The Assessment of Environment Protection Cooperation in the South China Sea

Ignatius Agung Satyawan[1]

[1] Department of International Relations and ASEAN Study Centre, Universitas Sebelas Maret, Indonesia

agungsatyawan@staff.uns.ac.id

Abstract. Located in a strategic position and geopolitics significance, the South China Sea is rich of biodiversity so it has abundance of fish stock to sustain food security among people in the coastal states. Since the increase of urbanization along the coastal area, pollution becomes inevitable. The South China Sea is also a hot-spot in the world because it is claimed either in part or in whole by six states namely China, Taiwan, Vietnam, Malaysia, the Philippine and Brunei. In addition, the hot-spot and climate change phenomena exacerbate environment degradation. This article asses cooperation among parties to address environment protection in the South China Sea since 1990's. Using historical perspective and qualitative approach and also utilizing primary and secondary sources, this article finds that cooperation carried out by several parties both informally and formally has not been maximized. However, this cooperation is able to become a confidence building measure to ease tensions and enable as an entry-point for political solution.

Keywords: South China Sea, environment, maritime issue

1 Introduction

The South China Sea (SCS), a semi enclosed sea, is a body of water surrounded by China, Taiwan, the Philippines, Malaysia, Brunei, Indonesia, Vietnam, Singapore, Thailand and Cambodia. Spanning 3.5 million square kilometres [1], this sea is rich of marine resources, biodiversity and also the most important of sea route for trade and communications. Approximately $5.3 trillion worth of trade passes through it every year. The SCS also home of 571 coral species, 3365 species of fishes, 1500 species of sponges, and more than 45 mangrove species [1].

The SCS is well-known as one of the hot-spot area in the world. China, Taiwan, Brunei, Vietnam, Malaysia and the Philippines are claim all or partial of sovereignty of area of the sea as well as its jurisdiction demarcation. Military skirmish and diplomatic spat sometimes occur among the claimants. Therefore, many parties reluctant to start doing cooperation on joint development including environment preservation as interim solution to solve the conflict.

Countries surrounding the SCS have tremendous economic growth, especially China and Taiwan. Cities along the coast-line such as Guangzhou, Ho Chi Minh, Bangkok, Jakarta and Manila more populated if compare to the last decade. Of course, the

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consequences of economic growth and population density accompany with deforestation have impact to environment degradation in the SCS. It was estimated that the mangrove forest loss rates in each country surrounding the SCS ranged from around 0.5 to 3.5% of the total area per annum [1] as well as, 82% of the coral reefs evidence of degradation. Another estimation mention that 70% mangrove forest has been lost to the land reclamation or become pond aquaculture [2]. Approximately 50% of seagrass also damaged due to destructive fishing [3]. It was noted, 46% coral reef in poor condition and 14% in critical condition [4].

To date, environment condition of the SCS exacerbate by climate change effects and Covid-19 pandemic. Flood, rising sea level and global warming damage mangrove forest along the coast and bleach coral reef. Many parties as a result of Covid-19 abandoned their cooperation activities in the SCS [5].

Figure 1 South China Sea map [6]

This article asses cooperation carried out by many actors from littoral countries to cope environment degradation of the SCS. Actors of the cooperation can be state or non-state conducted on formal or non-formal manners. The next section discusses method of investigation and followed by finding and discussion. The last section presents a conclusion of the research.

2 Methods

This research applies descriptive qualitative method with historical perspective, so it only describes certain phenomena on environment cooperation in the SCS. Using library research techniques, data are collected through literature and document inquiry and analysed by conducting interpretative procedure.

3 Result and Discussion

3.1. **Informal cooperation**

Informal cooperation is the result of informal meetings/dialogues known as Track Two Diplomacy. The participants in the dialogue do not represent their country but present on their own personal capacity, so they are more open to the new ideas from other participants. These new ideas will be more easily to transform into concrete actions and can even be raised to a formal level [7].

Since 1990, Indonesia has carried out a series of informal meetings, namely the Workshop on Managing Conflict in South China, which was funded by the Canadian International Development Agency. Under leadership of Indonesian diplomat and expert of international law of the sea Hasjim Djalal and Ian Townsend-Gault, the workshop which designed as annual meeting, invited participants from member of ASEAN states plus China and Taiwan. In the informal meeting, it enables China and Taiwan sit together at the same table.

Since beginning, the Workshop paid attention on environment issues. As a result, at the 11th Workshop in 2001, participants agreed to conduct scientific marine research called Anambas Expedition. The expedition was the first cooperation activity conducted on March 2002 in Anambas and Natuna water. This expedition had two purposes. The first was promoting spirit of cooperation among marine scientist participants and the second was establishing scientific collection of the biological specimens for further studies of biodiversity and other relevant researches. The expedition collected approximately 300 kilogram of biological specimen consisting of about 1000 species of various marine organisms from 60 sites including fish, crabs, shrimps, squids, octopus, and worms [8]. It discovered eleven new species that had never been identified before [9].

