

# *Study on Environmental Governance Mechanisms in the South China Sea*

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**Abstract:** The South China Sea plays an important role in the development of the coastal states, the region and even the world by virtue of its rich biological and oil and gas resources and convenient shipping lanes. In recent years, the ecological environment of the South China Sea has been facing increasingly severe impacts and challenges due to complex reasons. This article will analyse the security problems and challenges in the field of environmental protection in the South China Sea, starting from the unique geographical location and international status of the South China Sea, and combining with the new situation, new circumstances, and new problems in the South China Sea region that have emerged in the recent past. At the same time, the article will summarise the existing governance mechanisms in the field of environmental protection in the South China Sea, as well as the problems and deficiencies of these mechanisms. Finally, this article will combine the security problems and challenges in the field of environmental protection in the South China Sea and the existing governance mechanisms, and put forward proposals for environmental protection in the South China Sea from both the Chinese domestic and international levels, so as to promote the construction of a new type of environmental governance mechanism in the South China Sea.

## **1. Introduction**

The South China Sea is of great strategic significance to China and the world due to its special geographical location and abundant resources. And due to the many subjects involved in the South China Sea issue and the complexity of stakeholders, the South China Sea issue itself has complexity. In the field of environmental security, which is one of the non-traditional security issues, the South China Sea has more sources of ecological and environmental pollution, and the environmental problems are becoming more and more prominent, coupled with the different standards of different states, a special governance cooperation mechanism has not yet been formed in this field. In the face of such a situation, China should improve and innovate the governance mechanism of the South China Sea according to the actual situation in the South China Sea, and look for a new path of environmental governance in the South China Sea, so as to maintain the environmental security of the South China Sea.

## 2. Security issues and challenges in the environmental field in the South China Sea

First, with regard to land-based pollution, in recent years, the discharge of industrial wastewater into the sea has led to an increase in seawater pollution in the South China Sea, a decrease in marine biodiversity and a weakening of the self-purification capacity of the sea, which has seriously harmed the South China Sea's marine ecological environment. In addition, coastal states in the South China Sea have inconsistent policies and standards on land-based pollution, which makes it impossible to effectively control land-based pollutants and govern the marine ecosystem in the South China Sea.[1]

Second, with regard to pollution caused by resource development, Vietnam, Malaysia and other coastal states in the South China Sea have a large number of oil wells in the waters of the South China Sea, but there is a lack of regulation of the mining environment, with many oil spill accidents and densely polluted areas.[2] Meanwhile, the year-on-year increase in offshore drilling platforms and submarine oil pipelines has also led to a concomitant increase in the amount of sewage discharged into the sea from offshore oil and gas development zones, which has had a serious impact on the marine ecosystem of the South China Sea.[3]

Third, with regard to pollution from ships, the South China Sea, as an important route for international maritime transport, is an essential sea area for the Europe-East Asia route, the shortest route between African suppliers and Asian markets, and one of the most important oil transit points in the world.[1] The high number of ships travelling to and from the sea creates a high risk of oil pollution, and various oil spills continue to occur. Oil spills at sea are frequently widespread, not confined to one country, due to the mobility and connectivity of the oceans.

Fourth, with regard to climate change, global warming has intensified with the continuous emission of greenhouse gases in recent years. Although this is not pollution of the marine environment in the traditional sense, its impact on the oceans cannot be ignored. The adverse effects of ocean acidification, warming of the oceans and sea-level rise caused by climate change have led to serious damage to fishery resources in the South China Sea, leading to an increase in natural disasters in the sea area, seriously affecting the living conditions of the residents of the coastal states and restricting the development of the local economy.

