

In Depth: How Secrecy and Loopholes Fueled China's Swine Fever Crisis

By Du Caicai, Feng Yuding, Chen Shuning, Qi Xiaomei, and Ren Qiuyu



Disease prevention staffers spray disinfectant on a passing car in Qionghai, South China's Hainan province, on May 22, in an effort to contain the spread of African swine fever. Photo: VCG

In his capacity as director of the porcine infectious disease research branch of the Harbin Veterinary Research Institute, Qiu Huaji has been one of the strongest voices to weigh in on the African swine fever crisis that has lashed China since August.

“The official data shows that new sow stock has fallen by 20%. I have learned through other channels that the situation may be even worse. The losses are very, very heavy,” he said recently, noting that even midsize and large hog farms have been hit, resulting more than a million pigs being culled. “It is worth pondering — is it the biosafety of the pig farms? Or human factors?”

The complex, hardy virus that causes African swine fever kills almost every pig it infects, but is not known to harm humans. It can survive on soil for months, and in a frozen environment for several years. No vaccines or treatments exist.

It took a decade for swine fever to spread through Russia, but barely six months to appear north and south of the Yangtze River, Qiu said. He blames human ignorance and carelessness for its vast and rapid spread. “This would be unthinkable in any European or American country. This is a man-made disaster.”

“Only pigs, wild boars, and ticks can be infected, and the disease can only be transmitted through direct contact. It cannot fly, and its infectivity and transmission efficiency are relatively low. Its transmission is dependent on human intervention. If it is a so-called epidemic, it is a man-made one,” Qiu said.

Since swine fever was first reported in China in August, the country has recorded 143 separate outbreaks and culled over 1 million hogs, China’s vice minister for agriculture and rural affairs said Thursday. The frequency of new reports has slowed significantly. There were fewer than 10 confirmed outbreaks in June across the country.

But a Caixin investigation reveals a very different story. At local levels, covering up swine fever outbreaks has become the norm. Pig breeders around the country have described their frustration as their attempts to report very serious suspected outbreaks fell on deaf ears.

In some cases their reports were ignored because local governments couldn’t afford to pay the required compensation to the owners of culled pigs. Others feared punishment by higher authorities after a political order from the central government urged officials to “resolutely prevent more occurrences of the epidemic.”

Knowing their reports would likely go ignored, farmers began to discard their pigs at the first sign of symptoms — or worse, sell them on as quickly as possible. Potentially infected pigs were approved for sale to slaughterhouses, sometimes in different provinces, at rock-bottom prices — less than 4 yuan (58 U.S. cents) a kilogram in some cases. They became the perfect vector for the spread of the virus.

They have wound up in the refrigerators and on the dinner tables of thousands of Chinese households.

No fever, no subsidy

In April and May, locals filmed dead pigs floating in a section of the Xijiang River in Wuzhou, a southern Chinese city nestled in Guangxi Zhuang autonomous region halfway

between the provincial capital of Nanning and nearby Guangzhou. By May 14, nearly 400 dead pigs had been found.

The city denied swine fever had reached its pig farms, with the local agriculture bureau telling a newspaper on May 17 that it had “not received any reports of the African swine fever epidemic in Wuzhou.”

But Caixin’s visits to towns and villages along the Xijiang River in May told a different story. One Wuzhou farmer described how in early April his pigs developed high fevers, refused to eat, and ultimately stopped moving. Within days they were nearly all dead. In two decades raising pigs he had never seen anything like it.

Other pig farmers in the village said their animals had displayed the same symptoms. All suspected swine fever was the cause. Many called the local veterinarian and were issued treatments that had no effect. Still, the local government would not confirm that it was swine fever.

On December 14, the Ministry of Agriculture and Rural Affairs (MARA) clamped down, decreeing that information related to swine fever could only be released by the local agriculture and rural affairs departments, and that no other unit or individual could publish anything about the epidemic without authorization. Diagnoses were to be approved by laboratories that were themselves approved by the local agriculture authorities.

Crucially, without an official diagnosis there could be no subsidies for farmers. And dead pigs have no value. So farmers rushed to sell their stock whether or not they had developed symptoms — if they waited too long they would have to bury them.

Locals in Wuzhou believe the disease spread to their town from Bobai, a county in Yulin city more than 200 kilometers (124 miles) away. According to MARA, Bobai had a swine fever outbreak on May 27.

Bobai county is one of Guangxi’s major pig farming areas and a national pig transfer hub. In 2016 it had 262,000 live pigs. Locals told Caixin that large numbers of pigs began to die there in April and May, before the outbreak was officially confirmed at the end of May.

