions and municipalities under the leadership of the Party. They also include stories of the people and places that have left indelible marks in the Party's path to glory.



The Jinyang Bridge crosses the Fenhe River in Taiyuan, Shanxi province. MA LIMING / FOR CHINA DAILY

Shanxi boasts modernized mining

China's coal king has made great strides in reducing excess production capacity to improve economic reform

By SUN RUISENG in Taiyuan and LIU ZHIHUA

With a press of a button on a computer connected to the control system in an intelligent operations office, a team of underground machines responsible for coal mining transportation start working.

This happens routinely in a coal mine owned by Jinneng Holding Group, a State-owned energy giant headquartered in Taiyuan, Shanxi province.

While underground coal mining was once a labor-intensive, sometimes dangerous industry, modernized mining in Shanxi is quite different today, as operations use unmanned machines, remote monitoring technologies and intelligent decision-making and automated coordination systems.

Modernizing coal mining is just one example of the achievements Shanxi made during the 13th Five-Year Plan (2016-20) period, as it sought to deepen supply-side structural reform and upgrade its industries in pursuit of high-quality development.

In an article published in Qiushi journal, the flagship magazine of the Communist Party of China Central Committee, Lou Yangsheng, Party secretary of Shanxi, said: "Firmly bearing in mind the directions from President Xi Jinping, and fully implementing decisions of the CPC Central Committee, we perseveringly endeavor to take the new development path by unwaveringly pursuing transformation and innovation and focusing on improving weaknesses, deepening reform and strengthening Party governance."

"We must not fail expectations from President Xi, the CPC Central Committee and the people."

As China's major coal producing province, Shanxi used to rely on the resource to develop its economy.

While reliance on the industry once brought prosperity to the region, it also led to a series of problems, such as excessive mining, lack of diverse economic growth drivers and insufficient technological innovations.

Moreover, the country decided to cut overcapacity that has hindered China's overall economic performance, as part of its efforts for supply-side structural reform.

Led by Xi, the CPC leadership decided supply-side structural reform is a must to improve the economy in the face of complex domestic and international situations.

On Nov 12, 2013, the Third Plenary Session of the 18th Central Committee of the CPC decided China should establish and optimize a long-term mechanism to prevent and eradicate excess production capacity.

Moreover, in November 2015, Xi proposed supply-side structural reform at a meeting of the Central Leading Group for Financial and Economic Affairs of the 18th CPC Central Committee, noting that China's economy has entered a "new normal" of moderate to high growth.

The reform focuses on five fronts, including eliminating overcapacity, curbing debt levels and lowering business costs.

With cutting overcapacity high on the reform agenda, the country has made substantial headway in key areas such as coal and steel.

During the 13th Five-Year Plan period, China met its goal to reduce excess steel capacity by 150 million metric tons two years ahead of schedule.

Data from the China National Coal Association showed that China had shut 5,500 coal mines and eliminated annual capacity of more than 1 billion metric tons by the end of last year.

Meanwhile, China aimed to cut coal production by 500 million tons in three to five years starting from 2016, accord-

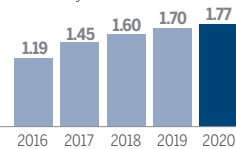
SHANXI

Population: 37.29 million
Area: 156,700 square kilometers



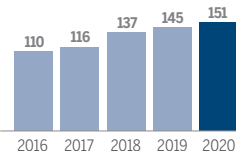
GDP of Shanxi

Unit: trillion yuan



Total value of imports and exports

Unit: billion yuan



Source: Shanxi Provincial Bureau of Statistics
CHINA DAILY

ing to a guideline issued by the State Council in February 2016.

According to the Central Economic Work Conference held last December, China will pursue supply-side structural reform as the main task while emphasizing demand-side management in 2021, to create a dynamic balance between supply and demand based on higher standards.

China is also determined to pursue greener energy mix and expand low carbon development. It has pledged to achieve a peak in carbon emissions by 2030 and carbon neutrality by 2060.

