



SAVE FOOD, ELIMINATE WASTE
BUILD A HIGH QUALITY FOOD
SUPPLY CHAIN

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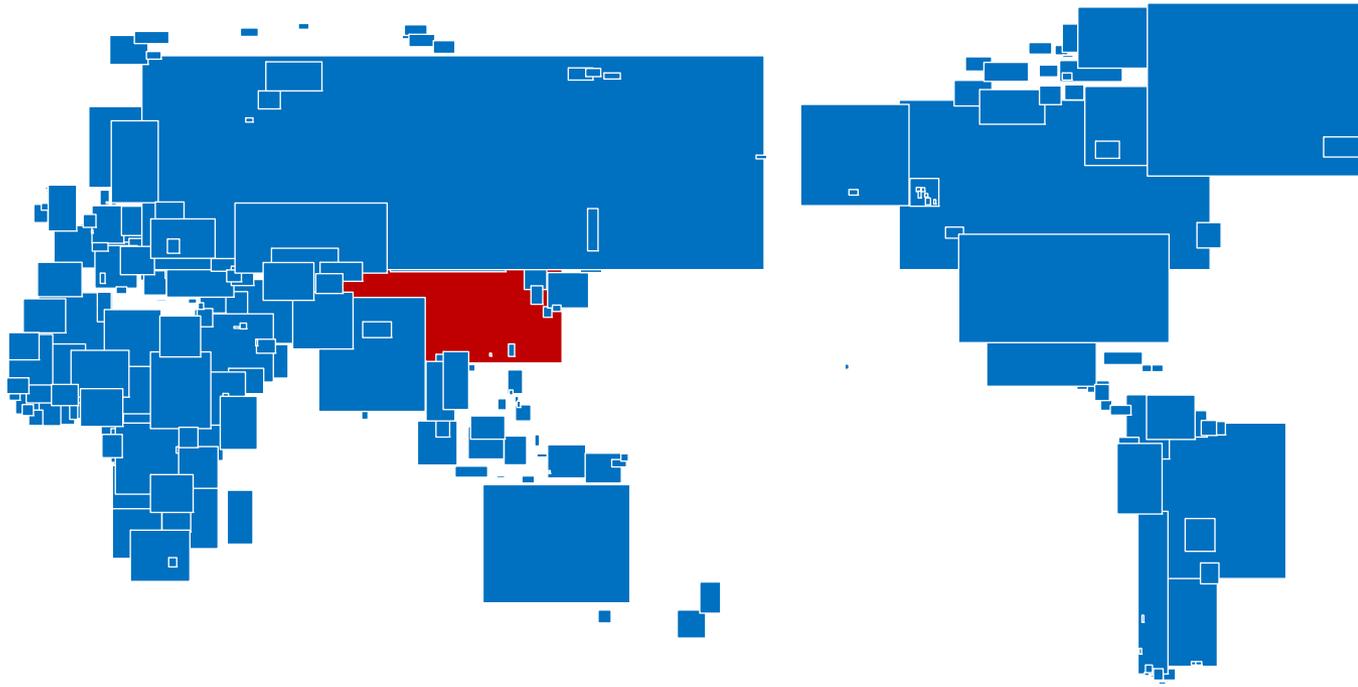
**Consciousness Change on Food Supply
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Part 1: The Current Situation of Food Waste in China and its Countermeasures

1. The Common Phenomenon of Food Waste



Worldwide

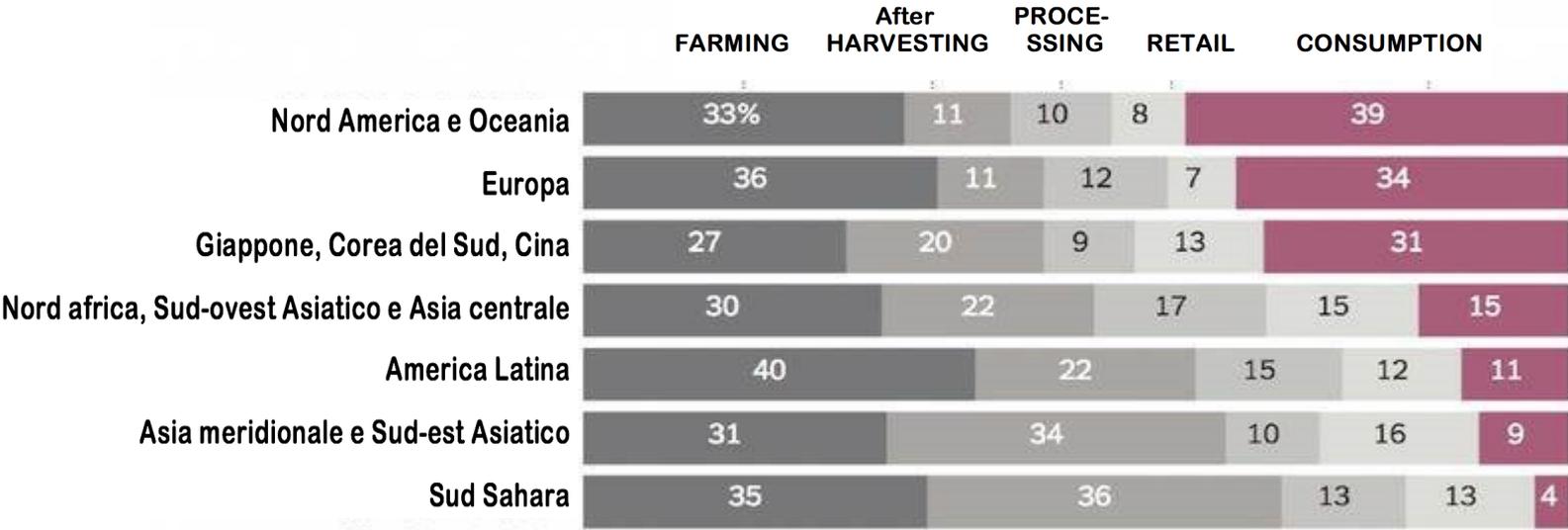
- Food waste: 1.3 billion tons per year
- Food waste ratio: 1/3
- Global hunger: 870 million people

China

- Food waste: 50 million tons
- Food waste ratio: 1/10
- China's poor population: more than 100 million people

2. FAO Survey on Food Waste in Different Regions of the World

Food Waste Differences in the World



Notes: Total quantity is likely to exceed 100% because the calculation adopted the round up to the nearest integer. The calculation of the percentage is based on the weight.

