



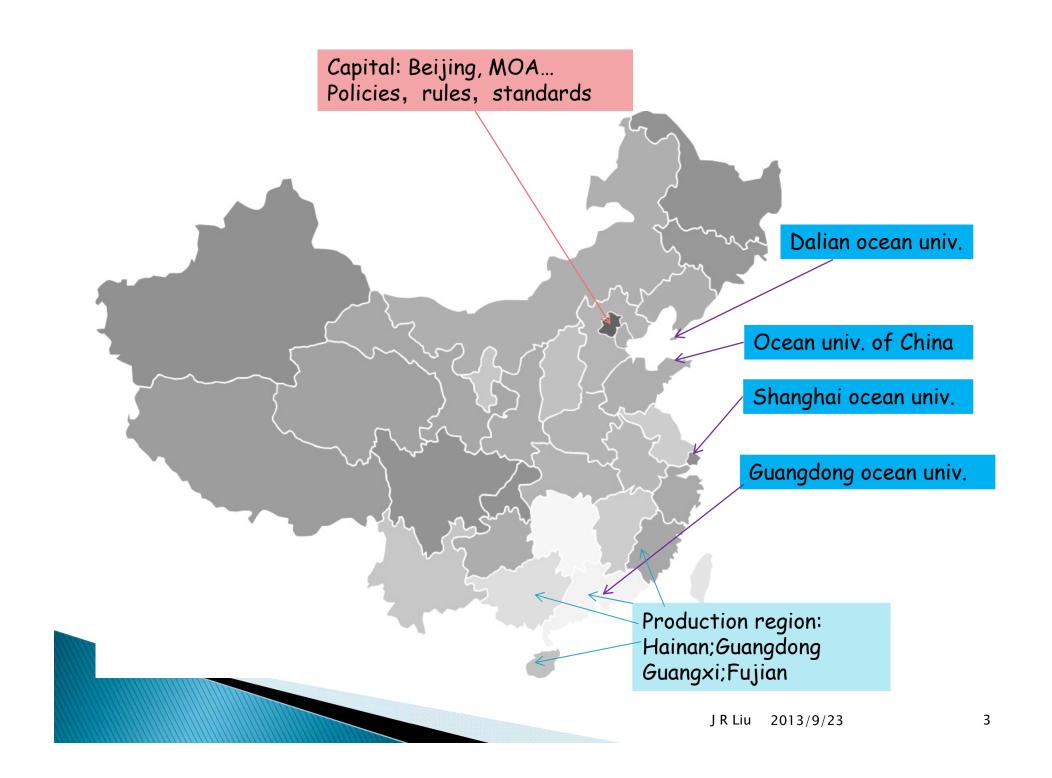
# The Production and market of tilapia in China

Junrong LIU Dalian Ocean University, China <u>ljunrong0411@gmail.com</u>

World Tilapia Conference September 16<sup>th</sup>-18<sup>th</sup>, 2013 Escola de Guerra Naval, Rio de Janeiro, Brazil,



Fish=鱼 (by meaning) 鱼=余 (by pronunciation) 余=surplus, extra, abundance



#### China Fisheries Profiles

#### China Fisheries Profiles:

#### Production

- Domestic production (cultured):e.g. Tilapia
- Imported raw fish (captured)

#### Processing

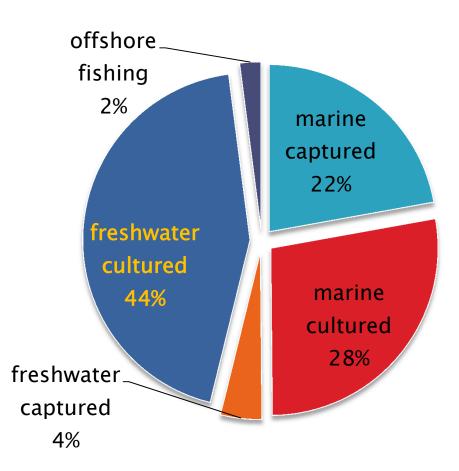
 Global center of fish (whitefish) processing industry

