

Government Policies Support To the Aquaculture Industry Context of Innovation

Author's Details:

⁽¹⁾**Thi Luu Pham, PhD**-University of Economic and Technical Industries

⁽²⁾**Thi Thu Hien Phan, PhD**-University of Economic and Technical Industries

Correspondence: Thi Thu Hien Phan No. 296/61/12 Linh Nam Street, Hoang Mai District, Hanoi, Vietnam.

E: ptthien.kt@uneti.edu.vn; T: +(84) 0914 915 926

Abstract: Aquaculture is one of the strengths of Vietnam. To develop and enhance the competitiveness of the aquaculture industry, the Government has enacted comprehensive innovation policies to support aquaculture businesses. However, in the current administrative institutions, these policies are not sufficient to help the aquaculture industry has a powerful and sustainable transformation.

Keywords: Government policies, aquaculture industry, Vietnam

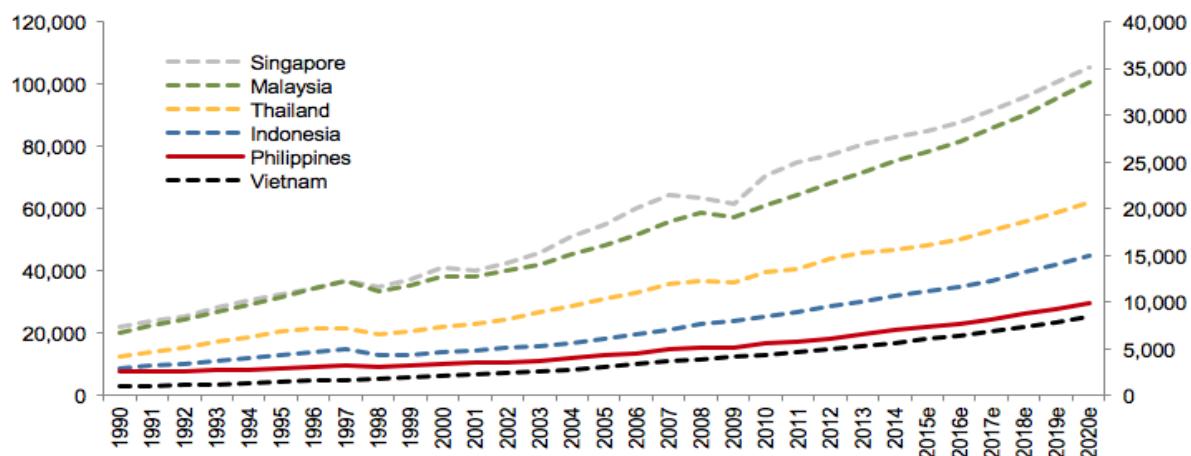
1. Innovation in the economic development of Vietnam

1.1. An overall assessment of innovation in Vietnam

- The economy of Vietnam is in the process of industrialization and integration into the world's economy. The ratio of the economy is also a huge shift from agriculture to industry and services.

In recent years, Vietnam's economy is growing faster (more than 6% / year), but lacks stability and sustainability. Compared with the economies of the countries in the region, the distance of Vietnam is quite large.

GDP per capita, PPP current international US\$, ASEAN-6, 1990-2020e



Source: IMF WEO Oct 2015 Database

Fig.1: GDP per capita

- Vietnam has made a very positive perception of innovation. The Government has enacted more and more policies to support private enterprises, especially small and medium enterprises (SMEs). However, the reform policies have not brought the expected effect. The private sector has not been respected and supported as much as the public sector, so it constrains the economic growth.

1.2. The government's reforms in the innovation process

1.2.1. Build a constructive and integrity Government

- Stabilize the macro-economy, improve the investment environment and business in the country.
- Clarify regulations on business, repeal inappropriate regulations and licenses which obstruct the operation of the businesses.
- Implement administrative reform, apply one stop shopping and shorten the licensing time and resolving administrative procedures.
- Fight against corruption in public administration.
- Improve the quality of human resources, apply information technology in public management and build e-government.