Fifth, with regard to fishery resources, persistent IUU fishing by coastal states in the South China Sea has seriously damaged the ecological environment of the South China Sea, and its most intuitive harm is the sharp decline in fish catches in the South China Sea. At the same time, IUU fishing has also led to a decline in the level of biodiversity of fishery species. In addition, fishing vessels engaged in IUU fishing are often not regulated in terms of sewage discharge, and the means of fishing are also extremely hazardous.[4]

In addition, individual states have discredited China's aquatic product exports in an attempt to win the international market by illegitimate means. On the one hand, they impose the so-called "technical standards" and "eco-labelling" to force China to disclose upstream and downstream information on its products and conduct investigations into the production and business activities of the relevant enterprises. On the other hand, it uses the media to disseminate false information such as "ecological damage" and lead international public opinion to achieve the purpose of placing China's relevant enterprises on the "Entity List", and then introduces a bill restricting the trade of aquatic products in China and constructs "environmental protection" barriers against China..[5]

## 3. Situation and problems of existing governance mechanisms in the environmental field in the South China Sea

The current situation is that the existing environmental governance mechanism in the South China Sea is currently characterised by predominantly bilateral governance, supplemented by

multilateral cooperation.[6]In the area of bilateral governance, the Chinese Government has consistently advocated the peaceful resolution of the South China Sea issue through bilateral negotiations, and is also happy to carry out cooperation in the maritime field through consultation between the two sides.Since the early 1990s, China has established a number of bilateral consultation mechanisms with coastal states in the South China Sea, including Vietnam, the Philippines, Malaysia, Brunei and Indonesia. And the issue of environmental protection in the South China Sea is also an important issue in bilateral governance.

In the area of multilateral governance, in 2002, China and the 10 ASEAN member states formally signed the Declaration of the Conduct of Parties in the South China Sea(DOC) , which is also the first political document signed by China and ASEAN member states on the South China Sea issue. Since the signing of the DOC, China and ASEAN member states have actively implemented the purposes and principles set out in the DOC and the practical maritime cooperation arrangements advocated by it, which have played a certain role in promoting the stabilisation and improvement of the environment in the South China Sea. In recent years, new situations and problems have emerged in the environmental field of the South China Sea, and there is an urgent need to formulate new rules based on the implementation of the DOC, namely, the Code of Conduct in the South China Sea (COC).

The problem is that, on the one hand, the existing governance mechanisms are unable to address the new circumstances and problems that have arisen in the South China Sea, such as the changes in the marine environment of the South China Sea as a result of climate change, which have led to the destruction of biodiversity and the consequent impact on fishery resources. The emergence and impact of such problems are not limited to the two states, and cannot be effectively dealt with and resolved by the existing governance mechanism alone. On the other hand, the existing governance mechanism is characterised by many initiatives but little implementation, and has long been in the predicament of “many consensus but difficult to promote”. [6]Moreover, due to the diversity of subjects and the complexity of geopolitics, no governance cooperation mechanism has yet been formed specifically for the South China Sea environment.

## **4. Suggestions and Prospects for Establishing a New Environmental Governance Mechanism in the South China Sea**

### **4.1 Policy Recommendations**

At the domestic level, China should adhere to the centralised and unified leadership of the CPC Central Committee over national security work and improve the efficient and authoritative national security leadership system. China should make environmental security governance in the South China Sea an integral part of its national security system, with multi-sectoral liaison for environmental governance in the South China Sea. While focusing on its own environmental protection work, China should also pay attention to the direction of public opinion in its neighbourhood and in the international arena, so as to prevent some states from taking this opportunity to accuse China of environmental protection problems.

At the international level, China focuses on a strategy that combines multilateral and bilateral cooperation, and grasps ASEAN as an important subject. The “maritime community with a shared future” should be regarded as important diplomatic concepts, and China’s concept of environmental security in the South China Sea should be actively advocated and systematically elaborated, so as to encourage coastal states in the South China Sea and the international community to build up a common consensus on environmental security. In response to the new circumstances and problems in the South China Sea environment, we should gather the strength of many parties to discuss solutions and build a green and safe environment in the South China Sea.