Source: Food and Agriculture Organization of the United Nations

3. Status of Food Waste in China



Waste on the Table

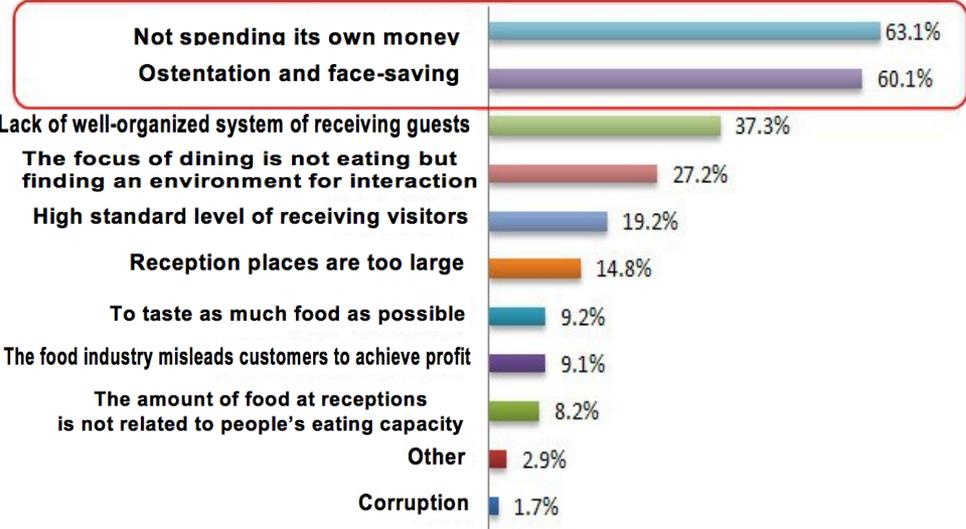
- Total waste: about 18 million tons of food is wasted each year, worth as much as more than 200 billion yuan.
- Waste equivalent: approximately 50 million people's rations per year

Waste outside the Table

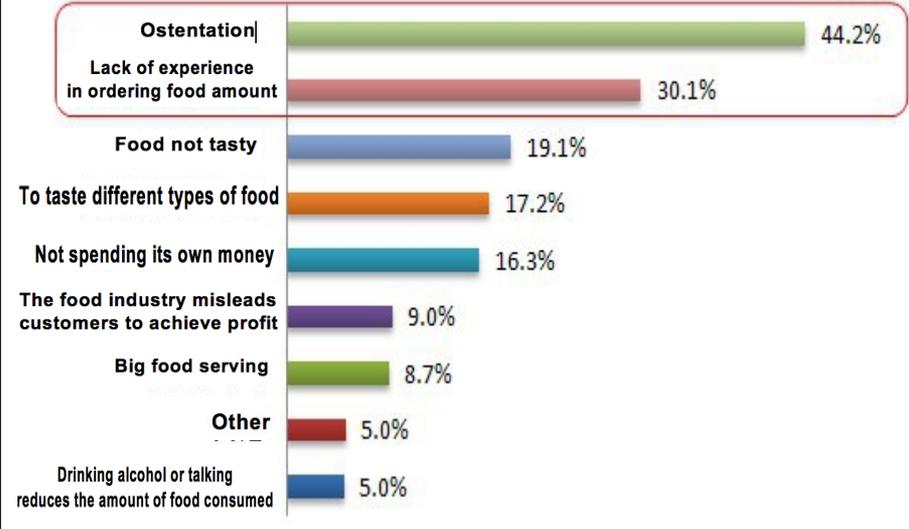
- Total waste: about 35 million tons of grain is lost annually in production, processing, storage and transportation.
- Waste equivalent: approximately equal to the total grain output of Jilin Province in a year.

4. The Main Reasons of Food Waste on Chinese Dining Table

Reasons that lead to food waste



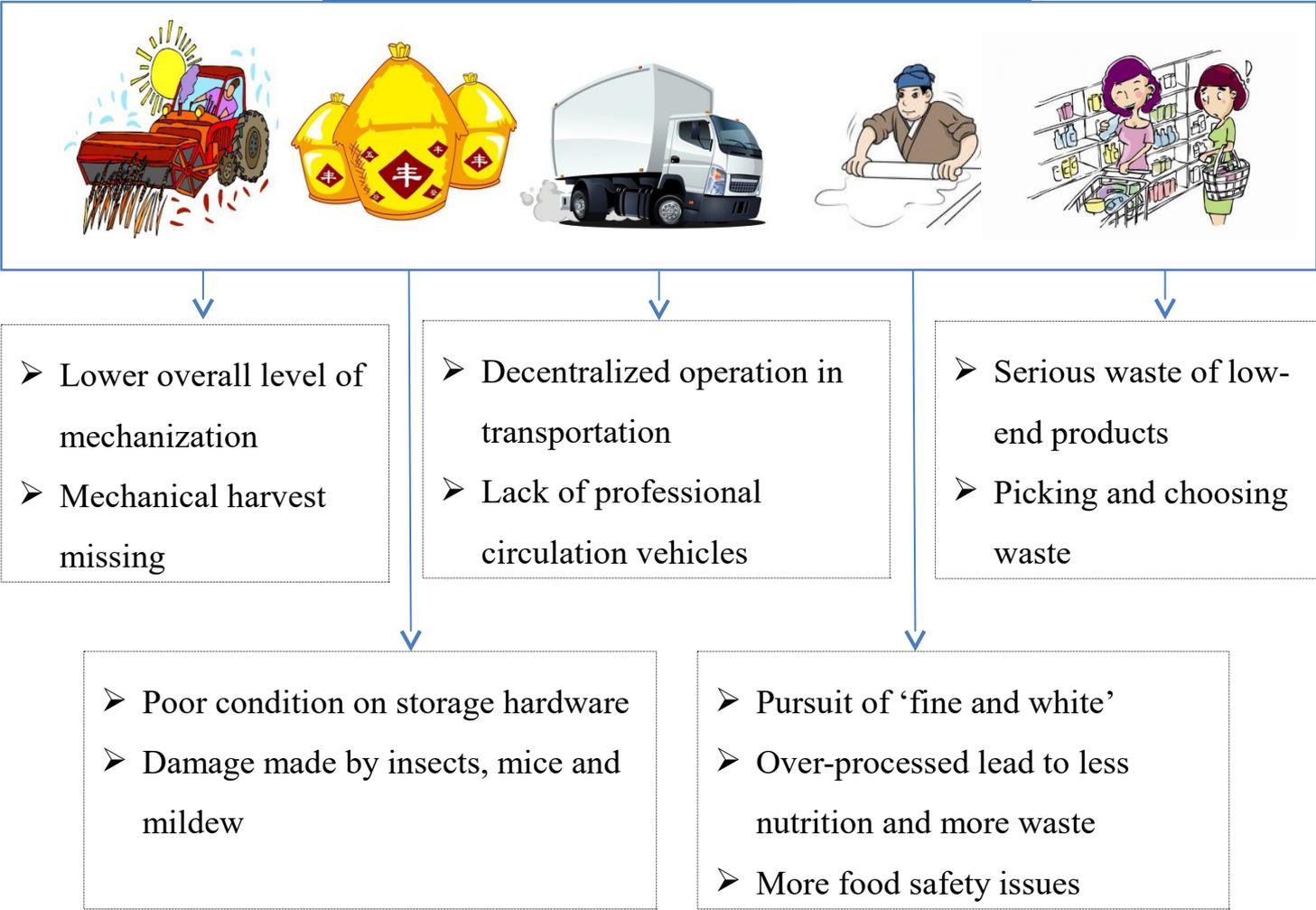
Reasons of food waste on Chinese business dining table



