

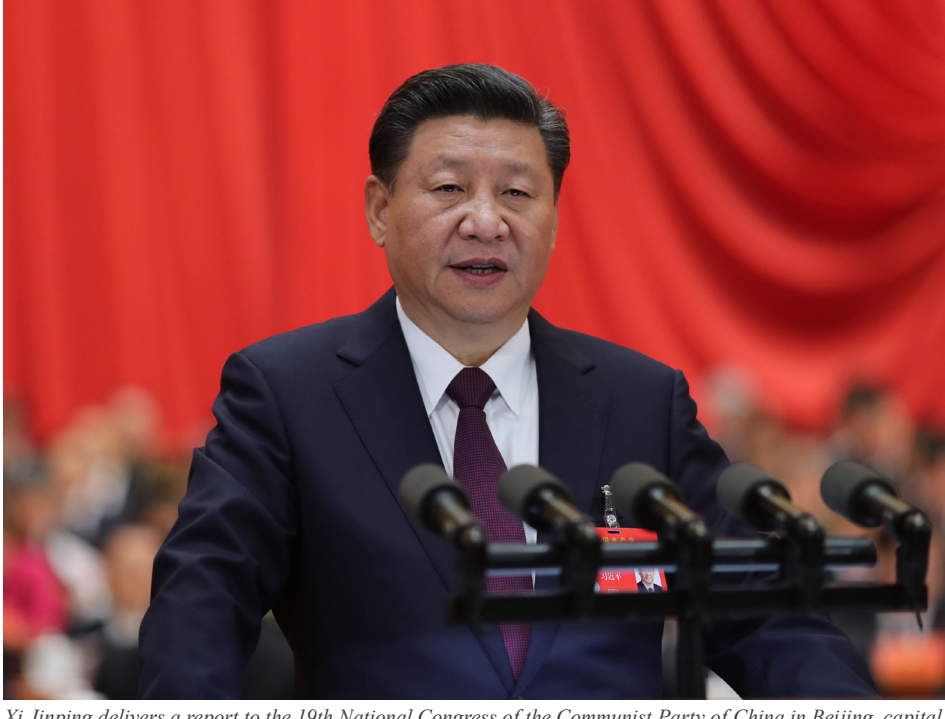
The Information Office, International Department of the CPC Central Committee

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## Xi Jinping: the man who leads China's reform into a new era

Xi has been and is a remarkably comprehensive reformer



Xi Jinping delivers a report to the 19th National Congress of the Communist Party of China in Beijing, capital of China, October 18 (XINHUA)

Wang Jun is a deputy editor and main author of the book *A Study of Xi Jinping Thought on Reform and Opening Up*.

Paper and documents pile up in his office. These are what his team has collected for research in writing the book.

"Xi Jinping is a man whole-heartedly devoted to reform and opening up," said Wang, President of the Guangdong Academy of Social Sciences.

In 2018, China celebrates the 40th anniversary of the reform and opening up, a cause started by Deng Xiaoping and is now being carried forward by Xi.

In late October, Xi came to Guangdong Province. He visited a reform-themed exhibition at the foot of the Lotus Mountain in Shenzhen, spending more than an hour inside the museum halls.

Xi paused in front of a large painting. It was a morning rush hour scene of the city in the 1980s. A giant poster stood tall before the Shekou industrial zone to constantly remind the city's early builders to seize the moment and strive for economic miracles.

It was not the first time Xi visited Shenzhen, a prominent test-bed of China's reform and opening up.

"Coming to Shenzhen, Guangdong again (because) we want to declare to the world that China will never drag its feet on reform and opening up! China is certain to show the world impressive new achievements in the next 40 years!" Xi said.

Six years ago, when Xi was elected General Secretary of the Communist Party of China (CPC) Central Committee, reform entered what many people call a "deep-water" zone. The CPC faced arduous challenges in reform, some foreign media claimed.

Xi has withstood the pressure and led China to achieve so much, Wang said.

The Chinese economy is being transformed from fast growth to high-quality development. In 2017, the growth picked up for the first time in six years, reaching 6.9 percent, way above the 3.7-percent global economic growth.

Over the past six years, more than 70 million new jobs have been created, more than the population of Britain. The size of the Chinese middle-income group has swelled to 400 million, constituting a huge consumer market in the world.

Overseas media called Xi "a far-sighted reformer" and "a serious reformer who built a unique path for China's future" and whose clear vision for reform "has inspired the nation."

### Determined to reform

When China began the reform and opening up in 1978, Xi was studying chemical engineering at Tsinghua University. His father, Xi Zhongxun, was then the Party Chief of Guangdong Province.

The elder Xi had high hopes for reform. He sought Deng's permission for "taking the first step" to set up a special economic zone that would break the new ground for reform.

The father's courage and sense of mission left a deep impression on the son.

In the early 1980s, as Xi senior was promoted to Beijing, Xi Jinping was sent down to work in the county of Zhengding, Hebei Province. He began his reform experiments there, starting with the rural land contract trial, being the first in Hebei to adopt this practice already tested in southern provinces.

As the county Party Chief, Xi already knew how hard it was to press ahead with reforms. He was critical of the "middle-level obstruction" issue and solved it by appointing willing and competent cadres to push forward reforms.



File photo taken in 1983 shows Xi Jinping in his office in Zhengding County, north China's Hebei Province (XINHUA)

Xi's reputation as a reformer was reinforced as he advanced his political career. In Ningde, Xiamen and Fuzhou of Fujian Province, Zhejiang Province and Shanghai Municipality, he kick-started innovative reform strategies to tackle different sorts of challenges.

"In a real sense, Xi comes from a reformer family. More important, Xi is deeply committed to reform," said Robert Kuhn, a leading U.S. expert on China and Chairman of the Kuhn Foundation, adding that when they met in 2005 and 2006, Xi spoke a lot on the importance of "reform in all facets."

"Xi's reform is derived from his experience," said Shi Zhihong, a former Deputy Director of the Policy Research Office of the CPC Central Committee. "He knew that the rigid old paths would lead nowhere, and reform was a must."

In 2012, reflecting on China's reform cause, Xi spoke highly of Deng. "If there were no Deng who guided our Party to make the historic decision to reform and open up, we couldn't have achieved this much," Xi said.

"The reform and opening up is a great awakening of our Party, and it gave rise to great theoretical and practical innovations," he added. Xi's thinking and practices of reform in provinces have been compiled into books, from which observers say one can trace the roots of China's comprehensive deepening reform that is being rolled out in the new era.

### "Fifth modernization"

On November 15, 2012, Xi met the press right after being elected General Secretary of the CPC Central Committee. He spoke of the need to adhere to reform and opening up to continue liberating social productive forces, resolve people's difficulties in life and work and stay committed to the path of common prosperity.

At the moment, Xi's resolve to carry on the reform could not be more obvious. But Xi knew how hard it would be. All low-lying fruits have been picked, what is left are hard bones, he said.

People following Xi in his reforms need to be brave enough to cross hurdles in thinking and break through the blockade of vested interest.

Xi came to Guangdong in his first domestic inspection tour after assuming the Party's top post. It was not by coincidence that in 1992 Deng visited Guangdong in his now well-known "southern tour." Deng's talks during the tour were instrumental in launching the reform and opening up.

In his 2012 visit, Xi paid tribute to Deng's bronze statue. "Reform and opening up is a make-or-break move that decides China's destiny," Xi said. "There is no pause or backtrack."

The *Financial Times* said, "Mr. Xi is hardly the first Chinese leader to talk about the need for reform. But the tone of the pronouncements emerging from his weekend trip has been more forceful than those employed by past leaders."

For Xi, reform must be carried on along the path of socialism with Chinese characteristics. Neither the old path nor the detour could work.

Xi insisted that reform shall suit China's own needs for change, and China would not reform to make others happy. "Only the wearer knows whether the shoes fit or not," he said.