## 4.2 Laws and Regulations Recommendations

At the domestic level, China needs to strengthen the construction and implementation of domestic sea-related environmental protection laws and regulations, and promote the construction of regional rules from the perspective of domestic law.

For example, the revision of the Marine Environmental Protection Law of the People's Republic of China has provided legal protection for domestic law enforcement responses and solutions to environmental pollution and ecological damage in the South China Sea caused by or likely to be caused by oil exploitation, industrial emissions and other reasons in the coastal states in the South China Sea. China should take this opportunity to further improve the rule of law system for national environmental security in China.

At the international level, as the main hand and focus of China and ASEAN member states to strengthen cooperation and control the situation in the South China Sea, China should actively promote and grasp the COC consultations, through which it can establish an environmental security order based on international law on environmental security issues in the South China Sea. By creating an effective rule system with regional characteristics that meets the actual needs of the region, China will explore a road of environmental protection in the South China Sea with Asian characteristics.

## 4.3 Institution Recommendations

At the domestic level, domestic legislation has been adopted to implement the “summer sea fishing moratorium” in the South China Sea, to strengthen cooperation in fisheries protection and marine aquaculture, to protect the ecological balance of the South China Sea and to achieve sustainable development of the marine economy.

At the international level, due to the complexity, widespread impact and difficulty of environmental pollution and ecological damage, it is difficult to achieve the desired effective results of environmental governance through bilateral cooperation alone. Therefore, multilateral cooperation will play an irreplaceable role in the process of environmental governance in the South China Sea. The coastal states in the South China Sea can jointly set up institutions and platforms for cooperation in the field of environment in the South China Sea, such as the “South China Sea Environmental Protection Council”. In the light of the actual situation, each state could establish a special fund for marine environmental protection in the South China Sea, relying on the existing financial guarantee mechanism for sea-related cooperation in the South China Sea region, and promote the completion of the construction of the environmental protection mechanism in the South China Sea independently and autonomously. At the same time, China should promote cooperation among the coastal states in the South China Sea to formulate environmental soft law documents in the South China Sea and gradually form new hard law rules.[7]

## 4.4 Economic development recommendations

At the domestic level, China should actively promote the transformation and upgrading of domestic industries, implement the new development philosophy and optimise the industrial structure. Meanwhile, China should promote the optimisation and upgrading of technology to reduce corporate emissions and energy consumption, and promote the green development of domestic industries.

At the international level, China should seize the opportunity to carry out multilateral consultations and cooperation. China should discuss with the coastal states in the South China Sea on countermeasures for industrial transformation and establish a maritime economic cooperation

mechanism among these states. This mechanism should focus on enhancing maritime connectivity and sharing tourism resources as its main objectives. The coastal states in the South China Sea can fully utilize the rich tourism resources and vast market potential of the region. By connecting port facilities and reorganizing the supply chain, they can develop unique marine tourism projects and routes. This approach also promotes the effective allocation of marine economic resources.[8] At the same time, efforts should be made to explore marine economic cooperation projects, focusing on areas such as marine finance, the promotion and application of marine science and technology, and marine environmental protection. These initiatives aim to promote the establishment of a blue economy partnership. Furthermore, they also aim to foster cooperation in the conservation of marine biodiversity and the sustainable use of oceans and marine resources.

#### 4.5 Energy sector recommendations

At the domestic level, on the one hand, China should rationally explore and develop fossil energy sources, strengthen the technological safeguards for energy development, and guard against the environmental pollution that may result from resource development. On the other hand, at the present stage, China should take advantage of the growing complementarity of various energy sources to create a new mode of cooperation on cross-cutting energy security, namely, “fossil energy + renewable energy”, in accordance with local conditions. China should take advantage of the South China Sea to develop renewable energy sources, develop the oceans and seas in parallel with environmental protection, and alleviate environmental problems while breaking through the bottleneck of energy supply by technological means.

