

Aquaculture and Trade of Tilapia in China

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The Palace of the Golden Horses Hotel, KUALA LUMPUR

An old myth in China



carp leaping over the **dragon's gate**

Tilapia's dragon gate

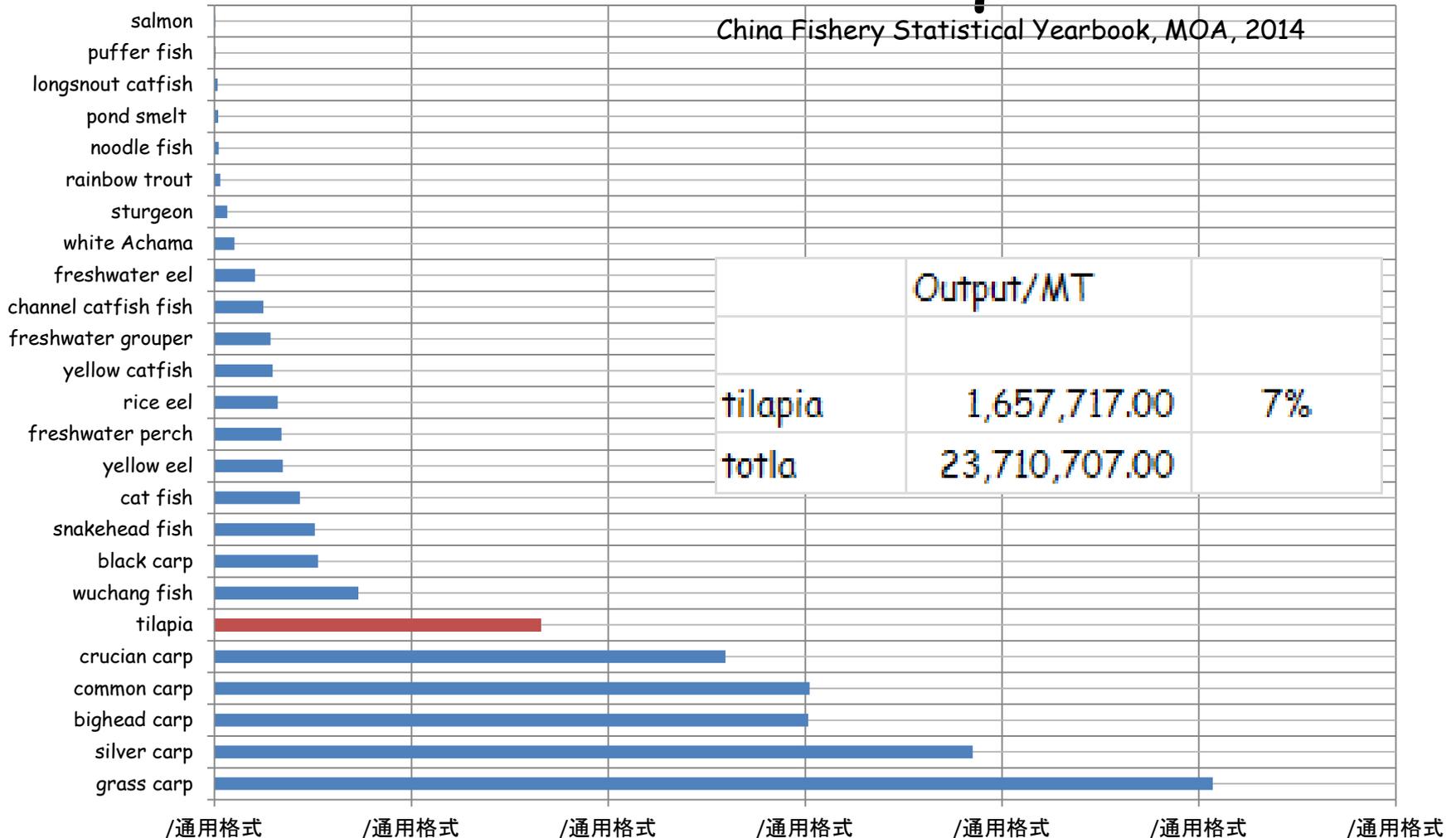


Diaoyutai State Guesthouse

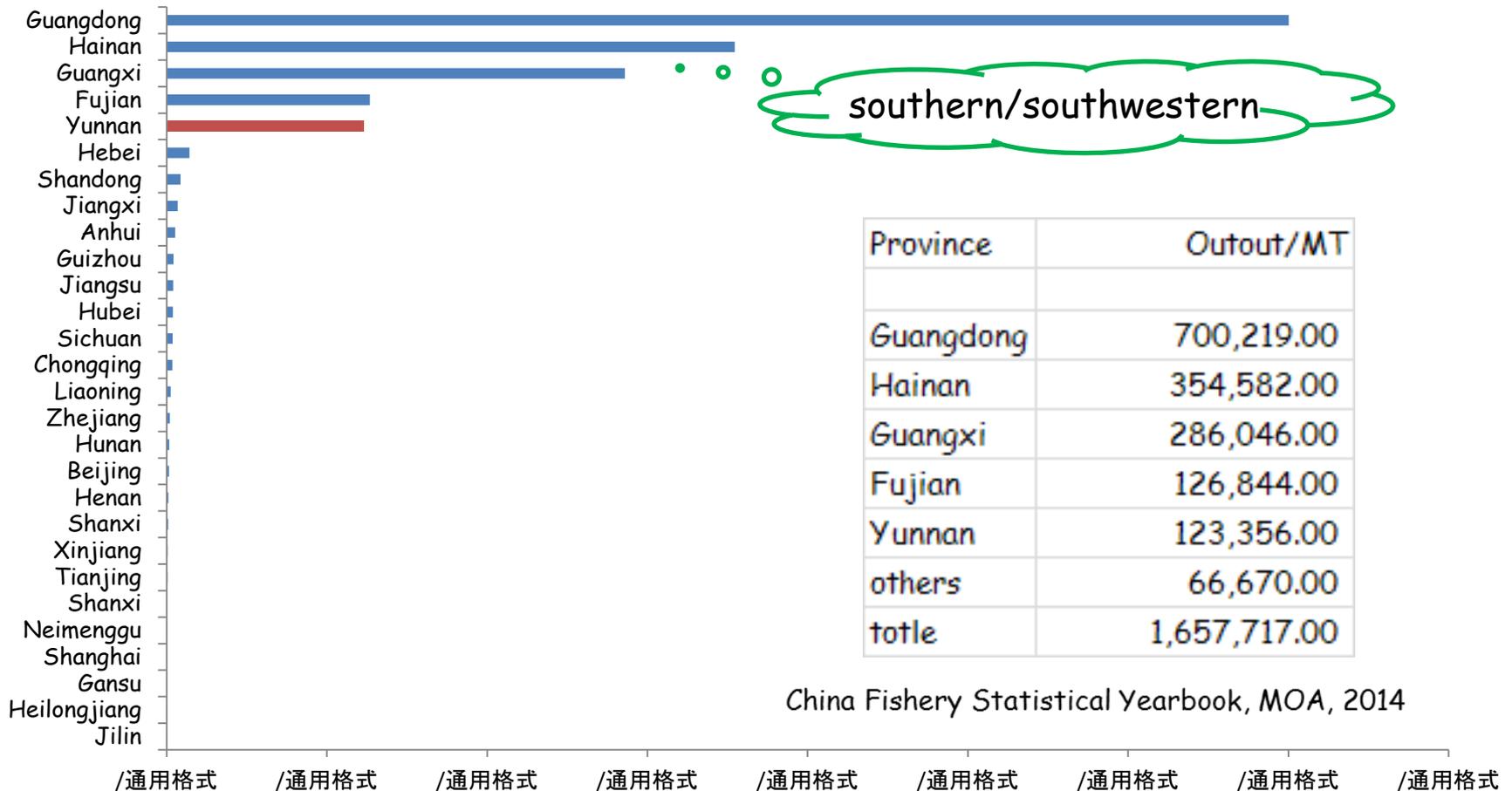
China's Tilapia Aquaculture
PRODUCTION PROFILE

