

Explore the Development of China's Marine Economy from the Perspective of High-quality Development

Qinghua Fu^{1, a}

¹Moutai Institute, Renhuai 564507, China

^a384426034@qq.com

Abstract

The marine economy is a strategic part of China's economic development, but the unreasonable development of marine resources, the backward marine industry technology and production methods have had a negative impact on the development of China's marine environment and marine economy. How to efficiently develop marine resources and develop the marine economy while ensuring the sustainability of high-quality development will be an important breakthrough in the development of China's marine economy. The global epidemic of new crown pneumonia has further strengthened China's demand for high-quality development of the marine economy. This paper studies the utilization of China's marine resources and the development status of the marine economy from the perspective of high-quality development.

Keywords

High-quality development; Marine economy; Resource development.

1. Status Quo of China's Marine Resources Development and Utilization

China Ocean is located in the Pacific Rim Economic Circle, with an excellent geographical location, and has more than 3 million square kilometers of territorial sea and 32,000 kilometers of coastline. The development of China's marine resources has a three-dimensional layout. The horizontal space is the functional division from coastal land resources to deep-sea resources, and the vertical space is the development of artificial integration functions such as ports, tourism resources and marine disaster prevention functions.

1.1. Development of horizontal functions of marine resources

The horizontal functional zoning of China's marine resources mainly includes marine fishery, marine mining, seawater utilization, and marine salt from the coastal land to the sea. There are more than 22,000 species of marine biological resources in China's waters, and the aquaculture area is close to 2,000,000 hectares. Marine fishing and marine aquaculture (including tidal flat aquaculture and shallow sea aquaculture) comprehensively consider the hydrological conditions and geological conditions of various regions and have the characteristics of regional differences, and the spatial distribution presents three major plates: north, middle and south. In recent years, due to the awareness of the seriousness of the decline of marine fishery resources caused by overfishing, overfishing has been effectively controlled. The marine aquaculture industry has developed rapidly. By 2019, the total output value of marine aquaculture has reached 354.203 billion yuan. The shrimp, fish, shellfish, abalone, ginseng and other seafood produced by marine aquaculture provide diversified choices for China's dietary consumption. At the same time, it also participates in the international seafood trade and circulation as an important commodity.

Compared with land, the ocean is not only rich in mineral resources, but also has many types, such as oil and natural gas for stable economic development, chlorine and uranium for

industrial production. China has oil reserves of 7.7 billion cubic meters, natural gas reserves of more than 2.4 trillion cubic meters, and oil shale reserves of 2.3 trillion tons. However, most of the development of marine mineral resources will have a certain impact on the marine environment. Therefore, in order to ensure the high-quality development of the marine economy, the development of mineral resources will often consider mining the required resources without affecting the marine environment. China started later than developed countries such as Europe and the United States in the development of marine resources, and there is still a lot of room for development in the mining of mineral resources.

Ocean energy is mainly renewable ocean energy and wind energy with high economic benefits. Because it belongs to clean energy, energy development will not cause serious pollution to the marine environment, but it is more dependent on existing infrastructure construction. For example, ocean energy needs to ensure strict flat tide and wave height restrictions, and also needs to have sea areas that meet the conditions of high-power pile drivers to achieve efficient development; wind energy not only has requirements for frequency and density, but also has a large overall development cost. Efficient storage of wind energy also requires further thinking. China's 32,000-kilometer coastline provides a good foundation for offshore wind energy. At this stage, China's onshore wind power installed capacity ranks first in the world. However, the high technical difficulty and high investment threshold still hinder China's marine energy development.

1.2. Vertical function development of marine resources

The development of marine transportation, coastal tourism and marine disaster prevention functions shows a clear vertical spatial layout. First of all, the economic development of coastal areas, and even China's economic construction, relies on the vigorous growth of the port economy. The port is mainly responsible for providing ships with the functions of docking, sheltering, and loading and unloading goods. As a major exporter, China ranks first in the world in terms of port scale. Against the backdrop of the COVID-19 pandemic in 2020, China's port cargo throughput and container throughput still ranked first in the world, with 14.55 billion tons and 260 million TEUs, respectively. Continuing to develop and manage port functions and maintain the stable development of the marine transportation industry and port service industry is the foundation for the sustainable and healthy development of China's marine economy.

