

Trade opportunities in China's pork chain

Management Summary



China is the world leading country in the production of pork. The industry plays an important role in China's rapidly developing agricultural economy. Under the authority of the Ministry of Agriculture, Nature and Food Quality an overview of trade opportunities for Dutch enterprises in the expanding and rising Chinese pork market was drawn up. Below a management summary of this report.

Pork consumption and production

Pork is one of the most important food sources for urban and rural residents in China. Pig farming is next to rice production traditionally the basic industry to guarantee food security for Chinese residents. The annual per capita consumption of pork was about 39 kg in 2006 and pork represents about two third of the total meat consumption. The official statistics in China, however, do not account for meat consumption in restaurants and for institutional consumption. Traditional 'Chinese style' meat products concern fresh, chilled and frozen meat and on a much smaller scale further processed high temperature meat products (HTMP). 'Western style' low temperature meat products (LTMP) nowadays have a small share of 5% in the meat consumption.

China is since 1990 the world leading country in the production of pork. The total annual output of pork grew from 24.0 million tons in 1990 and a share of 39% in world production to 51.2 million tons respectively 49% in 2005. Annual slaughtering reached a top of 660 million pigs in 2005. Due to serious outbreaks of blue ear disease (PRRS), output declined to 495 million heads in 2006 and 447 million heads in 2007.

Pork trade

Total import of pork varied between 400,000 and 800,000 tons per year over the past 10 years. Direct import into the mainland of China is only allowed through bilateral agreements. A large part is therefore traded through Hong Kong. Pig offal, seen as delicious by Chinese consumers, is the major product imported into China. It concerns either fresh, chilled or frozen offal. Carcasses and boneless pork are other important products. Viewed in the light of total production and consumption in China, the import only accounts for 1-2%. It is yet valuable to trading countries to make pork sales in their domestic region more profitable. Denmark, The Netherlands, Germany and France are the major European offal trading partners of China.

Current pork chain

It is forecasted that consumption and production will grow and will have it's consequences to scaling of the sector, quality requirements and restructuring of production chain. As China becomes more and more integrated in the global meat market, foreign investors are keen to step into China's fast growing pork chain. However, the current Chinese pork chain witnesses many paradoxes: e.g. small-scale farms with 5 pigs versus large-scale farms supplying the slaughterhouse over 10,000

pigs annually, illegal slaughtering versus HACCP certified companies, or open-air wet markets versus foreign invested hyper-markets.

Attractiveness of the pork chain for Dutch agribusiness

Eight Chinese slaughtering and processing companies, two Chinese feed producers and several Chinese experts were consulted and questioned on their perceptions of the current situation of China's pork chain, how they operate in this chain, and what their strategic plans are. They want to increase the quantity and quality of the annual output of meat products, pigs or commercial feed. While The Netherlands is just known for its highly skilled firms, farms and professionals in the pork industry, the Chinese plans imply excellent business opportunities (but also threats) for Dutch agribusiness.

To capitalize opportunities in China's pork chain, it is highly advisable to be physically present on Chinese grounds and not to rely only on import of products into China. Depending on the commodity this means either having an own production base in China with Chinese staff, having a share in a Chinese company or having a representative office with Chinese staff. First, while the dimension of physical trade of products from The Netherlands to China is limited in comparison with the demand due to the projected expansion of the production chain taking place in China. Second, while only companies with a Chinese business registration can access the subsidies made available by the Chinese government to stimulate the expansion of and investments in the Chinese pork chain. And in practice only Chinese know when, where and how to secure these subsidies. Part of the information stays unknown to foreigners and/or they lack the network to be on the right place at the right moment. A national regulation on merges and acquisitions forbids foreign investors, however, to gain a monopoly position in the mainland market of China.

Opportunities in information technology within the chain

To support product traceability along the whole chain, Chinese processing and slaughtering companies are in need of information technology. Specific reference has been made by them to Radio Frequency Identification technology (RFID). Companies providing these technologies and/or slaughter companies with a proven track record in this field are appealing business partners for the Chinese companies.