Role of tilapia in freshwater fish aquaculture

China Fishery Statistical Yearbook, MOA, 2014

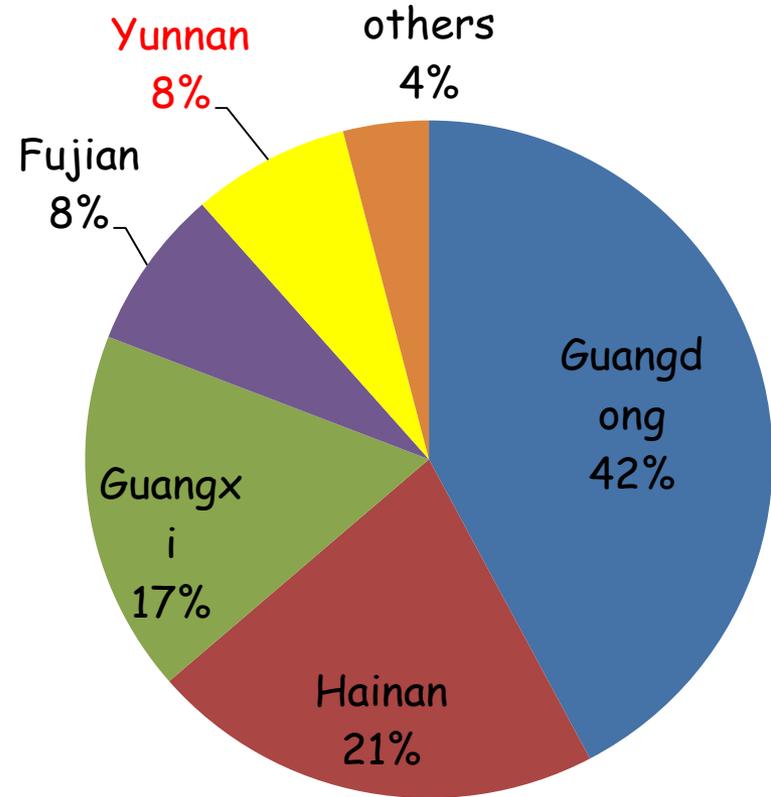
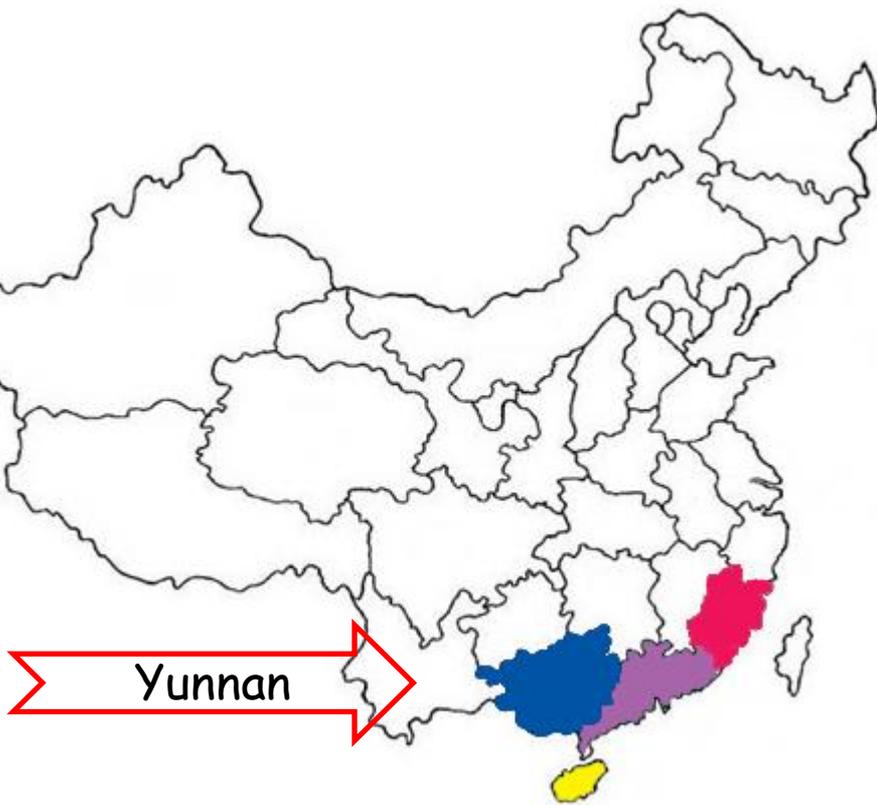


Tilapia aquaculture production (by region, 2013, in tonnes)



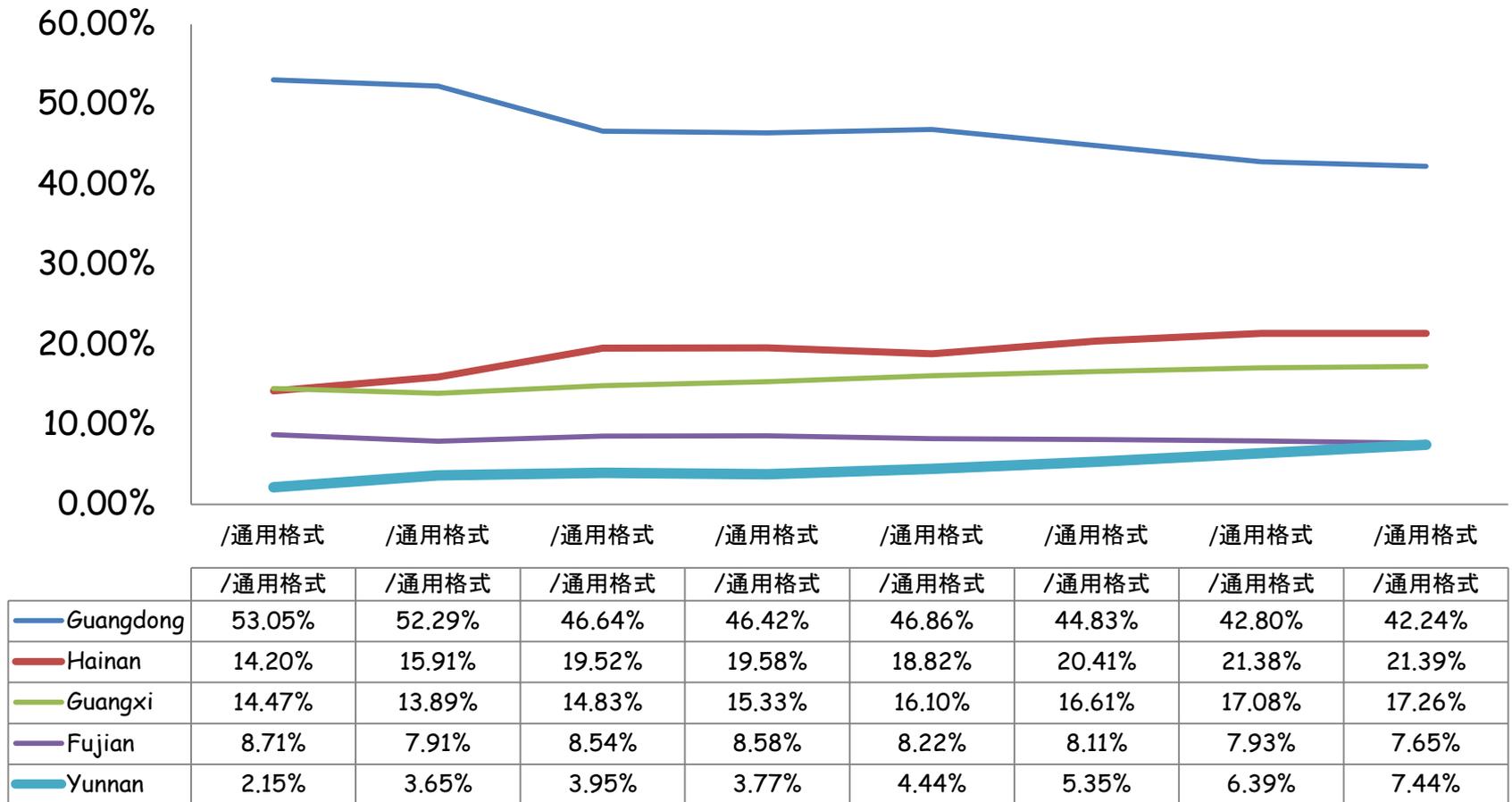
Geographic distribution of China's tilapia aquaculture sector (2013)