1.2.2. Promulgate policies to support businesses

- Facilitating the freedom of enterprises in accordance with the law. No criminalization of economic relations
- Adopting policies to support businesses such as tax breaks for a number of areas: agriculture, high technology, simplifying the loan procedures and land use.
- Supporting small and medium enterprises by building Innovation Incubators, Industry Clusters, especially for start-up enterprises, R & D, hightech.
- Conversation periodically opened for companies to find out their difficulties, thus taking measures to continue administrative reform.

2. Review the current Vietnam aquaculture sector

2.1. Aquaculture in Vietnam economy

2.1.1. The role of aquaculture in the national economy

Together with fishery, aquaculture provides inputs for seafood processing, seafood consumption, and export. Currently, with the growing demand of the market, while the fishery is slowing down, the requirements for the development of the aquaculture sector is becoming increasingly urgent.



Fig.2: Value chain of the aquaculture industry

In addition to contributing revenue to the economy, aquaculture plays other important roles in the environment and society, such as:

- Create great food sources to meet the needs of the people.
- Create an amount of work in the aquaculture business.
- Contribute to the improvement of the natural environment and the protection of natural ecosystems.

2.1.2. The aquaculture sector's development in recent years

Vietnam's aquaculture industry has generally grown over the years. However, the growth of the aquaculture industry in the future will be faced with many challenges from:

- The stability of the inputs: Seed, feed, drugs for aquaculture.
- The inland and abroad market.
- Environmental issues and climate change.

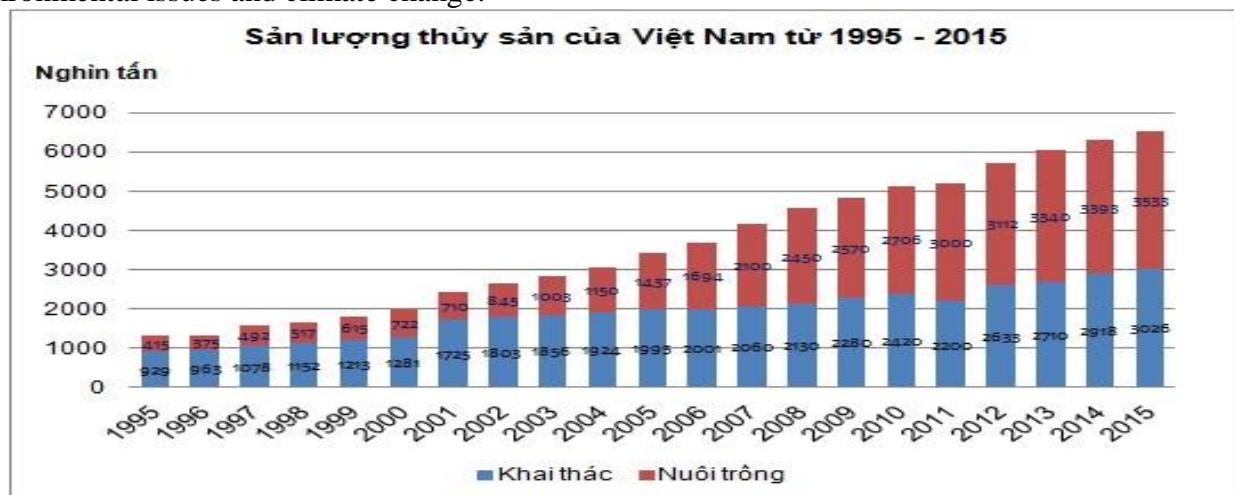


Fig. 3: The output of seafood in Vietnam increased rapidly and steadily over the years

2.2. Aquaculture Sector SWOT Analysis

2.2.1. Strengths

- Vietnam has natural conditions and climatic conditions favorable for aquaculture activities.

Vietnam coastline stretches over 3200 km with diverse marine ecosystems. The terrain Vietnam with many rivers, lakes, swamps, and large bays is suitable for aquaculture. The reserve of seafood in Vietnam is very large and diverse in species.

- The conditions of employment and social support are good for aquaculture activities.