To increase the annual output of pig farms, it is a prerequisite to know current production levels and monitor developments on a regular and preferably automated base. Dutch software companies have a chance to introduce data recording systems on professional and large-scale farms and, if infrastructure on hand, to extend these systems to data exchange systems along the production chain.

Opportunities in processing and packaging

Distribution of freshly slaughtered meat products is slowly shifting from *nóngmào* markets without cooling facilities to supermarkets with pre-packed meat.

Therefore, the companies interviewed have interest to apply high quality cold chain technology and expressed a need for international know-how on advanced fresh keeping techniques and packaging methods.

Although the market segment of further processed or convenience pork products is small in China, it offers opportunities for Dutch agribusiness. Chinese companies want to become more active in this market, but lack the competences to do effectively.

Opportunities in slaughtering (equipment) and meat sales

Meat consumption in China is for the majority based on non-processed fresh, chilled and frozen meat and this will stay so in the future. To secure supply of parts such as legs and offals, some companies in China's pork chain apply for import licences to source it from the international market.

Meat quality is becoming more important in Chinese slaughterhouses, especially meat quality influenced by handling of pigs pre-slaughter, the stunning technique and handling of the carcass post-slaughter. They are looking for international advanced technology and know-how to upgrade their slaughterhouse facilities to improve these processes. All in order to achieve competitive advantage and to be able to act on the world pork market.

In relation to the foregoing, many slaughterhouses don't have a grading system and the infrastructure to measure and monitor meat quality traits such as lean meat arising from on-farm influences like breeding and feeding. It is therefore hard to establish payments to farmers on quality and direct meat quality to desired levels.

Opportunities exist for Dutch equipment companies to provide the technique and infrastructure, being most easy in planned new to build facilities of top slaughterhouses and processing companies.

Opportunities in live pig transport

The usual means of transport of live pigs from the farm to the slaughterhouse are open trucks, not all of superior technology or high hygienic standards. To reduce sanitary risks and to increase transport quality (e.g. reduce broken legs and so on to minimize number of animals unfit for slaughter), two leading companies want to invest in special-purpose build vehicles according to international standards.

Opportunities in breeding

There's an ongoing demand for foreign robust, high proliferative breeding stock. Most of the companies involved in pig farming do import or are interested to import pure-bred female lines, but apply themselves two way and three way hybridization to fit the product to the Chinese consumer market. However, they become

more aware that breeding bears a higher financial risk than production farming and that it requires specific skills. Outsourcing of breeding is therefore considered by some companies. Breeders who are trained in production management will be contracted, and a subsidiary of the company will sell the breeding stock to their own pig production bases or external pig farms.

Opportunities in farm design and farm supplies

There are sincere intentions of leading pork production companies to expand in green field professional and large-scale pig farms. Next to this, also non-agricultural companies have announced to step into pig farming out of dissatisfaction with current quality and safety levels of Chinese pork. The companies are interested to implement high-technological housing, climate, feeding or manure treatment equipment to create an environment to realize high productivity and efficiency. They are sympathetic towards contracting international expertise to advise on farm design and farm management. It has to be kept in mind that the published intentions often finally result in practice to projects smaller in size.

Opportunities in feed manufacturing

In general, feed manufacturing companies often have old, severely repaired equipment or equipment subject to wear out rapidly. To be able to produce high quality feed for the top production farms, the leading feed companies are considering to invest in durable feed processing technology and equipment. Feed equipment supply companies do have a business opportunity here, but it concerns only a small market.

The development of high quality or innovative feeds provides opportunities for Dutch companies to sell feed formulation systems and provide subsequent know-how on feed resources.