Main tilapia production areas



Share of tilapia production by provinces in 2013

Production trend of main tilapia farming areas (2006-2013)



Yunnan: a new player

- Suitable climate for tilapia
 - far south west of china
- Cage farming
 - rich in reservoir resources
 - hydroelectric stations
- The 5th biggest in terms of output
 - 123,356 tons (2013)

<http://wsnews.com.cn/newsview.aspx?id=72403>



Recent years, aquaculture has become a fast growing sector in Yunnan especially for tilapia

Cage farming in Yunnan



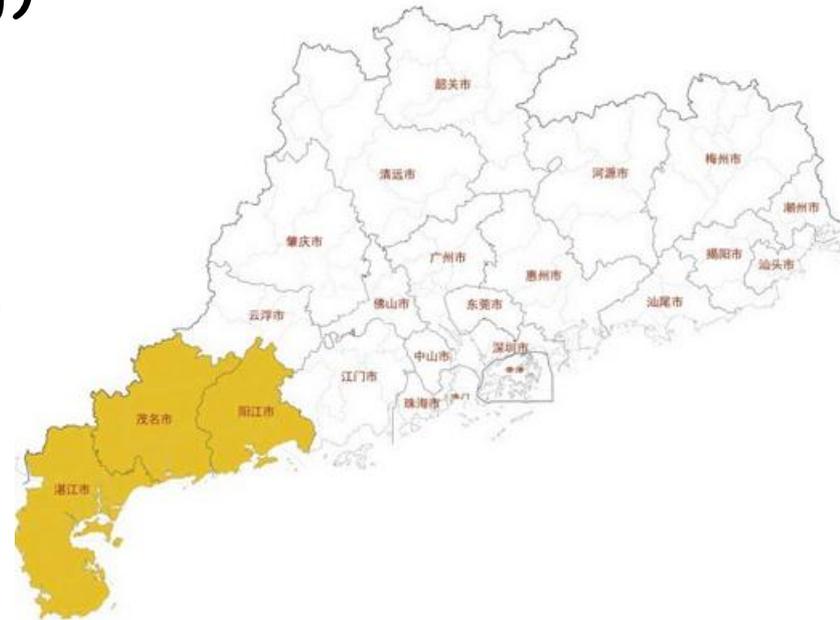
<http://www.lcagri.gov.cn/ws/news704/20140708/4889662.shtml>



http://www.shuichan.cc/news_view-192197.html

Guangdong

- Western Guangdong (Maoming)
 - 1/3 of total province
 - 1/8 of total China
 - 1/12 of world
- Intensive (exporting oriented)
 - 1 harvest/ year
 - 2 harvest/year
 - 3 harvest/2 year
- Overseas markets
 - USA
 - Mexico



(Wang Y, 2014)

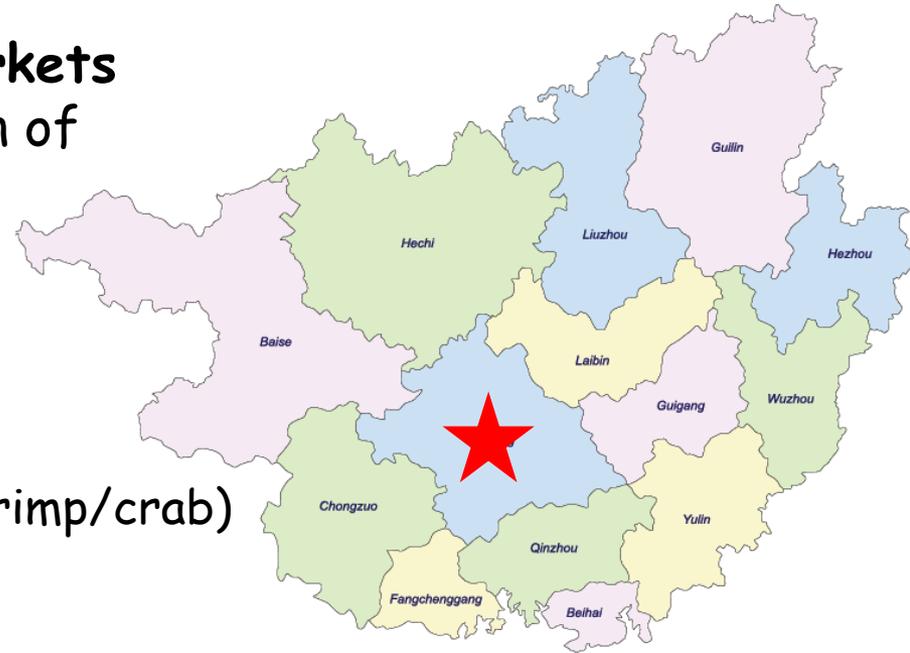
Hainan

- Production areas
 - wenchang, 70% of total province
 - and qionghai
- Intensive (export-oriented)
 - 2~2.5 harvest/ year
 - 3 harvest per year ongoing?
- Hainan Tilapia Sustainability Alliance (2014)
 - launching **regional tilapia brand**



