Peering into the future

YAKIMA, China — If there’s a face on the future of China’s apple industry, it just might be someone like Zhang Dayong.

As he barrels down one of Shanxi Province’s modern highways in his red and black Audi SUV, his cell phone rings every few minutes. In quick succession come calls from Thailand, America, China, and even Tanzania. Besides Chinese, he speaks English, French and enough Russian to get by. A decade ago, he started his career as a truck driver. When he acquired his first cold-storage building, he’d sleep in his truck. Now his generation is earning a comfortable income from the apple industry. In the first 10 months of this year, just one region, Yantai, increased fruit exports to China’s apple imports from Thailand, Indonesia, Malaysia, France and India, and importing apples from the United States.

Last year, he shipped 20 containers holding more than a thousand boxes each to Holland. This year, he shipped 30 containers, which he estimates brought in at least 200 containers. Under gentle probing, he admits he just sold a home in Paris, but has another in Normandy. In the same breath, he insists he’s not a success, at least not yet. It is, he quietly explains, his passion.

Now his generation is earning enough to eat. The Chinese central and local governments are offering tax breaks, land deals and working with farmers to improve quality. Governments are offering tax breaks, land deals and working with farmers to improve quality.

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Below Chinese characters that say “China Shandong Qixin Apple Art Festival and Contract Ceremony” and a replica of the Great Wall of China made with Fuji apples, more than 100 apple buyers line up to sign contracts. The town of Qixia calls itself the “Apple Capital.”

In Zhang Dayong’s packing plant in Yantai, Guo De Rong, left, and Wang Cai Yun place apples onto a small conveyor belt where they are sorted by their weight into the bins in the foreground at right. This is the only apple-sorting machine in Shandong Province, which monitors China’s apple industry as a whole, said Huang Xin Jian, a Yantai-based producer and exporter who installed one of the region’s first color-distinguishing packing lines last year. The machine was manufactured in China at about one-third the cost of European technology, he said. That’s not surprising, according to some American apple officials.

In 2003, China – sources of apple brokers and packers mill about in a cavernous exhibition hall where a hundred-foot-long silk banner of the Great Wall of China has been created out of red and yellow apples. There are polite displaying of fresh apples, materials for packing apples and products made from apple juice and cider, along with dancers dressed as ancient Chinese maidens in traditional costumes and dancing. But now comes the main event. More than a hundred apple buyers line up for a conveyor belt where they are sorted by their weight into the bins in the foreground at right. This is the only apple-sorting machine in Shandong Province, which monitors China’s apple industry as a whole, said Huang Xin Jian, a Yantai-based producer and exporter who installed one of the region’s first color-distinguishing packing lines last year. The machine was manufactured in China at about one-third the cost of European technology, he said. That’s not surprising, according to some American apple officials. A decade ago, Yantai had few ways to store apples. Today, it has an estimated 280 cold-storage buildings, up from the current 20 percent, he said.

Most fresh apples are still packed by hand. But in Yantai, there are at least 50 mechanized packing facilities, including at least one with the ability to clean debris from the fruit’s stem and separate apples based on color. That’s still a step above the most facilities, which simply pack the apples, irrespective of their size and color. Drying packing-line workers are paid the equivalent of $1 a day, regardless of whether they work eight or 12 hours.

While many Chinese disapprove of the idea of fresh apple orchards or picking fields, they said they’d welcome more good investments involving packing and processing. One of the latest packing facilities in Shandong Province is a Singapore-owned plant employing 50 workers. At least one major project to include Japanese ownership is being planned. Several more projects are taking place, but so far is a fairly limited scale. China’s relatively new and untested business climate, coupled with American skepticism about how fairly their businesses would be treated in local Chinese laws, coupled with American skepticism about how fairly their businesses would be treated in local Chinese
China’s 10 largest fresh apple export markets (Volume in 42-pound boxes)

<table>
<thead>
<tr>
<th>Country</th>
<th>Volume</th>
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<tbody>
<tr>
<td>United States</td>
<td>29,283,534</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1,442,171</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1,539,792</td>
</tr>
<tr>
<td>Singapore</td>
<td>1,560,364</td>
</tr>
<tr>
<td>Thailand</td>
<td>3,251,700</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2,619,433</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2,550,458</td>
</tr>
<tr>
<td>Philippines</td>
<td>2,200,107</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1,389,503</td>
</tr>
<tr>
<td>Singapore</td>
<td>1,560,364</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>3,251,700</td>
</tr>
<tr>
<td>Total including others</td>
<td>70,377,884</td>
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Source: U.S. Department of Agriculture

A worker strains to move a pallet of Chinese apples in Zhang Dayong’s cold storage building in Tancun, Shandong Province. Forklifts are seldom used to move the apples in the tight area. The boxes are stored in levels supported by bamboo and steel.

Business partners Gao Peng, left, and Zhang Dayong meet in the office of their empty new packing plant to discuss an ill-fated joint venture with an overseas investor. The two paid for the land and construction of their buildings for cold storage, packing and offices. Then their partner from the Philippines wouldn’t pay his part in buying equipment for the buildings. As a result, the Shandong Province farmers are working with overseas partners, including Japanese and Americans, as increasing, but difficulties can arise. Zhang worries he may have no legal recourse in the dispute.

The story begins in December 2001, when the first commercial shipment of Chinese Fuji apples arrived at Northwest Florida’s Pensacola port. The shipment was a minor one, but it had results in media suspensions and has reinforced American concern about the safety of Chinese apples.

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ANTAI, China — There’s little doubt that China’s apple industry has made spectacular, even historic, progress over the past few years. But three major hurdles are keeping the industry from reaching its full potential: storage, transportation and quality control.

If Shandong Province is any indication, the first two problems can be overcome given time and money. Quality control could prove more difficult.

Located a hard day’s drive northwest from the tomb of the first emperor of China, Shaanxi Province is more similar to Central Washington than other parts of China. Many call it the future of China’s apple industry.

The province already produces twice as many apples as Washington state. But unlike Washington, roads and storage are major problems for Shaanxi.

In Washington, apples are stored in vast refrigerated warehouses that are sometimes filled with nitrogen, which further lengthens an apple’s shelf life. When it’s time to go to the market, apples are loaded aboard refrigerated trucks, which can travel more than a thousand miles a day on smooth inter-state highways.

In much of rural Shaanxi Province, roads are narrow and bumpy. Cargo can be jostled and bruised, and most trucks are not refrigerated. Storage prior to shipping is spotty. Cold storage isn’t prevalent and what there is subject to occasional power failures. Modern storage facilities are being constructed. However, it will take Shaanxi 10 years to catch up with the most advanced regions, estimates Huang Xin Jian, a producer and exporter with operations in both provinces.

Shaanxi isn’t alone. Most of China’s seven other major apple-growing provinces, including some that reportedly still use caves to store apples, face similar hurdles.

Officials in many of those places hope to emulate northern Shandong Province, which has made the most advances in overcoming the problems.

As a long-established international port city in northern Shandong Province, Yantai’s business community was better positioned to take advantage of the early reforms. Today, its apple industry is acknowledged to be well ahead of the rest of the nation.

In the last decade, a network of modern highways were built linking many rural areas with cities and ports. And apple industry officials have been building cold storage and the more advanced controlled-atmosphere storage units.

In 2002-03, China exported 5 percent of its crop — or about 37 million boxes. United States exports about 13 percent of its crop — or about 27 million boxes. Washington state exports about 30 percent of its crop — or about 22 million boxes.