Opportunities in knowledge transfer and consultancy

Safe feed and safe food is a hot issue for all animal production chains, especially after the melamine incident in the dairy production chain. There are opportunities for Dutch agricultural consortia to initiate or participate in large-scale projects to ensure feed and meat safety in the Chinese pork chain and to advertise the Dutch high level standards on these aspects. Example projects are wide application of GMP+.

There are opportunities for Dutch educational and knowledge transfer organisations to upgrade basic production skills on farm level through either (1) training and support of large-scale farmers, (2) training of dealers, advisors, salesman within agribusiness companies who train and advise the farmers, or (3) training of staff of universities to improve the curriculum and the competences of animal science students.

Specific opportunities exist for pharmaceutical companies in training on animal health issues and sales of related remedial products.

Although consumption of organic products is still rather low, with increasing quality and safety concerns

of Chinese consumers, organic or partly organic-based products do have the interest of some processing companies. Dutch consultancy and knowledge transfer organisations can have added value to these companies and provide them with know-how on organic farming equalling the IFOAM standards.

Drawbacks and risks for Dutch agribusiness

Although many opportunities exist in China's pork chain, Dutch agribusiness has to be aware of the drawbacks and risks in doing business in China.

Sociological and cultural drawbacks

Some of the opportunities in the Chinese pork chain are not easy to realize for Dutch agri-business, because of a higher standing of other foreign countries in the eyes of the Chinese. Companies are occasionally prejudiced towards e.g. the U.S.A. or Denmark, not necessarily on the grounds of the quality of agribusiness firms in these countries but rather on grounds of better marketing of these countries in China. It is therefore a challenge for Dutch agribusiness to jointly promote their high quality products and know-how in order to market and sell 'Nederlandse waar'.

Not only a drawback but a serious threat for doing business in China is the creative mind of Chinese and their mind-set of 'I can do it myself much cheaper'. Examples of creative thinking and handling (or even to our opinion malversation or fraud) are e.g. sales of non-selected breeding material on an alternative market or e.g. application of duffle coat repairs to equipment which finally hamper the functionality and effectiveness of it.

Technological risks

Despite the vast progress in infrastructure and high-tech solutions that has taken place in China, the agricultural sector is relatively down in fields like application of high-tech equipment, logistics and information technology. This bears a risk for some of the business opportunities mentioned in paragraph 4.1. Good intentions result sometimes in bad enforcement. E.g. ear notching is often used for identification of pigs. However, problems with ear biting impair the practical implementation of a data recording system on farm and a tracking and tracing system along the chain. Also, the agricultural production chains face low mechanization and automation of feed distribution. No bulk vehicles are deployed in the distribution of feed from the factory to the farm; bags up to 70 kg each are used. Furthermore, in many feed factories outmoded equipment or equipment subject to wear out rapidly is used, resulting in high or recurring investments.

Economic risks

Chinese are cash-driven. Companies within the pork chain barely judge investments on cost-effectiveness or on rate of return. At times of low cash-flows it occurs that investment projects are temporary brought to a halt or

even totally cancelled. Dutch agri-business can therefore be confronted with an annulment of a (signed) contract. Also backyard and small professional farmers focus only on price in their supply of equipment and feed, the more so since due to their low production skills they have low alternative opportunities to increase cash. They make e.g. feed orders unpredictable and influence planning at the factory negatively.

Political drawbacks

Many Chinese companies perceive an unfair competition amongst themselves. First of all, regional differences in the enforcement of laws and regulations exist. The easiness of doing business in China's pork chain is therefore depending on the region. Second, unlawful acts were in the past sometimes punished gently by the government, although with the recent food scandals this diminishes rapidly.

The development of companies with regard to guaranteeing the quality and safety of meat and meat products is heavily depending on policies of the government, but the companies perceive a lack of specific policy support in slaughter and processing innovation. The good intentions of the Chinese government misfire in practice. The more since many governmental departments are involved in food safety and quality management without a clear division of responsibilities. This contains the risk to arrive at an impasse or a rigid situation with no progress.

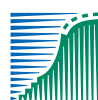
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