

Research on the legal issues of high-quality development of China's marine fisheries under the background of digital economy

Yuhan Yang, Yanan Qu

Dalian Ocean University, Dalian, Liaoning, 116023 China

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Abstract: After entering the era of digital economy, China's high-quality development of marine fisheries has ushered in new opportunities, and has increasingly become the key to improving the quality and efficiency of China's marine economy. The construction of marine database, the development of Internet e-commerce platform, the application of intelligent fishery law enforcement system and the application of big data technology such as marine disaster early warning system provide strong support for the high-quality development of marine fishery in China. However, the legal system related to marine fisheries does not adapt to the rapid growth of the digital economy. There are some problems, such as the weak awareness of fishermen's Internet law, the lack of laws and regulations in the field of marine fisheries digital economy development, and the imperfect supervision mechanism of marine fisheries digital economy. Based on this, China should strengthen the Internet rule of law publicity for fishermen, strengthen the construction of laws and regulations on marine fishery digital economy, and establish a sound regulatory mechanism for marine fishery digital economy, so as to stimulate the vitality of digital economy and realize the high-quality development of marine fishery in China.

1. Proposing the problem

China is a maritime country with rich marine fishery resources. The report of the 18 th National Congress of the Communist Party of China clearly pointed out that in order to improve the ability to develop marine resources, resolutely safeguard national maritime rights and interests, and build a maritime power^[1], the ocean is becoming a new field of high-quality economic development in China. As early as 2020, the added value of marine fisheries in China's 12 marine industry added value rankings has ranked third, and the marine fishery economy is continuing to develop at a high speed.

Digital economy is an emerging economic development model in recent years. It refers to a series of economic activities that use digital knowledge and information as production factors and information network and communication technology as important carriers to improve production efficiency and optimize economic structure. In the new era, new generation of information technologies such as big data, artificial intelligence, mobile Internet and cloud computing have been making new progress, and the scale of digital economy is showing exponential development. So far, the digital economy has become a new form of economic development driven by information

technology, pointing out the way forward for the future economic development of the world. Digital economy is not only a new field of economic competition among countries, but also the key to the high-quality development of China's marine fishery.

Digital economy is entering China's marine fishery field with a rapid trend. However, due to the late start of China's marine fishery economy, the lack of relevant legal provisions, and the weak legal awareness of fishermen in the Internet field, the penetration of digital economy in China's marine fishery field is relatively slow. Promoting the high-quality development of China's marine fisheries is not only an inherent requirement for building a maritime power, but also an important support for promoting the Chinese nation to realize the Chinese dream of great rejuvenation. Promoting the high-quality development of China's marine fisheries in the context of the digital economy requires a good legal environment^[2]. Therefore, it is necessary to study the legal issues of high-quality development of China's marine fishery in the context of digital economy. He has a positive role in promoting the economic development of China's marine fishery, finding new economic growth poles in China, and building a maritime power.

2. The role of digital economy in the high-quality development of marine fishery in China

2.1 Marine database construction promotes fishery information sharing

Since the founding of the People's Republic of China, China has continuously carried out a variety of marine surveys, hydrological monitoring and various observation activities, and has carried out data cooperation and exchange with many countries in the world for international sea areas. For all aspects of the world, multidisciplinary marine data and related information have been partially accumulated. The total amount of data is huge, and the data range covers the global sea areas including China's coastal and territorial seas. Because of the technical level and historical status of our country at that time, in the early stage, our country used paper, CD, tape and other methods to record marine data. The data was only recorded and could not be shared at all. Until 1980, with the development of computer network technology and the progress of marine surveying and mapping instruments, tens of thousands of marine data in China have truly realized information sharing, and the degree of sharing has continued to deepen and develop^[3]. After more than 30 years of construction and improvement, China's marine data sharing service has been initially incorporated into their business service system by the bureau or relevant departments, and has written a strong color in the process of promoting scientific and technological innovation in the marine field and the construction of a maritime power. The data of the marine database is increasingly rich, and the means and scope of data acquisition are also expanding, which promotes the planning and integration of the national marine database. So far, the marine database-the marine fishery exchange platform constructed by communication technology has realized the exchange and sharing of marine fishery information resources, and further promoted the progress of marine fishery technology.

