国立国会図書館 調査及び立法考査局

Research and Legislative Reference Bureau
National Diet Library

論題 Title	Summary
他言語論題 Title in other language	Summary
著者 / 所属 Author(s)	国立国会図書館調査及び立法考査局
書名 Title of Book	海洋をめぐる動向と課題　科学技術に関する調査プロジェクト報告書（Trends and Issues in Ocean Affairs）
シリーズ Series	調査資料 2024-5（Research Materials 2024-5）
編集 Editor	国立国会図書館 調査及び立法考査局
発行 Publisher	国立国会図書館
刊行日 Issue Date	2025-3-27
ページ Pages	155-158
ISBN	978-4-87582-938-6
本文の言語 Language	英語（English）
摘要 Abstract	—

Summary

Chapter 1 The Basic Plan on Ocean Policy and the Current State of Japan's Ocean Policy

LAWLER Mika

(Senior Specialist, Chief of Education, Culture, Science and Technology Research Service, Research and Legislative Reference Bureau, National Diet Library)

Since ocean policy must address a wide range of issues, the-whole-of-government approach is needed to advance it in a comprehensive and coordinated manner. In Japan, a series of Basic Plans on Ocean Policy has been formulated in accordance with the Basic Act on Ocean Policy, and the current Fourth Basic Plan on Ocean Policy was approved by the Cabinet in April 2023. Overseas, the U.K. National Strategy for Maritime Security and the U.S. National Strategy for the Arctic Region were released in 2022. These three ocean policies were each developed in the context of the recent security environment and the impact of climate change, and it is noticeable that three countries have adopted numerous similar measures. And although the methods differ, each of these policies were developed through cross-governmental coordination. This paper summarizes the history and status of Japan's four Basic Plans on Ocean Policy, and then presents an overview of the UK and US policies from 2022. In particular, the challenges of developing and implementing ocean policy, such as inter-agency correlation, identification of priority measures, and improved dissemination of information, are discussed.

Chapter 2 Efforts Being Made to Conserve the Land and Develop a Base for Marine Development in Okinotorishima and Minamitorishima

UCHIDA Tatsuo

(Senior Specialist, Chief of Land Development and Communication Research Service, Research and Legislative Reference Bureau, National Diet Library)

Japan's large number of remote islands provide it with exclusive economic zones (EEZ) covering a total area of 4.47 million km^2. In particular, the Okinotorishima EEZ and the Minamitorishima EEZ are each larger than 400,000 km^2.

The Japanese Government has been developing port facilities at both locations since fiscal 2010. Given the danger of Okinotorishima collapsing into the sea due to high waves and other environmental factors, the Government has been directly carrying out conservation work since fiscal 1987, with the Fisheries Agency continuously working to increase the coral reefs since fiscal 2006.

The construction of port facilities at Okinotorishima is taking significantly more time than initially anticipated, and construction costs are rising. Rising sea levels and increasing temperatures are also a concern. Regarding Minamitorishima, it is hoped that the port facilities will be made available to a wide range of relevant organizations as needed.

Chapter 3 **Worldwide and Japanese Trends in Marine Energy and Mineral Resources as well as Marine Renewable Energy**

YAMAGUCHI Satoshi

(Researcher, Economy, Trade and Industry Division,
Research and Legislative Reference Bureau, National Diet Library)

Japan has been a world leader in the development of marine energy and mineral resources, such as polymetallic sulphides and gas hydrates, but has yet to commercialize these resources within its territorial waters and EEZ. Outside Japan, while exploration for polymetallic nodules in the Area is expanding, there is also a growing movement to call for a moratorium on deep-sea mining due to its potential environmental impact. In the field of marine renewable energy, while the introduction of bottom-fixed offshore wind turbines as well as the commercialization of floating offshore wind turbines and tidal current turbines are progressing in Europe and China, Japan has lagged behind in commercialization of these fields.