#### Marketing

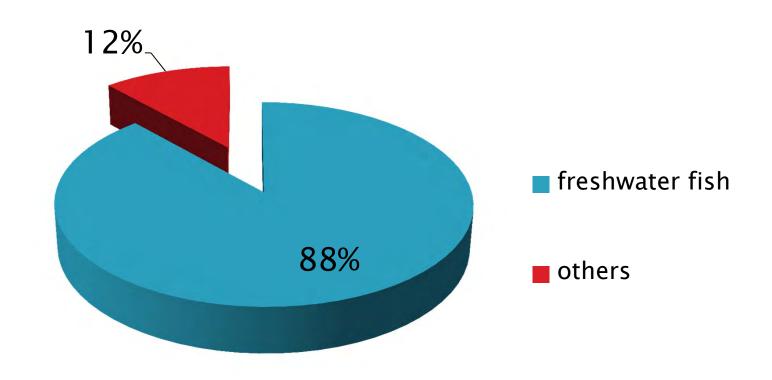
- Overseas: largest supplier
- Domestic: largest consume market(booming)

# Distribuation of total fishery production (2011) million tons

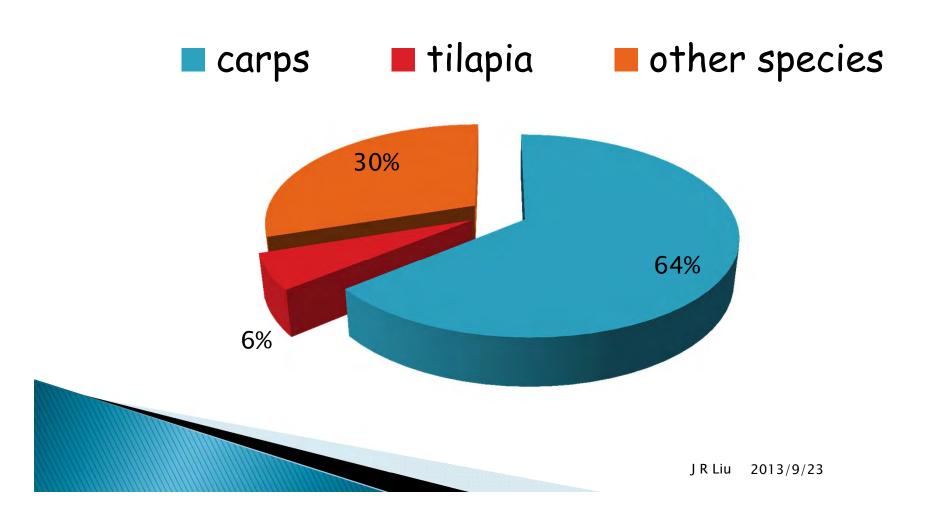
marine captured 12.42
marine cultured 15.51
freshwater captured 2.23
freshwater cultured 24.72
offshore fishing 1.15
Total 56.03