Amid the country's efforts in deepening supply-side structural reform, Shanxi province is resolute in eliminating excessive capacity in coal industry.

"Cutting overcapacity, developing advanced capacity and sticking to green, low-carbon and efficient development comprise the pivot of the supply-side structural reform in Shanxi province's coal industry," said Wang Qirui, the former head of the regional energy bureau. Ma Xiaohong, the then deputy general manager of the transportation and marketing subsidiary of Shanxi Lu'an Group, recalled the coal industry in the province once suffered from severe loss when the industry was marked with overcapacity, and the company lost 50 yuan for every ton of coal it produced.

Since reducing production capacity is the key to the transformation of the coal industry, the province is determined to do away with the industry's extensive development model, which is characterized as depending on investment and production increase for development and on price hikes for profits.

As the country's first pilot province for comprehensive energy reforms, Shanxi has made substantial progress in related areas. It shut down more than 178 coal mines over the 13th Five-Year Plan period, and its annual coal production capacity has been reduced

to 1.35 billion tons from 1.46 billion.

It also cut 115.86 million tons of excess coal capacity from 2016 to 2019, one year ahead of its goal to cut 113.8 million tons for the 2016-20 period. The reduction was the largest among all provincial-level regions, according to Xinhua News Agency.

While pressing ahead with supply-side reform, the province also has combined the efforts of cutting overcapacity with developing advanced production capacity, upgrading industrial structure, and transforming the energy industry, to pioneer China's energy revolution as it strives for greener energy sources.

It has been strengthening efforts to promote both green mining and intelligent mining technologies in accordance with the national agenda.

A central government guideline released in February 2020, jointly issued by eight government agencies including the National Development and Reform Commission and the National Energy Administration, stressed accelerating intelligent mining to improve safety and supply security.

It asked large-scale coal mines and those that had suffered disasters to embrace intelligent operations by 2025, with robotics and other forms of automation recommended at key underground positions.

The guideline said surface coal mines should also adopt intelligent operations and unmanned transportation vehicles, and that all types of coal mines should have intelligent operations by 2035.

Li Junfeng, a senior expert on climate change and energy, said the region's energy consumption registered almost zero growth over the past five years, coal consumption has declined drastically and carbon emissions ceased growing for four years.

Contact the writers at liuzhihua@chinadaily.com.cn

100 PATH TO GLORY

DIVERSIFICATION HELPS CREATE BETTER LIVES

Fresh thinking is benefiting residents of isolated communities in North China

By SUN RUISHENG in Taiyuan and LIU YANG

Zuoquan county, in the northern province of Shanxi, was once called Liaoxian county.

However, in September 1942, it was renamed after Zuo Qian, a general with the Eighth Route Army, four months after his death in the county as he and 2,000 comrades attempted to break out of an encirclement by the Japanese army.

The county, deep in the Taihang Mountain Range, was easy to hold but hard to attack, which was why the army chose to establish its headquarters there for five years.

However, the mountains, a natural defensive position during the War of Resistance Against Japanese Aggression (1931-45), also formed a natural obstacle that hindered local residents' access to the outside world and sowed the seeds of poverty.

During the most difficult times, before the start of a nationwide poverty alleviation campaign in 2012, 49,286 people, or 21.77 percent of Zuoquan's population, lived in abject poverty.

Thanks to comprehensive measures the county has taken since then, supported by higher authorities, Zuoquan was removed from a list of national-level poverty-stricken areas in April 2019 because none of its residents lived below the local poverty line of about \$2 a day.

With 286 dwellings, Zuoquan's Shangwu village enjoys a tranquil setting, clean air, a cool climate and a pristine environment. It is the perfect example of the county's poverty alleviation efforts.

Last month, the road that has connected Shangwu to the outside world since 1985 was upgraded, so the village is becoming a base for cycling tours. Some cyclists happily travel the 480 kilometers from Beijing to enjoy the tranquil location.

Villager Liu Cuiping, who runs a two-bedroom homestay, has benefited from the tourism boom. The county government provided her with a 20,000 yuan (\$3,000) subsidy to improve the rooms at her homestay.