The overall goal of deepening reform is to improve and develop the system of socialism



Xi Jinping talks with workers at Qixing farm, northeast China's Heilongjiang Province, September 25 (XINHUA)

with Chinese characteristics and modernize China's system and capacity for governance.

This overarching objective is described by observers as China's "Fifth Modernization" drive.

According to Xi, the reform must balance several pairs of relations: between mind emancipation and truth-seeking; overall advancement and breakthroughs in key areas; top-level design and crossing the river by feeling the stones.

He Yiting, Vice President of the Party School of the CPC Central Committee, said Xi's thought on reform has enriched and developed the theory of socialism with Chinese characteristics.

Zheng Yongnian, Director of the East Asian Institute at the National University of Singapore, said Xi answered the questions related to what to change, how to change in the new round of reform and who will implement it.

In November 2013, Xi presided over the third plenary session of the 18th CPC Central Committee that issued an extensive reform plan and a seven-year implementation timetable.

China's deepening reform in all areas has caught the world's attention. Some overseas media said the reform gave a big impetus to China's lasting and inspiring rise.

Since then, the succeeding Party plenums have all stressed deepening reform, which constitutes a prominent fixture in Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era.

Xi has become the leader in China's new round of reform and opening up.

### Lead by action

After the third plenary session of the 18th CPC Central Committee, Xi served as the head of a leading group on deepening overall reform. When it was changed to a committee, he remained as the chair.

In the meantime, he also chairs a number of high-level committees and commissions on areas such as law-based governance, foreign affairs, cyber-security and informatization.

By heading these groups, Xi can have face-to-face discussions with people working in different areas and better learn about actual situations.

Xi went through each version of major reform documents, added his personal insights and pushed for major progress.

Take the market's role as an example. In 2013, the Party decided to let the market play a "decisive" role in allocating resources. It sent a strong signal of policy adjustment as the original wording—"basic"—had remained unchanged since 1992.

When drafting the change, some people said it was still too early to make such a big leap. It was Xi who decided to make the change.

"Many of the major reforms would not have been possible if it weren't Xi," said an academic who was involved in drafting the document.

Xi led reform on multiple fronts to achieve breakthroughs: the gaps between urban and rural populations have been narrowed, the two-child policy initiated and pushed to yield results, splurge on government bills curbed, and vested interests broken up.

He constantly called on officials to have the perseverance to hammer away at obstacles until a task is done and make concrete, meticulous and effective efforts in reform.

Between late 2012 and late 2017, Xi took 50 domestic inspection tours, in which he researched and pushed for reform.



Xi Jinping talks with Yuan Longping and other agricultural experts at Nanfan Scientific and Research Breeding Base in Sanya, south China's Hainan Province, April 12 (XINHUA)

The reform progress encompasses an expansive scope of fields.

In the economy, he made the judgment of new normal, initiated the supply-side structural reform and drew a clear line between the government and the market.

In science, he set the goal of turning China into one of the world's science centers and an innovation high ground.

He led the anti-corruption fight to form a crushing tide and has won a sweeping victory.

He launched a major institutional reform to reshape Party and state organs, including the establishment of the National Supervisory Commission and the Commission for Law-based Governance of the CPC Central Committee.

Reform progress is reported on other fronts: people have stronger cultural confidence and sense of fulfillment; environmental protection systems are improved; and the armed forces have been reshaped.

In the five years since late 2012, more than 1,500 reform measures were issued. Reform picked up pace after the 19th CPC National Congress in late 2017.

In his 2018 New Year speech, Xi called on the Chinese people to "cut paths through mountains and build bridges across rivers" to advance reform.

Wang, the book author, said Xi has made breakthroughs in a number of tough and stalemated issues.

"Xi has been and is a remarkably comprehensive reformer, whose reforms are broader in scope than those of prior generations," Kuhn said.

### For the people

In April, Xi told visiting UN Secretary General Antonio Guterres that "everything we do is for people's happiness and national rejuvenation and to seek common ground for the world."

Xi has been stressing that reform should focus on what the people care about and expect the most. The aim, he says, is to give the people a stronger sense of fulfillment.

That may be felt more directly from the rise of earnings. The average income of Chinese grew by 7.4 percent annually over the past six years, eclipsing the GDP growth.

In October, wage-earners hailed a personal income tax reform which exempts those who earn less than 5,000 yuan (\$725) a month.

Many migrants and middle-income group.

Zou Bin is one of them who benefit from the reform. He rose from laying bricks at construction sites to heading a team in the Fortune 500 firm China Construction Group as a project manager.

In 2018, Zou started serving as a deputy to the National People's Congress, the top legislature. His first legislative proposal was, not surprisingly, about deepening construction labor reforms.

Poverty reduction is another milestone. In the past six years, about 70 million rural people had been lifted over the poverty line.

William Jones, Washington bureau chief of the *Executive Intelligence Review* news magazine, said ending poverty had long been regarded a major task for humanity but until recently, was seen as a Utopian dream.

"With China, that dream is now becoming a reality," he said.

Under Xi's lead, China's social security network has expanded, with the basic medical insurance covering 1.3 billion people and the social old-age insurance covering more than 900 million.



The blockbuster touched a public sore point of costly drugs. But fortunately, the issue is being addressed.

Policies have been introduced to exempt import tariffs on many cancer drugs, and efforts are on-going to bring more life-saving medicines into the medical insurance program.

Xi's reform also aims to nurture a great environment to conduct business.

The World Bank Group said in its annual "Doing Business Report" that China advanced to a global ranking of the 46th in 2018, up from the 78th last year, as the country implemented the largest number of reforms in the East Asia and Pacific region.

The "2018 China Business Report" by the American Chamber of Commerce in Shanghai also found that 83 percent of respondents in manufacturing sector and 81 percent in retail achieved profit, while 61.6 percent of companies expected to increase their China investment in 2018.

Private sectors in China have entered a new phase of development.

In 2018, a total of 28 Chinese private companies were enlisted in the Fortune 500, compared with a lone company in 2010.

### Connecting the world

China's reform has benefited the world. China contributed to global growth by an annual average of 18.4 percent in the past 40 years, second only to the United States, according to the National Bureau of Statistics.

In 2017, China accounted for 27.8 percent of global economic growth, more than that of the United States and Japan combined.

CRRC Corporation Limited (CRRC), the world's leading supplier of rail transit equipment, has improved infrastructure and brought jobs to more than 100 countries and regions since it was founded three years ago.

"President Xi visited our workshop in 2015, asking us to speed up innovation and create a brand for 'made-in-China' products, which has promoted our modern enterprise system reform and CRRC's integration with the global economy," said a CRRC executive.

Facing mounting protectionism and a stagnant world economy, Xi proposed to foster a new type of international relations featuring win-win cooperation and follow the principle of achieving shared growth through discussion and collaboration in engaging in global governance.

An important feature of Xi's reform is the integration of promoting domestic reform with the participation of global governance reform, said Shi.

Xi's proposition of building a community with a shared future for humanity reflects the pursuit of common values, Shi added.

When Xi was governor of east China's Fujian Province 18 years ago, he pushed for a demonstration project to help the Eastern Highland Province of Papua New Guinea with Juncao and dry-land rice planting.

The Juncao technology cultivates edible and medicinal mushroom from special wild grass so that trees do not need to be cut for mushroom growing. The technology has brought the hope of poverty eradication across the globe.

The success of Juncao is an epitome of the advancement of the Belt and Road Initiative, proposed by Xi to promote a shared prosperity of humanity by cooperation on trade and infrastructure. So far, more than 140 countries and international organizations have signed agreements with China to jointly build the Belt and Road.

Ecological degradation is a key global challenge. Xi attended the UN Climate Change Conference in Paris in November 2015. China is one of the first countries to sign the Paris Agreement on climate change. Xi personally handed over China's instruments of joining the Paris Agreement to then UN Secretary General Ban Ki-moon in September 2016.