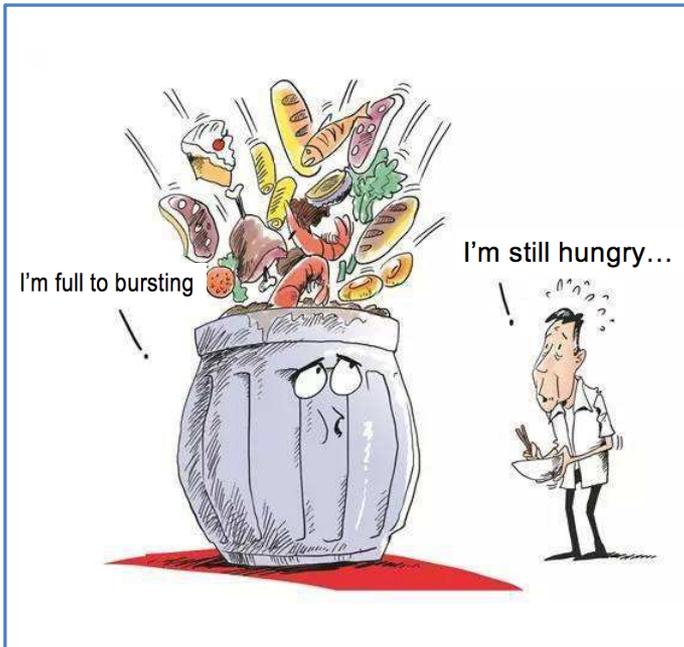
Face-saving and ostentation are the main reasons of Chinese dining table food waste !

5. The Main Reasons of Food Waste outside Chinese Dining Table

Waste on China's Food Industry Chain



6. China's Responses



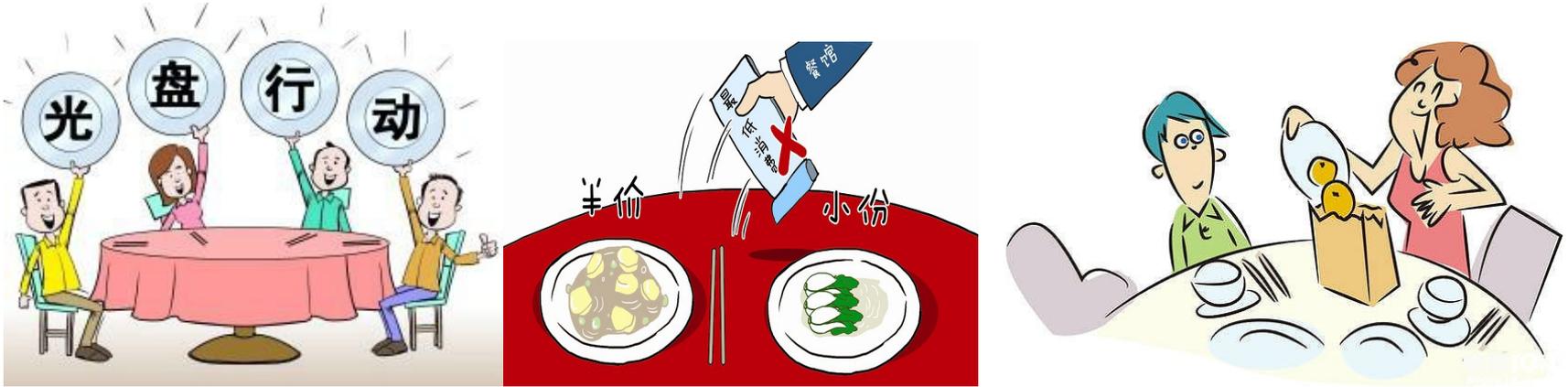
Waste on the Table

- Anti corruption
- Clear the plate
- Strictly saving and opposing waste
- Healthy life

Waste outside the Table

- Optimize the industry chain
- Improve and develop the quality and efficiency
- Pay attention to ecological sustainable development
- Strengthen food safety supervision

7. 'Waste on the Tip of the Tongue' is Significantly Reduced



- Using public fountains to eat dropped sharply: the incidence of non-compliance dropped from 52.2% in 2013 to 3.77% in 2017.
- The overall decline on the table waste: the waste rate in the catering industry in Wuhan dropped from 15% four years ago to 6%.
- Various forms of food-saving: half a serving, small portions of food, packing, cancellation of minimum fees, fines for leftovers, etc.
- Changing consciousness of consumption: eat less and eat better.

