Gembloux Agro-Bio Tech
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NEW CHALLENGES FOR THE VIETNAMESE AQUACULTURE SECTOR

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AGENDA

1. Introduction
2. General overview of the aquaculture sector
3. Aquaculture exports to the EU
4. Feed Industry
5. Middlemen
6. Market Situation
7. Sustainable aquaculture
8. Conclusion

1. INTRODUCTION

- The Fishery sector plays an important role for the economy of Vietnam. According to VASEP, fishery:

  + is a key national economic sector that contributed to 4-5% of GDP
  + ranks number 5 for export value (after garments, electronics, crude oils and shoes)
  + led VN to be in the top 10 leading exporting countries of fisheries since 2006

- The Aquaculture's share of production in the fishery sector increased sharply from 30% in 1990 to 52% in 2010 (Nguyen Minh Duc, 2011)

However, the seafood supply chain has not been effectively designed and operated . Problems include: resources protection, traceability limitation, food safety and lack of branding/eco-certification.

Objective of Research:

1. Characterizing the recent development of the aquaculture sector in Vietnam

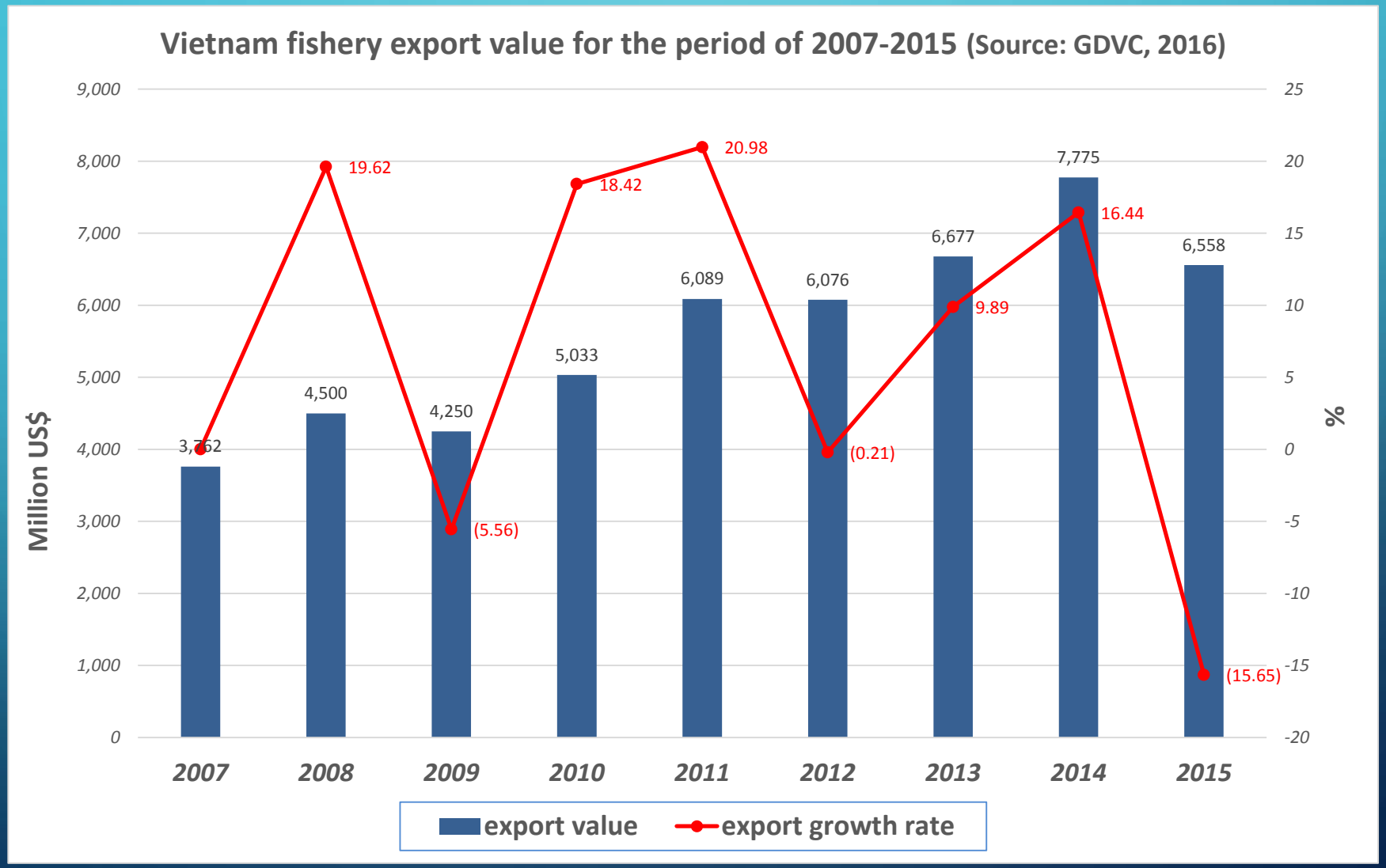
2. Describing the challenges that arise in the various constituent links in this industry in Vietnam