In the past six years, China has kept its promise to protect the Earth through deepening domestic reforms, including the implementation of 10 air pollution prevention and control measures, the promotion of a river chief system and introduction of a national park mechanism. Many of the reforms were initiated by Xi.

Xi brought China's opening up to a new level. He designed and pushed forward the opening of the world's first import-themed national-level expo. At the China International Import Expo, he reiterated opposition to trade protectionism and commitment to an open world economy.

The expo, held in Shanghai in November in 2018, was attended by over 3,600 companies, including nearly 180 American companies. Agreements on intended one-year purchases of goods and services were valued at \$57.83 billion.

China announced a series of measures to further open up its economy, including broadening market access, easing foreign equity restrictions, lowering automobile import tariffs and increasing imports. The number of free trade zones has risen to 12 in five years.

"Openness brings progress while seclusion leads to backwardness," Xi said.

Xi led China to be more involved in international economic cooperation, turning the country into a more mature modern market economy, said Wang.

### On the way

"Xi has transformed China at an astonishing pace," Geoff Raby said in his column in the *Australian Financial Review*. "At over \$8,000 per capita, China is now at the higher end of the World Bank's middle-income economy range, and some 40 percent of that was added during Xi's tenure."

"This is the new order in Asia. It is no longer emerging, it has arrived," he said.

The People's Republic of China will celebrate its 70th anniversary in 2019. The Chinese nation with a history of humiliation has stood up, grown rich and is becoming strong.

Xi's reform has laid a firm foundation for the Chinese nation's rejuvenation. It will be the first time in human history that a country of more than 1 billion people march into modernization as a whole.

China's reform has inspired the world: developing countries can walk a new path to modernization that is different from the West. It breaks the "end of history" and "Western-centered" mentalities.

The year 2018 also marks the 200th anniversary of Karl Marx's birth. China's successful practice has injected new vitality into the classic theory named after him.

What Xi aims to develop is a model of how a rising country can avoid confrontation with an established one. It will show that different civilizations can enrich exchanges and co-exist peacefully.

The reform is still on the way. It is no easy task to change the world's biggest developing country. China's per capita GDP has surpassed \$8,000, yet far from \$57,000 of the United States.

China is still facing an unbalanced industrial structure, weak innovation and financial risks.

Xi has many challenges ahead. With great courage, he is ready to lead the Party and the country to forge ahead with the reform.

"A lot of progress has been made over the past few years," Xi said. "But much can still be achieved as we embark on the new journey."

(Xinhua News Agency December 17, 2018)



Xi Jinping visits Farms and Land Reclamation Administrative Bureau of Jiansanjiang, northeast China's Heilongjiang Province, September 25 (XINHUA)



# A city's legend

## How Shenzhen evolved from a fishing village into a pioneering metropolis

By Yuan Yuan



The Qianhai bay area in Shenzhen, Guangdong Province, on July 31, 2017 (VCG)

Evolution from a fishing village bordering Hong Kong, Shenzhen, in south China's Guangdong Province, is now one of China's megacities. It has been the country's fastest growing economy over the past four decades.

The city was born under special circumstances. Right after China adopted its reform and opening-up policy at the Third Plenary Session of the 11th Central Committee of the Communist Party of China (CPC) in December 1978, Shenzhen was set up as a city in January the following year. In 1980, it was upgraded to a Special Economic Zone (SEZ) along with three other coastal cities in south China, with the aim of making it a pioneer in exploring ways to carry out reform and opening up.



The central district of Shenzhen on August 23, 2015 (XINHUA)

### Huge transformation

When Wu Jinqing arrived at the Shenzhen River in a rowing boat with his parents in the 1940s, it was a desolate place with few residents along the river. The family thought they could do better fishing there so they decided to stay, even though they couldn't afford to build a house on the bank. The whole family had to squeeze into a 4-square-meter boat and live on the river through every season. Gradually more fishermen from nearby areas in Guangdong moved along the river and a community was formed and named Yumin, or Fishermen, Village.

In the 1950s, with the support of the local government, many fishing families were moved up to the bank and settled down. But life was still difficult. The huge contrast between incomes in Hong Kong and Yumin Village prompted many to spare no effort in trying to reach Hong Kong.

The situation changed almost overnight after Shenzhen became an SEZ. Yumin Village, because of its unique location as the closest place in Shenzhen to Hong Kong, was set up as a trailblazer in the city.

In 1979, with the preferential policies of the Shenzhen SEZ, people in Yumin Village organized transportation teams of freight ships and opened for business. Some entrepreneurs from Hong Kong started renting houses in the village and converting them into factories. The rent went straight into the villagers' pockets. In 1981, the annual income of the 35 households in the village surpassed 600,000 yuan (\$94,200), translating into each household getting more than 10,000 yuan (\$1,570) annually, a sum that many in other regions in China couldn't even dream of at the time.

In 1981, it built villa-style apartments for villagers, each with a garden, fishing pool, refrigerator, rice cooker and TV—luxurious for Chinese people at that time when the average yearly per-capita GDP was no more than 400 yuan (\$62.8). It quickly became the wealthiest village in China, placing it in the spotlight ever since. In 1984, the late leader Deng Xiaoping visited the village and praised it for its development.

In 1992, it set up a stock company with every villager as a stockholder, making it the first village stock company in China. In 2001, it made almost 100 million yuan (\$15.7 million) and used it to demolish old buildings and construct new residential compounds, 90 percent of which were used for renting, whose proceeds went directly to the villagers. A property management office was set up to manage the rental apartments.

"The people who left the village for Hong Kong started to flow back," Wu said. Wu's family can now get more than 50,000 yuan (\$7,834) each month from rent alone. As an original stockholder, Wu also gets profit-sharing payments every year from the stock company. President Xi Jinping visited the village in 2012.

"Life now is far beyond what I could have imagined when I was young," said 80-year-old Wu, who now works as a volunteer in the village. As the "walking history book" of the village, he loves to share his story with visitors. "Without reform and opening Up, it is hard to say what my life would be like now," he added.



Volunteers from Dive4Love give classes to students from a high school in Dapeng New District on May 21 (WEI YANG)

### Pioneering spirit

The development of the Shekou Industrial Zone is another microcosm of the rapid growth of Shenzhen. The industrial zone took the lead in breaking many shackles and tried every possible way to develop its economy.

"Now, we might take the achievements for granted, but every step the pioneers took in the reform and opening-up process was full of risks. They were heading on a road that no one else had ever taken and didn't know whether every step would work or fail in the end," said Liu Wei, Deputy General Manager of China Merchants Shekou Industrial Zone Holdings Co. Ltd.

In the Shekou Museum of Reform and Opening up, launched in December 2017, there are two exhibition halls. One is about the history of the Shekou Industrial Zone, while the other is about Yuan Geng, dubbed the "father of Shekou."

"Yuan is a legendary figure," Liu said. "He was a fearless explorer and played a key role in establishing the Shekou Industrial Zone."

Born in 1921 in Boan County, now a district of Shenzhen, Yuan joined the CPC in 1938 and served in the People's Liberation Army as a soldier before becoming a senior military officer. He became a diplomat after the founding of the People's Republic of China in 1949. When he was dispatched to south China to do research on possible development plans in 1975, he was already 61 years old.

After thorough investigations, Yuan concluded that to develop the economy, foreign investment had to be injected into China's economy. His proposal got a go-ahead from the Central Government.

Yuan chose a piece of undeveloped land in West Shenzhen, which covered over 12 square km and bordered the New Territories in Hong Kong, for an industrial district. He helped build it from scratch to attract overseas investment, aiming to fuse the advantages of cheap land and labor from the mainland with Hong Kong's funds and technology.

On July 2, 1979, the groundbreaking explosion demolishing the hills in Shekou became known as the "first explosion of reform and opening up." It made way for land construction to begin. Shekou, the test tube of the project, set out on a new experimental road.

