The beef cattle and beef industry development in China

Dr. Xiangdong Hu

Institute of Agricultural Economics and Development,
Chinese Academy of Agricultural Sciences

Hanoi, Vietnam, Aug. 10, 2017
Contents

- Introduction of the beef cattle industry
- The beef cattle situation based on survey data
- The prospect for the beef industry
Contents

- Introduction for the overall beef cattle industry
- The beef cattle situation based on survey data
- The prospect for the beef industry
1. Beef production increased from 269,000 tons in 1980 to 7,001,000 tons in 2015.
2. Cattle is changing the role from draft cattle to beef cattle.

Beef production from 1980-2015 (1000 tons)

Source: National Bureau of Statistics of China
The different scale beef cattle farm slaughter percentage, the small scale quit out and large scale increased dramatically.

Source: MOA
The resources of dairy herd is a growing source for beef production, providing approx. 6 million slaughter animals in 2016.

Source: MOA and estimation
Beef market was pretty good. There was few fluctuation, and the beef price kept the increase trend.
After 2011, the beef import turn to the rapid rising channel. Export was main for the Hongkong and Macao.

Source: National Bureau of Statistics of China
There are more and more countries to export beef to China.

Before
Brazil
Uruguay
Australia

Year of 2016
Brazil
Uruguay
Australia
New Zealand
Namibia
Hungary
Mongolia
America

The port in Henan province accepted the import live cattle from Australia for slaughtering; The new port of Shidao in Shandong province is another one.
US beef imports in China

• US beef came back China’s market after 20\textsuperscript{th} Jun. 2017; it prohibited to import since 2003.

• The first US beef imported from Shanghai, which sold via e-commercial. The prices of filet steak and rib eye were 33.89USD/300g and 38.35USD/400g, which were higher than Australian and South American.

• Until now, it was few US beef coming into China; China has very strict regulation for the imported beef quality, such as no ractopamine usage.
Beef smuggling still existed, and its players and channels are expanding

• Quantity: According to estimation, beef smuggling in China accounts for 10% of domestic beef consumption.

• Product type: Beef products, live cattle (mainly from South-east countries).

• Channel: Mainly distributed in some provinces such as Guangdong, Hunan, Shanghai, Guangxi, Yunnan, etc.
Per-capita beef consumption below 1 kg in rural areas and 2.5 kg in urban areas (at home consumption). The average consumption 5-6 kg.

<table>
<thead>
<tr>
<th>Year</th>
<th>Pork (kg per capita)</th>
<th>Beef (kg per capita)</th>
<th>Mutton (kg per capita)</th>
<th>Poultry (kg per capita)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td>2000</td>
<td>13.3</td>
<td>16.7</td>
<td>0.5</td>
<td>2.0</td>
</tr>
<tr>
<td>2001</td>
<td>13.4</td>
<td>16.0</td>
<td>0.6</td>
<td>1.9</td>
</tr>
<tr>
<td>2002</td>
<td>13.7</td>
<td>20.3</td>
<td>0.5</td>
<td>1.9</td>
</tr>
<tr>
<td>2003</td>
<td>13.8</td>
<td>20.4</td>
<td>0.5</td>
<td>2.0</td>
</tr>
<tr>
<td>2004</td>
<td>13.5</td>
<td>19.2</td>
<td>0.5</td>
<td>2.3</td>
</tr>
<tr>
<td>2005</td>
<td>15.6</td>
<td>20.2</td>
<td>0.6</td>
<td>2.3</td>
</tr>
<tr>
<td>2006</td>
<td>15.5</td>
<td>20.0</td>
<td>0.7</td>
<td>2.4</td>
</tr>
<tr>
<td>2007</td>
<td>13.4</td>
<td>18.2</td>
<td>0.7</td>
<td>2.6</td>
</tr>
<tr>
<td>2008</td>
<td>12.7</td>
<td>19.3</td>
<td>0.6</td>
<td>2.2</td>
</tr>
<tr>
<td>2009</td>
<td>14.0</td>
<td>20.5</td>
<td>0.6</td>
<td>2.4</td>
</tr>
<tr>
<td>2010</td>
<td>14.4</td>
<td>20.7</td>
<td>0.6</td>
<td>2.5</td>
</tr>
<tr>
<td>2011</td>
<td>14.4</td>
<td>20.6</td>
<td>1.0</td>
<td>2.8</td>
</tr>
<tr>
<td>2012</td>
<td>14.4</td>
<td>21.2</td>
<td>1.0</td>
<td>2.5</td>
</tr>
<tr>
<td>2013</td>
<td>19.1</td>
<td>20.4</td>
<td>0.8</td>
<td>2.2</td>
</tr>
<tr>
<td>2014</td>
<td>19.2</td>
<td>20.8</td>
<td>0.8</td>
<td>2.2</td>
</tr>
<tr>
<td>2015</td>
<td>19.5</td>
<td>20.7</td>
<td>0.8</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Source: National Bureau of Statistics of China

Beef consumption is still potential increase following as the income increase and urbanization.
Contents