2.1. GENERAL OVERVIEW OF THE AQUACULTURE SECTOR (PRODUCTION)

- VN production of this sector has grown exponentially in 1990-2010:
  + Average growth rate of fishery production: 8,65%/year
  + Average growth rate of aquaculture production: 12,6%/year
- Aquaculture accounted for 3.1 mil. tones of products in 2012 (more than fishes catches with 2.6 mil. tones)
- The aquaculture sector generated an est. US$3 billions in 2011 and employed more than 1.6 mil full time equivalent workers

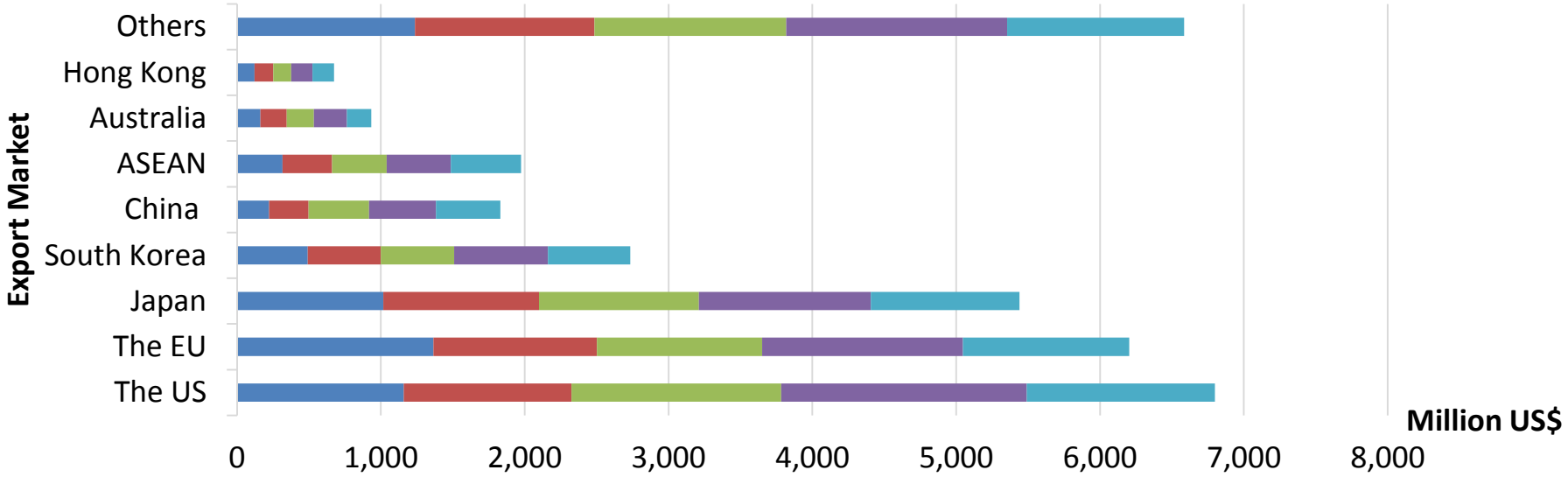
(Source: Nguyen Minh Duc, 2011)

2.2. GENERAL OVERVIEW OF THE FISHERY SECTOR (EXPORT VALUE)



2.3. GENERAL OVERVIEW OF THE FISHERY SECTOR (EXPORT MARKETS)

Main export market of Vietnam fishery products 2011-2015 (source: GDVC, 2016)



	The US	The EU	Japan	South Korea	China	ASEAN	Australia	Hong Kong	Others
2011	1,159	1,365	1,016	490	223	316	163	120	1,236
2012	1,166	1,137	1,084	510	275	344	182	131	1,248
2013	1,458	1,149	1,111	510	419	380	190	126	1,335
2014	1,708.0	1,396.3	1,194.7	651.7	465.8	446.7	228.5	147.7	1,535.3
2015	1,308	1,156	1,034	572	448	487	171	150	1,231