2.2 Internet e-commerce platform helps marine fishery products sales

Under the background of digital economy, the new Internet format is developing rapidly, which injects vitality into the development of digital marine fisheries. Under the influence of the Internet e-commerce platform, the sales volume of marine fishery producers has continued to improve, and has also made great contributions to the development of China's fishery economy. First of all, Internet e-commerce entrepreneurship has brought new basic jobs to fishermen. Many fishermen have entered the front of sales, entered the network, and become a fishery product sales anchor. With the continuous improvement of the prospect of e-commerce entrepreneurship, a large number of migrant workers return to their hometowns to produce seafood, sell seafood, drive the stable income increase

of returning fishermen, and contribute to the realization of rural revitalization. Secondly, e-commerce live broadcast has brought new channels for the sale of fishery products, which can be sold to the whole country and even the whole world, and the localization of fishery products is increasing. Both time-honored brands and local characteristic fishery products have achieved good marketing results through e-commerce live broadcast channels. Based on this, the state has intensified its efforts to support the agricultural activities of Internet e-commerce. During the double eleven period, CCTV also jointly set up a special farm to help farmers, and vigorously promoted China's high-quality fishery products. Finally, with the explosion of short video platforms such as Kuaishou and Douyin, many fishermen and seafood manufacturers engaged in fishery production recommend their products through short videos. A large number of high-quality fishery product orders are sold to all over the country through relevant short video platforms, which injects new vitality into the table of thousands of households for marine fishery producers and the revitalization of China's marine fishery economy.

2.3 Intelligent fishery law enforcement system to achieve efficient fishery law enforcement

Intelligent fishery law enforcement system refers to the comprehensive intelligent service platform of fishery administration built by cloud computing, Internet of things, mobile Internet and other technologies. The whole system includes electronic map, unified database and identity management of law enforcement personnel. Due to the particularity of fishery law enforcement, law enforcement agencies use intelligent law enforcement systems such as installing video cameras in key sea areas under their jurisdiction, equipping fishing vessels with GPS emergency rescue procedures, and installing water quality inspection systems during fishery breeding and transportation to assist fishery law enforcement. Through the application of these digital law enforcement systems, we can quickly understand the law enforcement environment and on-site conditions, and realize cross-space remote fishery law enforcement, which not only improves work efficiency, but also improves the quality of fishery law enforcement services.

2.4 Marine disaster early warning system to strengthen the dynamic monitoring of marine disasters

With global warming, extreme climate events occur frequently, and the frequency of various marine disasters is increasing. Frequent marine disasters have brought great trauma to the safety of people's lives and property around the world. In recent years, due to the continuous improvement of China's economic development speed, a large number of population and economic industries have migrated to coastal areas, resulting in increasing pressure on marine disaster prevention and mitigation in coastal areas of China. At present, the marine disaster monitoring system in China includes radar, satellite remote sensing, marine stations, etc., and has formed a comprehensive and multi-level marine disaster warning system from top to bottom, covering a wide range, which can meet the daily needs of marine disaster monitoring in China. With the help of the national policy, China has actively promoted the development and application of marine disaster early warning system, which has greatly improved the efficiency of marine disaster early warning, reduced the loss caused by the occurrence of marine disasters in China, and provided a strong guarantee for the health and safety of people in coastal areas.

3. The dilemma of high-quality development of China's marine fishery under the background of digital economy

3.1 Fishermen's Internet legal consciousness is weak

The relationship between husband and wife, parent-child relationship, etc. in the marriage legal system reflects the needs of members in family life. Therefore, in the marriage legal system, the exercise of rights and the performance of obligations have unity, and the relationship between rights and obligations does not have consideration and balance. In the chapter of "family relations", the Civil Code has made many important amendments and improvements to relevant legal rules. To improve the legal system of marriage and family through the Civil Code, it is necessary to adjust the marriage system appropriately, so that people's right to choose freely is wider, and the wishes of civil subjects are highlighted. The power of agency for family affairs is stipulated in Article 1060th of the Marriage and Family Part of the Civil Code, which fully emphasizes that husband and wife are in an equal position in the family and have the same right to put forward family decision making opinions. Therefore, it is the proper meaning of marriage for husband and wife to exercise the right of agency in family affairs. However, the marriage law does not stipulate the right of husband and wife to represent their families. This compilation of the Civil Code confirms that the civil legal acts carried out by one spouse for the needs of family daily life are effective for both spouses, unless otherwise agreed between one spouse and the other. The addition of regulations in the civil code is effective for both husband and wife, and the agency right of family affairs is limited to dealing with domestic affairs, excluding the production and sales activities of both parties.