A large container was constructed to be the team's office and was set down right at the reconstruction site. As the leader in the reform campaign, Yuan conducted a series of bold experiments in the industrial zone and made 24 institutional reforms, including distributing wages and housing based on performance and merit, rather than according to official rank, a method that was commonly used in state-owned enterprises in China at that time.

Overcoming a variety of difficulties, Yuan established the China Merchants Bank, China's first joint-stock commercial bank, and Ping An Insurance, the nation's first joint-stock insurer. He also engineered the revival of the state-owned China Merchants Group, a conglomerate founded in 1872.

In 1982, there were more than 100 companies settled in Shekou. Many shopping malls started to spring up, with the first bonded area and the first duty-free shop in China also emerging.

"Shekou is very efficient," Lin Xiaojing, who has been living there for almost 50 years, said. "If a person wanted to set up a company, the application process was normally three months in other regions of the mainland. But in Shekou, it only took 10 days." This has made Shekou a magnet for business starters.

By 1992, when Yuan retired at age 75, Shekou had become an industrial kingdom worth over 20 billion yuan (\$3.13 billion), and per-capita GDP had climbed to 32,000 yuan (\$5,000), on a par with the Four Asian Tigers at that time.

In 1979, the GDP of all of Shenzhen was 197 million yuan (\$31 million), while in 2017, the number jumped to 2.24 trillion yuan (\$352 billion), an average annual increase of 23 percent. Shenzhen has become a gold mine of possibility for people all over the country seeking innovation and adventure.



Yumin village in the Luohu District of Shenzhen today (Yuan Yuan)

### A future center

Some 30 years after Shekou took the lead in reform, Qianhai, a neighboring area, took the baton to expand and deepen reform.

Similar to Shekou, Qianhai started from nothing. Zheng Hongjie was dispatched as director of the newly established Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone Administration in January 2010 right after the zone was established as a pilot district designed to facilitate greater cooperation between neighboring Hong Kong and the mainland.

The office of the administration was also renovated from abandoned containers at the construction site. But this time it was a much bigger one with a complex of 333 containers.

About three weeks after taking office as General Secretary of the CPC Central Committee in late 2012, Xi chose Guangdong as the destination for his first inspection tour outside Beijing, and he visited Qianhai.

"Xi said that since the country has provided favorable policies to Qianhai, it should boldly go forward," said Zheng. "This is very encouraging to us."

On April 27, 2015, Shekou was incorporated and the Qianhai-Shekou Free Trade Zone was set up. Spanning 15 square km of newly reclaimed land on the western edge of Shenzhen, Qianhai is slated to become a large Central Business District (CBD) with a cluster of high-end offices, hotels, apartments and civic institutions when its development is completed by approximately 2020.

"Yuan Geng explored a new pattern for reform," Zheng said. "Now we will explore new systems and institutions for future development." Institutional reform is the major focus. By June 2012, the State Council had approved 22 policies for Qianhai that were even more preferential than those for Shenzhen.

"It is an SEZ within the Shenzhen SEZ, which is very innovative in terms of policy, technology and financial services," said Wang Jinxia, Deputy Director of the Qianhai Management Bureau.

Legal innovation and financial reform have become the key to the zone's international recognition, and it has attracted companies from home and abroad. Hong Kong laws can be applied to settle economic disputes in Qianhai, which has been highly appreciated by Hong Kong enterprises.

In addition, it only takes three work days to register a company in Qianhai, with an average of seven companies from Hong Kong settling in Qianhai on a daily basis.

Chen Sheng, a Hong Kong local, started his company in Qianhai in 2015, as one of the first batch of businesses in the zone. Within a year, the companies got 50 million yuan (\$7.85 million) worth of financing. By 2017, they started helping China's brand to go abroad with their international networks.

Statistics show that the total added value by firms registered reached 203 billion yuan (\$31.8 billion) in 2017, with a year-on-year increase of over 40 percent. As of the end of March, the zone had had a total of 168,600 registered companies, or an average of 88 new enterprises per day.

"We have completed the planned goal three years in advance, making it China's fastest-growing zone," said Wang Jinxia, Deputy Director of the Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone Administration.

### Greener pastures

Dapeng New District, on the other hand, has a different goal from Qianhai's big CBD objective. It aims for a milder and greener image as the city shifts from high-speed to high-quality development with more focus on environmental preservation.

With an area of 294 square km and a coastline of 133 km, Dapeng New District is rich in marine resources and is a destination for diving enthusiasts. This is the only area in Shenzhen that is not evaluated by its GDP.

In the 1990s, companies with intensified energy consumption and pollution emissions populated the area. To restore the ecological environment, 184 such companies were shut down. Ninety-seven companies renowned for research in biomedicine, gene technology and marine organisms were set up, including the China National Genebank, the largest genebank in the world.

The government is not alone in ecological protection. Dive4Love, a non-governmental organization (NGO) initiated by a few diving fans, aims to protect the sea's coral.

The organization, now with more than 1,600 registered volunteers, set up classes on marine ecology in every primary school, middle school and high school in the Dapeng New District. The students sometimes have their classes on the beach. By December 2017, the group had cleaned up 115,000 square meters of ocean and collected over 200 kg of marine debris.

There are 112 volunteer organizations in Dapeng New District, including the largest coral conservation team in the country. The volunteers in the district are from many countries including Australia, Indonesia, Malaysia and Thailand.

"We have gained a reputation as a coral protection NGO," said Shen Xiaoming, one of the founders of Dive4Love. "Many divers carry out their classes wherever they go diving and take pictures with the flag underwater to share on social media. We believe with the collective efforts of various parties, Dapeng and Shenzhen can be greener and prettier."

(Reporting from Shenzhen, Guangdong Province)



# The urban underground

## Subway construction boosts urban development

By Yuan Yuan

More than 10 million people ride the 22 subway lines in Beijing every day, making the intermingled metro system an indispensable part of the city's urban life.

But things were very different just 10 years ago, when Beijing only had a handful of subway lines. In the 1980s, the city's first two subway lines dominated underground transportation until the turn of the century, when more lines were finally added.

In recent years especially, the subway network has expanded considerably in megacities. At the same time, many other cities have hopped on the metro map in China. The lengthening city subway networks connect suburban districts with central areas, reduce commuter time and make people's life more convenient. This is the epitome of urban development in the past 40 years since reform and opening up began.

### Fast growth

Line 1, running east and west, began operating in 1971, making Beijing the first city in China to have an underground railway system. In September 1981, after a decade of trial operations, the line was finally opened to full public use.



The Yanfang subway line in southwestern Beijing, the first fully domestically-developed, automated line in China, will open to the public at the end of 2018 (XINHUA)



Subway Line 1 in Chengdu, capital of Sichuan Province, holds an event in honor of World Reading Day, on April 23. A series of scholarly-themed subway trains focused on the evolution of Chinese books to create compartments with different types of books (XINHUA)

Line 2, a loop circling roughly under the Second Ring Road, became the second operational line, but still, the area covered by both lines was mostly in downtown Beijing. The ridership was low at first, totaling 105 million in 1985—the equivalent of 10 days of ridership today.

"In the 1990s, only a small fraction of people would choose the subway since it was more expensive than a ride by bus. Plus, the number of subway stations was quite limited," said Chang Zhifu, a volunteer with the metro system for many years. "Many who took the subway had to transfer to buses to get to their final destinations anyway, so it was not a good deal," the 76-year-old Beijing resident added. After quite a few price adjustments, the fare was finally set at 3 yuan (\$0.47), regardless of transfers or distance, in 2000.