2011 2012 2013 2014 2015

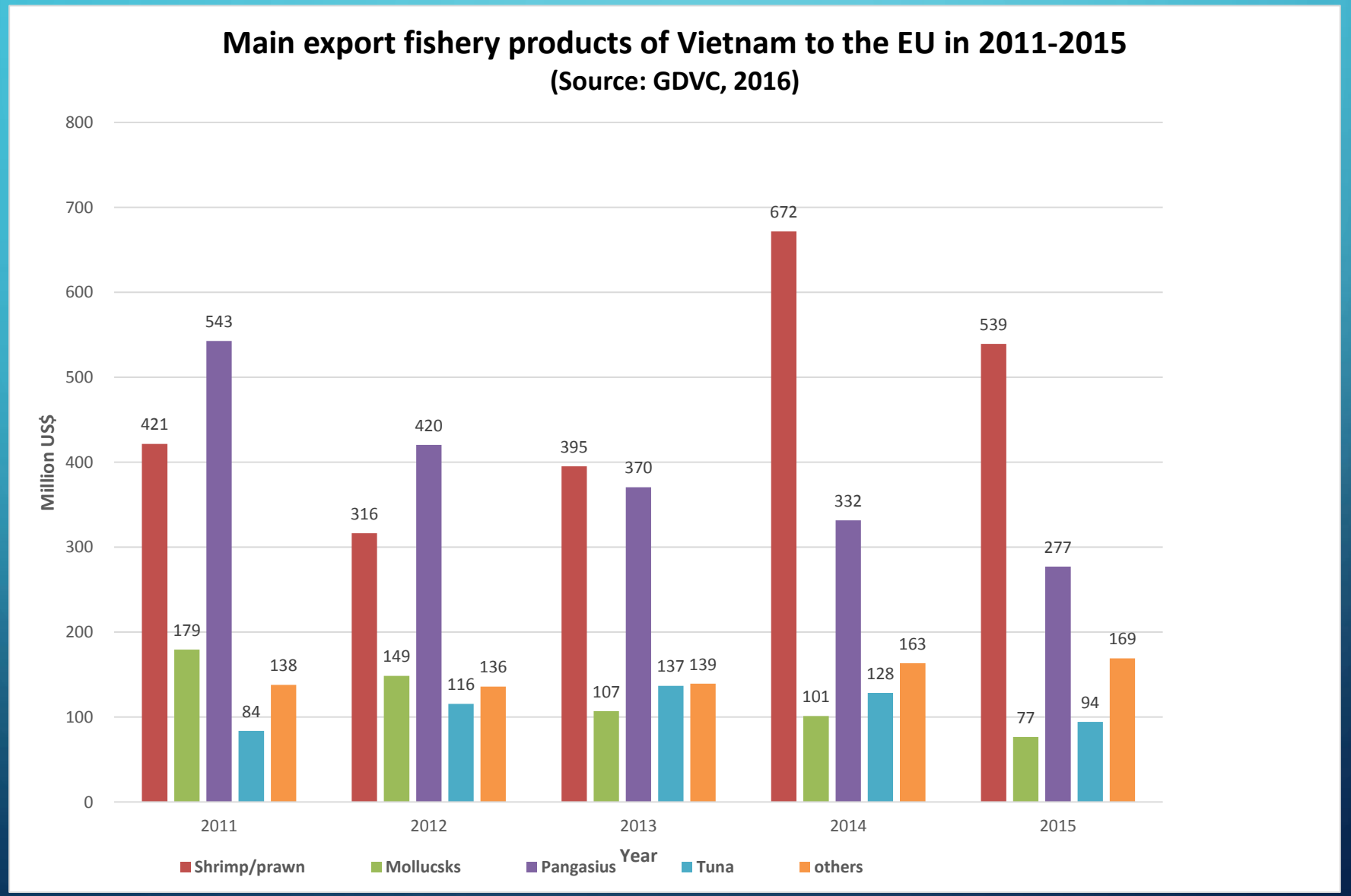
2.4. GENERAL OVERVIEW OF THE AQUACULTURE SECTOR (SUSTAINABLE ISSUES)

- Aquaculture sector is facing lots of difficulties in funding, expanding market, complicated diseases, and especially raw material shortage.
- Trade surplus has increased from 4% in 2007 to 11% 2012