In the Civil Code on Marriage and Family, the division of marital property is mainly elaborated by enumerating methods, which improves the operability of the law in a certain sense. The Civil Code confirms the legal rules of marital property division. In order to ensure the stability of marriage relationship and joint property relationship, it is not allowed to divide the joint property of husband and wife during the marriage relationship^[4]. At the same time, the Civil Code clarifies the distribution of debts that both parties should bear, and both husband and wife should jointly bear marital debts, and on this basis, both husband and wife should sign the debt matters for ratification. The debts incurred by one spouse in his own name and the debts incurred by family daily expenses are recognized as joint debts of husband and wife, but the debts other than family daily expenses are not joint debts of husband and wife. Clarifying the boundary of husband and wife's joint debt has effectively solved the problem that one spouse has no bottom line to bear the debt for the other in the past practice^[5].

3.2 Lack of relevant laws and regulations in the field of marine fishery digital economy development

Although the laws and regulations in the field of marine fishery digital economy are constantly improving and perfecting, because the digital economy is a new thing, it is also just beginning to enter the process of marine fishery development. To a certain extent, there will be a problem of legislative lag. In addition, China's digital economy legislation started late, the legislative mechanism is not perfect, the legislative technology is also lagging behind and the speed of digital economy development. Therefore, if we want to promote the high-quality development of marine fishery in the context of digital economy, the relevant legislation in the field of marine fishery still has a long way to go.

First of all, the special legislation in the field of digital economy is obvious, which leads to the lack of relevant legal basis for the high-quality development of marine fishery under the background of digital economy, especially the lack of digital economy promotion law, which cannot form a joint

force of technology, talents and funds in the field of marine fishery development.

Secondly, the legislation of digital economy lags behind, and the development speed of law and digital economy is not coordinated. The relevant provisions on promoting and guaranteeing the development of marine fishery economy with the development of digital economy are scattered in various policies, regulations and documents, but the relevant policies have not yet risen to the legal level and lack the strong guarantee of national coercive power. Moreover, the arrival of the current digital economy era has brought new problems to the marine fishery field, such as the unclear division of collision tort liability of unmanned ships, and some problems caused by online sales of fishery products.

Finally, China's digital economy legislation is derailed from international legislation, and lags behind other countries in terms of data protection. Compared with Germany, the European Union and other countries, there is still a way to go in the relevant digital economy legislation and international convergence.

3.3 The legal mechanism of marine fishery digital economy supervision is not perfect

The imperfect legal mechanism of China's marine fishery digital economy supervision is mainly reflected in the following three aspects: First, the legislation on the privacy protection of citizens' personal data is seriously backward, which hinders fishermen's sales of fishery products on the Internet. For a long time, China has not established a complete legal system for personal privacy protection. Personal data privacy protection is scattered in China's civil law, tort liability law, intellectual property law and other legal provisions. In the face of a large number of privacy infringement cases caused by the development of the digital economy, the lack of personal information protection legislation is becoming more and more obvious. Many basic personal data information protection problems in the digital economy are difficult to solve. Secondly, there is a lack of legal system related to public data sharing. Although there are relevant legal systems for the disclosure of relevant data information, it mainly focuses on the open sharing of data between government departments, and lacks relevant laws for the government to open data to other public. Finally, the power division between the legal supervision subjects of the marine fishery digital economy is unclear and the work overlaps obviously. There is a conflict between the existing decentralized supervision and the development of the digital economy across the grid development of geographical space. The development of the digital economy is a networked development across regions. It is not limited to a simple region, but our traditional supervision mechanism is based on territorial regions. Supervision, which leads to the need to apply for permission from various regions when marine fishery enterprises carry out related work involving the digital economy, has brought great obstacles to the high-quality development of the marine fishery economy, and requires relevant departments to coordinate with each other and introduce relevant laws and policies to regulate the behavior and jointly promote the vigorous development of the marine economy^[6].

4. The legal countermeasures for the high-quality development of China's marine fisheries under the background of digital economy

4.1 Strengthen the Internet rule of law propaganda for fishermen

The Internet is not an unsupervised area. Fishermen should abide by relevant laws and regulations when conducting Internet activities, and actively accept the norms of Internet legal norms and relevant Internet community conventions. The premise of abiding by the law must first know the law, so we should strengthen the Internet rule of law propaganda for fishermen.