At the international level, China should join hands with ASEAN member states to build an energy community and jointly promote the development and utilisation of renewable energy. In October 2021, ASEAN issued the Joint Statement on the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change, launching the ASEAN Plan of Action on Energy Cooperation (2021-2025). The Plan sets targets to increase the share of renewable energy in the energy mix to 23% and the share of installed renewable energy capacity in the total installed capacity to 35% by 2025.[9]In response, the ASEAN member states have introduced green development strategies to attract clean energy investments and promote a green, low-carbon economic transition.[10]China should seize the opportunity of ASEAN member states to promote the development of clean energy, and attach importance to promoting scientific and technological innovation cooperation, which can provide talent and technical support for neighbouring states and jointly promote the transformation and upgrading of the energy sector in the South China Sea.

#### 5. Conclusion

At this point in history, the opportunities for environmental governance in the South China Sea generally outweigh the challenges. China should face up to the challenges and deal with them calmly, so as to “maintain stability in the midst of chaos and seize opportunities in the midst of change”. Based on the actual situation and problems facing the South China Sea environment, China should improve and innovate the South China Sea environmental governance mechanism, and vigorously promote the interaction between bilateral and multilateral strategies. Through cooperation in the above areas, we will find a new path for environmental governance in the South China Sea, so as to safeguard China's environmental security and related rights and interests in the South China Sea.

## References

- [1] Ren Yuanzhe, Wang Jing. (2021). *Ecological and Environmental Cooperation in the South China Sea: Mechanism Building and China's Role*. *Southeast Asian Affairs*, 4, 82-98.
- [2] Zhang Qiang, Lv Fuliang, He Xiaosu, Wang Bin, Sun Guozhong. (2018). *Progress and Insights of Oil and Gas Exploration in the South China Sea in the Past 5 Years*. *China Petroleum Exploration*, 1, 54-61.
- [3] Xue Guifang. (2019). *Construction of China-ASEAN Cooperation Mechanism for Marine Environmental Protection in the South China Sea under the Threshold of "The Belt and Road"*. *Journal of Political Science and Law*, 6, 74-87.
- [4] Zhang Junjue, Su Fenzhen, Wang Wenyue. (2018). *A Review of Research on the Environmental Geography of Resources in the South China Sea*. *Progress in Geography*, 11, 1443-1453.
- [5] Ministry of National Security. (2024). *The So-called "Environmental Protection" is Actually "Trade Protection", Beware of the Political Conspiracy Behind It*. [https://www.thepaper.cn/newsDetail\\_forward\\_26207929#](https://www.thepaper.cn/newsDetail_forward_26207929#)
- [6] Wu Shicun. (2021). *Advancing Cooperation in the South China Sea through Regional Multilateralism*. <https://opinion.huanqiu.com/article/433kwXL0j9L>
- [7] Bai Jiayu. (2020). *Research on Environmental Governance Cooperation Mechanisms in the South China Sea - A Comparative Perspective with Arctic Environmental Protection Mechanisms*. *Journal of Ocean University of China (Social Sciences)*, 3, 21-31.
- [8] Xinhua News Agency. (2018). *Participants: "Pan-South China Sea Economic Cooperation" Helps Prosperity and Stability in the South China Sea*. [https://www.gov.cn/xinwen/2018-04/12/content\\_5281802.htm](https://www.gov.cn/xinwen/2018-04/12/content_5281802.htm)
- [9] ADC. (2020). *ASEAN Plan of Action for Energy Cooperation (APAEC) 2016-2025 phase II: 2021-2025*. <https://aseanenergy.org/asean-plan-of-action-and-energy-cooperation-apaec-phase-ii-2021-2025>.
- [10] Wang Qin. (2024). *Trends and Implications of ASEAN-7 Participation in the Indo-Pacific Economic Framework (IPEF) - Based on the Perspective of China-ASEAN Economic Relationships*. *Asia-Pacific Economic Review*, 3, 31-39.