# fish in total freshwater culture production (2011)

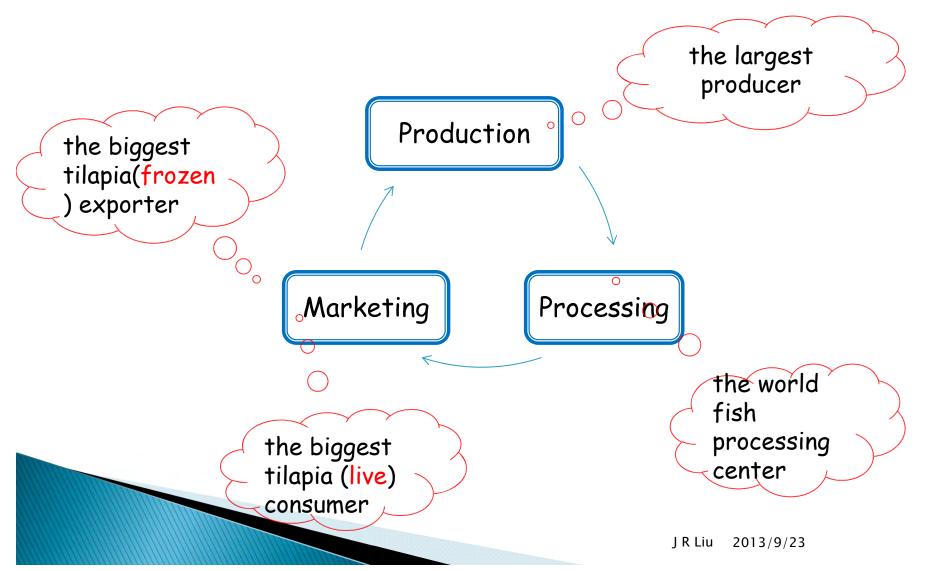


# Share of tilapia and carps in freshwater fish cultured in 2011

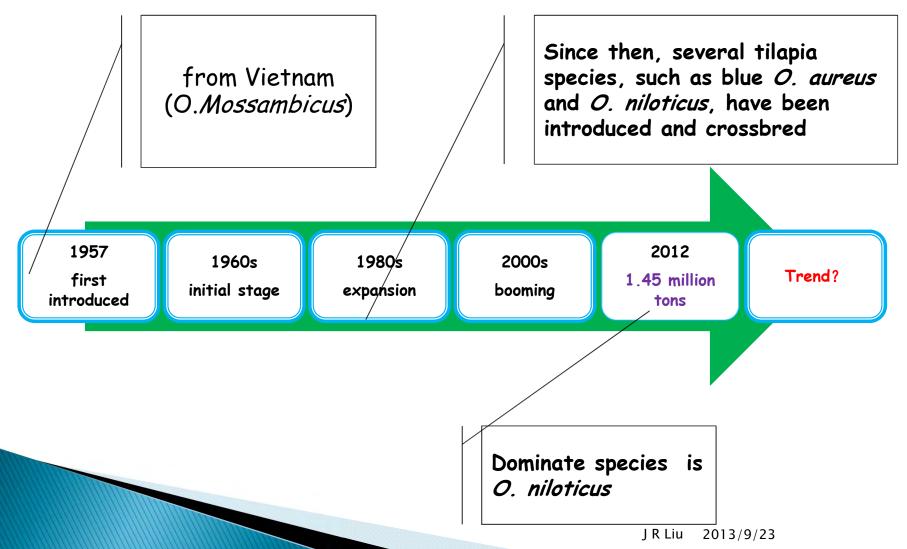


### China's Tilapia production

# Role of China in global tilapia supply chain

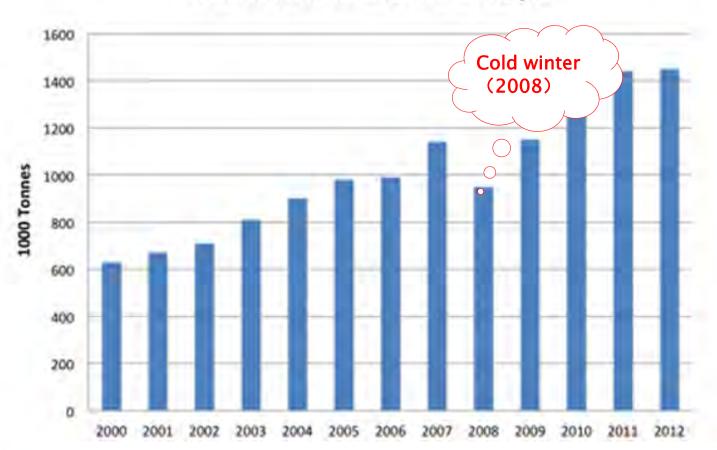


#### Timeline of Tilapia in China



## Trend of tilapia production between 1997 to 2012

#### Annual Production of Chinese Tilapia



Chinese Aquatic Product Processing & Marketing Alliance (CAPPMA)

J R Liu 2013/9/23

### China's stat. of tilapia (2012)

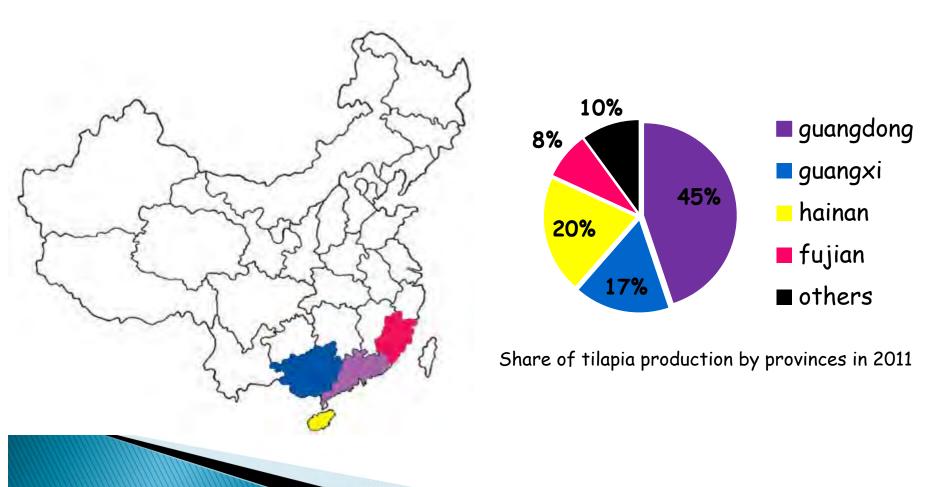
- Production
  - Global total: 3.79million tons
  - China total: 1.45 million tons
- Processing (for exporting)
  - Quantities:
    - raw fish: 946,000 tons of live weight (65.2% of total)
    - frozen products: 350,000 tons
  - Oversea market
- Domestic market:
  - Consumption forms: Live fish
  - Quantities:
    - 500,000 tons (34.8% of total)
  - Main markets:
    - guangxi, yunnan ,sichuan, guizhou (mainly, inland area)