Guangxi

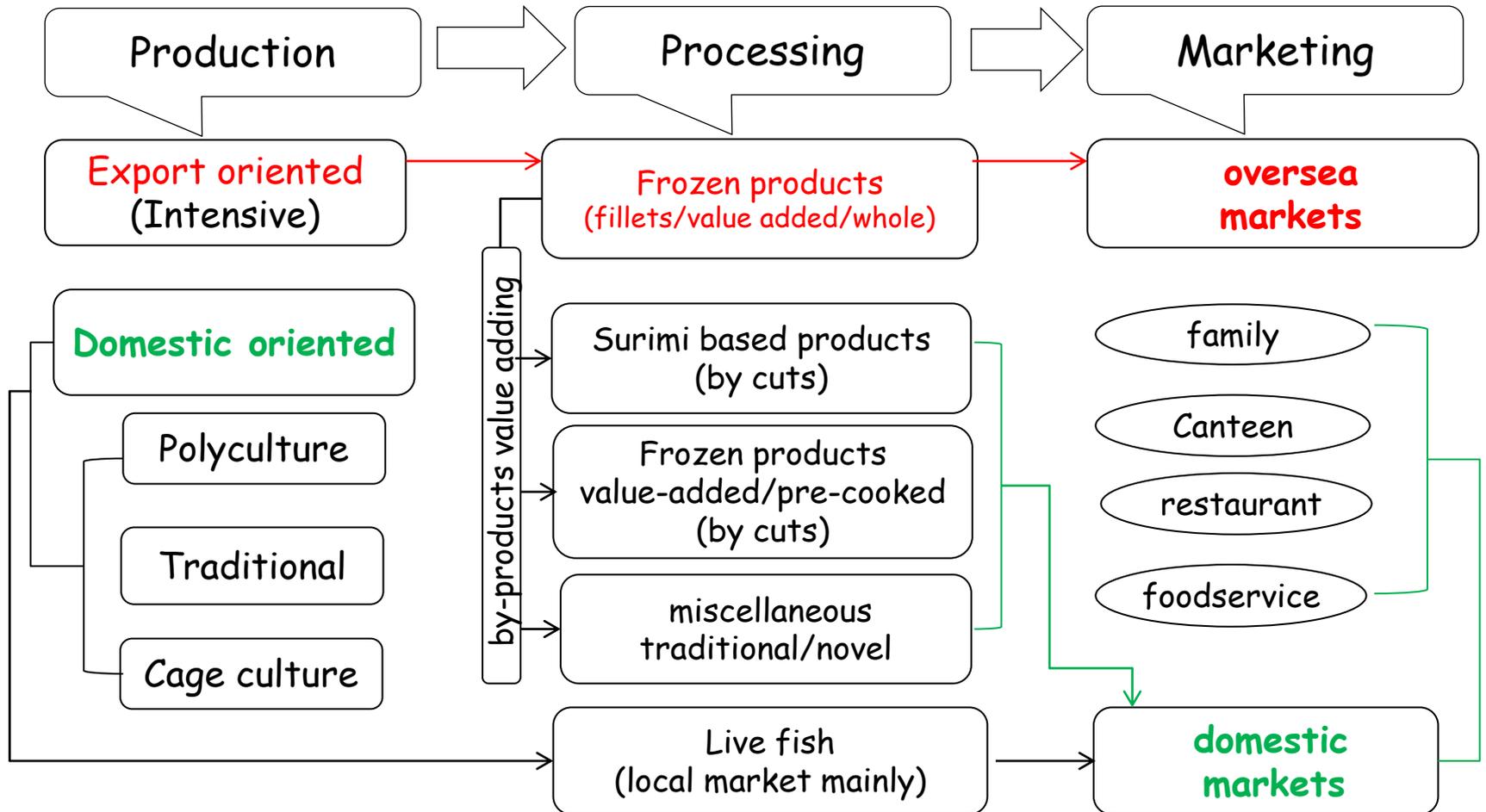
- Intensive
 - 1 harvest per year
 - **Nanning**, the largest tilapia markets
 - The average daily consumption of tilapia amount to 5 tons
 - Market size : 650~750g
- Semi-intensive
 - Qinzhou、Fangchenggang
 - Polyculture with carp
 - Salt water: fish and shellfish (shrimp/crab)
 - Freshwater: fish and fish
- Traditional
 - Hepu(Beihai)



China's Tilapia Industry

INDUSTRY CHAIN

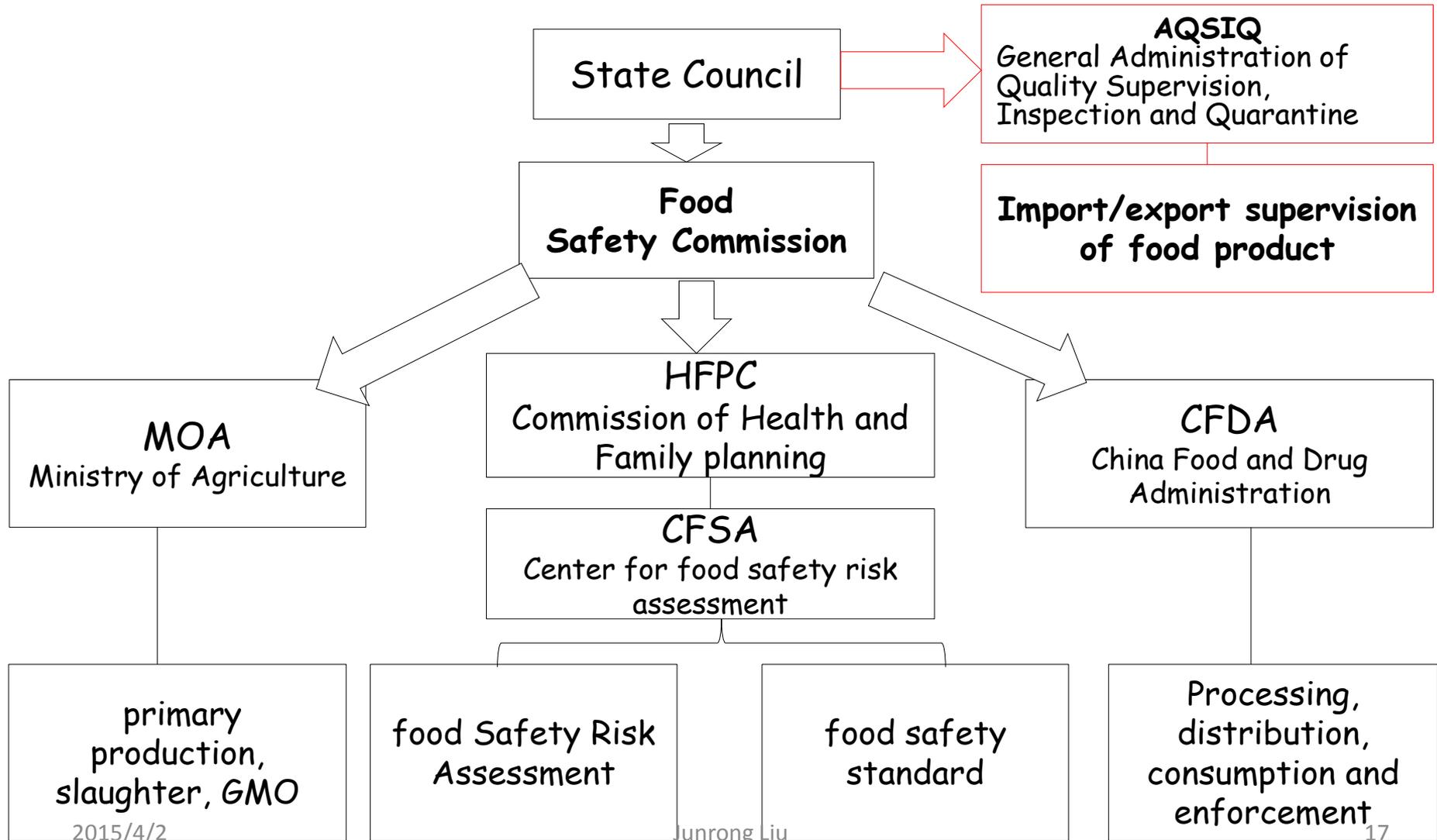
China tilapia industry chain



Two track of China's seafood safety system

- Exporting market: **Developed**
 - Export Oriented System (EOS).
 - AQSIQ: General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China
 - Whole chain traceability
- Domestic market: **Developing**
 - Highly Diversity and Complex