Vietnam has a high ratio of agriculture in the economy. Labour in agriculture accounts for nearly 50% of the total labor force. The labor costs in aquaculture are cheap and the laborers stick with the profession. Vietnam is also a country with a long tradition in the aquaculture sector, so people have valuable experience in this activity.

- Vietnam currently has some large and traditional export market such as USA, Japan, EU. There are also some potential markets in terms of demand and geography such as China, ASEAN, Korea.

2.2.2. Weaknesses

- The level of investment in the field of aquaculture is low with backward technology.

This leads to low productivity in aquaculture and low product quality in the output. On the other hand, the high costs in aquaculture decrease the competitiveness of products in the international market.

Besides, the shortage of high quality labor reduces the expansion and adaptability of the Vietnamese seafood to new markets.

- The role of aquaculture management and development of the government ineffective.

The Government has not implemented a comprehensive quality control issue of the output of aquaculture. Some companies violating the regulations of the safety and hygiene condition in the production or use of banned substances in aquaculture make negative impacts on the brand image of Vietnam in the international market.

Also, the government has not implemented the long-term comprehensive and sustainable development strategy in the aquaculture sector, resulting in that enterprises, especially private enterprises are difficult to orient their development and investment plan.

- The aquaculture industry is facing huge problems due to the environment in the process of industrial growth. Many large factories are built. They operate and discharge into the external environment which does not only threatens the aquaculture industry but also the lives of local people.

2.2.3. Opportunities

- Vietnam's economy is in the process of globalization

Participation in the economic organization of open, free economic agreements like FTAs, TPP brings huge opportunities for exports of goods of Vietnam including aquaculture.

The aquaculture in Vietnam has the low productivity, but the costs of raw materials and labors are quite cheap, so the price competitiveness compared to other countries is higher.

2.2.4. Threats

- Besides the opportunities that the integration brings, the aquaculture in Vietnam will meet the challenges coming from the major seafood exporting countries such as India, Indonesia, etc.

- Technical barriers and protectionism of the difficult markets.

USA or EU use taxes to protect domestic producers against cheap products of Vietnam aquaculture. Other countries can also improve the technical barriers to quality, safety or origin of the products of Vietnamese aquaculture.

3. The Government's policy to develop the aquaculture sector

3.1. The development plan of the Aquaculture sector in the medium and long term

- The government determines the competitive advantages of Vietnam aquaculture, identifies the current and future needs of the aquaculture market both in domestic and abroad, thereby builds the comprehensive plan and long-term national strategy for the aquaculture.

- Planning the aquaculture based on the production characteristics, economic and social conditions and infrastructure of each region with long-term vision. Ensuring stable and expansive production requirements of businesses in harmony with the plans of other sectors such as agriculture, industry, tourism, defense, etc.

3.2. Building Market

- Building Vietnam aquaculture Brand, strengthening the trade promotion activities to promote Vietnam aquaculture products internationally, building Vietnam aquaculture distribution centers in domestic and abroad.

- Researching needs and expanding markets for exporting Vietnam aquaculture products.

3.3. Support for capital and land

- Investing the construction and development of the aquaculture sector such as investing in infrastructure, expanding and building new seaports, roads and improving transport problems.
- Creating the conditions for enterprises to borrow capital at low interest rates, access to FDI, loans from banks and credit institutions, subsidizing and reducing tax for aquaculture businesses in disadvantaged or disaster areas.
- Having policies about the land to encourage enterprises to invest in the direction of centralization, increasing productivity and sustainable development.