# Tilapia in China's national mordern agriculture plan

- 2007, national modern agriculture "PLAN" (by MOA and MOF)
  - "National Modern Agricultural and Industrial Technology system"
- Total 50 species
  - 34 corps
  - 11 livestocks
  - 5 aquatic species
    - Freshwater(Carps)
    - Shrimps
    - Flatfish
    - Molluscs
    - · Tilapia: national technology system of tilapia industry



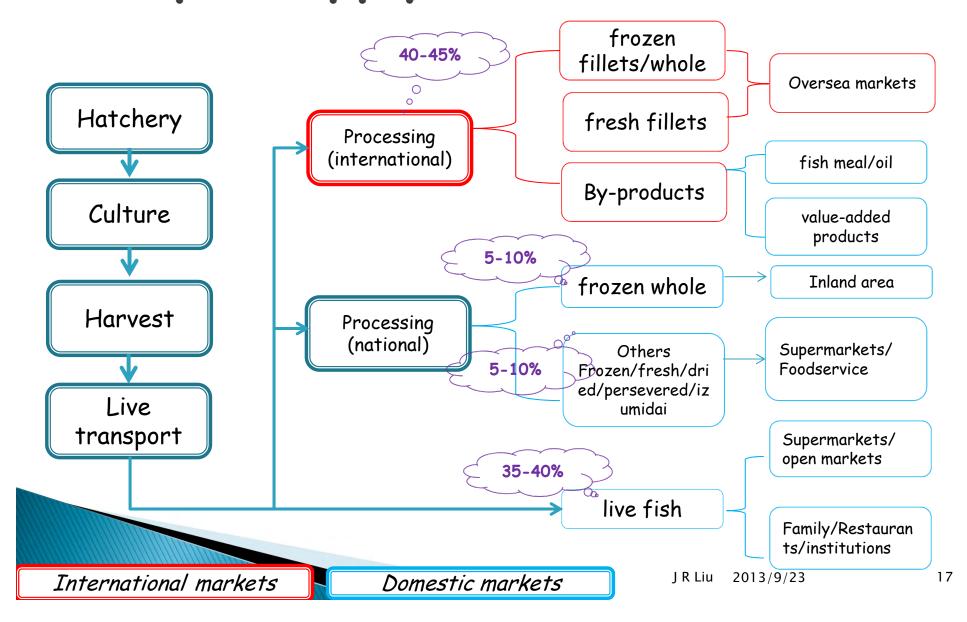
### Tilapia production areas



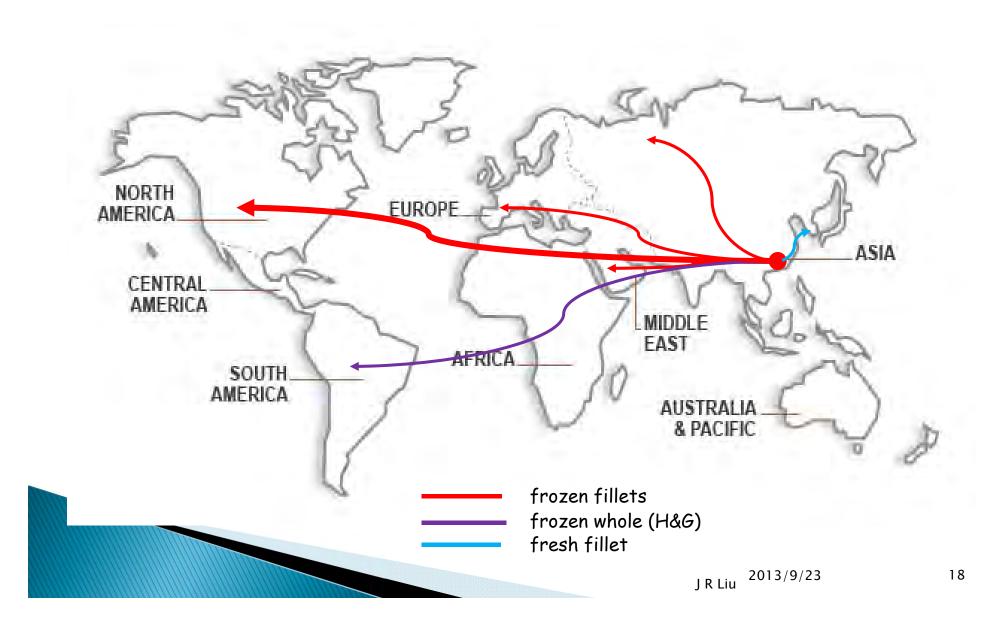
#### International markets

Resistance level around the corner

### Tilapia supply chain in China



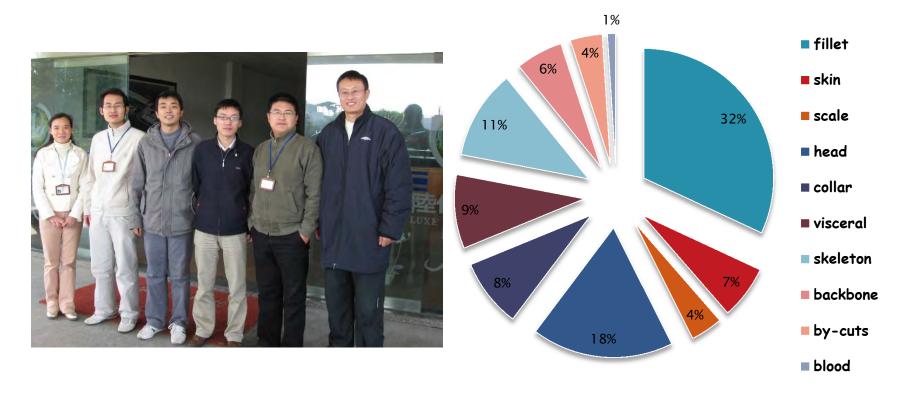
#### Main export markets of Chinese tilapia



### Challenges and Opportunities

- Competitive tilapia producers
  - Tropical climate/Low labour costs
  - Ares suitable for tilapia culture
    - Africa, Southeast Asian and Latin America countries
- Competitive substitutes species
  - Pangasius
- Overall rising costs(huge disadvantage for exporting)
  - Production costs (labor costs ...)
  - appreciatation of RMB
- Oversea markets uncertainties
- Emerging market and high-end fresh product market

### A tilapia story



Subdividing of tilapia









J R Liu 2013/9/23









#### Domestic market

the huge potential of the domestic market

#### China's freshwater fish consumption

#### Disadvantage

- Limited consumption:
  - areas
    - Inland mainly
  - eating habits
    - · eating home
    - "muddy taste"
  - only prefer live fish

#### Advantage

- Huge Population