Japan's efforts in these areas have yet to come to fruition. While problems with national planning, delays in institutional arrangements for development, and other policy issues have been pointed out, it will also be important to keep a close eye on the policies, technological developments, and market trends of countries around the world.

Chapter 4 **Arctic Ocean Observational Research**

INO Chihiro

(Researcher, Education, Culture, Science and Technology Research Service,
Research and Legislative Reference Bureau, National Diet Library)

The Arctic has become increasingly important worldwide due to the effects of climate change, the potential for resource development, and the use of sea routes. Trends in the Arctic region that could have a major impact on Japan's society and economy include the negative effects of extreme weather conditions and changing fishery resources brought on by climate change in the Arctic as well as the benefits of developing sea routes and energy resources.

Although Japan does not have a coastline on the Arctic Ocean, it does play an important role in providing scientific knowledge, and conducts a wide variety of Arctic Ocean observational research since the 1990s. Observational methodology includes the use of ships, moorings, drifting buoys, underwater robots, and satellites. Each of these methods has advantages and disadvantages, and effective observation is achieved through the combined use of each. This observation data also contributes directed to society, for example, by serving as sea ice information for use in ship navigation. Challenges to be faced in future Arctic research include the need to respond to changes in scientific cooperation with Russia and the education of domestic and overseas researchers. Japan plans to further develop Arctic Ocean observational research by building new arctic research vessels, developing new satellites, and operating them. And it is hoped that the knowledge gained from this research will be widely used by the international community.

Chapter 5 **Ocean Policy of the U.S.: Promotion of Ocean Science and Technology R&D**

OKAMURA Koichiro

(Professor, School of Business Administration, Kwansei Gakuin University/
Senior Consultant, Education, Culture, Science and Technology Research Service,
Research and Legislative Reference Bureau, National Diet Library)

Since the 2000s, the United States has strengthened interagency cooperation and developed a comprehensive policy framework aimed at the sustainable use of resources, environmental conservation, and security. In recent years, while the importance of ocean policy has been increasing, the direction of ocean policy has changed between the Obama administration, which promoted a comprehensive ocean policy and emphasized science and technology; the first Trump administration, which prioritized economic activity and energy development; and the Biden administration, which reorganized ocean policy to make it sustainable by emphasizing environmental issues and climate change measures.

Today, U.S. ocean policy is led by the Office of Science and Technology Policy and the National Science and Technology Council of the presidential executive branch, and the main ministries and agencies involved in science and technology include the National Oceanic and Atmospheric Administration, which is responsible for ocean observation and environmental conservation; the National Science Foundation, which supports basic research; the Department of Energy, which develops energy technology; and the Office of Naval Research, which promotes naval research.

It is expected that future ocean policy will continue to develop while balancing ocean environment protection, climate change measures, and economic activity, while being influenced by each administration.

Chapter 6 **Key Issues Surrounding Values in Ocean Governance**

KISHIMOTO Atsuo

(Professor, D3 Center, Osaka University/
Director, Research Center on Ethical, Legal and Social Issues, Osaka University/
Senior Consultant, Education, Culture, Science and Technology Research Service,
Research and Legislative Reference Bureau, National Diet Library)

The ocean plays diverse roles for humanity, including as a source of food, resources, energy, transportation, and recreation. In recent years, its importance and complexity have increased due to climate change, population growth, and geopolitical shifts. At the same time, its high potential has gained attention through concepts like the “Blue Economy” and the resulting “Blue Growth”. In international ocean governance, values such as equity, justice, and inclusivity are emphasized, particularly centered around the Sustainable Development Goals (SDGs). Concepts like “Blue Justice” and “Ocean Equity” have emerged, shedding light on the voices of groups that have been marginalized and, at times, excluded. While ocean governance often focuses on scientific and technological aspects, insights from humanities and social sciences have become indispensable. Ethical norms and social inclusion are key to governing the globally connected oceans.