She said her business was closed until July as a result of the novel coronavirus outbreak, but the monthly



A paved road runs through vineyards in Zuoquan county, Shanxi province. XING LANFU / FOR CHINA DAILY

income from the homestay has remained above 1,000 yuan since then. That's a sizable amount for local people, who had lived on less than 7 yuan a day for generations.

Liu Junfei, the village Party secretary, said cultivation of corn and millet used to be the main source of income. In mid-2014, more than 60 percent of Shangwu's 711 residents were still living in poverty, while few families had indoor sanitation.

Diversification

He added that it was hard for villagers to change their traditional crops, but some were forced to do so in order to escape poverty.

It was a "rewarding option" and the villagers diversified by planting peaches, plums, apricots, grapes and walnuts, as well as vegetables and other cash crops.

The farmers sell the produce directly to tourists or online, saving heavy logistics costs.

Liu Junfei said the village is now home to 20 homestays and three family inns and restaurants. The men go to cities as migrant workers, while the women stay home to take care of the

children. They work in the tourism and catering sectors while also collecting herbs to boost family incomes. "The village will strive to develop tourism and make it a reliable source of income in the future," he said.

Neighboring Zecheng village has taken the same development path and now has 37 homestays.

Wen Zhixian, deputy head of the Zuoquan county government, said authorities are calling on residents to tap into the natural environment and picturesque landscape of the Taihang Mountains to develop the tourism and catering sectors.

The two villages are perched in a 58-kilometer-long valley known as the Taihang Gallery. A road that meanders through it connects them with the outside world, and the locals call it an "artery" for tourism.

Wen said the county government has planted about 288,000 gold-leafed trees of various types on the mountain slopes on both sides of the road in a bid to make it a popular route for self-driving visitors and touring cyclists.

To attract tourists and make full use of the area's unique musical culture, the county government hosts a folk song festival every year.

Liu Erping, director of the county publicity department, said Zuoquan is seeking to breathe life into its tourism industry and make such development more sustainable by holding more folk music activities.

In addition to tourism and cash crops, photovoltaic power generation is helping to alleviate poverty.

Located in the east of the Loess Plateau, the northern province of Shanxi is known for its hundreds of cultural heritage sites. The Taihang Mountains dominate the eastern region, while the Yellow River runs through the south. The province nurtured many heroes of the Communist Party of China, including Gao Junyu, who devoted his life to helping set up the CPC in the 1920s. It is also the place where General Zuo Qian sacrificed his life while fighting against the invading Japanese forces.

'Little golden suns'

In Lianbi village, located on a rugged mountain slope, farmers lived a hand-to-mouth existence for generations before the road was extended to reach it about 10 years ago.

Guo Yinglin, 64, the village Party secretary, said it now takes less than 20 minutes to reach the county seat by car. In the past, some villagers had never visited the county seat because the journey involved a walk of at least two days.

On mountain slopes where the land is too infertile to farm, government guidance and subsidies have encouraged villagers to install solar panels.

Guo said the "little golden suns", which are connected to the electricity grid, generate about 1 million yuan each year for the village.

"The 'sun-given' money is exclusively spent on caring for the sick, disabled, low-income and widowed seniors in the village," he said.

"Each needy family receives 3,000 yuan a year from it."

Since 2016, China has invested more than 300 million yuan to build dozens of village "solar power stations", with an installed gross capacity of 80.27 megawatts.

That makes full use of the barren mountains and benefits 129 formerly poverty-stricken villages.

On the other side of the Taihang Range lies Lyuliang, a city that has enjoyed a similar rags-to-riches story. Poor transportation also made Lyuliang a suitable military base for the CPC's forces during wartime, but it also kept local residents isolated from the outside world.

By the end of 2014, about 19 percent of its population, accounting for about 46 percent of Lyuliang's rural residents, lived in poverty.

However, a passenger train started operating in June 2018. It links Caijiaya village, the heartland of poverty-stricken Xingxian county, with Taiyuan, the provincial capital.

