

Root Causes of the Problems of the Development and Utilization of Marine Resources Assets from the Perspective of Economics

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Abstract: In the process of China's economic development, with the acceleration of the development process of the marine industry, the traditional utilization of resource assets can no longer meet the market demand for the three superior products of the sea, land and air, especially the emerging technologies, emerging marine technologies and other high-value industries. From the perspective of economics, this paper studies and analyzes the economic situation and the composition of capital elements in China's coastal areas. By analyzing the current situation of the development and utilization of marine assets in China's coastal areas, as well as some existing problems and shortcomings, it discusses the difficulties faced by resource-based enterprises under the new situation and the countermeasures and methods. On this basis, the corresponding suggestions and countermeasures are put forward. The survey results show that strengthening government guidance is the main solution, improving the relevant laws and regulations, and the market guidance and improving the property rights mechanism are the secondary solutions to improve the utilization efficiency of resource assets.

1. Introduction

In recent years, China's marine economy has developed rapidly and occupies a very important position in the national economy. In recent years, the state has increased its efforts and investment in marine development [1-2]. However, due to the influence of traditional thinking inertia and the constraints of some institutional factors, such problems as unstable sea conditions, low resource value and serious environmental pollution have always existed. At the same time, the bad weather and climate disasters brought by global climate change have also caused great inconvenience to people's life and production, All these make mankind face great challenges in the process of seeking

other energy methods to replace other fossil fuels such as oil [3-4].

As for the research on the development and utilization of marine resource assets, scholars at home and abroad have conducted a more in-depth discussion on this issue. Domestic scholars put forward their own originality from different angles. Some scholars believe that after China's economic development enters the new normal, the coastal areas gradually promote the transformation to the mainland, but in the process, there are also some contradictions and problems that cannot be ignored and cannot be solved, such as environmental pollution and ecological deterioration, which seriously affect the development process of China's marine resources and hinder the smooth implementation of this project. Relevant studies have been made on these problems and difficulties [5-6]. Some scholars have systematically analyzed the economic development level, industrial structure adjustment, transformation and upgrading of China's coastal areas and put forward the strategy of "overall regional coordinated development" [7-8]. Therefore, based on the perspective of economics, this paper studies and discusses the development and utilization of marine resource assets.

With the rapid development of economy, the development of marine resources has become an important industry indispensable to the development of our national economy. However, due to over exploitation and unreasonable utilization, many problems have arisen. From the perspective of economics, this paper analyzes the limitations of marine resource assets at the present stage, including the lack of understanding of historical value, social benefits and ecological benefits, and puts forward suggestions and Countermeasures against these limitations, so as to achieve the goal of sustainable management and provide new impetus for economic growth, and enable more enterprises to better develop resources with potential commercial potential.

2. Discussion on the Root Causes of the Problems of the Development and Utilization of Marine Resources Assets from the Perspective of Economics

2.1. Development of Marine Resource-based Assets

The development of marine resource assets refers to the comprehensive utilization of marine products, tidal flats and sediments in the sea area, so as to obtain a certain amount of economic benefits. This process is often accompanied by some uncertain factors, such as natural conditions and climate. To study the development of marine resource assets from the perspective of economics is to clarify its connotation [9-10]. First of all, we must realize that its essential attribute is to bring benefits to investors. Secondly, we should correctly define who the investment target is and how to make necessary choices for investors when raising funds. All these issues are inseparable from the basis of rational analysis and judgment. From the perspective of economics, the main contents of the development and utilization of marine resource assets include: the first point is to divide them into production factors and consumption factors. These factors can be further refined into marine industry and marine biological resources. The second point is that many new fields and new business forms have emerged from the development of traditional economy to modern society. The third is to develop and research other aspects (such as ecological footprint) that have a great impact on human living environment, so that people can enjoy a higher quality of life and a higher level of spiritual needs to a certain extent [11-12]. Figure 1 shows the technical composition of marine resources development and utilization.