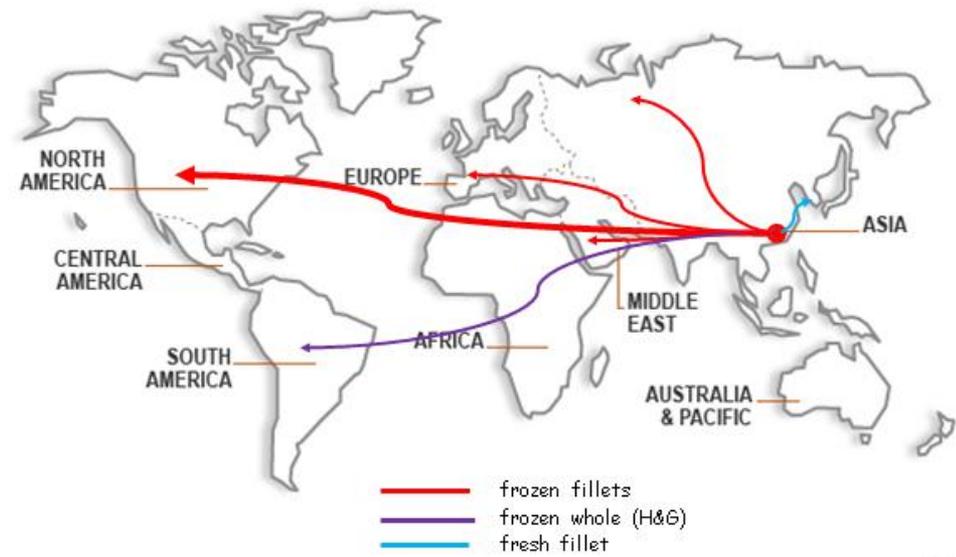
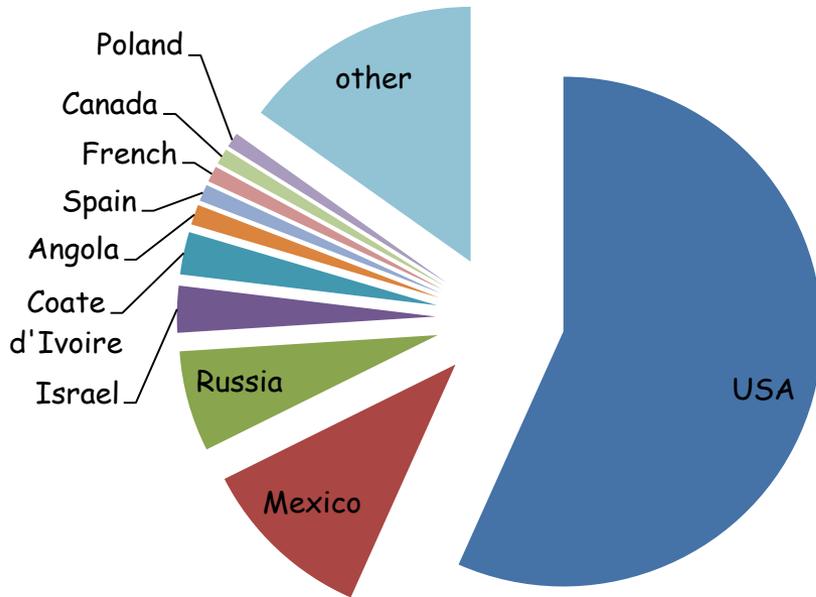
China Food Safety System



exports volume slowing down
oversea markets diversifying

INTERNATIONAL TRADE

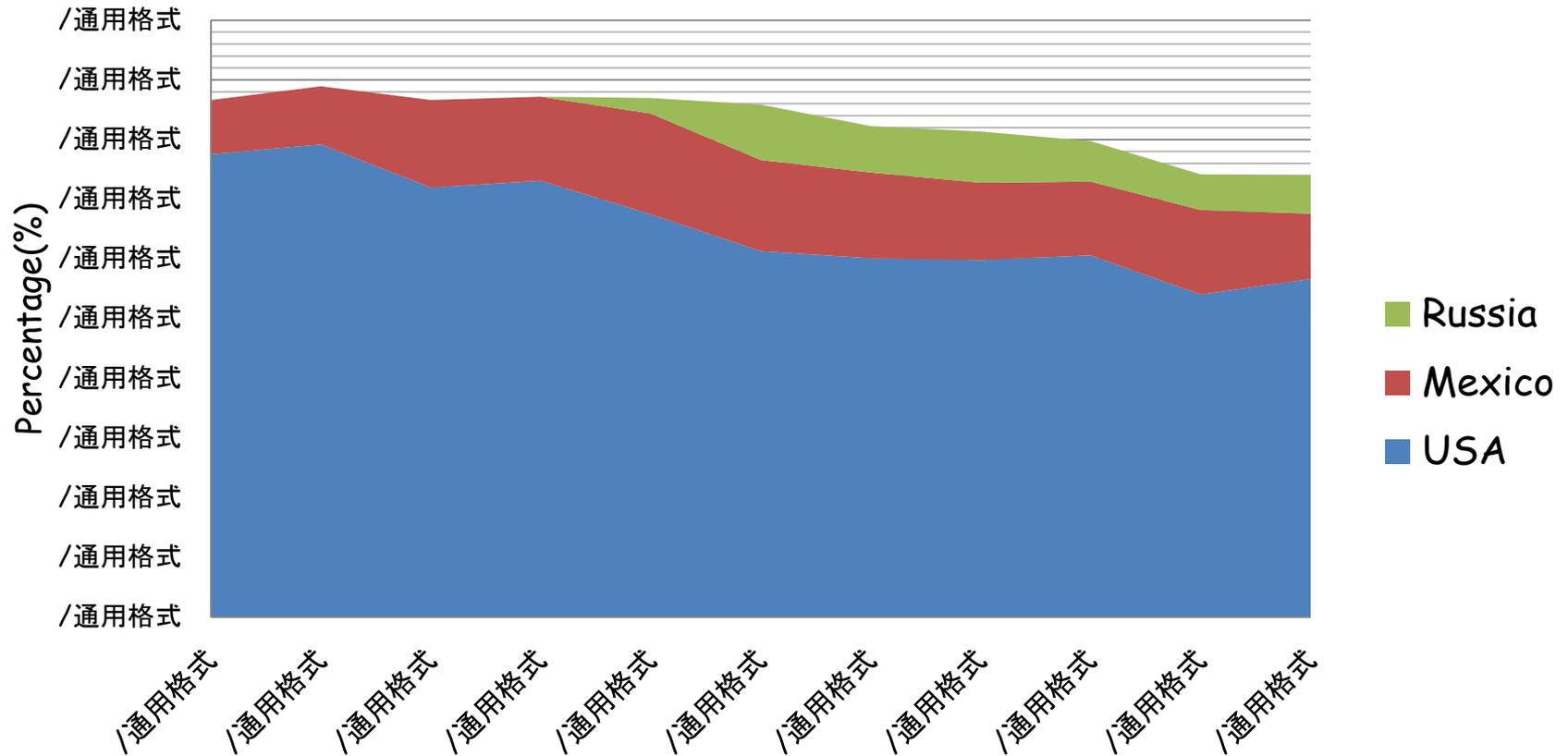
International markets



distribution of main exporting markets(2012)