That has seen local specialties — such as millet, beans, rice, jujube and cooked wheat foods — gain access to a larger market and tourists have started flowing into the mountains by rail.

By the end of last year, the final batch of 5,312 impoverished residents from 2,504 families in Lyuliang had bid farewell to poverty.

Contact the writers at sunruisheng@chinadaily.com.cn

Generations of greening grow job opportunities

By SUN RUISHENG in Taiyuan and LIU YUKUN

Once a drought-plagued region in the northwestern part of Shanxi province, Youyu is now an eco-friendly county with forest coverage of more than 56 percent, thanks to greening efforts by generations of locals.

Li Yunsheng was one of many residents who fought desertification. "Back in the old days, the environment was severely damaged and living conditions were terrible," the 66-year-old recalled.

"When we were kids, we used to light up the house even during daylight because the sky was clouded by sandstorms. Some mornings, it was difficult to open the doors because our house had been half-covered by sand during the night."

The local government said that in the 1940s and '50s, the greening rate in Youyu was just 0.3 percent.

In 1949, the county's Party secretary, Zhang Ronghuai, called for trees to be planted to reduce sandstorms and improve the environment. Since then, government officials, forestry technicians, workers and local residents have spent decades working to improve the local environment.

"Growing up watching the greening efforts by the older generation had a great influence on me. After running a driving school and making enough money to support my family, I started thinking about what I could do to follow in their footsteps," Li said.

In 2002, he left the driving school and spent about 6 million yuan of his own money on equipment and a rental contract to work more than 666 hectares of sandy land on Mount Matou.

He has spent nearly two decades far from his family, planting trees and devoting himself to greening efforts.

"It was much harder than you could imagine. At that time, the land had deteriorated too severely for trees to survive," he said.

"In sandy areas, the saplings could easily be blown away by winds. Also, there were no roads on the mountain, which made water and sapling deliveries extremely difficult."



Forests and grassland now cover the once barren mountains and hills of Youyu county, Shanxi. XIN TAI / FOR CHINA DAILY

There were more challenges to overcome. As the high altitude made it difficult to cook or boil water, Li could only eat simple meals, mainly made from flour, and drink untreated water.

Eventually, after many attempts and consultations with professionals, he discovered ways to plant trees in the sandy ground and, after years of effort, the environment of Mount Matou has improved greatly.

Li said he started a herding business on the mountain in recent years, which has helped him earn as much as 500,000 yuan (\$77,200) per annum. He is also planning to develop tourism-related businesses on the mountain.

Decades of dedication

Han Xiang has also spent decades planting trees. Thanks to his efforts, Shuimogou, once a wasteland in Youyu with some 3,000 trees across 160 hectares, has been turned into a forest of about 300,000 trees.

Han's story dates back to 1998, when the local government encouraged residents to rent deserted land and undertake greening efforts. Han, then Party chief of Youyu's land construction bureau, became the first person to sign a land rental contract.

He spent two years leveling the

ground and doing preparatory work for planting on Shuimogou.

In the first few years, he and his son fetched water from a nearby ditch about 60 times a day, bringing it back to the planted areas on the slopes or the mountain top. A lack of equipment meant they had to use simple tools, including wooden buckets and shoulder poles, which often caused injuries, Han recalled.

He said a businessman offered him 10 million yuan to buy the rights to his rental contract, but he refused.

"The forests and land of Shuimogou mean I am spiritually wealthy," he said.

When he was 66, the heavy workload saw Han diagnosed with a herniated disc that compressed a nearby nerve and made it impossible to take care of himself.

His daughter, Han Jianfang, who looked after him at that time, said the family understood and supported him. "My father was one of many who devoted themselves to the greening efforts and improving Youyu's environment," she said.

Yu Xiaolan, 55, is another local who has spent years turning wasteland into forests. In 1989, she arrived in Youyu from Kaiyuan, a city in Yunnan province.

Having grown up among moun-

tains covered by trees and plants, she was shocked to see the barren land and sandstorms.