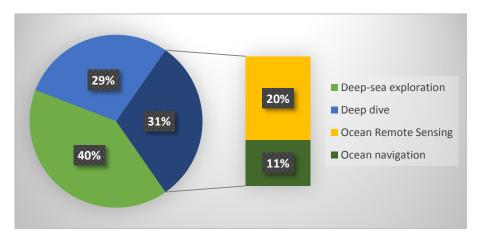


Figure 1. Marine resource assets development technology

2.2. Characteristics of Marine Resource Assets

- (1) The development of marine resource assets is long-term. For a long time in the past, due to the influence of policy factors, China's sea area use system and management methods were not sound enough. Therefore, marine products such as ships and offshore platform equipment are an industrial type with high input and low output [13-14]. In China, there are many natural landforms in the sea and land, such as mountains and hills. However, most of these geological structures are caused by irreparable or unpredictable sequelae and are reconstructed to maximize the utilization value. Moreover, due to the large area of the sea area, complex and diverse terrain and various types of marine resources, the development process has certain time interval, uneven regional distribution, seasonal change laws and the influence of natural factors [15-16].
- (2) Natural resources are scarce and non renewable. With the economic and social development, the improvement of human living standards and the change of consumption concepts, the limited resources have gradually become one of the bottlenecks restricting its further development. Freshwater fishery production accounts for a large proportion of the environmental capacity of China's sea areas. It is one of the non renewable and non replaceable resources. At the same time, it can not be reasonably compensated for the damage caused by human activities to marine life. In addition, with the continuous improvement of the level of economic development, scientific and technological progress, the improvement of people's quality of life and the change of concept, people's awareness of the decline in the quality of marine products and the increase in the degree of harm caused by such reasons, the marine environment has been seriously polluted [17-18].
- (3) The development of marine resource assets has a certain time and space. It is mainly manifested in the following two aspects: first, the marine resources themselves are immovable or storable, which makes it possible to self regulate in a long period of time; Second, with the economic development, people's demand for seafood has gradually increased, and non necessities (i.e. industrial chemicals) have appeared, resulting in changes in the market supply-demand relationship, resulting in the continuous rise of commodity prices, thus forming corresponding changes in the use value of fixed assets.

2.3. Stakeholders in the Development and Utilization of Marine Resource Assets

In the process of developing and utilizing marine resource assets, the interest subject is one of the most important elements. For any economic organization, the principle of cost-effectiveness and the principle of profit maximization determine that it must undertake the obligation of matching certain risks with the rate of return. However, from the actual situation, at present, China has not clearly defined what proportion of interests should be allocated by the government, enterprises and other investors, investors and managers in the process of developing and utilizing marine resource assets. Therefore, there are asymmetric information and conflicts of interests among various entities in the marine industry chain. From the perspective of the stakeholders, the development of marine resource assets is to obtain profits, but it needs to pay a certain price to recover costs and obtain benefits. Therefore, it can be divided into two types: one type is the capital income obtained by government investment enterprises in business activities; The other is for investors to get the corresponding reward by raising funds through various channels. As for the state, the state-owned assets administration and other relevant institutions, which are the responsible subjects with huge investment and return in the development and utilization of marine resources, are the most important and one of the biggest beneficiaries in the development and utilization of marine assets.

In the process of the development and utilization of marine resource assets, we should make full use of computer technology, establish a database, and use it as the basic data for management and analysis. First of all, we need to collect a large amount of recoverable reserves, quality and quantity data; Secondly, it is also necessary to collect all kinds of statistical indicators based on representative data resources related to various economic activities and investment projects, such as historical transaction conditions and fund use conditions. Finally, it is necessary to screen these statistical data information. Fig. 2 is the specific flow of data mining.

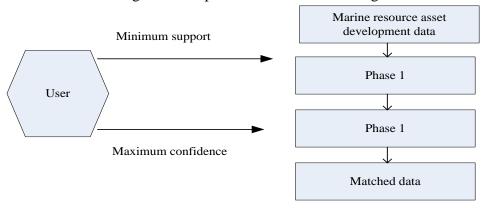


Figure 2. Data mining process

By mining the data of the development and utilization of marine resource assets, we can help us analyze and judge the impact of sea conditions, tourism, weather and other factors on sustainable development. Support in Data Mining: set an item set a and a transaction set D, then the ratio of the number of transactions of a in D to the total number of transactions in D is the support (a) of a in D, as shown in formula (1):

$$Support(A) = \frac{\left\| \left\{ d \in D | A \in d \right\} \right\|}{\|D\|} \tag{1}$$

Rule support: the ratio of the number of transactions in transaction set D between item a and item B is the support $(a \Longrightarrow b)$ of rule $a \Longrightarrow B$. This means the probability of simultaneous transactions between a and B, as shown in formula (2):

$$Support(A \Rightarrow B) = \frac{\left\| \left\{ T | A \cup B \right\} \subseteq T, T \subseteq D \right\|}{\|D\|} = P(A \cup B)$$
(2)

Minimum support: a minimum limit value set by the user for the frequency of the item set, usually recorded as min_ sup.