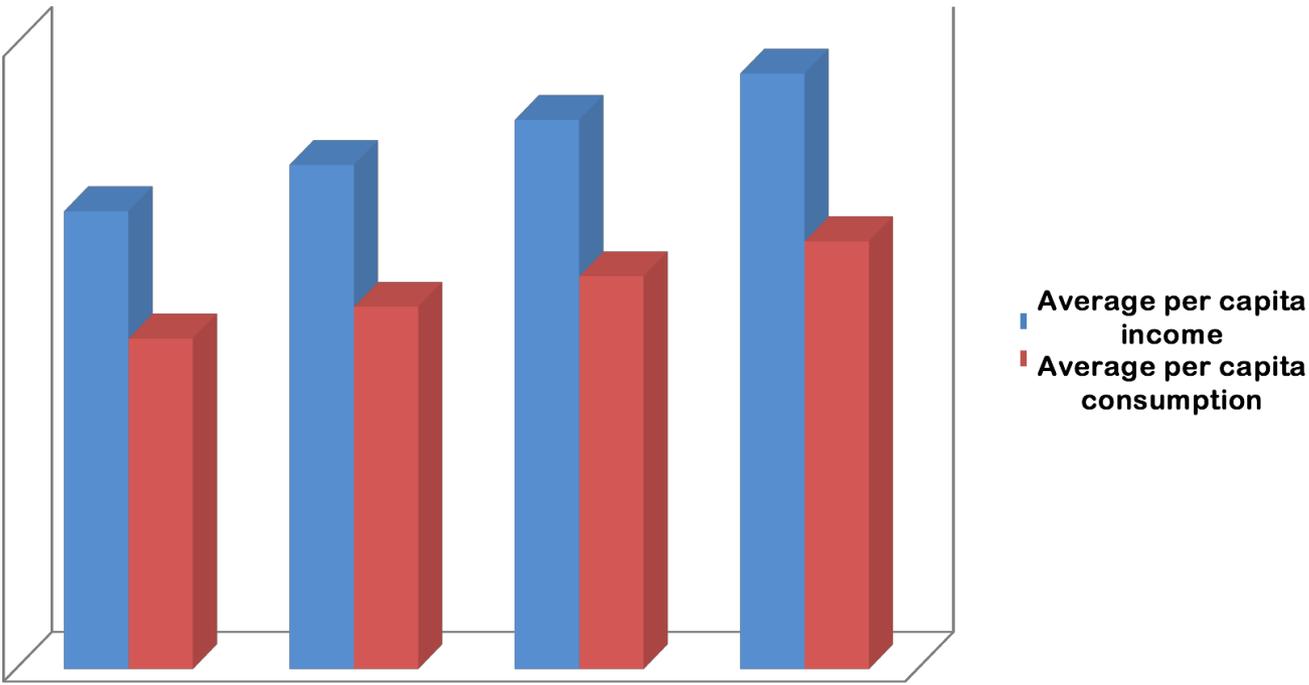


Part 2: The Influence of Consumption

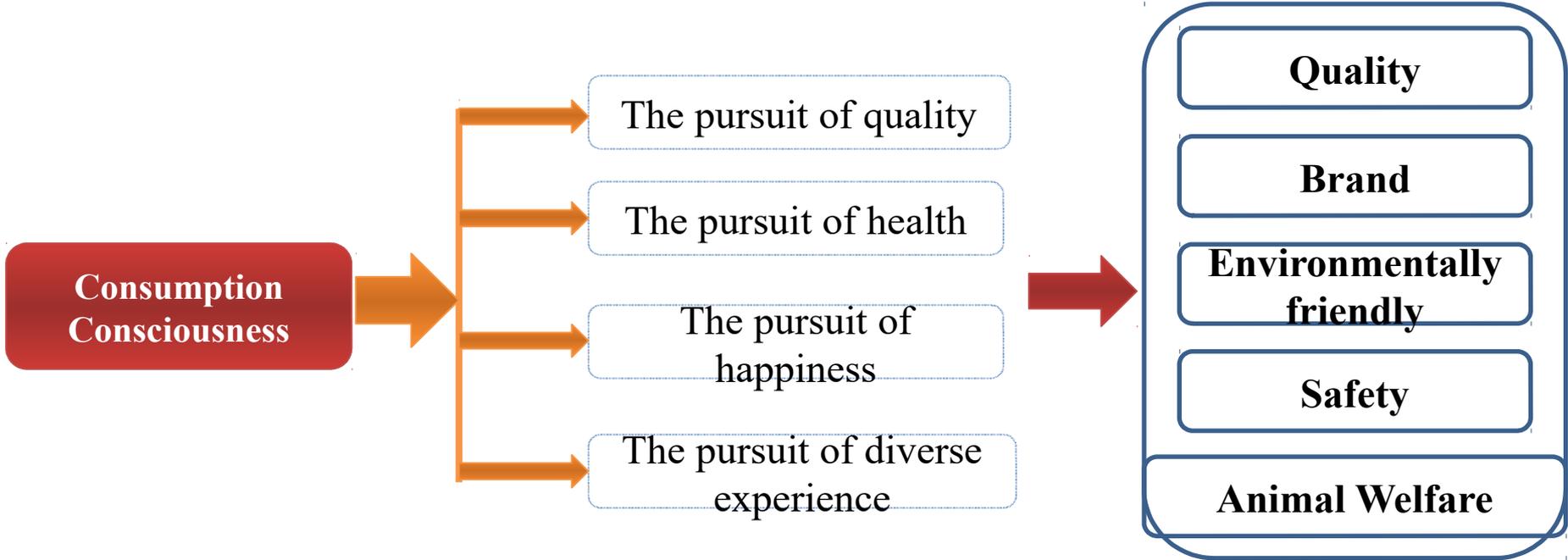
Consciousness Change on Food Supply Chain