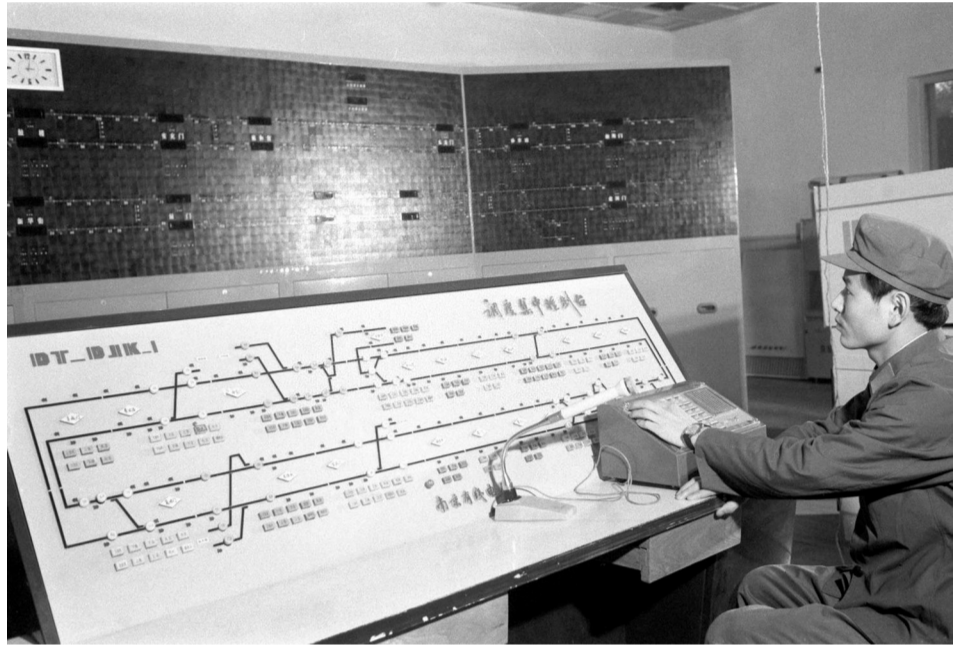
The next line, Line 13, a half loop that links the northern suburbs with Line 2, was put into operation in January 2003. Another line, Batong Line, an extension of Line 1, was opened in December 2003. These two lines helped the ridership hit 607 million in 2004.

Line 5, which took more than seven years to construct, was opened in October 2007 as the city's first north-south line. Subway fares again were changed to a flat fare of 2 yuan (\$0.32), including unlimited transfers. That year, ridership rose to a total of 655 million.

In July 2008, Line 10, the Olympic Special Line and the Airport Line were all opened on a trial basis ahead of the Beijing 2008 Summer Olympic Games. With the addition of the three new lines, total ridership rose by 75 percent over the previous year to 1.2 billion in 2008.

Chang served as a volunteer at the Olympic Park subway station. "Many people came to me asking how to get to their destinations via the metro," Chang said. "With more lines in the city, it was the primary choice for Olympic-goers."

In November 2008, the Central Government launched an extensive economic stimulus package, helping the Beijing Municipal Commission of Urban Planning to expedite subway construction. Above-ground light rails to suburban districts, which were cheaper to build, sprouted up. It was during this period that the city's railway network began to rapidly sprawl as more than 10 new lines have been added in the past 10 years.



upper: The subway control center of the second phase of Beijing subway on January 30, 1982

lower: The traffic management and control center at Songjiazhuang subway station on December 11, 2012

example, in December 2012, Line 6, paralleling Line 1's east-west trajectory, was put into operation. Line 4, funded through a joint venture with the Hong Kong MTR, was built as another north-south line, reaching the farthest southern suburbs. Ridership skyrocketed to 1.2 million daily, almost twice the number initially expected. At the end of 2017, the city's subway lines measured 608 km, which is expected to increase to 630 km by the end of 2018.

"The subway stations now are a lot cleaner and more orderly," said Chang, who now serves at the Nanluoguxiang Station of Line 8 for two hours a day. She said she is awed by the incredible expansion of the subway system in the past years. "It is very convenient now to take the subway to go many places in the city, even Fragrant Hill in a far western suburb is within metro reach."

Chang told *Beijing Review*, "There used to be a ticket-selling window here, but now all the tickets must be purchased through the machine." Every day, she helps passengers buy tickets using the automated ticket-selling machines. "More young people now choose to scan a QR code with their smartphones to hop

on the subway, but most tourists and seniors still use cash," Chang said. "I'm happy to help people here and offer information. I think I will be a subway volunteer until I get too old to work."

### Hi-tech dimension

According to the official website of the State-Owned Assets Supervision and Administration Commission of the State Council, Line 12 of the Beijing subway system will be unstaffed, the first in the world. Expected to be in operation in 2021, the line will apply the Communication-Based Train Control System, which was developed domestically by the China Railway Signal and Communication Corp. (CRSC) to conduct fully automated operations. The power, fire alarm and electromechanical devices will also be automatically monitored.

Zhang Zhihui, chief engineer of the CRSC, said driverless technology will help to reduce human resources and will have a major focus on device reliability and stability. Xinhua News Agency cited engineers and automation experts who said the automated operation system will avoid accidents caused by human misjudgments or operational errors.

On December 30, 2017, three new subway lines were put into operation in Beijing, bringing the total line number to 22. The latest subways have been equipped with newly adopted techniques.

Line S1, connecting Beijing's western districts of Mentougou and Shijingshan, is the city's first medium-low speed maglev line. Maglev trains have no wheels but rely on electromagnetic forces. Cars are elevated about 1 cm above the tracks, considerably reducing friction and providing a smooth ride. There are seven stations along this 10.2-km line with a top speed of 100 km per hour.

The Yanfang Line, being constructed in Beijing's southwest suburbs, will be China's first fully domestically-developed automated subway with nine stations on its 14.4-km main line. The decision to build the wholly automated line was made in 2013 while China was busy expanding its metro system.

"It is an exciting decision," said Xu Ding, an official from Beijing MTR Construction Administration Cooperation. "Before, we would spend a lot of money purchasing facilities abroad, since our technology was quite limited."

"In addition, when these facilities had problems, we could only make simple adjustments or else we had to wait a long time for the foreign providers to analyze the issues," he explained. In 2010, China launched railway research and development on the auto-operation system. Now the system has been totally developed domestically.

### Economic driver

Technological advances gave metro expansion in many Chinese cities a strong boost. Since May 2013, cities only need approval from provincial authorities rather than national ministries to build a metro line.

From 2010 to 2015, China built roughly 370 km of subway lines each year, investing 1.2 trillion yuan (\$189 billion) in these projects. By April 2018 there had been 31 cities in China's mainland that have a metro in operation and another 15 had been approved with projects under construction, making China the country with the world's longest subway lines in operation.

Shanghai's railway system, which opened in 1993, currently holds the title of being the world's longest, spanning 673 km in total.

"Urban rail transit not only helps with urban space expansion, but also boosts economic development," said Li Guoyong, an inspector of the National Development and Reform Commission's basic industries department.

At the end of 2017, the National Development Reform Commission announced plans to relax the requirements needed for local governments to pursue subway projects. It included lowering the minimum population from 3 million to 1.5 million, which means more third- and fourth-tier cities can submit proposals.

"China's third-tier cities are actively building metros. This enthusiasm will be a key driver of infrastructure building," said Jiang Shenggang, a metro expert in Fujian Province on China's southeast coast.