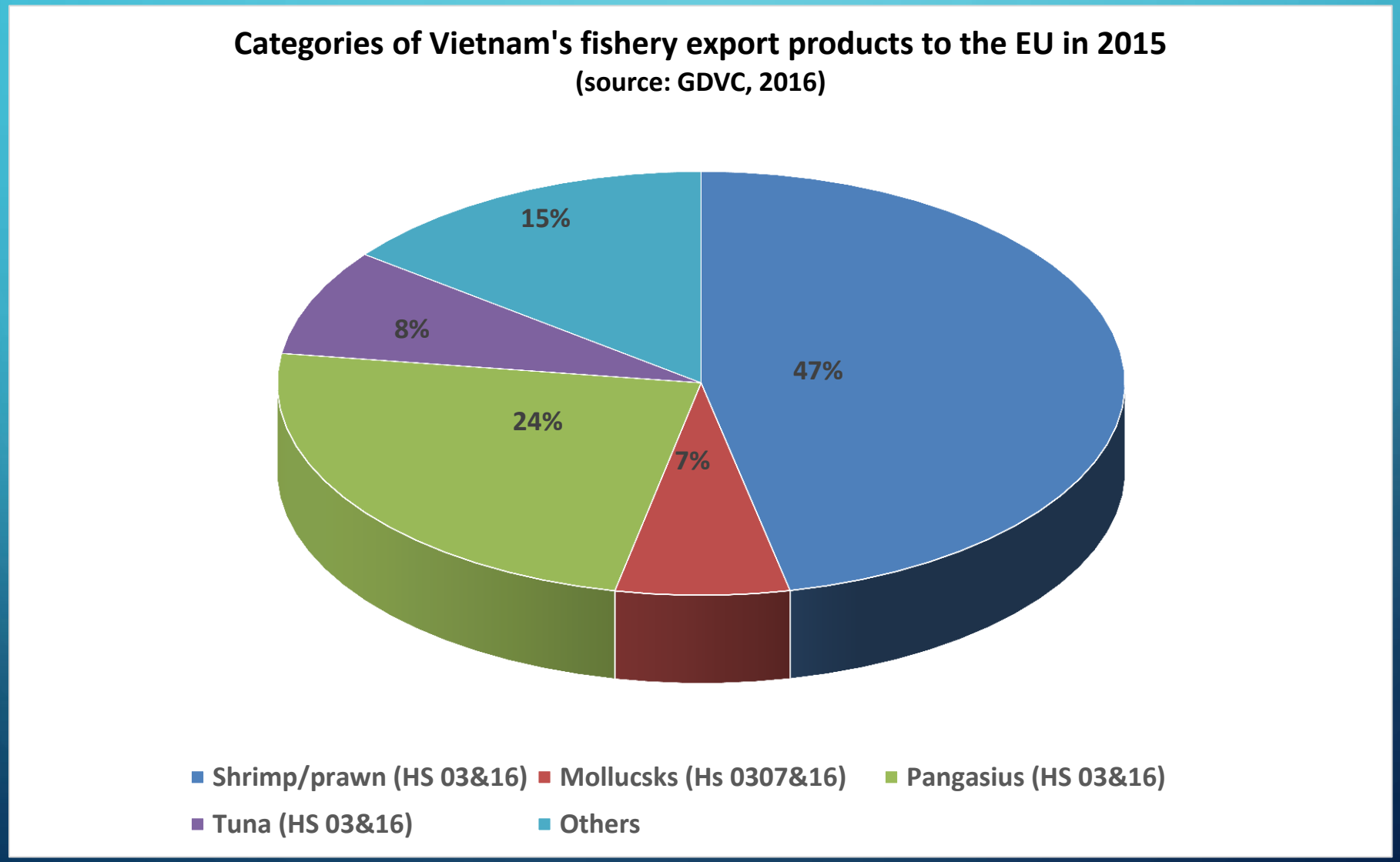
These issues negatively affect business efficiency and sustainable development of the industry despite the sector has considerably contributed to job creation and economic growth.