- Introduction for the overall beef cattle industry
- The beef cattle situation based on survey data
- The prospect for the beef industry
Samples for the beef cattle farms

• Three levels for samples:

1. 250 villages monthly data since 2008

2. 750 beef cattle farms monthly data since 2008

3. 1499-1513 beef cattle feedlots (50 heads +) since 2015.
1. Machinery in agriculture sector
2. Farmer leave rural area especially for those poverty and mountainous areas where are main beef cattle cultivation regions.

number beef cattle farms/total farms (%)

Source: survey data
The beef cattle inventory, yearly slaughter and breeding beef cattle fall decline in survey villages. Existing beef cattle farms never expand the scale so many to make up quitting farms.
The scaled beef cattle farms keep relatively stable.
(1) Facilities investment (2) feed base

The average size in scaled farms from 2015 to 2017 (heads)

Source: survey data
### The cost and revenue in the finishing beef cattle farms

<table>
<thead>
<tr>
<th></th>
<th>Jun.-17</th>
<th>May-17</th>
<th>Jun.-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of 450Kg beef cattle (USD/head)</td>
<td>1399.8</td>
<td>1532.1</td>
<td>1512.6</td>
</tr>
<tr>
<td>Profit for 450 Kg beef cattle (USD/head)</td>
<td>171.0</td>
<td>224.0</td>
<td>197.7</td>
</tr>
<tr>
<td>Profit per day (USD/head)</td>
<td>1.02</td>
<td>1.18</td>
<td>0.95</td>
</tr>
<tr>
<td>Beef cattle for slaughtering (heads)</td>
<td>1466</td>
<td>510</td>
<td>724</td>
</tr>
<tr>
<td>Farms selling the cattle</td>
<td>66</td>
<td>53</td>
<td>54</td>
</tr>
<tr>
<td>Total Farms</td>
<td>750</td>
<td>750</td>
<td>750</td>
</tr>
</tbody>
</table>

Source: survey data
The cost and revenue of the cow-calf farms

<table>
<thead>
<tr>
<th></th>
<th>Jun.-17</th>
<th>May-17</th>
<th>Jun.-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calf live weight (kg)</td>
<td>281</td>
<td>275.2</td>
<td>343.8</td>
</tr>
<tr>
<td>Price (USD/kg)</td>
<td>4.2</td>
<td>4.0</td>
<td>3.4</td>
</tr>
<tr>
<td>Revenue of 300Kg calf (USD/head)</td>
<td>1270.9</td>
<td>1212.2</td>
<td>1025.2</td>
</tr>
<tr>
<td>Cost of 300Kg calf (USD/head)</td>
<td>773.0</td>
<td>787.9</td>
<td>751.1</td>
</tr>
<tr>
<td>Profit for 300Kg calf (USD/head)</td>
<td>497.9</td>
<td>424.3</td>
<td>274.1</td>
</tr>
<tr>
<td>Profit per day (USD/head)</td>
<td>1.4</td>
<td>1.2</td>
<td>0.8</td>
</tr>
<tr>
<td>Calf for selling (head)</td>
<td>107</td>
<td>88</td>
<td>317</td>
</tr>
<tr>
<td>Farms selling the cattle</td>
<td>27</td>
<td>24</td>
<td>21</td>
</tr>
<tr>
<td>Total Farms</td>
<td>750</td>
<td>750</td>
<td>750</td>
</tr>
</tbody>
</table>

Source: survey data
Contents

- Introduction for the overall beef cattle industry
- The beef cattle situation based on survey data
- The prospect for the beef industry
The overall beef supply-demand

• The amount of cattle inventory will remain stable with a little decrease. The amount of breeding cattle inventory will keep stable under the government support.

• The cattle slaughter weight will continue to rise.

• The beef price will stay high level.

• The imports of beef production will increase, the proportion of the smuggling market is expected to decrease with cracking down on smuggling.
Some influence factors with high production cost

• Limited factors for the development beef cattle: Land, capital and environment protection.

① Loan guarantees

② Protection of prime farmland

③ The MOA makes the pollution treatment of livestock and poultry as one of the key tasks in the 13th five-year plan.
Opportunities for the beef industry

• In 2017, the pilots’ area for *Grain crops to forage grass* will be expanded to 670,000 ha; it will promote the development of grass planting and cattle breeding and the combination of grass planting and cattle breeding.

• Grass animal husbandry development plan will make a promotion of increasing efficiency in beef industry.

• Poverty alleviation plan will encourage some poor areas to grow grass, raise beef cattle and sheep.
Opportunities for the beef industry

• The huge quantity of by-product of crops and by-products of agricultural products processing industry: Pollution or feed resources for cattle?

• Decision makers enable the beef industry to make a contribution to sustainable agricultural development.

• Huge market: Beef demand will keep increase, and there are more and more people to consume the beef.
Knowledge is our business

Any Questions?

Xiangdong Hu

Office Tel.: +86-010-82106717

Mobile: +86-0-13811614436

E-mail: huxiangdong@caas.cn