On a public bus route from central Yulin to Bobai, Caixin saw banner after banner warning people not to discard their dead pigs on the side of the road, and describing the punishment for doing so. When asked about this, the bus driver made a vomiting gesture.

“As soon as I got into Bobai, I had to close the windows. The smell of the dead pigs made me gasp for breath.” Both sides of the road were littered by carcasses, he said, and some had been thrown into the middle only to be crushed and run over by cars.

A village farmer in Bobai county told Caixin that all the pigs in a large area had died in April, including his own. Farmers called the local veterinarian to report the abnormal deaths, but they declined to come to the scene to do blood tests, and told the farmers to bring their pigs to the treatment center. “The regulations say that the pigs can’t be disposed of at random, but there were too many dead pigs, and the treatment centers were too busy. Some people couldn’t wait and just took care of it themselves,” the farmer told Caixin.

The government failed to organize a cull of pigs that did not die of the disease. So the farmers began to sell them, ignoring how many were sick or potentially infected. Local pig farmers in Bobai told Caixin that pig traders from Hunan and even Shandong provinces rushed there to buy the live hogs at heavily discounted prices.

Despite the abnormal deaths in April, groups of live pigs were being transported to neighboring Guizhou province through late May, only to die in slaughterhouses and be diagnosed with swine fever. Only then was the epidemic in Bobai uncovered.

On May 18, MARA announced that the swine fever was detected in the Guizhou capital of Guiyang. It said its investigation showed the pigs had been illegally transferred from other provinces.

Tan Bohui, the owner of a pig farm in Bobai county, confirmed that he sold a batch of live pigs to Guizhou pig traders around May 16. “They said they took the pigs to a slaughterhouse in Guiyang and they were found to have African swine fever, so they came to check my pig farm,” he said. He refused to divulge how many pigs he had on the farm when the epidemic took hold, but other villagers estimated there were at least 200.

Tan’s experience shows that the local government was refusing to acknowledge that swine fever had reached Bobai despite evidence it had. On May 23, the Guangxi animal disease prevention and control center confirmed that Tan’s pig stock had indeed been infected with African swine fever.

Afterward, Bobai was designated as a site of infection and the remaining live pigs there were culled. Inspection stations were erected at intersections, where license plates were recorded and vehicle wheels were disinfected. But one confirmed sick case and two

blockaded towns came too late for Bobai county. “The pigs were dead before they came to confirm, the pigs that could be sold off were sold. Even if there are (subsidies) now, there are no pigs left to claim it on,” one farmer from Bobai said with a sigh.



A sick sow is left alone in a farm in Tengxian county, Wuzhou, of South China's Guangxi Zhuang Autonomous Region. The rest of the pigs on the farm were either sold or died of suspected African swine fever. Photo: Du Caicai/Caixin

Spreading ‘like fire’

Maoming city, located 100 kilometers from Bobai near the Guangxi border in Guangdong, has the greatest number of live pigs in the whole province. Or it did, before a whopping number were culled or killed by swine fever. Just like in Guangxi and Guizhou, as soon as pigs started dying the farmers started frantically trying to sell them. Pig carcasses were piled along the roadside and hidden in the mountains.

The owner of a pigfeed shop said his sales fell from 400 tons per month to just 200 by May. “Any pigs that haven’t died could be sold for a couple yuan per kilo, but they don’t know if the pig is infected or not. They were sold to Henan, but (the infection situation) in Henan is pretty serious too. So many places have no pigs now. The pig farmers are all poor,” he said. According to data released online in May, Henan’s pig stocks fell 50% in April from the previous year.

It is believed that the Maoming epidemic was introduced from other cities in Guangdong — Zhuhai, Guangzhou and Huizhou — which were all confirmed to have cases of swine fever in December 2018.

Officials from the Guangdong Provincial Department of Agriculture and Rural Affairs told Caixin that after a slaughterhouse in Zhuhai found and reported an outbreak, the source was traced to a pig farm in Foshan city, about 150 kilometers away, that sold off its infected pigs.

Li Dan (pseudonym), an official from Zhaoqing city's animal husbandry bureau, a branch of the municipal agriculture and rural affairs department, said that Zhaoqing had its first reported outbreak in January. The suspected source was a sick pig transported from nearby Foshan. Since then, the virus spread "like fire," he said.