Her first thought was to move back to Yunnan, but when she saw that the local people were trying hard to improve the environment, she was touched and decided to stay.

As a result, she rented over 266 hectares of deserted mountain land and started planting trees.

In the first few years, she carried barrels of water up and down the mountain numerous times a day, planted seeds, nurtured apple saplings and grafted them onto Siberian crab apple trees.

After five years, she harvested her first apples and promptly gave them to her fellow villagers. "It was like a miracle from heaven, growing fruit on such drought-hit, barren land. I wanted to share the joy with others," she said.

In the past 30 years, Yu has planted more than 800,000 pine trees, about 30,000 fruit and cottonwood trees, over 0.6 hectares of sea buckthorns and many other plants. She has also started fishing, livestock breeding and agritainment businesses on the mountains she rents.

"Planting trees and grasses helped with the greening of the wasteland, while livestock breeding and other businesses provided job opportunities for local villagers, especially those living in poverty. The improvement in the environment has also boosted local people's incomes," Yu said.

Hundreds of thousands of locals like Li, Han and Yu have spent years working on the greening of Youyu.

In the past 70 years, the county's green area has risen from 0.3 percent to 56 percent, thanks to the efforts of generation after generation.

Now, Youyu has nearly 113,333 hectares of plantation forests and about 130 million trees. The county's environmental improvements have also helped boost the number of businesses. To date, local residents have bred about 750,000 goats and sheep, and grown 26,667 hectares of grain and many other crops.

The environmental changes have also attracted a growing number of tourists. Last year, despite the challenges posed by the COVID-19 outbreak, Youyu registered 4.25 million visits.

The tourism boom has played a major role in the growth of the local economy, according to the county government.

Contact the writers at liuyukun@chinadaily.com.cn

Firms' successes reflect growing industrial ability

By SUN RUISHENG in Taiyuan and LIU YUKUN

With a steel product 0.015 mm thick — less than a quarter the thickness of a standard sheet of A4 paper — and 600 mm wide, one doesn't need the strength of the Incredible Hulk to rip it apart.

The extremely thin stainless steel sheet, aka "hand-tear steel" because it can be easily torn by hand, was finally produced after 700 failed attempts by Taiyuan Iron and Steel Group, in which the Shanxi provincial government holds a controlling stake.

The steel is used in a wide range of sectors in high-end manufacturing, and also for foldable screens in high-end electronics, flexible solar modules and energy-storage batteries.

Data from the company, also known as Tisco, show that more than 50 metric tons of hand-tear steel have been used in manufacturing across several sectors since 2018. The steel is the market leader in China with a share of 70 percent.

Liao Xi, deputy head of technology and quality at Tisco Precise Strip Steel, a Tisco subsidiary, said: "The company can meet wide demand from both domestic and overseas customers, including for customized hand-tear steel products. No more than three companies in the world can match what we do."

Gao Xiangming, Tisco's chairman, said the successful research and development of hand-tear steel has promoted the growth and upgrading of key materials in the high-end manufacturing industry.

Hand-tear steel is just one of many achievements of the company's R&D team in recent years. It has also developed products such as duplex stainless steel rebars for the Hong Kong-Zhuhai-Macao Bridge project and large high-purity seamless stainless steel circular forgings for a nuclear power project in Fujian province.

The forgings will be used as the supporting ring for a pilot 600,000-kilowatt fast reactor in Xiapu county, Ningde city. The ring, which will endure temperatures of up to 650 C, will have a working life of about 40 years.

Gao said Tisco is now ramping up efforts to optimize company structures, encourage technological R&D and improve staff training to make it a leading global manufacturer.

The development of hand-tear steel and the stainless steel forgings are among many achievements in high-quality development made by companies based in Shanxi.

In recent years, the province has stepped up efforts to make breakthroughs in fields such as new infrastructure, new materials and new technologies.