The 76-year-old volunteer Chang Zhifu help passengers purchase subway tickets on self-service machines on May 14 (YUAN YUAN)

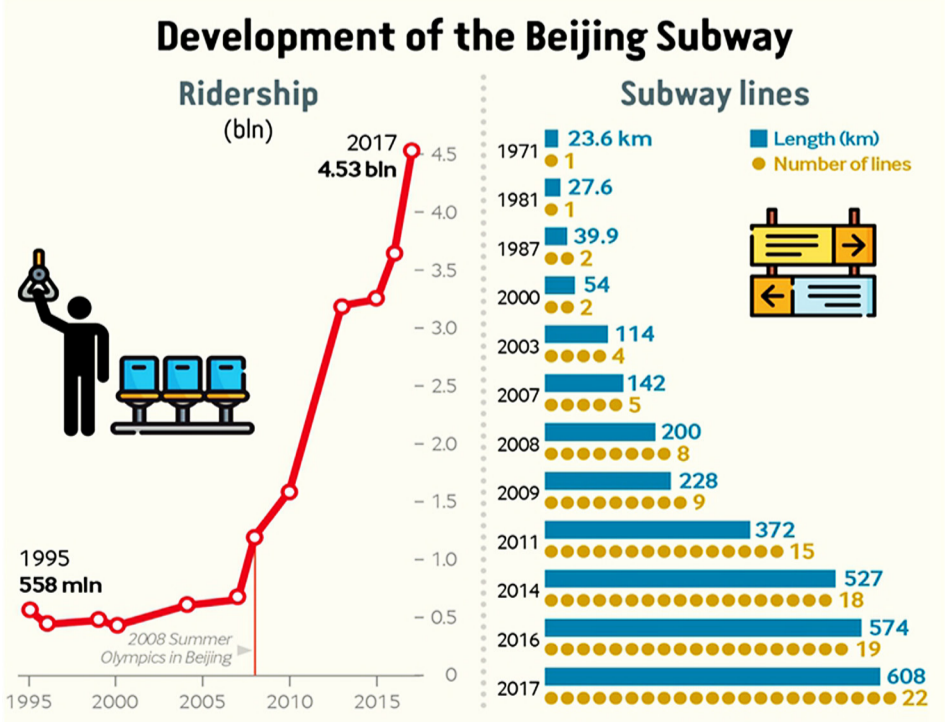
### Improved services

With many more people opting for an underground commute, peak-hour congestion has become a major problem, as is the case in many other megacities around the world.

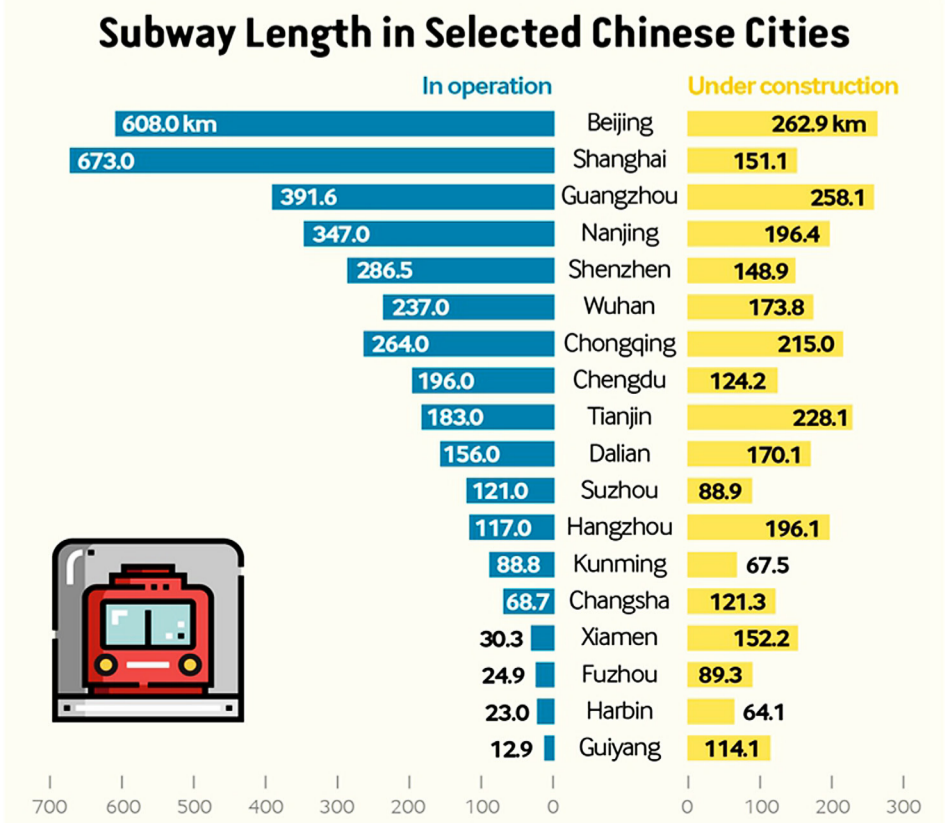
"We have to wait in super long lines to squeeze onto the trains and it is normal to wait for six trains before you are finally able to

board one," said Fu Yimin, from Tiantongyuan, a residential compound at the northern terminal of Line 5. "In order to be on time to work, I have to leave my house half an hour earlier to avoid rush hour."

This is commonplace for most subway lines at peak hours. In order to relieve the pressure, more lines and trains have been launched. For



(Source: Beijing Subway, designed by Pamela Tobey)



(Source: National Development and Reform Commission; designed by Pamela Tobey)



# A big granary

## Heilongjiang drives agricultural modernization of the country to help guarantee food security

By Zan Jifang



A harvest scene in Youyi Farm, northeast China's Heilongjiang Province (COURTESY PHOTO)



Agricultural machines on display in the Beidahuang Agricultural Machinery Garden in Youyi Farm (WEI YAO)

In late September, the peak harvest time, workers in Youyi Farm, the largest state-owned farm in China located in the vast plains north of Heilongjiang Province, were racing against time. The corn had already been harvested and the soil turned over, waiting for next year's sowing. As the farmhands worked frantically to gather the rice, there was one noticeable difference. The laborers doing the work were not humans but an army of giant, advanced agricultural machines.

"We finished harvesting maize earlier than other places because of the large-scale use of agricultural machinery, which helped us sell our corn earlier and at a better price," Yang Deqing, in charge of publicity in the farm's fifth administrative zone, said proudly.

As one of the 113 farms under the Heilongjiang Farm and Land Reclamation Administration, Youyi is a pioneer in exploring agricultural modernization. The 55,400-square-km reclaimed land in Heilongjiang, better known as Beidahuang, or the Great Northern Wilderness, started to be developed in 1947.



Liu Huangao from Youyi Farm (WEI YAO)

Back then, the area was just a wide stretch of wasteland. Today, it has been transformed into the largest grain production base in China and is a leader in implementing mechanized farming and modern agriculture. The annual production can feed more than 100 million people for one year. The former wildland has become a granary of the country.

### Starting from scratch

In the reclamation area, Youyi Farm, sprawling more than 1,800 square km, has a unique position: It was a pilot for mechanized agriculture and introducing the most advanced technology and machinery.

Established in 1954, the farm was one of the major development projects in the early years of the People's Republic of China. It was set up with the assistance of the Soviet Union, which is why it was named Youyi, meaning friendship in Chinese.

The first batch of workers and management personnel came from different parts of the country; most were graduates from colleges or technical schools.

Liu Huangao, today a retired management staff, was one of the young people who started their career on the farm. He witnessed its growth from zero to the current success. The 86-year-old, regarded as a walking encyclopedia of the farm's history, described the development course "dramatic changes."

"The Soviet Union sent 2,560 agricultural machines in the beginning and also sent 49 professionals to teach us how to reassemble and operate the machines," he said.

After graduating from an agricultural mechanization school in Harbin, capital of Heilongjiang, in 1954, and undergoing two sessions of training by Soviet professionals, Liu began to work as a tractor driver on the farm.

He still remembers the hardships the first workers—over 1,400 Chinese employees and 49 Soviet professionals—experienced. "There were no roads, and we had to build roads first. There was no drinking water, and we had to use the water obtained by thawing snow. There were no vegetables, and we had to do with pickled beans," he recalled.

It marked China's embarkation on a road of mechanized farming, a revolutionary transition from the traditional labor-intensive farming mode.

Zhang Fushan, a former worker at the farm, was recognized as a National Model Worker in 1995. He participated in the leapfrog development of the farm after China started reform and opening up in the late 1970s. In 1978, the farm imported 62 agricultural machines and other equipment from the United States, becoming the first farm in China to introduce the most advanced agricultural machinery in the world. The move greatly narrowed the gap between China and developed nations in mechanized agriculture.