The head of one pig farm in Zhaoqing told Caixin that he had reported infections to veterinary stations and local animal husbandry bureaus every day, even contacting the head of the bureau. "The leader said that there was no information about an epidemic in (my) district," the pig farmer said. "According to regulations, reports must be made level-by-level, starting from the lowest level, and he was not allowed to report on their behalf."

He also said that local officials not only refused to deal with reported outbreaks, but threatened farmers: "There is no swine fever here because no national departments have announced it. Whoever dares to spread such rumors can be arrested," they were told.

Li Dan, the animal husbandry bureau official, estimated that the pig stock in Zhaoqing has dropped by about 60%. But the city still has no official confirmation of African swine fever. Caixin found that this was the case in multiple townships and cities in southern China — numerous dead pigs, evidence of outbreaks with animals testing positive for the virus, yet no official confirmation.



In a clean-up effort, workers retrieve dead pigs floating in a small river in Wuzhou, Guangxi, on May 2. Many farmers couldn't afford the cost of disposing of dead pigs during swine fever outbreaks and simply dumped them in the river. Photo: Du Caicai/Caixin

Swapping ear tags

In coastal Shandong in China's east, it was the same story as in the south. Shandong slaughters and processes the most pigs in China, after Guangdong — in 2016 the slaughtering and processing volume of large-scale enterprises in Shandong accounted for 25% of fixed-point slaughtering nationally.

Shandong has had one outbreak of swine fever officially confirmed. It was confirmed in the provincial capital of Jinan in February 2019, but residents elsewhere in the province suspected outbreaks had occurred in other cities starting in September.

There are suspicions the unconfirmed outbreaks in Shandong province can be traced to Jiangsu province, where the MARA reported an outbreak in the port city of Lianyungang as early as August, at which point it banned the transfer of live pigs from Jiangsu to other provinces.

But a number of farmers in Shandong's Linyi city told Caixin that pigs from Lianyungang continued to be shuttled into other provinces in defiance of the ban. At the borders of the

two provinces, pig dealers were seen unloading pigs from trucks with Jiangsu license plates into trucks with Shandong license plates under the cover of night. The dealers were then seen swapping the pigs' ear tags.

The ear tags — essentially a form of pig identification card — are administered by epidemic prevention personnel when the animals are vaccinated in the spring and autumn. They can be traced back to a village-level officer or local veterinary station. Local farmers told Caixin that epidemic prevention personnel often buy and sell ear tags illegally: “They are part-time workers, making only 1,800 yuan per year. There are always people willing to take risks for the sake of money, even veterinary stations sell ear tags,” one farmer told Caixin.

One veterinarian told Caixin that the backroads linking Lianyungang and Linyi had made it difficult to enforce transport bans. He added that grassroots infectious disease prevention work had been seriously inadequate in the space of the rapid expansion of China's pig breeding industry. “In fact, for many years, China has never successfully isolated an animal epidemic. That's all reliant on vaccinations,” he said.

Farmers believe that pigs from Jiangsu, Henan, Hebei, and other provinces continued to flow into Shandong despite the interprovince transport bans.

An official from the Shandong Animal Husbandry and Veterinary Bureau told Caixin the bureau “has not received reports from cities and towns in the province about the epidemic. Perhaps this is everyone's understanding, but different people have different understandings of the matter. In addition, the disease is a professional matter and cases can only be based on officially published results.”

Though there has only been one “official” case of swine fever in Shandong province, the province's pig stock has declined 23% from last year. Farmers reported seeing highly abnormal symptoms in their dying pigs — one farmer said that the spleen of a 100-pound dead pig had turned black and purple and swelled to five or six times the normal size. He was told by the local animal husbandry department that “many diseases can cause these symptoms.”

The other thing that has swollen has been the debt held by pig farmers. One, in Linyi, told Caixin that local pig farmers often serve as the guarantor for other pig farmers' bank loans, leaving a chain of pig farm owners in a bind as their stocks die off.

A problem of money

One of the motivations for local governments to conceal or delay reporting swine fever cases is economic — some simply cannot afford to pay the required subsidies to farmers for culling their pigs, while others fear the effect of a pork embargo on their local economy.

“When I spoke with a Spanish expert on African swine fever, he said something unforgettable: Prevention and control of African swine fever is a matter of money,” said Qiu Huaji, a researcher from the Harbin Veterinary Research Institute of the Chinese Academy of Agricultural Sciences. “This is the essence of the problem.”

In September 2018, MARA put a price on culling subsidies. The standard subsidy would temporarily be 1,200 yuan per pig, with the central government to provide a percentage of that depending on the region, with the remainder shouldered by local financial departments. It was also to be adjusted according to the size or breed of the pig.