At the Huawei Shanxi (Lyuliang) Big Data Center, more than 900 servers run simultaneously, using fast calculating speeds and efficient storage functions. Xinhua News Agency estimates that the center will generate revenue of 500 million yuan (\$77.7 million) this year.

According to Wu Hongwen, head of the Shanxi Department of Industry and Information Technology, the province had installed 16,281 fifth-generation base stations by the end of last year and applied the technology to coal mining operations.

Contact the writers at liuyukun@chinadaily.com.cn



100 PATH TO GLORY



Shen Jilan (second from right) walks out of the Great Hall of the People in Beijing on Sept 29, 2019, after receiving the Medal of the Republic. PROVIDED TO CHINA DAILY

A pioneer who flew the flag for gender equality

Late NPC deputy who kept humble was at forefront of nation's revival

By SUN RUISENG in Taiyuan and LIU YUKUN

Shen Jilan lived a remarkable life before she died last year at age 91. She was the only deputy to attend 13 consecutive sessions of the National People's Congress, China's top legislature, since it was established in 1954; she was a pioneer who encouraged women in her hometown to work instead of staying at home; and her proposal on gender pay equality became a key part of the 1954 Constitution of the People's Republic of China.

Shen was referred to by many titles during her life, but she usually told people "I'm just a farmer".

She was born in 1929 in a remote village in the Taihang Mountains, a revolutionary base of the Communist Party of China in North China's Shanxi province. When Shen was 17, she married a soldier from Xigou village, Pingshun county.

It was a time when many women still followed the old custom of foot-binding and were asked to stay at home.

In 1951, the government of Xigou formed a cooperative to boost farming. Villagers struggled to make ends meet, and Li Shunda, head of the cooperative, turned to

women to boost the labor force.

Shen was appointed deputy head of the cooperative and started to persuade women to join men in doing agricultural work. However, Shen soon encountered a hurdle — pay inequality.

"Men got 10 work points a day, but we only got a maximum of five points no matter how much work we did," Shen told Xinhua News Agency. The work points were a labor-based payment system during China's planned economy era.

Shen organized a contest to plant and fertilize seeds to prove that women can do the same, or more, work than men. The women won the contest as many of the men paused to smoke tobacco. After that, the women were given equal pay.

Media attention

Shen soon gained fame across the country through media coverage. In 1953, she attended the World Congress of Women in Copenhagen as a role model for women's liberation. The next year, she attended the NPC's first session, during which the Constitution was passed, establishing "equal pay for equal work" as she had proposed.

In 60-plus years serving as an NPC deputy, Shen made numerous proposals covering education, transportation, the conservation and development of water resources and many others, most of which were closely related to benefiting farmers.

Under proposals from Shen and

many other deputies, numerous projects in Shanxi have been achieved, including utilizing water resources from the Yellow River for the province's irrigation and water consumption needs, the Taiyuan-Jiuguan Highway and the renovation of industrial bases.

Shen viewed the NPC as a platform where she could speak on behalf of the public.

In 1973, she was appointed the head of the provincial women's federation and moved to the capital, Taiyuan. However, she refused to relinquish her *hukou*, or household registration in Xigou, nor receive any salary, a house or other benefits for her new position.

"I can't leave Xigou or farm work. I'm just a farmer and my roots are in the countryside," Shen said.

Poverty work

After serving the provincial women's federation for 10 years, Shen returned to Xigou, where she was given another task — help fellow villagers get rid of poverty.

At that time, China was in transition from a planned economy to a market economy, under the reform and opening-up drive, which started in 1978. Shen proposed a mechanism to encourage co-development of collectively owned businesses and privately owned ones.

Shen opened the first collectively owned enterprise, a ferroalloy plant, in her village in 1985, and later built a walnut oil factory and a cannery.

These projects were followed by

an alnico plant, beverage factory, and many other collectively owned enterprises, which became the pillars of Xigou's economic growth.

In 2013, Shen shut down the ferroalloy plant as it failed to meet the country's standards on environmental protection. Later, she proposed the closures of a number of companies that had high energy consumption, high levels of pollution and excessive emissions, and set up environmentally friendly businesses.