1. The Increasing Income and Consumption of Chinese Residents

**Per Capita Income and Consumption of Chinese Residents, 2013-2016
(RMB Yuan)**

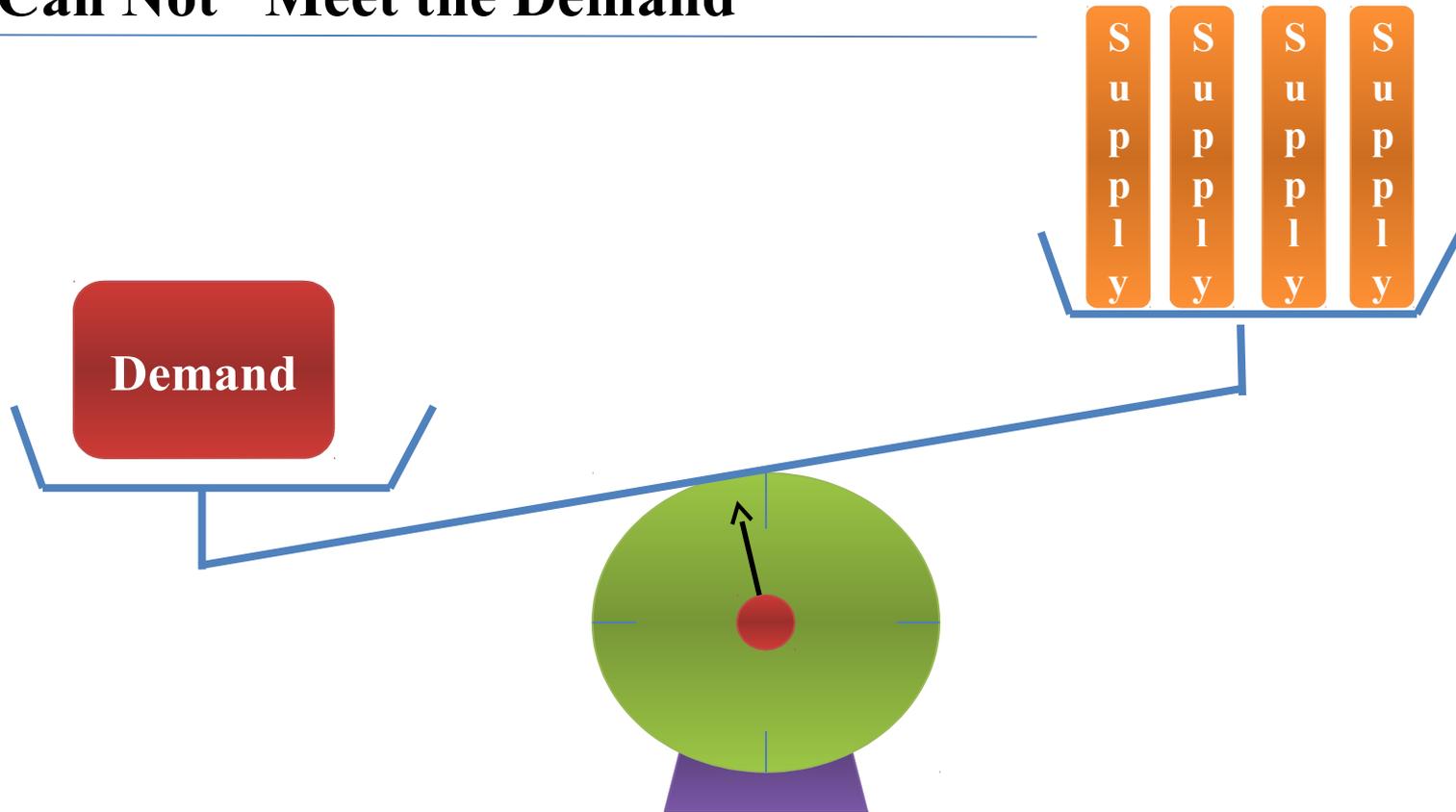


2. Changes in Chinese Consumer Consciousness Put New Requirements on Food Consumption



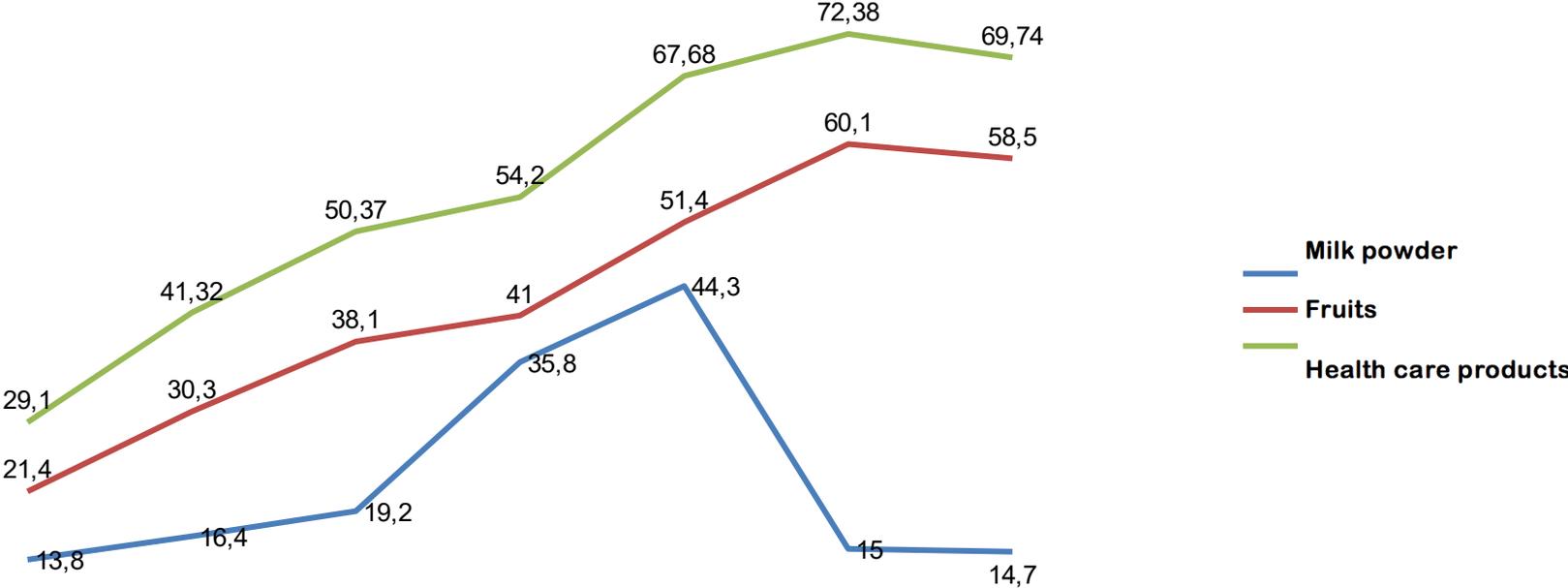
With the increase of income levels, changes in Chinese consumer consciousness have made new demands on the food supply chain!