First, further promote the fishermen's legal publicity work sinking. The suspension of work is the

most prominent problem in the process of fishermen's legal publicity, which hinders the progress of legal publicity. We should start from the current situation of marine fishery development and the actual needs of fishermen for Internet law, and truly implement the legal publicity, not just a slogan. The staff at all levels should strengthen the investigation of the actual work in the field of marine fishery, understand the real needs of fishermen, solve the urgent difficulties of fishermen, and protect the legitimate rights and interests of fishermen. Second, improve the content of Internet rule of law propaganda for fishermen. At the present stage, the most critical problem in the publicity of the rule of law is to adjust the content of the publicity of the rule of law, increase the legal content involving marine fisheries and fishermen, improve the content system of fishermen's legal publicity, and meet the increasing demand of fishermen for the Internet legal system. Third, optimize the Internet legal publicity environment for fishermen. To transform the focus of rule of law propaganda from 'educating' fishermen to 'serving' fishermen, to build a public legal service agency led by the government and participated by various social forces to solve fishermen's legal disputes, to put fishermen in the first place of rule of law propaganda work, and to improve the effectiveness of legal propaganda.

4.2 Strengthen the construction of laws and regulations on marine fishery digital economy

In recent years, the digital economy has become an important weapon to boost the economic development of all countries. All countries have also complied with the trend of digital economy development and continuously formulated and upgraded the legal norms of digital economy development. As a country with a good momentum of digital economic development and actively seeking to build a maritime power, China should also accelerate the introduction of a legal system based on the current situation of China's marine fishery development, reverse the backward situation in the field of fishery digitization, and provide legal guarantee for the high-quality development of China's marine fishery.

First of all, the digital economy legislation in the field of marine fisheries must be based on the current situation of China's fishery economic development. China is the second largest digital economy country in the world. The rapid development of China's national economy and the improvement of international competitiveness have also benefited from the support of the digital economy. In the face of the backward reality of China's fishery digital economy legislation, we can appropriately learn from foreign advanced legislative experience for our use. Because the digital economy is an export-oriented economy, the digital economy legislation of various countries is also trying to solve the common problems in the process of its development. Therefore, drawing on the experience of other countries' mature marine fishery economic legislation is conducive to solving the problems faced by China's high-quality development of marine fisheries.

Secondly, special legislation in the field of digital economy of marine fisheries should be strengthened. Based on the main contradictions in the high-quality development of China's marine fishery under the background of digital economy, we actively explore and formulate a systematic and complete marine digital economy law, comprehensively improve the modernization level of China's marine fishery digital economy governance system and governance capacity, and provide legal support for the international multilateral digital economy model advocated by China.

4.3 Establish a sound legal mechanism for the supervision of marine fishery digital economy

In order to realize the efficient operation of the legal system to promote the high-quality development of marine fisheries, the key is to establish a relatively perfect digital economy legal supervision system. In the context of the digital economy, promoting the high-quality development of marine fisheries requires maximizing the guidance and normative role of the law. The opening and

sharing of marine fisheries data resources is an important basis for the high-quality development of marine fisheries. In order to better stimulate the role of digital economy in promoting the development of marine fishery, laws and regulations related to data opening, data trading and data protection of marine fishery should be formulated as soon as possible to create a good legal environment to promote the development of digital economy of marine fishery.

The focus of the legal system construction of marine fishery digital economy supervision should mainly include the following aspects : First, the personal information protection law should be promulgated as soon as possible, the scope of personal information should be clarified, and legal protection should be provided for fishermen in the Internet sales of marine fishery products through legislation^[7]. Improve the marine fishery public information sharing system mastered by government departments and relevant organizations, improve the marine fishery information occlusion, commercial enterprises can not join the work of high-quality development of marine fisheries, should formulate relevant high-quality development of marine fisheries Information disclosure, the opening of marine fisheries-related data and information to develop higher-level legal provisions^[8]. Thirdly, in order to improve the efficiency of marine fishery digital economy supervision, a cross-sectoral cooperation mechanism should be established as soon as possible. The government, the Bureau of Oceanography, the Bureau of Natural Resources, the Bureau of Finance and other relevant administrative agencies cooperate with each other to further clarify the boundaries between different policies and regulations, and to do a good job in supervision and coordination between different departments, so as to form a joint force of departments and contribute to the high-quality development of marine fishery.

5. Conclusion

In the new era, in order to achieve leapfrog development, marine fisheries need to accelerate transformation and upgrading, and maximize the role of digital economy in promoting the development of marine fisheries. In the future development of marine fishery, we should pay attention to the application of various science and technology supported by big data. Only by continuously promoting the transformation and application of scientific and technological achievements and changing the traditional development mode of marine fisheries, can we enhance the development potential of China's marine fisheries, realize the high-quality development of China's marine fisheries, help China to remain invincible in the international competition of marine fisheries, and also realize the green, low-carbon and high-quality development of marine fisheries for China.

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