In terms of tourism functions, all parts of China are making full use of marine resources and further exerting the role of coastal tourism in promoting economic growth. In recent years, China's marine tourism has developed on a large scale. Some coastal parks, large hotels, and business districts have become important tools to stimulate the local economy. For example, Dalian and Sanya have achieved stable growth of tourism economy through the effective combination of cultural environment and marine resources. ^[1] However, marine tourism is highly variable due to natural weather, location, etc. How to effectively combine technology to create a richer marine tourism situation while protecting the marine ecological environment is the strategic goal of high-quality development of marine tourism.

In addition to its conventional economic capabilities, the ocean also has an important disaster prevention function that also plays an important role in China's marine economy and the economic growth of other industries. Waste disposal, sewage and flood discharge are the three main disaster prevention functions of the ocean. All kinds of wastes generated in industrial production, in order to avoid the waste of land resources caused by landfill, enterprises need to dispose of the wastes to the CB3097-1997 dumping standard, on the premise of not causing serious negative impact on the marine environment, To ensure that the waste will not be dumped at the location that will not affect the life of the surrounding residents and the aquaculture industry; and the pollution discharge with higher requirements than the dumping

should avoid the marine economic zone to avoid affecting the national production; the flood discharge is aimed at the inland area. Rainstorms cause waterlogging, and low-lying terrain is often chosen to enter the sea, so that people in inland cities are not affected by floods in their production and life, and at the same time, coastal cities have a certain degree of tide resistance [2]. The disaster prevention function of the ocean puts forward higher requirements for marine environmental protection and the high-quality development of the marine economy. Strengthening the further optimization of the layout of waste disposal, sewage and flood discharge sites is extremely important to the healthy development of the marine economy.

2. The Status Quo of High-quality Development of China's Marine Economy

2.1. The overall development of the marine economy is stable

Since the reform and opening up, the marine economy has gradually become an important part of the national economy. From 2009 to 2019, China has doubled its marine gross product, successfully breaking through the 9 trillion yuan annual gross product mark, contributing 9% of China's GDP, and surpassing the United States in 2011, making it a veritable world marine economy power. Affected by the global new crown epidemic, China's marine economy has been strongly impacted, and the gross marine product in 2020 will drop by 5.3% compared with 2019. With the slow recovery of the global economy and the gradual opening of global logistics and domestic tourism, China's marine secondary and tertiary industries have slowly recovered in the first half of 2021, with internal circulation driving external circulation. trillion-dollar target.

2.2. There are differences in the development of regional marine economy

Although China's total marine economic output has declined significantly due to the impact of the new crown epidemic in 2020 and the development of the marine economy has been restricted, the marine economic output accounts for nearly 15% of the coastal area's GDP, and it is still the backbone of the economic development of the coastal area. The horizontal and vertical development of marine functions makes the development of marine economy in various coastal areas have both similarities and differences. From the perspective of coastal economic zones, there is an imbalance in the high-quality development of marine economy in different coastal areas. The development level of marine economy in the Pearl River Delta and Yangtze River Delta regions is significantly higher than that in the Bohai Rim and Beibu Gulf regions [3]. The development level of the marine economy, especially the high-quality development level, is closely related to the distribution of marine resources, geographical environment and government policies in various places. The four regions of Guangdong, Shandong, Shanghai and Tianjin are at the top of the marine economic development of the 11 coastal regions, while Ji, Qiong and Gui are at the bottom.

The large differences in the degree of agglomeration of marine industries in different regions are one of the reasons for the uneven development of marine economic regions. Relying on the industrial agglomeration and location advantages of the three free trade zones in Nansha, Shenzhen and Qianhai, Guangdong is far ahead in the added value of the marine industry. Similarly, Shanghai benefits from a high degree of industrial agglomeration and a sound economic foundation. The marine tertiary industry has the highest proportion in the country, maintaining a level of more than 60% in the past ten years, showing a typical "three, two, one" high-energy marine industry structure. In contrast, Shandong Province, which accounts for a large proportion of the marine economic output value, has only accounted for about 45% of the marine tertiary industry in recent years, ranking low among coastal cities. The economic value of the marine secondary industry, which is dominated by shipbuilding and marine engineering,

has The proportion still ranks first, and the industrial structure is still relatively traditional. Although various coastal areas differ in their dependence on the marine economy, the overall planning of marine resources in various regions and the optimization of the marine industrial structure are still important factors for the high-quality development of the marine economy.