But even paying 10% of the subsidy would be a heavy burden for cities like Zhaoqing in Guangdong. In 2018, the number of live pigs in the city hit 4.4 million. Li, the Zhaoqing animal husbandry official, told Caixin that as of mid-May, the official number of culled pigs for which compensation was required hit nearly 70,000 — and he estimates the real number of dead could be double that. Officially acknowledging every case of swine fever in the city would have seen it forced to fork out tens of million of yuan in subsidies.

Even more developed cities such as Guangzhou and Foshan would be unlikely to be able to afford to pay what they owed, let alone rural governments like those in Guangxi. So local governments looked the other way, Li said, granting farmers the required quarantine tickets whether or not the pigs were already infected.

In addition to the economic pressure of subsidies, experts said the epidemic was handled poorly on a policy level.

According to an official from the Guangdong provincial bureau of agriculture: “The whole industrial chain — pigs, feed, slaughterhouses, veterinarians, imports and exports — was not very coordinated.” Departments failed to consult with each other, resulting in mixed policy messaging, he said.

The official said that many of the policies and measures taken in the early stages of the epidemic were superficial and incoherent, making it difficult for grassroots units to do proper prevention work.

Before the outbreak, pig farmers traditionally used swill as feed. That's now thought to have helped facilitate the spread of the virus. Once the outbreak occurred, MARA banned the use of swill for feeding pigs.

But the Guangdong official said that the policy was difficult to implement because there was no centralized method for collection and disposal of the large quantities of kitchen waste used to make swill. In addition, the remains of the live infected pigs that were smuggled or sold to slaughterhouses were likely used in processed meat products that ended up contaminating the swill.

The virus was also carried by and spread through humans and vehicles. Industry insiders called for a national fund for building standardized disinfection and washing stations, but said their calls were ignored.

Li said that in February and March every town in Zhaoqing built a washing center — but there were no detailed rules on how to operate them. The staff had limited knowledge and were drawn from a variety of departments, and some were low-skilled workers. “They sent a few people to the washing stations, sprayed cars at random, and left,” he said.

Qiu said properly disinfecting vehicles is a multi-step process that starts with thorough cleaning. That meant using the right concentration of disinfectant and allowing it to sit for a sufficient period of time. However, Caixin's investigation found that at many sites in Guangdong, Henan, Shandong, Heilongjiang, and Liaoning provinces and the Guangxi Zhuang autonomous region, such prevention and control methods were virtually nonexistent.

“In notices and at meetings, we were all talking about strengthening biosafety, but didn't know what biosafety is, how to strengthen it, how to prevent deaths,” Li said. Though all towns had treatment centers, the number of pigs that caught swine fever increased exponentially, far exceeding what the centers were equipped to deal with.

Far-reaching effects

What is certain is that the swine fever outbreak will have a long-term impact on pig breeding and agriculture in China. According to MARA statistics from June 12, the number of live pigs in China was down 22.9% year-on-year in May. The number of sows was down 23.9% for the same period. The decline is continuing.

According to industry statistics, more than half of China's 94 core national breeding centers have been affected. Farmers are unable to replenish their stocks. Ramped up MARA restrictions on breeding and transport made the transfer of piglets and breeding pigs more difficult.

Fan Fuhao from the Guangzhou branch of the Pig Quality Supervision, Inspection and Testing Center and secretary-general of the Guangdong Pig Industry Association, said pigs suddenly had to be tested for a number of other diseases, such as foot-and-mouth and blue ear disease. Though a variety of tests were already required, the implementation was ramped up, which had its own costs — testing for swine fever could cost as much as 1,000 yuan.

The prognosis for piggeries affected by the epidemic is not optimistic. With the continued spread of the virus, improving pig production capacity has become an urgent national issue. On May 28, MARA and the Ministry of Finance jointly issued a document asking localities to provide discounted loans and support for pig farms and breeders. Funds from the central government would be arranged in appropriate scale, the document said.

However, the lack of funds has created a bottleneck. A recent survey by the National Bureau of Statistics found one-third of farmers in Jincheng city, the heart of the Shanxi pig industry, had been driven from the industry by the impact of swine fever. Their main obstacle was insufficient funds to start from scratch.

“Our pig industry has reached a life or death moment, and it's far from over,” Qiu said. “We cannot destroy our pig industry. If everyone still has a conscience and principles, this must be the basis and starting point of our fight against African swine fever.”

This story has been updated with additional information.

Contact reporter Ren Qiuyu (qiuyuren@caixin.com)