Concentration ratio of oversea market

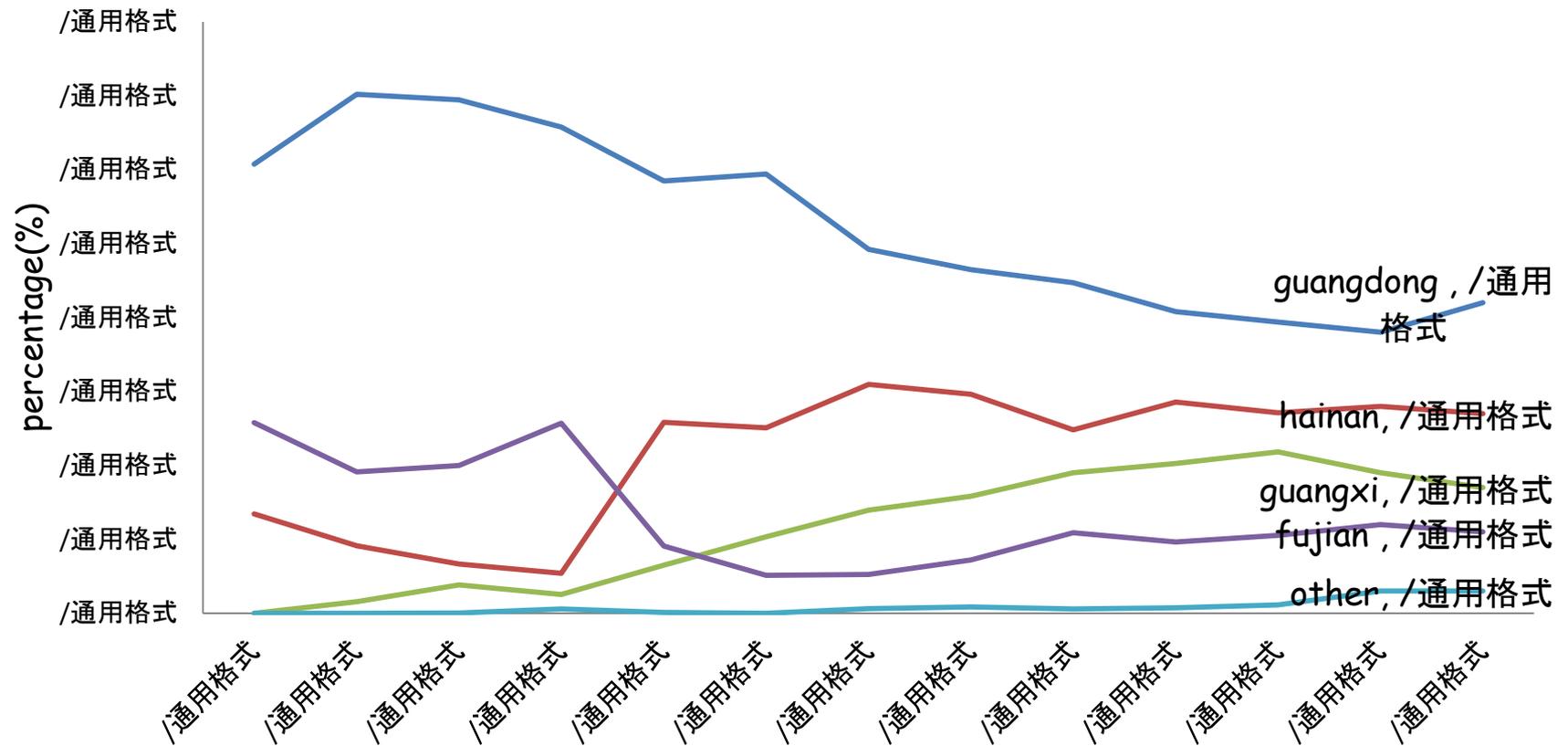
markets distribution by value (%)



Zhang Hong-yan, et al. 2014

Distribution of export regions

shear of exports by value (%)



Zhang Hong-yan, *et al.* 2014

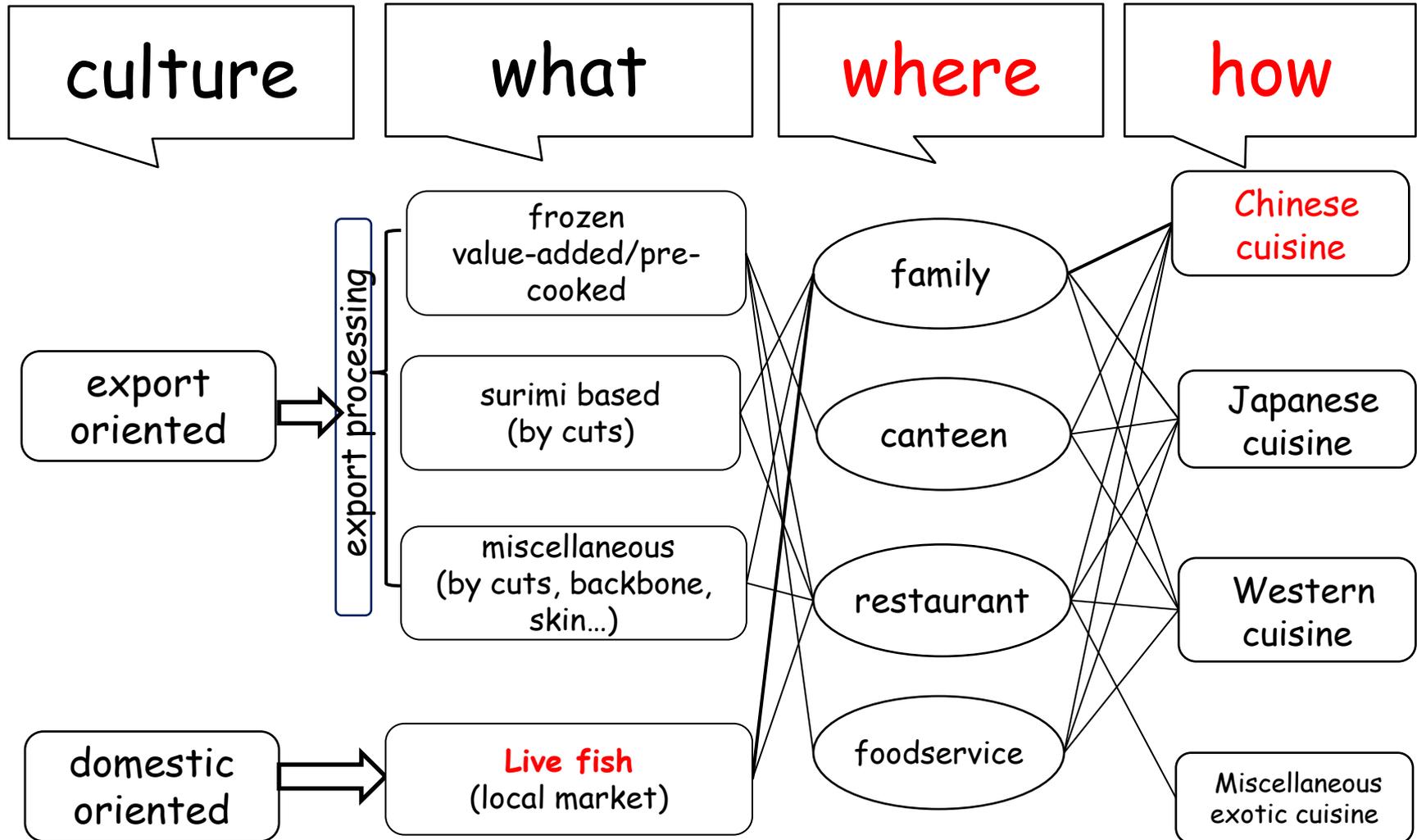
Share of main oversea markets for each producer(%), 2013