2.3. Problems existing in the high-quality development of the marine economy

First, marine energy development, ship pollution, marine aquaculture and marine pollution have brought serious environmental damage and environmental pollution problems. China's oceans, especially the offshore waters, are seriously polluted. The sea area that does not meet the relevant standards for sea water quality is about 140,000 square kilometers. Among them, the Bohai Bay and the East China Sea have the most serious pollution problems. What follows is the continuous reduction of marine resources, threatening the variety and quality of marine fisheries. Coastal environmental pollution will also seriously hinder the high-quality development of coastal tourism.

Second, China still has geographical limitations in the development and utilization of marine resources. Because most of China's oceans are in a semi-closed geographical environment, the development of distant-water fishing, deep-sea exploration and other industries is restricted; there are also disputes over sea rights with neighboring countries in some sea areas, which hinders the in-depth development of marine resources. Especially in the fringes of the territorial sea, energy resources such as oil and natural gas have been gradually discovered in recent years, which has increased the geographical value of the ocean, and also intensified the friction with the Philippines, Indonesia and other countries in terms of sea power relations.

Third, there is still a certain gap between China's scientific and technological level in the marine industry and the world's leading level. In addition, there is also the problem of uneven spatial distribution of marine resources, resulting in limited capacity for marine resource development. At the same time, the marine pollution control technology and marine resource management system are still immature, which restricts the high-quality development of the marine economy to a certain extent.

3. Countermeasures for China's Marine Economic Development from the Perspective of High-quality Development

3.1. Improve the marine environment management system

China should take the high-quality development strategy as the guiding ideology for future marine environment management and marine resource utilization, improve the marine environment management system, and supervise the development and utilization of marine resources through a two-pronged approach to development and protection. At present, China's marine resource management is still based on inland natural resources, which is incompatible with marine resource management. We should refer to the relevant legal provisions of developed countries such as the United Kingdom, France and other developed countries with large marine resources, formulate marine environmental management measures in line with China's national conditions, and improve relevant Chinese laws and regulations. At the same time, although marine resources are rich in variety and large in storage, extensive development based on land resource development experience is a waste of marine resources. China should promote the efficient use of green energy from the perspective of strategic development. Only by constructing a long-term plan for the development and utilization of marine resources, improving the management system for marine resources development, and increasing the enforcement of laws and regulations, can we achieve the healthy development of marine resources and the sustainable protection of the marine environment.

3.2. Increase investment in scientific and technological research and development

At present, China's current marine science and technology research capabilities still need to be improved, the traditional marine industry has problems such as waste of resources and environmental pollution, the emerging marine industry needs to be expanded and innovated, and the structure of the marine industry needs to be further upgraded. Therefore, scientific and technological innovation in the marine industry should be market-oriented, combined with goals such as marine environment improvement and industrial upgrading, to help the high-quality development of the marine economy. Although the new crown epidemic has impacted the development of China's marine economy, from another perspective, it also provides space and time for the incubation of high-tech new marine industries. Therefore, China should increase its investment in marine science and technology research and development in the next few years, actively cultivate the independent innovation capabilities of domestic enterprises and research institutes, and realize the transformation and upgrading of traditional marine industries. The strategic development goal is to cultivate emerging marine industries and make China a scientific and technological power in the field of new marine industries. Government departments should also give certain financial and policy support to marine science and technology talents, stimulate the cultivation of marine special talents, strive to cultivate high-quality marine science and technology talents in large quantities within five to ten years, and invest in the innovation and upgrading of the marine industry. Accelerate the transformation of theoretical achievements of marine development and management technology into practical production tools, and comprehensively enhance the technological strength of China's marine industry.

3.3. Coordinate the coordinated development of coastal areas

The outline of the "14th Five-Year Plan" mentioned that "the implementation of the regional coordinated development strategy is one of the important national strategies in the new era. Accelerating the coordination and coordination, orderly competition, green coordination, and sharing and win-win new regional development mechanism will optimize the economic layout. To achieve this goal, we should make overall planning of marine resources, dilute the impact of administrative regions on the development of marine industries, strengthen mutual learning between regions, and actively create high-efficiency agglomeration areas for marine industries. Adjust the industrial structure of each region and adjust measures according to local conditions, so that it can create maximum value on the basis of conforming to the conditions of marine resources in each region. Coordinating the development of marine economy in various regions and economic circles is particularly important for the high-quality development of China's marine economy.

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