

## Chinese Food Safety: A Case Study of Pig-Raising Industry

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### Abstract

This paper introduces the Shuanghui scandal, which is affected Chinese food safety to some extent. On that base, the causes of the food safety problems in pig-raising industry in China are explained. Finally, some suggestion was presented to improve the safety in china.

**Keywords:** Food safety; Pig-raising industry; Chinese agricultural

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### INTRODUCTION

Human society has been worried about food security rather than food safety because of low productivity. Food safety overwhelmed food security in western developed countries because of robust development of productivity. When Chinese people get rich, they are more aware of the quality of products, especially the quality of food products. With the openness of the Chinese society, the media report more news on food safety; people pay more attention to food safety; and there are more concerns on food safety from the aspect of food business because they want to compete with international counterparts. As the main meat consumed daily in China, pork is concerned most by the public. There are many concerns about the quality of pork industry, such as the addictive residual

of feed, residual of antibiotics, and using of Clenbuterol. However, China is different from developed countries with high reputation of food safety in terms of the mechanism of food producing. The scale of individual company is so low compared with the counterpart. China has to establish its own suitable food safety regulation system incorporated with the experiences of developed countries. In this report, I am going to review the food safety issues and food safety regulations in western countries and then analyze the relative issues in China through a case study of pork industry.

### Shuanghui Scandal: Another Sanlu in Pig-Raising Industry?

Chinese food safety has been a hot topic in recent decade with the development of Chinese economy. Along with more and more cheap commodities of agri-food have been exported to every corner of the world, especially in western countries, many scandals have broken out with tough regulations in developed countries. The critics to Chinese food safety reached a peak when the Sanlu scandal in dairy industry broke out in 2008 before the opening of Beijing Olympics. After that, any news about food safety on media can cause echo in the public. This year, there was a big scandal in pig-raising industry which is related to the biggest pork processing company in China, Shuanghui Group. It seems that Shuanghui is another Sanlu in pig-raising industry, and the food safety in pig-raising industry is serious. Is that the reality of pig-raising industry?

### A Brief Overview of Shuanghui Scandal

On 15<sup>th</sup> March, which is the annual consumers' day in China, CCTV 2 (a, 2011) disclosed how some pig brokers purchased pigs which had been fed with Clenbutrol and sold it to Shuanghui, the largest pork processing company of China. After that, there were overwhelming reports about this scandal, which made the public, think all the pork in China contaminated. As a public company,

Shuanghui Group's stock price had a 10% decrease which is biggest decrease a day for any stock in Chinese stock market. Later, it applied temporary stock suspension in Shanghai Stock market the day after that. The government of Henan Province, where Shuanghui's headquarter is located, began to investigate the problems existing in Shuanghui. A few days later, the government of Henan Province announced that local government had inspected the related factory of Shuanghui Group, and found that among the 689 pigs in stock, 19 pigs had Clenbutrol residues (CCTV2b, 2011). Shuanghui Group apologized to the public for this scandal. On 20 April, its stock re-transacted in the stock market, and got two direct 10% down. However, its price got the bottom in early May, but increased gradually although the Chinese stock market had a sharp decrease in the last few months along with the crisis of European financial market.

From the above two pictures about the stock market, it can see that investors have panics at the first stage of the scandal, but now, they have confidence in the development of Shuanghui, which shows that the problem may not be serious as the media show.

### Regulations After the Scandal

After the scandal, the governments tightened the regulation on food safety in pig-raising industry.

A national campaign started in April to crack down on illegal additives in food. 2000 suspects have been arrested and more than 4900 businesses have been shut down for illegal practices during (Xinhua News Agency, 2011; Ramzy, 2011).

In July, a meeting of quality supervision system was hold in Chengdu. It was announce that the credit file system will be set up in food processing companies and food additives manufacturers over China (Zhu & Hai, 2011).

Also in July, two cases related to clenbuterol had been made the judgments, one principal criminal was sentenced to death penalty with reprieve because of the production of the clenbuterol, which is banned in the feed all over

China since it has been founded hazardous to human beings. The principal criminal knew it was hazardous to people, however, he still co-invested with other to produce clenbuterol for pig feed (Chen *et al.*, 2011).

At the same time, three government officers were sentenced to prison for 6, 5 and 5 years respectively as they made certification without quarantining the pigs for sell (Chen *et al.*, 2011).