3.4. Technical Innovation in Aquaculture

- Government and enterprises identified science and technology goals in aquaculture.
 - + Applying biotechnology in aquaculture with the aims to produce better aquaculture varieties, conserving the exploitation aquaculture gene sources, improving feed, preventing diseases and treating the environment.
 - + Applying new production techniques to increase product quality, increase productivity - reduce costs of aquaculture and protect the environment.
- Government supports businesses:
 - + Training human resources, especially skilled and high quality labor.
 - + Constructing infrastructure, modernizing machinery and equipment for the aquaculture sector, such as increasing the investment number and level for the research and development facility (R & D), constructing the laboratories, Website system - national database of techniques and industry statistics, constructing the aquaculture food processing plants.
 - + Applying science and technology, information technology in aquaculture activities.
- Strengthening the international cooperation and exchanges.
 - + Popularizing models of modern production, clean production programs and products (ISO, VietGAP)

3.5. Encouraging aquaculture

- + Socializing and helping aquaculture sector have greater interaction with other organizations and sectors. Since then, strengthening the links between aquaculture businesses and between aquaculture businesses and society, facilitating for aquaculture businesses to access to the market, access to diverse resources and improve competitiveness.
- + Developing technical staff, veterinary staff, policy advisors. Developing programs to prevent epidemics alert and improve the environment.



Fig.4: Linkages between entities in the fisheries sector

4. Reviewing the government's support policy and recommendations

4.1. General assessment

In recent years, the Government has given a lot of policies to support the aquaculture industry. Generally, the policies were effective in helping the aquaculture industry make great strides. However, not all policies are effective as expected, due to the deficiencies both in issuing and implementing.

- The overall plan is rather obvious, but some regional and industrial plans are overlapped or lack of details. For example, the Government's aquaculture plan is not synchronized and inconvenient to roads or aquaculture processing areas.
- Branding:

Vietnam's aquaculture export is still relating to problems overseas legal such as Businesses dumps and violates the banned substances in the aquaculture product. Another problem is the name registered - brand rights for businesses. Without better control for product quality and effective intervention of government in the negotiation and settlement of commercial disputes, Vietnam's aquaculture brand will lose in the international market.

- Supporting capital and land

In the process of implementation of the policy above, there are many problems in both content and implementation. Consequently, many businesses and households do not get the best support for capital to develop production. Two typical examples are here: The case of Doan Van Vuon (Tien Lang - Hai Phong): The government is wrong in the decision to lease and acquire land. The story of two farmers in Quang Ngai can borrow loans to exploit aquaculture but after 10 years, the bank does not lend because of not knowing well about the policy.

- Technology

- + Many Vietnam aquaculture businesses have been able to approach and apply the achievements of advanced scientific technology of abroad to manufacture. However, the majority of businesses still relies on the old model. The main reason is that the businesses do not have enough capital and skilled labor to change the production mode.

- + The link between aquaculture businesses and the research center is not rigid. There are no much practical applications of the businesses from the University.

- production Environment

A very serious problem is that the government now licensed to many industrial production businesses which do not have the ability to control the amount of waste discharged into the environment. This has led to the terrible environmental destruction. The case of Formosa on dead fish probably will not be the example but the term which accompanies the aquaculture industry in the future.

4.2 Recommendation

- In addition to improving the efficiency and overcoming the limitations in the development policy of the aquaculture industry, the Government should implement such issues such as:
- Quantifying precisely, specifically and publicizing about the environmental costs which the aquaculture businesses cause as well as costs that other businesses cause for the aquaculture businesses from discharging to the environment. The rules are fair and the government acts as referee, but of course, the Government wants to quantify and first forces businesses to dispose their waste to protect the environment.
- Characteristics of aquaculture are subject to greater risks from natural disasters and climate change. Seafood themselves are creatures facing all kinds of disease and weather. So, credit institutions tend not to invest in this sector. The government should have a more important role in the creation of a trust of banks for aquaculture businesses.
- Strictly controlling the safety norms of the aquaculture. Handling heavily the businesses which use banned chemicals in aquaculture activities.
- Orientating in macroeconomic development has to be harmonized and sustainable. Needing transparency and increasing the monitoring rights of people with industrial projects. Resolutely not for industrial development affects the environment.

5. Conclusion

In the new context of innovation and integration, Vietnam's Government are having new reforms. Identifying that the private sector is the main force for growth, the government has issued many policies to support private businesses, including aquaculture businesses. In fact, these policies have helped businesses have a better operating environment, improve productivity and product quality. But the government needs to

take further detail steps to improve the business environment and better support for businesses, especially the aquaculture businesses with specific characteristics.

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