3. The Investigation Process of the Root Causes of the Problems of the Development and Utilization of Marine Resources Assets from the Perspective of Economics

3.1. Root Causes of Problems in the Development and Utilization of Marine Resource Assets

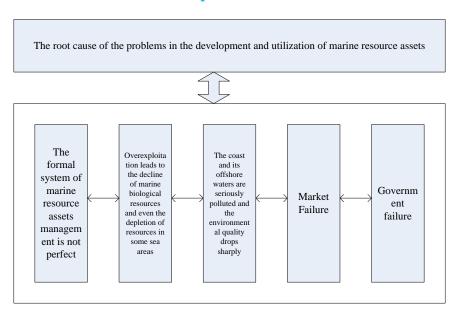


Figure 3. Root cause of the development and utilization of Marine resource assets

The development of marine resource assets involves a wide range of contents, mainly including seawater, seabed exploration and marine biological industry. In China, there are several problems in the utilization of marine assets (as shown in Figure 3):

- (1) There is no clear definition of property rights. The lack of effective legal protection system and relevant policies and regulations to restrict enterprise behavior is one of the most important reasons for the occurrence of non-standard phenomena in marine resources economic activities.
- (2) The development subject is scattered and small in scale, the industry distribution is disordered, and the management is chaotic. It is common in the coastal areas. During the development of marine assets, there is a lack of correct and reasonable assessment and management of marine assets. At present, there is not enough attention to whether there is available fresh water in the sea area and whether the seabed environment can be exploited and utilized. Some enterprises even think that there is a difference between seawater and seafood, and they can obtain huge benefits without investment or only a small amount of funds. Therefore, various expenses incurred in the development process greatly exceed the expected costs.
- (3) The development subject is single. China is rich in marine resources, but most enterprises are dominated by traditional industries. In these emerging industries, the success rate of most marine resource asset projects is low due to the limitations of technological innovation and limited market development capacity.
- (4) The government's support is insufficient and the policy is not perfect. The state's overseas investment in coastal areas, especially in Guangdong and other places, has exceeded US \$5 billion, and its development subject has also changed from single to multiple. But for our country, it is difficult to achieve only by relying on local financial support.

3.2. Investigation on Solutions to Development and Utilization of Marine Resource Assets

Before conducting an in-depth study on the development and utilization of marine resource

assets, we should first make clear what is economic capital, as well as the causes and types of it. Only after these problems are clear can we put forward targeted solutions. China's policy and capital investment in marine economic development are not enough. Therefore, to solve these problems, the government needs to actively encourage and support the construction of infrastructure in coastal areas and the adjustment of relevant industrial structures. At the same time, capital accumulation and optimal allocation can also be realized through investment. In specific practice, it is necessary to consider factors such as different industries, enterprise types and resource nature before deciding whether to develop and utilize marine assets or convert them into financial instruments to achieve better development results.

4. Investigation and Analysis of the Root Causes of the Problems of the Development and Utilization of Marine Resources Assets from the Perspective of Economics

4.1. Analysis of Solutions to Problems in the Development and Utilization of Marine Resource Assets

Table 1 is the investigation and analysis of the channels for solving the problems in the development and utilization of marine resource assets.

Solution	Agree	Commonly	Disagree
Strengthen government management	78%	13%	9%
Strengthen market guidance	56%	34%	10%
Improve the property rights transfer mechanism	39%	57%	4%

Table 1. Solution analysis

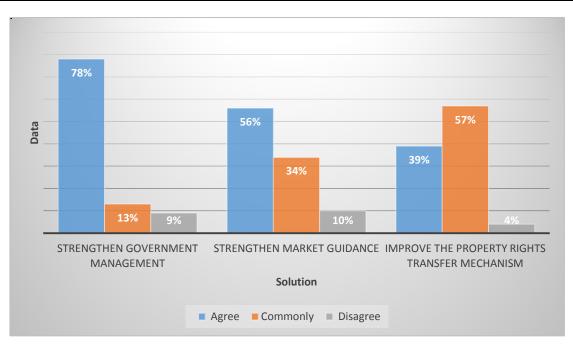


Figure 4. Problem solving

The government should formulate and promulgate relevant policies on the development and utilization of marine resources to standardize the process of marine asset development so that it can

be effectively managed. At the same time, it is necessary to strengthen the investigation and handling of illegal and illegal acts, establish and improve various rules and regulations, work mechanisms and accountability systems, strengthen the construction of law enforcement teams and improve the quality of law enforcement personnel, clarify the scope of responsibilities and responsibilities of various departments and tasks, and formulate a series of measures to formulate a unified, concrete and feasible action plan and planning plan, so as to achieve the perfection of laws and regulations on resource development and utilization. It can be seen from Figure 4 that strengthening government guidance is the main solution, while market guidance and improving property rights mechanism are the secondary solutions.

5. Conclusion

With the development of economy, the exploitation of marine resources has become an indispensable part of our national economy. However, due to its inherent characteristics and overexploitation, it has caused a series of serious problems. From the perspective of economics, this paper studies the development and utilization of marine assets in City. Firstly, it analyzes the reasons for the formation and influencing factors of the trading price of the regional land use right in the port. Secondly, it points out the problems such as the use and non-use land rights and interests trading market and the non-standard charging phenomenon in China, and puts forward solutions. Finally, the paper takes the policy suggestions on marine resources as the summary part of the full text.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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