From the 1980s to the end of last century, the farm imported more than 100 agricultural machines, covering every farming process. "The machines were for deep digging, precision drilling and controlling weeds with chemicals, and using them greatly improved the crop quality and reduced the human labor cost," said Zhang, who used to operate the imported machines.

"After importing U.S. machines, the grain yield increased year by year. On an average, a worker could produce 100,000 kg of grain a year at that time," Liu said.

Entering the new century, Zhang, as a senior operator of modern agricultural machinery, went to the United States with other colleagues to look for the latest machinery. "We later imported some machines with information technology and digital control, increasing the precision and standard of agricultural production," he said.

The updating of agricultural machinery has given the farm a nearly 99-percent comprehensive mechanization rate as well as a rich experience in agricultural mechanization. It is held up as a model for other farms in the reclamation area. Agricultural mechanization is an important reason for the grain production of the area.

Today, the Beidahuang Agricultural Machinery Garden in Youyi Farm with its display of more than 150 agricultural machines—from the 1950s tractors to today's hi-tech machines, each worth millions of yuan—silently tells the history of the march to agricultural modernization. It was a march in which the farm, the entire reclamation area as well as the country took part.

### Achieving self-reliance

Benefiting from its abundant land resources, large-scale mechanized farming as well as the dedication of generations of people, the reclamation area today can guarantee the production of 20 billion kg of commodity grain a year. The comprehensive grain production of the area is nearly 22 billion kg a year, around one third of the total output of the province.

Heilongjiang has long been an important contributor to the country's total grain production, and currently its output accounts for one 10th of the national total. According to provincial government statistics, the total grain output in 2017 was 60.2 billion kg. For seven consecutive years the province has held the top spot in the country for grain production and for five years in a row, maintained the record of growing over 60 billion kg of grain.

When President Xi Jinping inspected the reclamation area in September, he praised the contributions of Heilongjiang's agricultural reclamation, which ensured food security, supported the development of the country, and safeguarded stability in the border areas. Xi stressed the importance of self-reliance in food production, saying China should always have control over its own food supply.

The development of agricultural reclamation in Heilongjiang over the past decades was a process of industriousness and self-dependence. Liu of Youyi Farm said when the farm was established, the plan was to make it a base to produce grain, accumulate agricultural mechanization experience and cultivate agricultural management personnel, showing the importance the Chinese leaders then attached to agricultural self-reliance.

It is a remarkable achievement for the reclamation area to realize agricultural mechanization and modern agriculture supported by information and intelligent technologies in the past decades, Xi said during the visit. "It was not an easy job turning the wilderness into a big granary; the people in the reclamation area have played an important role in feeding the Chinese people," he said.

### Hi-tech and green mode

Technology is an indispensable element in the transformation of Beidahuang. Various state-of-the-art technologies have been applied in agricultural operations, such as satellites, drones and sensors. Agricultural technology professionals too are playing an increasing role in agricultural production.

Tang Caojiazi is a young technician at Youyi Farm's agricultural production department. A postgraduate in crop cultivation and farming system from Changchun-based Jilin University, he is now mainly in charge of choosing and testing seeds.

"Before using seeds on a large scale on the farm, we must have a three-year test for the sample seeds to ensure they can grow stably," the

34-year-old technician said. "We also monitor the performance of the seeds currently in use and give suggestions to farmworkers based on our analysis."

He is the third generation of Beidahuang residents. His grandfather migrated from Shandong Province in east China and his parents once worked in another farm. After graduation, he chose to come back to his hometown and work in the reclamation area. His family supported the decision.

"I grew up on the farm, so I have a special rapport with the black soil," he said. Having witnessed the changes in the reclamation area day by day and the painstaking work of the older generations, he hopes he can make his own contribution to the development of the farm.

"The development mode has gradually changed from the traditional labor-intensive way to hi-tech, so I think there will be greater space for me to develop on the farm," he said.

Tang and his colleagues are also in charge of training farm managers and workers during winter. "Every year, we have at least 20 training sessions, where we discuss the advantages and disadvantages of every type of seeds and how to grow them," he said.

Besides the application of high technology, sustainable and green development is another trend in the reclamation area, as well as in other agricultural production bases in Heilongjiang. The province is making efforts to protect the environment and provide clean air, lucid water and high-quality soil for agriculture.

Burning residual corn stalks or straw in the fields is strictly forbidden to protect the environment. Violators face a heavy fine. In July, the province released a three-year action plan (2018-20) to protect the black soil, a kind of soil unique in northeast China that has a high content of organic matters. The plan focuses on protection measures to control the degradation of the black-soil farmland, improve the ecological environment of fields, and increase the comprehensive grain production capability.

Guaranteeing food supply for a population of nearly 1.4 billion is not easy. Heilongjiang, as a major grain production base in China, has high expectations to fulfill—that it will continue to play its role as a ballast to guarantee the country's food security and in the days to come, become a green granary and a green vegetable garden.

## Heilongjiang Farming Facts

### Annual grain production

More than **60 bln kg** for the past five years



First in China for **7 years**



### Modern agricultural machinery cooperatives

**1,400**



In 2017

Total grain production

**60.2**

**bln kg**



Improved seed variety coverage rate



First in China



Contribution rate of agricultural science and technology



Mechanization rate



**10.5** percentage points higher than national average



**30** percentage points higher than national average



(Source: Hljagri.gov.cn; designed by Pamela Tobey)



# The art of reinventing

## Jiayuguan diversifies its economy to increase its resilience

By Wang Hairong



East Lake in Jiayuguan, Gansu Province, is an artificial lake dug in Gobi Desert (COURTESY PHOTO)

To the sound of a whistle, a row of peacocks march onto a narrow bridge behind a woman carrying a basket of food for them. As she walks, the woman sprinkles a bit of food from time to time while the peacocks peck and trail behind her, cackling loudly. The woman happens to be a staff member at the China Peacock Court, a large peacock farm in Jiayuguan, a city in northwest China's Gansu Province.

Suddenly, the woman issues an order, and the peacocks take off one by one, flapping their wings strenuously to fly across the lake and land on the rails on the bank. "It is rare to see peacocks fly, but we have managed to train them to perform for visitors," Yang Hui, General Manager of the peacock farm, told *Beijing Review*.

Launched in 2012, the farm is now home to approximately 30,000 peacocks and peahens—most of which are blue, with a small number green and white—and embodies Jiayuguan's effort to adjust its economic structure and enrich its tourism resources. Occupying an area of 60 hectares, the farm is the largest breeding and feeding ground for blue peacocks in Asia, Yang said.

### An iron and steel city

Although named after the Jiayuguan Pass, the westernmost end of the Great Wall built in the Ming Dynasty (1368-1644), Jiayuguan City really credits its birth to the Jiuguan Iron and Steel Group, also known as Jiugang.

In 1955, geologists discovered a large iron ore deposit in the vicinity of the Jiayuguan Pass, leading to the founding of Jiugang three years later. As more and more people from other parts of the country flocked to work for the plant, the area was officially established as a city in 1965.

In the ensuing decades, Jiugang grew into the largest iron and steel production base in northwest China. "If Jiugang sneezes, the city will catch cold," Li Ning, an official with the city's Development and Reform Commission, once told the media.

Jiayuguan was characterized by a small primary industry, a large secondary industry and a weak tertiary industry. Located in the heart of the Gobi Desert, the city's agriculture is negligible. The manufacturing of iron and steel once contributed to 80 percent of the city's GDP, Li said.

But the iron and steel city faces two grave development bottlenecks. In recent years, China has suffered from an overcapacity of iron and steel production. As a result, in December 2015, the Central Economic Work Conference decided to promote supply-side structure reform and make cutting overcapacity, especially in steel and coal industries, a top priority.