3. Problem: The Supply of Domestic High-quality Food Can Not Meet the Demand

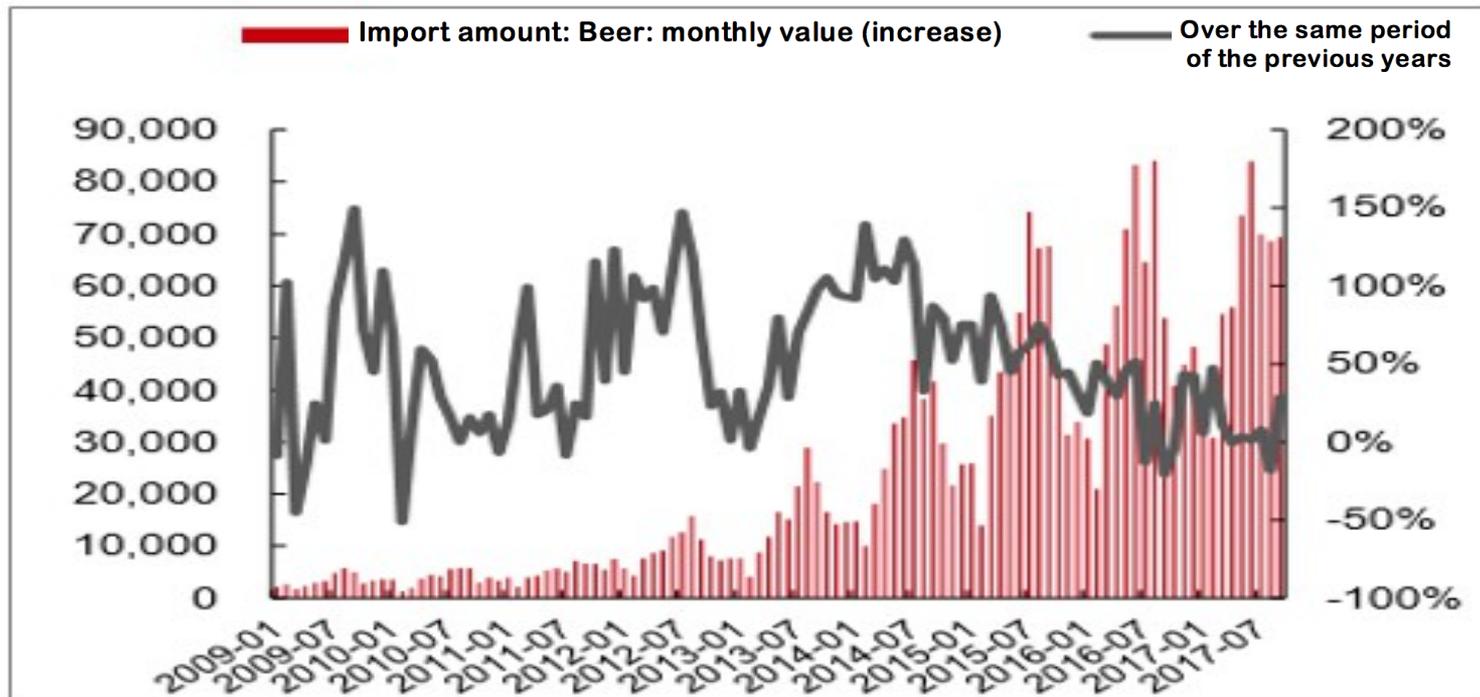


4. Imported Food is Welcomed by Chinese People

China Imported Milk Powder, Fruits and Health Products (100 million U.S. dollars)



4. Imported Food is Welcomed by Chinese People



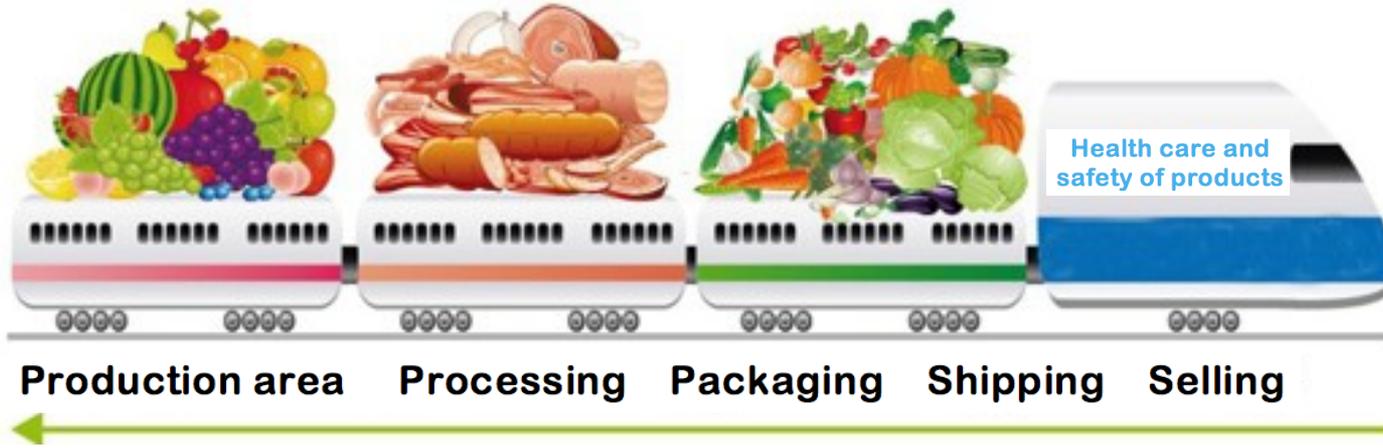
➤ China's imported beer has entered an explosive growth period since 2013.

➤ China imported beer in 2017:

The number was 7.162 million kiloliters, a year-on-year increase of 10.8%;

The amount was RMB 5.054 billion, a year-on-year increase of 14.8%.

6. The Optimization and Upgrading of China's Food Industry Chain is Imminent

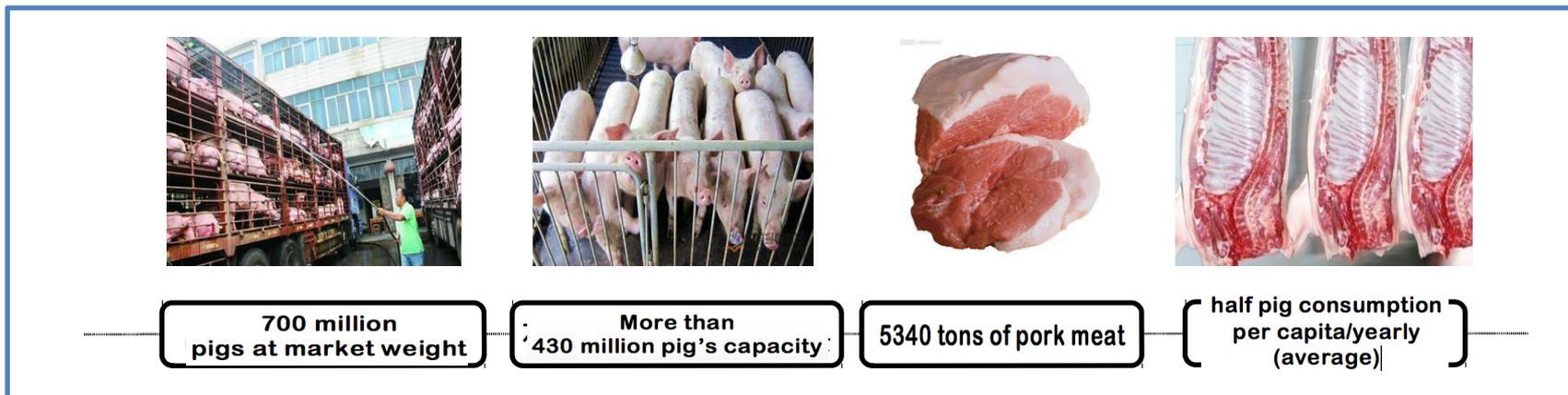




Part 3: a Model of Cooperation between China and Europe

1. Pork Consumption in China

Overview of China's Pig Industry Development in 2017



Comparison Project	China 	USA 
Market Concentration	Top 3 share less than 3%	Top5 share 30%
Maximum Manufacturer Share	Wen's shares, 2.2%	Smithfield , 18%
Number of farms	50 million	70,000
Scale	More than 500 pigs, 40%	More than 1000 pigs, 98%

2. Food Safety Incidents Occur



- There are many links in the industry chain which are fragmented and difficult to establish standards.
- There is a mismatch between small-scale decentralized production and large-scale processing and they are not connected tightly.
- Supervision on food safety and quality is difficult.