Success story of Anambas Expedition, ignited participant from the Philippines to propose Anambas Expedition expanded including Palawan water in the following year. At the 13th Workshop in 2003, the Workshop mandated the Philippines to take responsible for Palawan Expedition. Due to promulgated of United Nations Convention Law of the Sea (UNCLOS) which stipulates that states surrounding semi enclosed water like the SCS should cooperate to preserve their environment, the Philippines has changed the platform of cooperation. It upgraded the mandate for conducting marine scientific expedition from informal to formal level and changed the name became Exercise Luzon Sea and was held in March 2004. The scope of this expedition was not only in the waters of Palawan but also included the waters of Luzon Island.

3.2. **Formal cooperation**

This section discuses formal cooperation that means member of participants of cooperation are states. Some examples of formal cooperation such as COBSEA, PEMSEA, JOMSRE, ASEAN-China cooperation is examined in brief below.

The Coordinating Body for the Seas of East Asia (COBSEA) is a regional intergovernmental mechanism functioning as decision making for its member includes Cambodia, China, Indonesia, Republic of Korea, Malaysia, the Philippines, Thailand, Singapore and Viet Nam in protection and sustainable development of the marine and coastal environment. Concerning the SCS, COBSEA implemented Global Environment Capacity/ UN Environment Program (GEF/UNEP) under project Reversing the Environmental Degradation Trend in the South China Sea and Gulf of Thailand in 2002 to 2008. The output of this project was adoption of the SCS Strategic Action Program as a framework for cooperation in preserving and protecting mangroves, coral reefs, seagrasses and wetlands as well as prevention of land-based pollution and conservation of fish stocks [3].

Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) as the second formal cooperation is a regional coordinating mechanism for the sustainable development of coastal and marine areas in the East Asian Seas region. PEMSEA started in 1993 under domain of United Nation Development Program (UNDP) which implemented project namely the Prevention and Management of Marine Pollution in the East Asian Seas and continued with Building Partnership for Environmental Protection project from 1999 to 2007 as an implementation of Sustainable Development Strategy for the East Asian Seas (SDS-EAS). Member of PEMSEA consisted of countries partner such as Indonesia, China, Republic of Korea, Japan, Vietnam and the Philippines, as well as non-countries partner mostly were international non-governmental organization.

Bilateral formal cooperation as the third example conducted since mid of 1990s. Vietnam and the Philippines carried out bilateral cooperation to established management mechanism for marine resources in the SCS under the name Join to Oceanographic Marine Scientific Research (JOMSRE). This cooperation begun in 1996 to 2007 and divided into four phases. The first phase conducted in 1996, second phase in 2000, the third and the fourth phase in 2005 and 2007 respectively. Marine scientists from the two countries were working together cruising various spots in the SCS, especially in the water of Spratly Islands. It was noted, the two countries intended to expand its membership included member of ASEAN and China. The scientists found that densities and stocks of the marine species related to coral reefs have been drastically reduced as well as the biomass of fish species [10].

The fourth cooperation is between ASEAN and China. Based on Declaration of Conduct of Parties in the South China Sea signed in 2002, ASEAN and China established cooperation in protecting and conservating marine biodiversity in the SCS. Started in 2004, ASEAN-China opened Dialogue on Environmental Policies and agreed this issue was part of Plans of Action to Implement the Joint Declaration on ASEAN-China Strategic Partnership for Peace and Prosperity [3]. The two parties adopted China-ASEAN Strategy on Environmental Protection Cooperation 2009–2015.

Based on description of cooperations mentioned above, many parties included scientists, states/countries and non-governmental organization have tried to combat

environment degradation in the SCS. However, these efforts were not optimal since the cooperation mostly took place in coastal areas. Due to the dispute of sovereignty and overlapping jurisdiction, it was limited cooperation took place in off-shore area.

4 Conclusions

The SCS is a strategic area connected Indian and Pacific Ocean as well as China and Southeast Asia region. Therefore, the SCS is one of busiest sea lanes and communication in the world. Besides that, the SCS has rich of resources both living and non-living. The vast area of the SCS is home for rich marine species especially fish that important to fulfil nutrition for people living surround of the SCS. In fact, in recent decades, environment condition of the SCS suffer from degradation due to population density in the coastal of the SCS, sedimentation and pollution.

Efforts to improve environmental conditions and maintain living species have been made by many parties, both informally and formally. Although all these efforts are very useful for reducing environmental degradation in the SCS, the results are not optimal because there are still many areas, especially in off-shore areas which are disputed by countries regarding sovereignty and overlapping claim of jurisdiction, are lack as object for cooperation.

Although various cooperation in the field of marine environmental conservation that has been carried out has not brought optimal results, this cooperation has had a conducive impact. It could be establishing confidence building measure for reducing conflict tensions in the SCS. Non-sensitive areas of cooperation such as environmental issues can be accepted by all parties, so it is hoped that it can spread to other areas including economics and politics. The contribution of cooperation in the environmental field can pave the way for conflict resolution in the SCS.

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