- Urbanization
- Increasing in
  - Incomes
  - attention to healthy foods
- Changing in
  - Life style
    - Eating out, eating fish

# New Domestic market driving factors

- Our population and average demand for fish keep increasing;
- People are changing living style
  - eating out, food fashion chasing
  - Booming of Sichuan restaurants all around countries
- China's food supply chain has been suffering from some serious problems.
  - Bird flu(Chicken?); Dead pig(Pork?); Rat meat(Lamb?)
  - A strong push to switch to fish

#### Freshwater fish Boom in china











#### Main issues

- Sustainability
  - negative impacts on environment
  - threaten by deteriorating environment in turn
- Food safety
  - disease/animal welfare/food safety
- Production uncertainty:
  - extreme weather interruption
- Low value adding along the supply chain
  - negleting brand building

### Ongoing Measures

to achieve a sustainable development of China's tilapia industry, government enterprise and academia are joining hands to take several measures focusing on points below:

- Improve tilapia aquaculture management
- Compliance with the international standards
- Educating rural farmers
- Building a whole chain traceability system

#### Conclusion

- Production level will stay in stable
- China will maintain it's "driver's seat"
- Export market will have at most a slight increase
- Domestic market will enjoy a potential demand
- Sustainability is the key word for China's tilapia industry's future.

### Thank you and welcom to China