Province	North America	EU	Russia	Mexico
Guangdong	45	5	21	56
Hainan	33	47	22	31
Guangxi	19	28	9	9
Fujian	2	19	48	3
others	1	1	0	1

highly differentiated in both products and consumers

DOMESTIC CONSUMPTION

Consumption pattern in China



Domestic potential demand of tilapia

- Live fish consumption
 - farming area, inland mainly
 - Guangxi, Yunnan, Sichuan, Guizhou
 - traditional Chinese cuisine
- Processed products consumption
 - first/near-tier cities
 - coastal, good developed
 - Beijing, Shanghai, Guangzhou
- Premium products (Izumidai)
 - sushi and sashimi grade tilapia

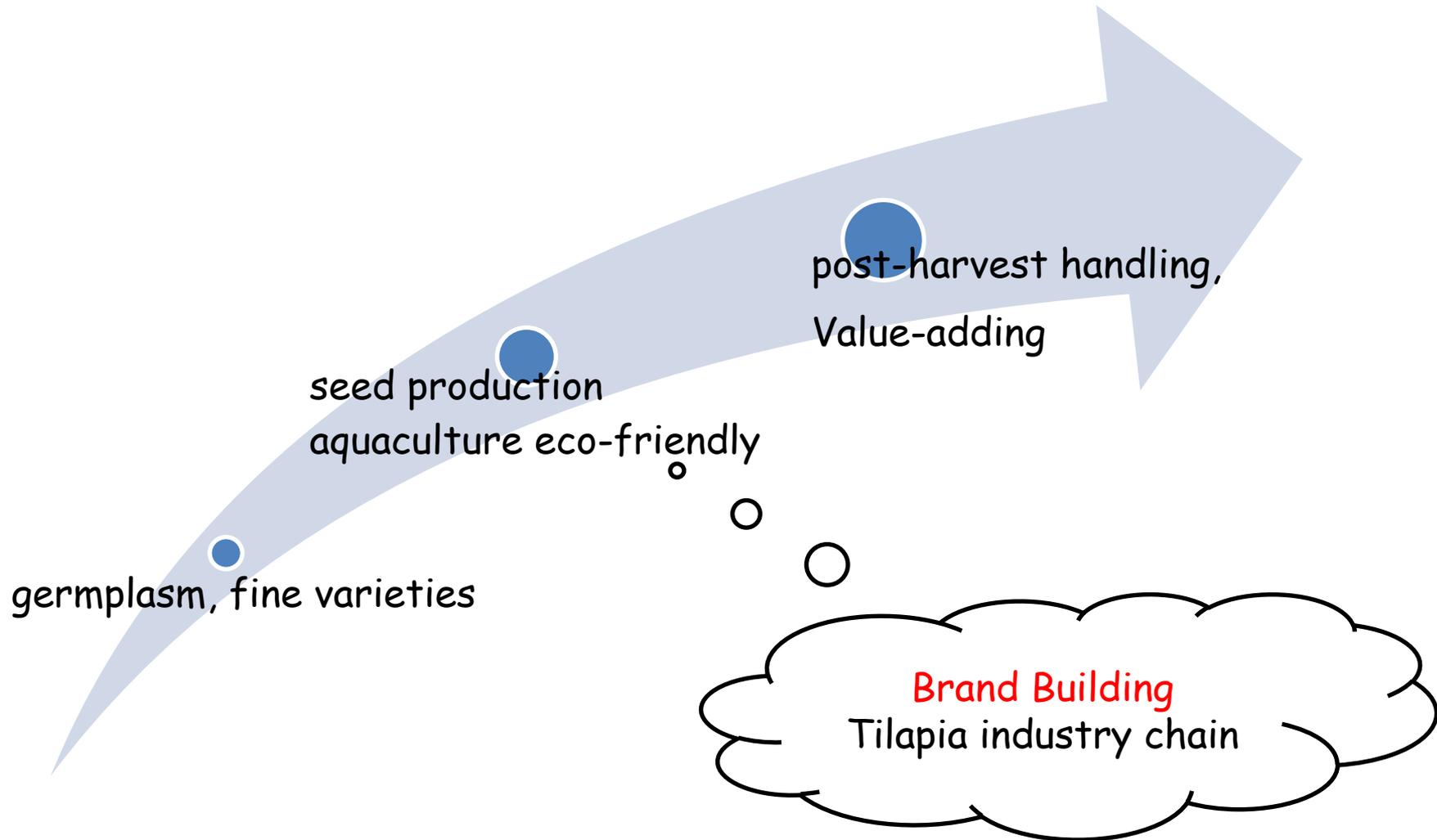