In response to the Central Government's decision, Jiugang has cut its iron and steel production capacity by approximately 5 million tons since 2015, said Yang Hongwei, a former employee of Jiugang and currently an executive at Zixuan Wine, an outgrowth of Jiugang. Yang said that Jiugang shut down two plants, one in north China's Shanxi Province and the other in Lanzhou, the capital of Gansu.

In addition to a glut in production, Jiugang faces a more fatal threat, Yang said. It has been estimated that the iron ore deposits that Jiugang lives on will be depleted in three decades, which compels the company and the city to explore alternative income resources, he added.

In recent years, Jiayuguan's Municipal Government has decided to adjust the city's economic structure by fostering emerging industries such as photovoltaic power generation and new construction material production as well as food industries such as wine making, dairy production and animal husbandry. It also vigorously encourages the development of the tertiary industry. Promoting the integrated development of cultural and tourism sectors has been the city's most important measure to boost its tertiary industry.

The measure has yielded results as data from the municipal government shows that the proportion of the primary, secondary and tertiary industries shifted from 1.4:71.6:27 in 2013 to 2.2:51.8:46 in 2017. The city, with a population of 300,000, received about 8.57 million visitors last year, registering a year-on-year growth rate of 22 percent, according to data provided by the local government.

### Diversified tourism resources

Jiayuguan is rich in cultural tourism resources, the most famous of which is the Jiayuguan

Pass. Built in the 14th century, it used to be a defense fortress and a bustling transportation hub along the Silk Road. Now, like an aged hero, it still stands proudly and commandingly, attracting tourists to come and admire it.

Other well-known heritage sites in the city include the Wei-Jin Tombs, the Overhanging Great Wall and the First Beacon Tower of the Great Wall.

About 1,400 brick tombs built during Wei and Jin dynasties (220-420) are scattered underneath a large stretch of the Gobi Desert, with exquisitely painted bricks embedded in the tomb walls. The murals depict a variety of daily activities such as farming, hunting, dancing, sericulture, eating and drinking. They not only yield aesthetic value, but also attest to the relatively humid weather and the social customs of the time. An image from the paintings of a mailman on horseback was adopted as a stamp in 1982, becoming a symbol of China's postal system.

Another of the city's famous heritage sites, the Overhanging Great Wall, is part of the ancient Jiayuguan defense system. It is perched on the eastern side of the Black Mountain, which lies about 7 km northwest of the Jiayuguan Pass. Viewed from a distance, this section of the Great Wall appears to be a dragon crouching over the steep slope. Statues built at the foot of the mountain depict famous historical figures. The wall was built of layers of a blend of gravel, yellow earth and straw, while the bricks were made by setting the mixture in the sun to dry. The adobe bricks were tested by shooting arrows into them and only the bricks that could resist being pierced by the arrows were used to build the wall.

Rich as Jiayuguan's cultural heritage is, the city wants to do more to lure tourists to stay for longer visits. Against this backdrop, the China Peacock Court has emerged as both a breeding farm and a tourist attraction. "Last year, 320,000 tourists visited the peacock farm, bringing in more than 8 million yuan (\$1.22 million) in profits," said Yang. The farm has generated jobs for over 100 people.

With lush meadows, lakes, artificial hills and wooden sheds, the farm is like a big park. Peacocks loiter on the grounds, displaying their magnificent tails occasionally and shrieking constantly. The park even boasts tropical plants such as palm and banana trees, making a bunch

of bananas hanging from one tree a rare sight in the northern desert area.

Wine is also a combination of production facility and tourist attraction. Founded in 2005 by Jiugang, the winery is now one of the two largest of its kind in Gansu.

In its spacious and stylish wine cellar, Yang Xingyuan, who is in charge of cultural and tourism affairs for the company, introduced it to visitors.

He said that Jiayuguan, with its dry weather and plenty of sunshine, has an environment favorable for planting grapes. To develop the wine-making industry, Jiugang dispatched more than 300 employees to work there and invited experts from Northwest A&F University based in Yangling to oversee the production process. A vineyard of more than 3,000 hectares was cultivated to supply raw materials for production.

"The winery was set up to meet high standards. We use the world's leading technology. Our liquid filling line was imported from Italy, and wine barrels were brought from France and are among the best in France," Yang Xingyuan said.

He lauded Jiugang's decision to set up the winery as visionary and of lasting importance, since it is a precaution against iron ore depletion in the future.

Currently, the winery has an annual production capacity of 50,000 tons. It has developed more than 80 product varieties in four series, namely, dry wine, ice wine, liqueur and brandy, he said. The products have been distributed to more than 20 provincial level administrative areas across China.

The winery also receives an annual average of 70,000 tourists who bring in a yearly income of more than 5 million yuan (\$765,500). Tourists can tour the winery and participate in a wine-tasting activity at a long table set with flowers and sparkling wine glasses with bottles of various sizes.

In addition to production facilities open to tourists, a large-scale amusement park was built in Jiayuguan to offer tourists a modern thrill apart from climbing the Great Wall and visiting ancient tombs. Fantawild Adventure, built by a Shenzhen-based company in south China's Guangdong Province, features art performances and themed adventures, such as the exploration of the Silk Road, China Space City and the Tanggula Snow Mountains, as well as an exhilarating ride along a torrent.



Peacocks in China Peacock Garden in Jiayuguan, Gansu Province, on June 20 (YU XIANGJUN)

of bananas hanging from one tree a rare sight in the northern desert area.

In addition to peacock viewing, the park also offers wedding services, hosts performances and features a recreational area for children.

Raising a tropical bird in Gansu, which has a drier and colder climate, is a challenge. "None of the first batch of peacocks we raised in 2012 survived, either because of their maladjustment to the climate or the food," Yang said.

The farm invited experts from several universities to tackle the problem. Now peacocks live in specially designed rooms in winter, and they are fed food containing over 10 ingredients such as carrots, wheat, corn and beans.

"Now the eighth batch of peacocks has been bred on the farm," Yang Jia, a staff member, said, adding that peacocks usually have a life span of 20 to 25 years, with their prime lasting from three to five years.

Similar to the China Peacock Court, Zixuan

### Green city

In addition, on a street in Jiayuguan stands a landmark statue that is conspicuously out of place considering the city's desert location. It is a statue of a giant dolphin, but after visiting the East Lake Park nearby, one understands why the marine animal has been chosen. The East Lake, surrounded by dense forest, covers 560,000 square meters that reminds one of the sea. Standing at a sightseeing platform at the top of a high-rise building at the center of the park, Wang Lihong, Deputy Director of the Jiayuguan Bureau of Parks and Forests, said that the surrounding area, including the lake, forest and modern residential neighborhood, was once desert lands.

Since a forestation campaign was launched about two decades ago, the green coverage ratio in this oasis city has increased from 4 percent in 1994 to the current 39 percent, Wang said. She recalled that when she started working in Jiayuguan in the early 1990s, she often rode a bicycle to the fields to plant trees, bringing her lunch along.

Local people support forestation not only by participating in tree planting, but also by regularly paying a greening fee to help the forestation effort, she said.

According to data from the municipal government, the city currently has more than 110 public green spaces and 13 parks, all open to the public free of charge. It even has a large wetland park, the Caohu National Wetland Park, which sprawls right next to sand dunes.

At the inception of the city, trees were planted simply to shield against wind and sand, so only one or two varieties of trees were introduced. Later, the city cultivated 62 plant varieties that suit local conditions on the basis of the careful study of local climate, soil and plant characteristics. These varieties share some common features, such as all inexpensive, drought and cold, and are inexpensive.

As a result of all these projects, Jiayuguan, with its rich cultural resources, lush vegetation and plenty of bodies of water, has transformed into a comfortable place for locals to live and for tourists to visit.



Su Ying, a staff member of Zixuan Wine, inspects products in the winery's cellar in Jiayuguan, Gansu Province, on June 20 (YU XIANGJUN)