In September 2011, the National Food and Drug Administration of China announced to stop producing, transporting and using the tablets of clenbuterol, and abandoned the certificate of producing clenbuterol (Wu, 2011). Although clenbuterol is a medicine for asthma, the administration thinks that there are alternatives now for it. It can be seen as the consequence of the Shuanghui scandal. Therefore, the production and using of clenbuterol in the future is illegal.

### The Causes of the Food Safety Problems in Pig-Raising Industry in China

Today, there are more and more reports about food safety issues on the media of China. It seems that food in china is worse in safety although china gets great economical achievement. In my opinion, it is a reality that there are food safety problems. However, it may not be worse than ever. There are a few reasons for the food safety issues.

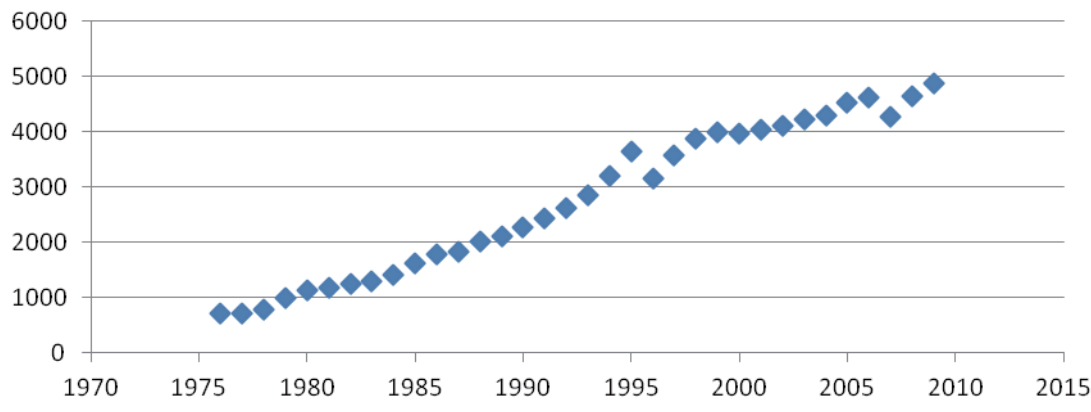
Firstly, there is so fast increase in pork consumption and production.

In the last few decades, there has been significant increase in pig-raising industry, not only pork production, but also pork exportation, and pork production.

The number from the Fourth World Pork Committee showed that the pork production of China in 2006 was 5197 million kg, which was about half of the whole world pork production. The annual pork consumption per person was 39.6 kg in 2006, which was about 60% of annual meat consumption per person (Jiang, 2007).

As far as the pork consuming as is concerned, the number has increased significantly in the last few decades.

## Pork Consuming of China (Unit: 10 million kg)

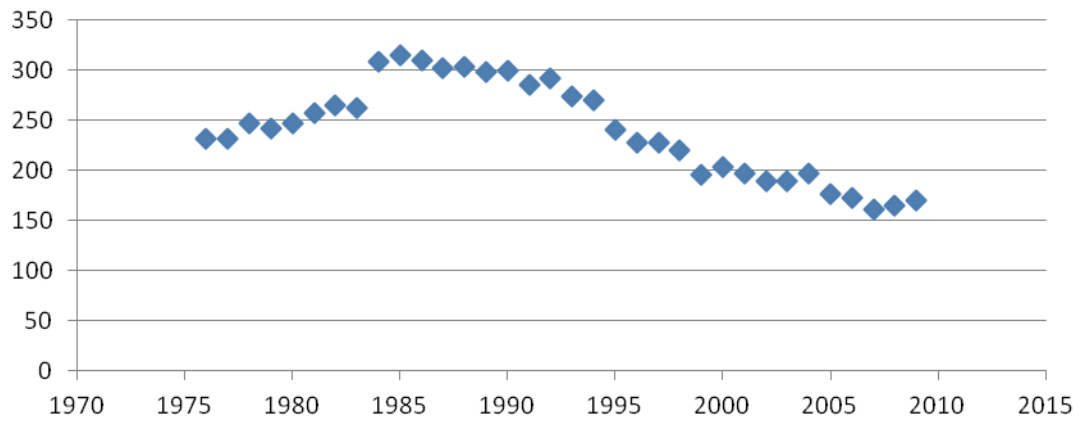


The above chart shows that in the last few decades the pork consumption in China has increased significantly. In 1978, the number is slightly over 700 million kg; while in 2009, the number has increased at a peak at 4879 million kg. From above table (Statistics on pork consuming of

China, 2009), it can be seen clearly that the number of pork consumption has an increasing trend.

