The assessment of environment protection cooperation in the South China Sea

Ignatius Agung Satyawan*

International Relations Department and Centre for ASEAN Study, Sebelas Maret University, Indonesia

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 area. 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.

1 Introduction

The South China Sea (SCS), a semi enclosed sea, is the water area surrounded by ten countries, namely Indonesia, Singapore, Malaysia, Thailand, the Philippines, Brunei, Cambodia, Vietnam, China and Taiwan. Spanning 3.5 million square kilometres [1], this sea is rich of marine resources, biodiversity, non-living resources especially oil dan natural gas 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.

* Corresponding author: agungsatyawan@staff.uns.ac.id

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 are more populated if compare to the last decade. Of course, the consequences of economic growth and population density accompany with deforestation have impact to environment degradation in the SCS. It was predicted the loss rate of mangrove forest around 0.5 to 3.5% every year in each country surrounding the SCS. [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]. In addition, marine plastic pollution damages ecosystem of the SCS and poisoning food supply chain that endangers for human health [6,7]. Moreover, since 2010s China made reclamation and built artificial island in the Spratly Islands destroyed marine habitat permanently [8].

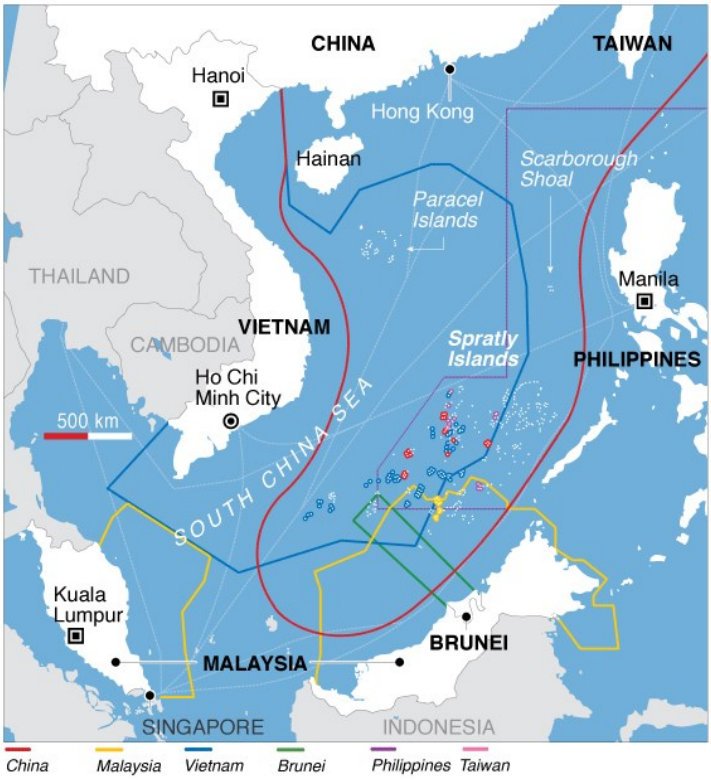

Fig. 1. South China Sea overlapping claim map [9]

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 it discusses method of investigation and followed by finding and discussion. The last section presents a conclusion of the research.

2 Method

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 Finding 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 [10,11].

Since 1990, Indonesia has carried out serial 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 enabled China and Taiwan sat together at the same table [12].

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 collection of biological samples for further studies on biodiversity and other relevant sciences [12]. The expedition succeeded in collecting 300 kilograms of biological samples consisting of 1000 species of various marine organisms from 60 sampling points. Organisms found include: shrimps, crabs, octopus, fish, worms and [13]. It was noted, the expedition found eleven new species that had never been identified before [14].

Success story of Anambas Expedition, ignited participant from the Philippines to propose Anambas Expedition expanded including Palawan Island waters in the next 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.

It was noted that the two cooperations succeeded in promoting dialogue and exchanged knowledge among marine scientists from the conflicting countries. While avoiding sensitive overlapping claim area, the cooperation took place only in the water under jurisdiction of the participants' country.

3.2 Formal cooperation

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

The Coordinating Body for the Seas of East Asia (COBSEA) is a mechanism of regional intergovernmental functioning as decision making for its member includes Cambodia, China, Indonesia, Republic of Korea, Malaysia, the Philippines, Thailand, Singapore and Viet Nam in protecting and sustaining 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 coral reefs, mangroves, wetlands and seagrasses as well as preventing of land-based pollution and conservating of fish stocks [3]. Though having a lot of participants, COBSEA lacked of trust among them due to take place in sensitive area, so the result was not effective [15,16].

Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) as the second formal cooperation is a mechanism for regional coordination on sustainable development of marine and coastal region in the East Asian Seas region. PEMSEA started in 1993 under domain of the 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, Japan, China, Vietnam, Republic of Korea, and the Philippines, as well as non-countries partner mostly were international non-governmental organization. The partnership built by PEMSEA involving government and non-government organizations has been running but cannot be said to be optimal because it is not yet effective in managing fisheries depletion [16] or preventing environmental damage due to reclamation and the creation of artificial islands.

Bilateral formal cooperation as the third example conducted since mid of 1990s. Vietnam and the Philippines carried out bilateral cooperation to establish management mechanism for marine resources in the SCS under the name Join to Oceanographic Marine Scientific Research (JOMSRE). This cooperation started in 1996 to 2007 and consisted of four stages. The first stage conducted in 1996, the second in 2000, the third and the fourth stages in 2005 and 2007 respectively. Marine experts from the two countries collaborated on exploring various spots in the SCS, especially in the Spratly Islands water. It was noted, the two countries intended to expand its membership included all members of ASEAN and China. The experts found that stocks and densities of the marine species related to coral reefs have been reduced drastically as well as the biomass of fish species [17]. However, this finding has not yet found a solution on how to overcome it.

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. In fact, ASEAN members are less united in facing China. Some members are likely pro to China and others are more critical. Among ASEAN members themselves, there has been no significant progress in implementing marine environment protection [18].

4 Conclusion

Based on description of cooperations mentioned above, many parties included scientists from countries and non-governmental organization surrounding the SCS have tried to combat environment degradation. However, these efforts were not optimal since the reduction of environment degradation has not shown significant results.

Secondly, due to the conflict of overlapping claim and sovereignty of the SCS, littoral countries are still distrust each other in conducting cooperation. This condition has an impact on the achievement of less effective on cooperation results.

Thirdly, although the cooperations are not optimal, it has a conducive impact. It could be establishing confidence building measure for reducing tensions in the SCS. Therefore, it enables to pave the way for conflict resolution in the SCS.

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