lack of top-grade quality tilapia

ISSUES AND SOLUTION

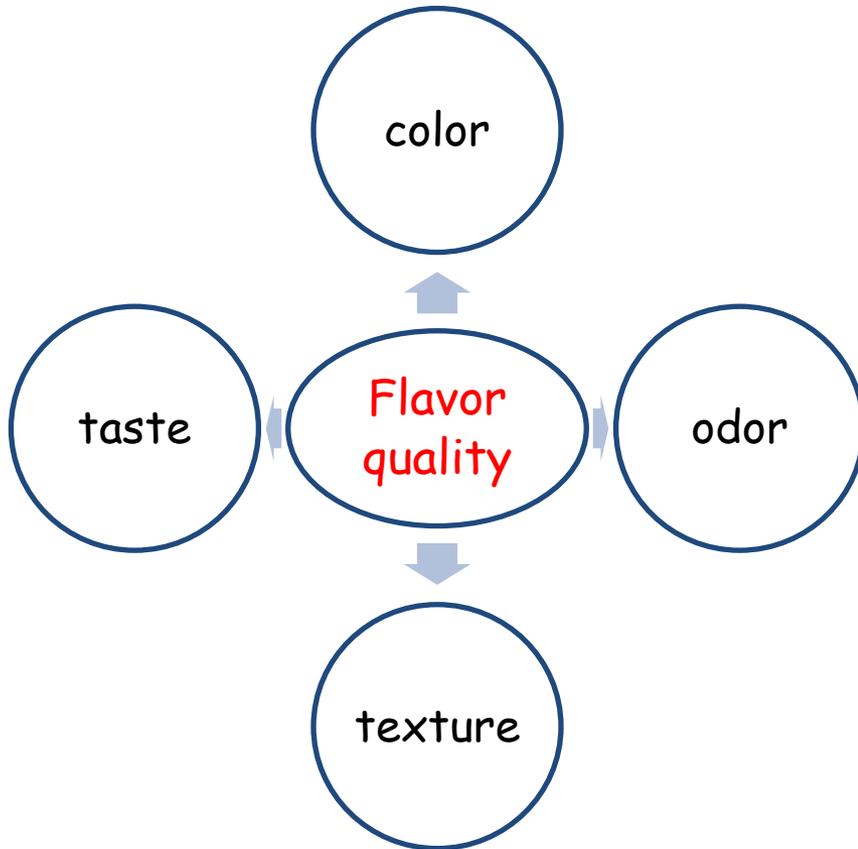
Strategic Core: Quality



Comprehensive solution



Whole chain strategy

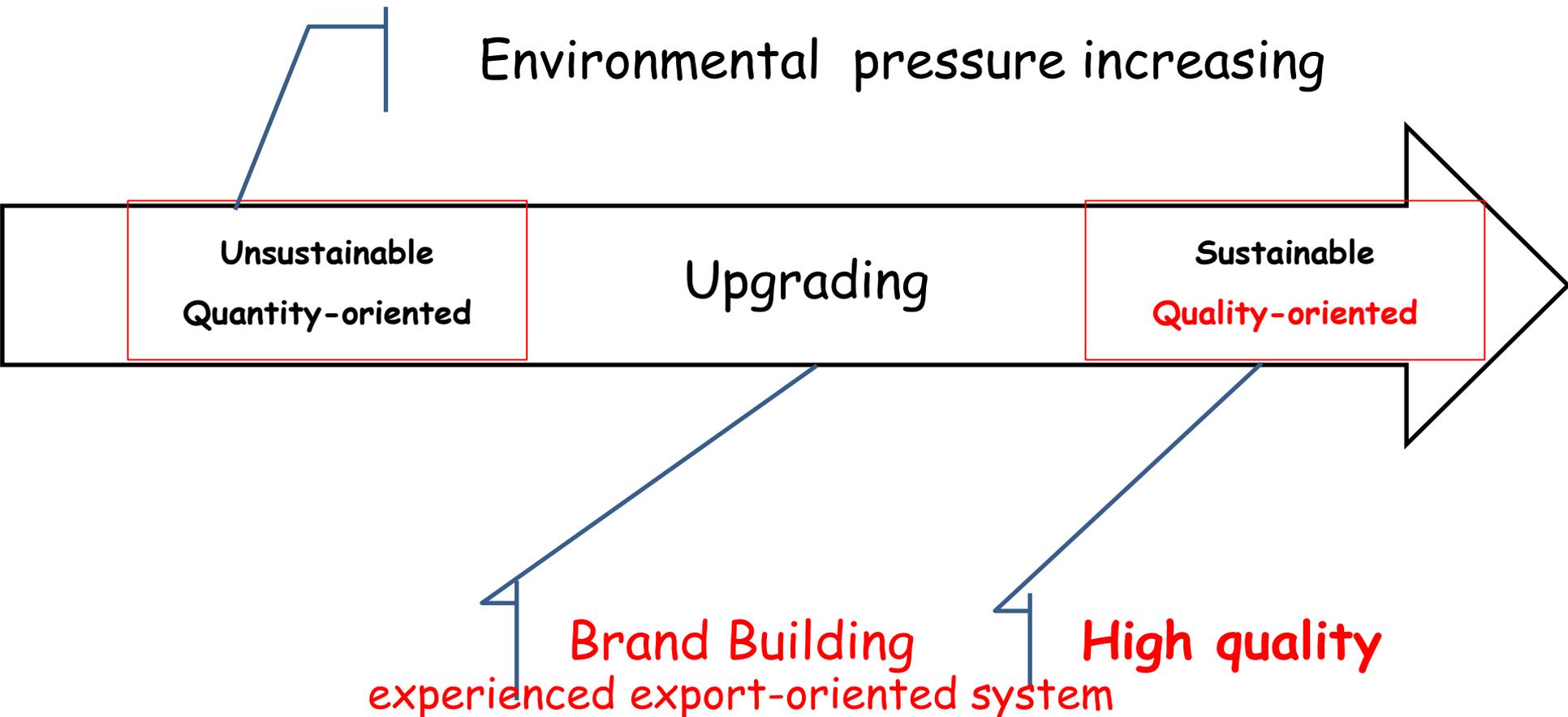


- Broodstock
- Aquaculture
 - water quality
 - fish feed
- Harvesting
 - live handling
- Processing
 - value adding
- Distribution
 - live transport
 - cold chain
- e-service (Alibaba)

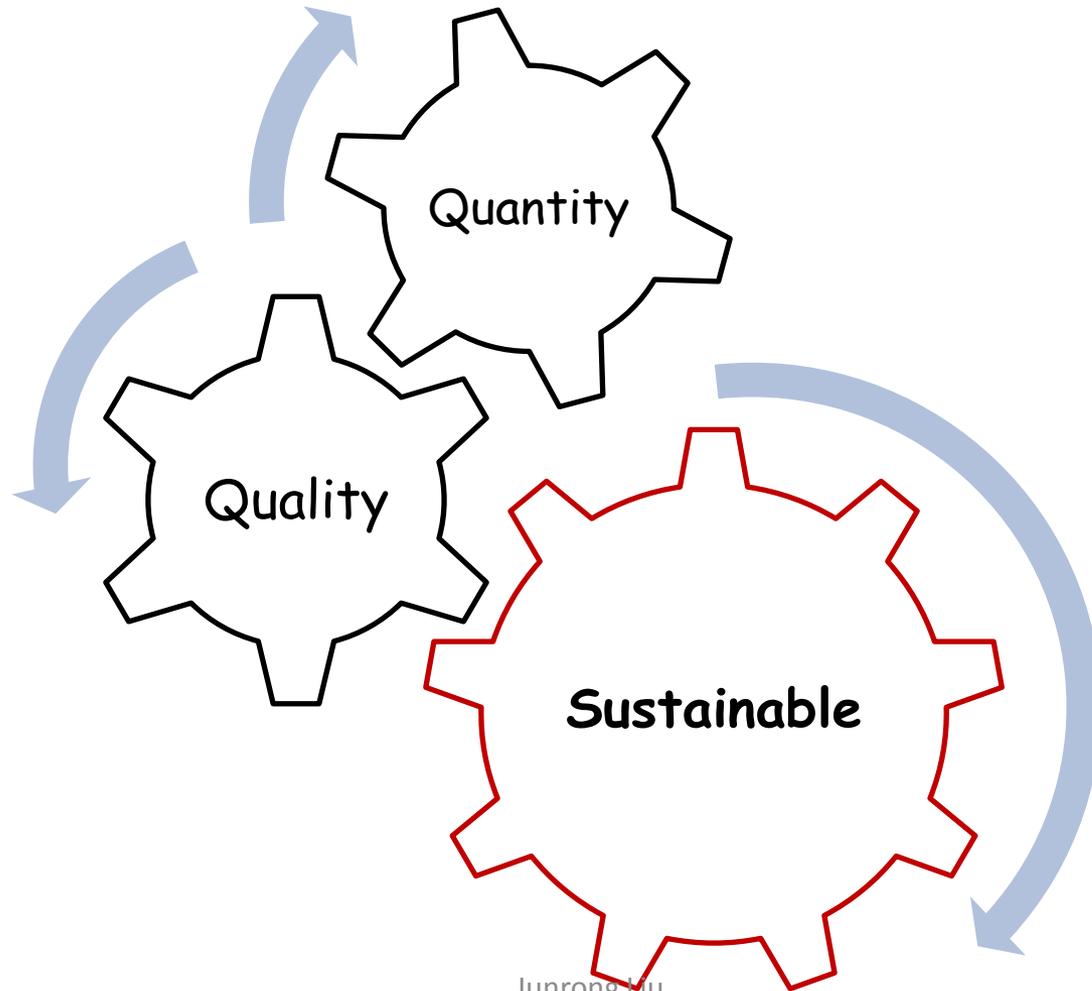
turning from quantity-benefit to quality-benefit
reducing reliance on exporting
enhancing efforts to develop domestic markets

TRENDS AND PROSPECTS

Upgrade of tilapia industry



Balance



Thank you very much