Another data I am concerning is the pigs exported. According to the experience of western countries, exported food normally has better quality demands.

### Pigs exported (Unit:10K Pigs)



From the above chart, it can be seen clearly that the number of exported pigs has not increased as the pork consumption in China. On the contrary, it has a decrease trend. The number of pigs exported had increased from around 2 million from 1976 to around 1990. Then it has decreased from the peak to 1.7 million in 2009 (Statistics on pig exportation of China, 2009). When comparing the number of pork consumption and the number of pigs exported, we can draw a conclusion that the proportion of exportation of pigs has a down trend. The increase of supply mainly meets the demand of domestic market.

The significant increase of pig-raising industry causes problems avoidably. In order to meet the demand, the main aim of the industry is to produce as much as possible no wonder of the measures.

Secondly, the use of clenbuterol has been disputable.

Clenbuterol was invented in 1964 in America, initiatively used as a medicine for respiratory diseases. Later, it was discovered that clenbuterol was effective to increase the proportion of lean meat of husbandry. Then it was used as an addictive in feed (Kang, 2011).

In 1980s, a Chinese visiting scholar noticed the function of clenbuterol when he was doing his research in America. Later, he introduced it to China and recommended its use in pig feed. The extension of feed with clenbuterol was sponsored by a national fund. In one year, the feed with clenbuterol was spread to fifty counties in eight provinces. It was estimated that the use of feed with clenbuterol saved 38 million RMB in one year for farmers (Kang, 2011).

At the same period, there were some findings that clenbuterol had dysfunctions. However, the Chinese researchers failed to notice that (kang, 2011).

In 1997, 17 people were poisoned by pig livers in Hong Kong. Then Hong Kong government found that it caused by the residue of clenbuterol in the livers (Kang, 2011). After that, the dysfunction of clenbuterol was recognized by Chinese researchers, and later it was banned to use in feed. Six years had passed since its ban in USA (kang, 2011).

However, after the ban, there are still cases of food poisoning by clenbuterol in China (Kang, 2011). Although it is illegal to use it in feed, some farmers use it intentionally or unintentionally to make their products popular in the market.

Thirdly, the scale of farming in China is too low.

Different from the developed countries, in China, the scale of farming is too low. Traditionally, one household raises around 2-3 pigs per year. They use the stool of pigs as basic fertilizer. Although more and more farmers can invest pig farms, the scale of farms is still low. Normally, one farm can produce 50-100 pig per year. Farms which can produce over 100 are rare. Therefore, it is really difficult for food safety regulation in China. After the scandal, Shuanghui announced that it will test every pig in the future, which is really ridiculous in western countries.

On the other hand, the farmers living in rural area are elders. Their ability is relatively low. With the development of urbanization of China, many young farmers have become migrating workers in cities. The

second generation migrating farmers are not willing to go back to countryside because they are brought up in cities. It makes the population in countryside more aged. Whereas, it is also a chance for Chinese agriculture to promote its producing scale.

Fourthly, it is a consequence of media competition.

Chinese media have been strictly regulated by government since the liberation. In the last decade, the media are freer to report events except for politics. When Shuanghui scandal was exploded by CCTV2, reports on the scandal could be found everywhere. However, there were not many reports about other pork companies in China. Because Shuanghui does not raise pig itself and it just purchases pigs on the market, other companies cannot be innocent for that.

## CONCLUSION

Pork is one important food in Chinese diet. It is about 60% of whole meat consumed in China. In the last few decades, the numbers of both pork production and pork consumption have increased sharply with the economic boom of China. At the same time, people's demand for pork does not focus on quantity, but on quality. There are large demands for lean meat in Chinese pig-raising industry. The extension of feed with clenbuterol, which was once legal and now is illegal, has made negative effects on pig-raising industry in China. As long as there are strong demands for lean meat, there will be someone to use the illegal drug in feed. Different as the industry in developed countries with large production scale, the scale of Chinese pig-raising industry is relatively so low, which makes strict food safety regulation complicated and costly. The fast urbanization decreases the whole ability of farmers on the one hand, and provides a chance to promote the scale of agriculture in China on the other hand. A free media act as a watchdog for food safety surveillance on one hand, and exaggerate the seriousness of food safety on the other hand in order to attract more readers and audience because of severe competition. Over all, there is always food safety issue, but it is not as serious as the media show. For developing countries, food safety regulation is more complicated than that in developed countries.

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