3. Cooperation between China and Europe: the opportunities



China has a vast market and huge potential for improvement

Pay attention to environmental protection

Encourage the production of high quality foods

Support the integration of food industry chain construction

Europe has advanced technology and industry chain management experience

Has advanced environmental protection technology and equipment

EU food standards are recognized by Chinese consumers

Has food supply chain management and organizational experience

4、 TWB+HOPE: The Cooperation Model



To create a vertical foodsafety chain for pork meat in China through a Sino-Italian Joint Venture (JV) between TWB Sistema Italia S.p.A. (Rome, Italy) and West Hope Tequ (Chengdu, China)



A. Become the first manufacturer in China of:

- ❑ **Sanitary Certified pork meat:** 1st phase (60.000 tons on the 1st year and 120.000 tons the 2nd year commercialized); 2nd phase (500.000 tons)
- ❑ **Reproducers pigs** (200.000 parents/year) and semen (10 million doses)

B. Equalize and overcome European quality and health standards of pork meat.

4、 TWB+HOPE: The Institutional Commitment

The Project has been highly welcomed by Chinese authorities at all levels:

- Central Government (the Project Agreement between JV Partners has been signed in presence of the Prime Ministers of China and Italy, Mr. Li Keqiang and Mr. Matteo Renzi and also successively confirmed as a common priority);
- Local Governments of the 5 provinces involved (Sichuan, Guizhou, Yunnan, Jilin, Xinjiang) delivering grants and administrative support.
- The project is aligned with the international agreements between China, Italy and Argentina.



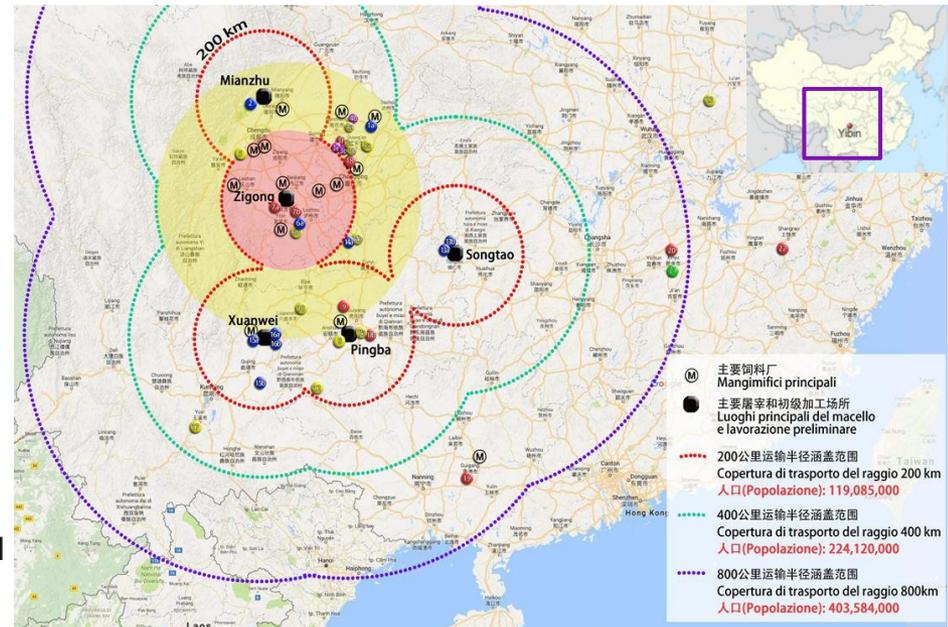
4、 TWB+HOPE: The Key Strategy

Serving a huge national market by small integrated systems

Following the European experience, the JV will adopt the model of Integrated Territorial District for Animal Production (DiTIPA) and Meat treatment and delivery.

This strategy allows:

