Pig Industry in South Korea

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Background

Even though Korea has given a lot of efforts to develop agriculture, it is still much less developed than other industries such as ICT, Heavy Industry, car and mobile phone. One of the reasons is that Korean agriculture is protected and not open to international competition. Another reason is a low policy efficiency; Even though Korea is one of top countries in the amount of agro-subsidies, the effect of the subsidies falls short of expectations.

The livestock sector is one of the relatively better developed agricultural sectors. A lot of meat and dairy products imports pushed Korean livestock farmers to innovate.

Development in pig industry

The recent development in the pig industry is remarkable. Since pig farmers have to compete with various foreign pork products, they are generally innovative and eager for development. Interestingly however, the trigger of the recent development is not innovation by farmers’ own initiative or the governmental subsidies, but it is a disease. There was a severe outbreak of Foot and Mouth Disease between November 2010 and February 2011. Due to the culling of pigs, the number of pigs dropped 40% in 3 months. The number of pig farms also dropped 33% because many farmers gave up pig farming. In order to recover the number of pigs, the sector was compelled to scale up farm size. A lot of integration – vertical and horizontal- happened.
The number of pigs recovered in one and half years and even increased more than the level before the FMD outbreak. As the pork production soared, the price of local pork went down. This lowered the profitability of farmers. Furthermore, The EU-Korea FTA and the US-Korea FTA effectuated in July 2011 and March 2012 respectively promoted the importation of pork products, which drove pig farmers among severe competition in the market. Many pig farms with less than 5,000 pigs were bankrupted. The number of pig farms decreased 6.7% in December 2013 compared to the same month in 2012. This again lead to innovation in pig farms and increase of the number of animals per farm. The number of slaughtered pigs was 16 million animals in 2013, 14.8% hike from the previous year and the production of pork was 857 thousand ton in 2013, 13.4% hike from the previous year. In 2013, the Korean government took measures to control the over-production by reducing the number of sows. From end of 2013, the number of pigs slightly went down.

Opportunities for Dutch business

Even though the Korean pig sector is developing in terms of farm size and production volume per farm, the productivity is still low, with only around 14.6 slaughter pigs per sow per year, compared to almost the double amount in the Netherlands. The production costs of fatteners are around € 3.0 per kg, which is about double the level in the Netherlands. The inefficiency of the Korean pig sector is considered to be caused by 1) old-fashioned housing and equipments 2) Lower technology level in pig breeding 3) inefficient feed logistics. These three will be the areas where Dutch business can play a role in the development of the Korean pig industry.

1) Housing and equipments
One of lessons learned from the outbreak of FMD is that FMD spreaded rapidly across the country due to the vulnerability in the housings and facilities in pig farms in terms of biosecurity. Since the outbreak of FMD, the Korea government has pushed the sector to modernize housings and facilities for better biosecurity. In march 2011, Korea introduced a licensing system for livestock husbandry, allowing only the livestock farmers who have good facilities and knowledge & education level.

As the farm size is recently getting bigger, the interest in modern pig housings and equipments is soaring among farmers. The average age of Korean farmers is around 64 years old and the number of farmers is decreasing. Korean pig farmers are trying to introduce automation system for pig farming to tackle the current situation. They are increasingly installing hi-tech pig housings and facilities, more specifically, modern housing system, automated feeding system, health check and detecting system, tracking & tracing system and so on. The Korean government is also supporting farmers providing them with subsidies.

Some Dutch housing and feeding system companies are already active in the market and are increasing the sales. There is no discrimination between local and imported products for the subsidy.

2) Breeding technology

Korean farmers are getting piglets mainly from local breeding companies. But the pure breeds are a lot imported from foreign countries, mostly from Canada and some from Denmark. In spite of consistent efforts to develop the pig breeding industry by the Korean government and sector, the number of weaned piglets per sow per year still remains half of that of the Netherlands. One of the reasons considered is that the performance result of breeding pigs by farm is not fed back to breeding companies in time and systematically and which hindered the interlink between breeders and famers.

There are two obstacles for Dutch pig breeding companies in developing the market in South Korea: one is a sanitary barrier for the export of breeding pigs and porcine semen from the Netherlands to Korea. For this, the two countries should work on the agreement of animal health requirements. The other one is the fact that Korean farmers don’t like to pay for the royalty for breeding lines and knowledge. So it is recommended to develop different kinds of revenue model. As the Dutch breeding technology is renowned in Korea, showing the actual performance to Korean farmers is important.

Some Dutch pig breeding companies have knocked the door over the last 5 years and faced difficulties due to the aforementioned obstacles. But as the Korean pork market opens more and more under FTA and the sector is getting pressure for innovation, high-level breeding technology from the Netherlands will be necessarily required.

3) Feed Industry
In Korea, there are 4 major swine feed companies. 3 out of 4 have their own subsidiary pig farms. The major 4 companies are merging not only other small feed companies (horizontal integration) but also pig farms (vertical integration) to improve the economic efficiency.

The quality of local feed products is generally regarded to be of an international level. One multinational feed company is already active in the market and the level of the other 3 companies is also comparable. The problem of the Korean swine feed sector is that feed prices are too high because about 85% of feed ingredients are imported and the logistics is not efficient enough. Since feed accounts for most of the total cost for pig farming, Korean pig farmers are suffering from that.

Dutch feed companies could play a role for the Korean pig sector by selling knowledge on feed economy, nutrition and logistics as well as hi-tech feed / feed additives.