(Source: Nguyen Minh Duc, 2011)

3.1. FISHERY EXPORT TO THE EU



3.2. FISHERY EXPORT TO THE EU



3.3. AQUACULTURE EXPORT TO THE EU (SUSTAINABLE ISSUES)

- Exportation of VN.mese seafood to the EU is facing with Stronger competition (Japan, Thailand, Indonesia), strict application of technical barriers to trade measures, food safety management and anti-dumping measures

  => fishery export to the EU dropped by 17.18% in 2015 (GDVC, 2016)

- To improve, VN has to apply comprehensive economic and technical solutions.
- A Centre for import, auction and distribution of Vietnamese products was established in Zeebrugge port of Belgium (Vietnam fishery magazine, 2013)
- Great opportunities to VN aquaculture sector from EU-VN FTA in 2018

4.1. FEED INDUSTRY

- Highly fragmented: most businesses are small and medium sized operators. Large producers (FDI, Joint Ventures) produce 50-60% of all VN manufactured animal feed
- There is a hard competition in this industry. No encouragement to cooperation & exchange of information.
- Total feed capacity is unknown due to varied methodologies, while the demand for feed increased 13%-15% annum in 2005-2012.
- Location of VN feed mills is driven by the availability of port facilities (as the industry is dependent on imported raw materials) and population (meat/fish demand)

=> majority of production being in red River Delta and the South East.

4.2. AQUACULTURE FEED INDUSTRY

- Growing demand for aquaculture feeds → an increase in the number of formulated feed suppliers
- Formulated feeds constitute a large portion of the production cost → form a barrier to their use in aquaculture enterprises
- To stimulate the production & adoption of fishmeal replacers: environmental benefits & avoidance of overfishing should be taken into account
- Feeding by trash fish is extremely damaging to the environment
- Alternatives for fishmeal are fish meal replacers: plant proteins & the use of better breeds of aquatic animals with better feed conversion

Based on a sustainable assessment, we will suggest developing a labelling system to replace the current system

5.1. MIDDLEMEN (1/2)

- Middlemen have played a crucial role in the shrimp farming sector
- Small farmers depend on middlemen for the farm inputs (working capital, transportation, marketing the products to exporters/processors)
- Farmers prefer to sell to middlemen because exporters are accused of delaying payment and they may not accept the whole harvest
- This position in the SC gives middlemen a lot of power & influence in the subsector, against little interest in making the SC more efficient and sustainable. Most middlemen are undereducated and unaware of the significant of food safety issues (Van Duijn, 2012)
- Local government agencies, Farmer associations, and NGOs are making effort to restructure the value chain (Hop & Burny, 2015)

5.1. MIDDLEMEN (2/2)

- Efforts must focus on encouraging farmers to form cooperatives, while encouraging exporters to build up more direct & long term relationship with producers through contract farming
- Currently, only large scale farmers supply directly to exporters, mostly on a spot market basis
- Contract farming agreements are scarce but are growing in number due to the efforts to organize farmers in co-operatives
- Regards to the Pangasius sector, the role of middlemen is not very significant because farmers could sell their products to processors via the affiliated companies of processors

6. MARKET SITUATION

- Main drivers: Income and population growth, while limited increase in capture fisheries production, high meat and feed prices.
- Developing countries, particularly in Asia: continue being the main producers, exporters and growing consumers.
- Aquaculture will remain one of the fastest growing food sectors, despite a slowdown of its average annual growth rates (5.6% in the previous decade to 2.5% recently).
- Local demand for fishery products is expected to increase rapidly due to: growth of population (annualized rate of 0.8% in the period 2013-2022), and GDP per capital is expected to increase by 11.8% per annum in the same period.

→ **Pressure on seafood resources will increase but also more opportunities available**

7. SUSTAINABLE AQUACULTURE

- Aquaculture has expanded to supply domestic and export markets
- The main concerns are: quality and sufficiency of seed and feed supply, disease control and management of environment impacts
- Issues to consider: capacity of seas and inland water areas, extension services and marketing channels and quality control systems
- More emphasis on expanding aquaculture programs: poverty reduction
- There is an increased demand for brand, traceability, trademark and certification/sustainability among the buyer countries

This all links to the term "SUSTAINABILITY" with various meanings →

Need further studies on this field

8. CONCLUSION

- Reaching the goal of the sustainability is a responsibilities of all participants.
- These include: farmers, products' traders, policy makers and agricultural development stakeholders.
- Sustainable agriculture is not a simple model or package to be imposed
- BUT more a process of learning and adaptation that considers together with the environment, economic and social dimensions

→ This is the challenge not only for Vietnamese agriculture sector bur ALSO for research centers and universities

Q & A

Thank you for your attention!

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