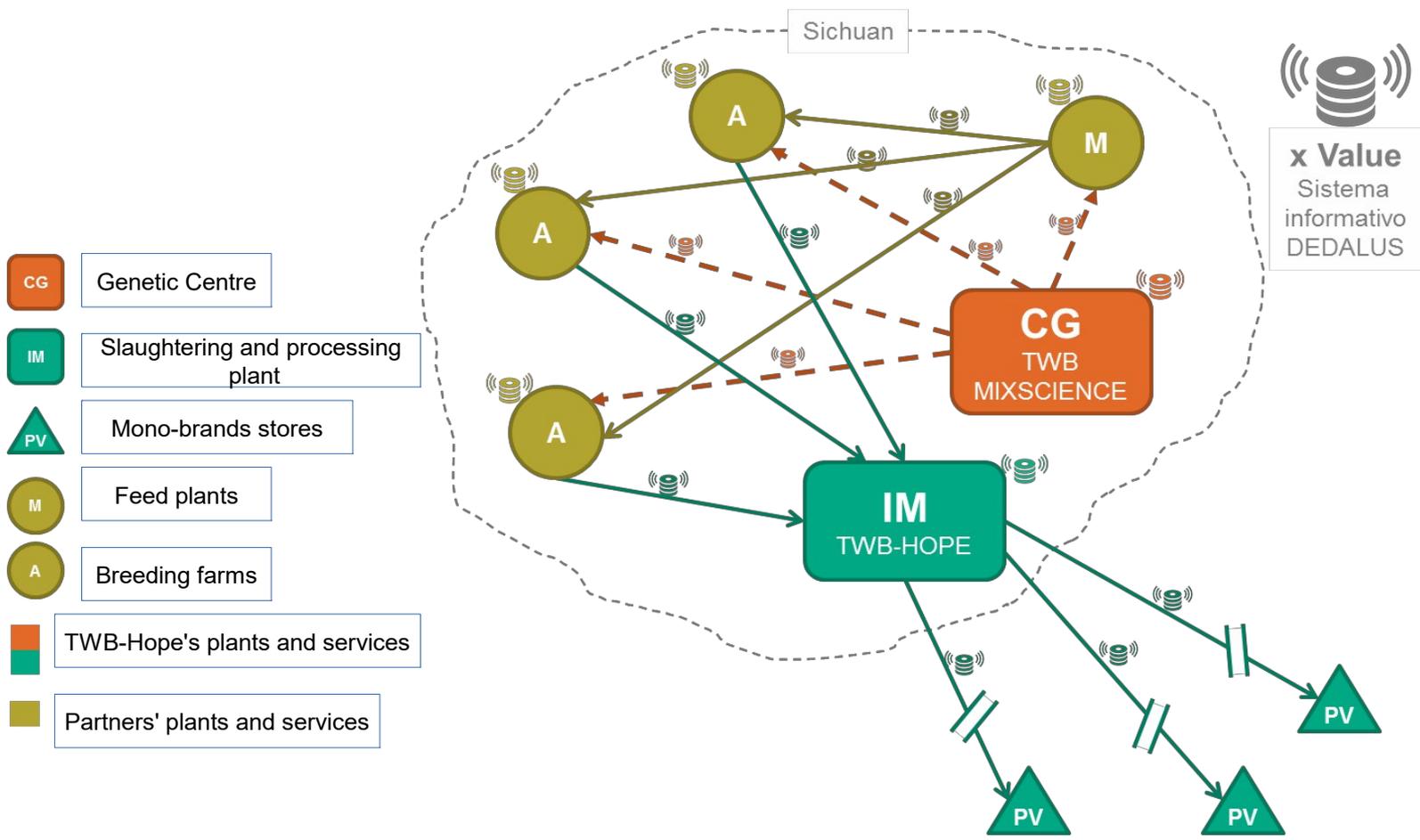
- A strict surveillance on sanitary security and small farmers continuous advisory
- A coherent and systematic set of feedback between industry and farmers
- The valorization of agricultural soils and green energy production with the industrial zootechnical waste
- To improve the living standards in townships and the social commitment to the new food safety chain.



The TWB HOPE Food Safety Project is an international ethical cooperation (Italy-China-Spain-France-Canada) aimed at creating a model of sustainable food production chain.

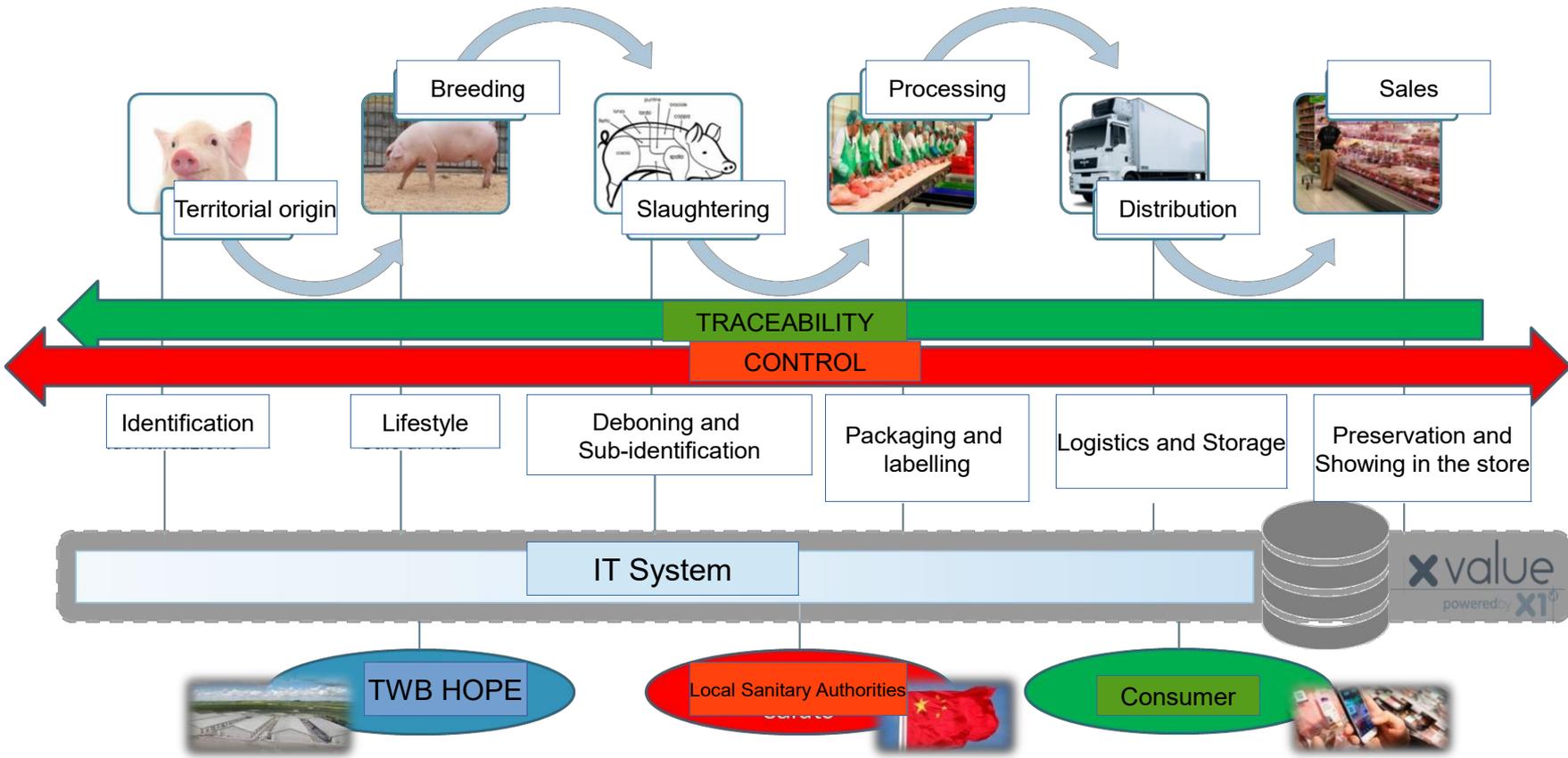
4、 TWB+HOPE Technological Model

Top European Technology spread all along the chain through middle scale plants.
 Gradually introduce local workers in the advanced technologies, reducing financial risks ad adjusting the model
 by consumers requirements.



4、 TWB+HOPE Cooperation

Food safety and operational flows





THE END

THANK YOU