Under Shen's leadership, shiitake mushroom growing in greenhouses and photovoltaic power generation saw rapid development in Xigou. In 2019, overall income in Xigou reached 72 million yuan (\$11 million), and per capita disposable income was 13,600 yuan which topped all villages in Pingshun county.

Last year, Shen died after battling a number of illnesses. Up until her final moment, she was still raising suggestions on poverty alleviation and improvements to rural infrastructure.

Over more than 60 years as an NPC deputy, Shen witnessed huge changes in China.

"I rode a donkey, later a truck, and then a train to Beijing for the 1954 meeting over four days. But today, it only took three hours by high-speed train," she told Xinhua.

Xigou has set up several memorial sites to commemorate Shen and her contribution to the village.

Contact the writers at liuyukun@chinadaily.com.cn

Physicist takes pride in leading institute established in north

By SUN RUISENG in Taiyuan and LIU YUKUN

For 85-year-old Peng Kunchi, spending nearly 30 years establishing a world-class physics research institute in a less-developed northern province was one of the greatest achievements of his life.

"The Institute of Opto-Electronics at Shanxi University, established in 1985, went on a long journey from zero to a top-level institute," the physicist said. "We are now in the position to conduct dialogue and academic communications with labs across the world at the same advanced level."

Peng was born in August 1936 in Zhenjiang, Jiangsu province. He began studying physics at Sichuan University in 1957 and four years later decided to pursue a career in the field.

After graduation, he became a physics lecturer at Shanxi University. Since then, he has never stopped thinking about how to inspire students to learn, develop their character and build a stable and mature academic team.

Zhang Tiancai, one of Peng's graduate students, said: "I wouldn't have the achievements I have today if I hadn't gone to Shanxi University and learned from Peng. It's not a place to have fun, but it's a good place to conduct academic research, especially for people who really want to achieve something."

Recognition

Peng devoted great effort to the research and development of laser resonators and solid-state lasers, striving to make a breakthrough in related technologies.

In 1978, he discovered and corrected mistakes in an academic article on the journal Applied Optics by two United States researchers, and was invited to become a member of The Optical Society.

In 1981, Peng was selected as a member of China's first group of visiting scholars to the French National Centre for Scientific Research, a state research organization and the largest fundamental science agency in Europe.

He later went to the quantum optics laboratory at the University of Texas in the US for advanced studies.

During that period, he participated in early experimental research on the generation of squeezed states of light and developed an advanced laser.

At that time, quantum science had been undergoing development in the Western countries for more than 60 years, and experts in the field had been awarded Nobel Prizes.

However, for young Chinese researchers, quantum optics was still a new field.

Wu Ling'an, a researcher at the Institute of Physics of the Chinese Academy of Sciences, who studied in the US with Peng, said: "We were all very excited and felt that this was a new research field. At that time, some people said that they wanted to return to China to carry out new and cutting-edge research."

Peng, then 48, was among the



We went abroad to learn advanced science and technology, not to pursue personal enjoyment of life. We should return to our homeland, where technology is still less developed, and there is still a lot of work for us to do."

Peng Kunchi, physicist at Shanxi University

group of researchers who wanted to return to China, Wu said. He was at the forefront of international laser research and had accumulated valuable experience in establishing high-level laboratories.

Returning home

In the early 1980s, Peng proposed to the Shanxi government the idea of returning to China to establish a laboratory. The provincial government quickly approved his plan and allocated \$200,000 to Peng, who was still in the US, to purchase advanced laboratory equipment.

"He bought all kinds of equipment in the US, ranging from optical platforms to small multimeters. He bought them quickly and shipped them back to China," Wu said.

In 1984, Peng declined overseas job offers with good salaries and benefits, which went against the trend of Chinese academics at the time, and returned home.

Relatives, friends and colleagues told Peng he was making a mistake. However, he replied without hesitation: "We went abroad to learn advanced science and technology, not to pursue personal enjoyment of life. We should return to our homeland, where technology is still less developed, and there is still a lot of work for us to do."

In April 1985, Peng established the Institute of Opto-Electronics at Shanxi University. Through decades of effort, the institute has established itself as a world leader in the research and study of optoelectronics. The institute has prepared different types of light fields and completed a number of experimental studies into quantum communications, measurement and computing.

Last year, Physical Review Letters, an academic journal sponsored by the American Physical Society, published a research article by a Peng-led team from the institute. According to the institute's official website, it has been committed to transforming basic research results into applied technologies in recent years.

Contact the writers at liuyukun@chinadaily.com.cn

Cultural treasure emerges from backwaters

By SUN RUISENG in Taiyuan and LI YANG

In 1998, Jia Zhangke put his hometown of Fenyang in Shanxi province on the cinematic map when it featured as the backdrop for his film *Xiao Wu*, the one that placed him under the spotlight.

Known as *The Pickpocket* overseas, the film was recognized at the 48th Berlin International Film Festival and launched the career of Jia, one of the key members of the so-called sixth generation of Chinese film directors.

After the breakthrough, Shanxi was prominently featured in the films of directors from the province, who said it was their way of "repaying" their home.

Jia, in particular, maintained his close association with Shanxi. His subsequent films, *Platform* and *Still Life* in the 2000s and *A Touch of Sin*, *Mountains May Depart* and *Ash is Purest White* in the past decade, recorded the changes in Chinese society and both everyday and extraordinary images of Shanxi people.

In his films, Jia employs Shanxi performers who speak in dialects and tell "Shanxi stories" in natu-



Movie director Jia Zhangke from Shanxi province.

PROVIDED TO CHINA DAILY

ral settings of the province.

Some film critics have said that Jia's hometown constitutes a character itself in his movies.

With the support of Jia, the Pingyao Crouching Tiger Hidden Dragon International Film Festival was founded in Pingyao, Shanxi, in 2017.

Jia has played down the claim that the film festival is a nostalgic small event. To hold an international film festival in Pingyao, a fourth-tier town, is to promote the flow of cultural resources from the top of society to the bottom, he said.

The province needs such projects

to make itself known to the world, and Shanxi's rich cultural resources need to be marketed through them.

"The film festival is a resource with huge amounts of information, and its long-term benefits will be gradually realized in the future," Jia said.

As the film festival has been held four times already, the event has established a brand that has helped it mature due to ongoing input from industry figures.

The Pingyao county government will host the fifth version of the event, which will help secure the long-term viability of the festival.

Wu Xiaohua, Party chief of Pingyao, said the festival has become an introductory "business card" not only for the city but also Shanxi.

Cultural village

Four years ago, the Seed Cinema opened in Jiajia, Jia's home village.

As an important part of the Jia Zhangke Arts Center, the director hopes it can take root and bloom in order for a cinema culture to prosper in Jiajia.

Apart from the arts center, Jiajia now has Fenzhou Folk-Custom Park, the Ma Feng Memorial Hall, the Industrial Cultural Innovation

Park and Jiajie Street. The village has developed into a model for cultural tourism.

Jiajie Street receives about 2 million visitors a year, bringing tangible benefits to local farmers.

Xing Wanli, Party chief of the village, said Jia was invited to promote local Lyuliang culture in 2016.

At the time, Lyuliang literature gained wider recognition, due to Jia's efforts. His team had unearthed nearly 500 writers from Lyuliang, a mountainous region known for its harsh environment.

In 2019, the inaugural Lyuliang Literature Season was held in Jiajia, the first major literary event staged in a Chinese village.

Jia said Shanxi literature is not only important to China, but also the rest of the world. He hopes a more favorable environment can be created for literature lovers in Shanxi to thrive and provide a path for national and world-class writers to visit the province.

Jia hopes more people from Shanxi accept the challenge to promote their province as a cultural treasure.

Contact the writers at liyang@chinadaily.com.cn



Peng Kunchi conducts an experiment at his lab in Shanxi University in Taiyuan, Shanxi province. PROVIDED TO CHINA DAILY