

THE ROLE OF 4OCEAN IN CLEANING UP OF MARINE DEBRIS IN BALI IN 2022-2023

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ABSTRACT

The garbage piled up in the ocean can be caused by household waste and increasing marine tourism and shipping activities. The increase of marine debris is an international case because it has impacted the global climate crisis resulting in the damage of marine ecosystems. Those large impacts caused by pollution in the ocean prompted many parties to make regulations regarding the marine debris crisis. In carrying out its project, 4ocean cleans up the garbage by transporting it from rivers, coasts, and the ocean, then brings it to the land and processes it into recycled products. The 4Ocean teams work using environmentally friendly equipment. 4Ocean cleans the ocean by removing around one million pounds of garbage every month. This project can help the government tackle the marine waste crisis. The method used in this research is a literature study where the author collects data through previous writings and searches for data from the internet. This research aims to look at the role of international organizations as one of the actors in international relations in dealing with the waste crisis.

INTRODUCTION

Indonesia is an archipelagic country that offers enchanting marine beauty and biodiversity, therefore attracting many domestic and foreign tourists to come and enjoy the Indonesian sea. The beauty of the sea is utilized by the local government for economic growth through the tourism sector. The sea is also home to a lot of life, both humans and marine biota. (Palupi, 2022)

Bali is one of the provinces in Indonesia which has its attraction for the sea. Therefore, Bali gets a lot of visits from tourism enthusiasts, both cultural tourism and what attracts the most interest is beach

and sea tourism. As maritime tourism increases, the increase in marine debris also increases. Although it cannot be denied, marine debris is not only produced by tourist activities. Garbage in the ocean can come from land due to human activities, for example, household activities produce a lot of waste. Household waste is one of the largest contributors to waste every day. The rubbish is then washed away through waterways, whether through streams, rivers, or lakes, and finally ends up in the ocean. This rubbish is what makes the sea polluted, compounded by shipping activities. Bali, which offers an enchanting sea, opens up opportunities for more and more ships to

sail and operate in this area to enjoy views of the open sea and also enjoy the charm of the underwater world.

As a maritime country, Indonesia is open to shipping traffic. This shipping activity is also a source of marine pollution. Universally, shipping activities are one of the producers of marine waste, so it has become a global concern to create regulations and a legal basis for the international shipping industry, especially in the aspect of protecting and preventing possible pollution in the ocean. According to research conducted by Jambeck, Indonesia is the second-highest waste-producing country after China. (Jambeck et al., 2015) Pollution in the ocean which increases every year has prompted the IMO (International Maritime Organization) to make regulations regarding the causes and prevention of pollution that occurs in the sea. Pollution caused by shipping activities can cause a decline in the balance of the marine ecosystem and can even impact humans.

The large amount of rubbish and oil waste that is thrown into the sea can cause the phenomenon of ocean acidification due to a decrease in the pH of seawater. (Executive et al., 2021) Marine biota that is contaminated by marine pollution can be contaminated, for example, fish that have been contaminated are consumed by humans so humans can also be contaminated and even poisoned. For this reason, the IMO created a convention on pollution that occurs at sea, specifically for ships crossing the sea, namely the International Convention on the Prevention of Pollution from Ships or the International Convention on the Prevention of Pollution from Ship Waste. This convention is called Marpol or Marine Pollution.

Marine Pollution was created so that shipping activities can also preserve the sea and the ecosystems in the ocean. Unfortunately, not all shipping companies or individuals involved in the world of shipping comply with the regulations contained in Marpol 73/78 Annex V. According to research conducted by Rudi and Asrin in their journal entitled Analisis Pemahaman Anak Buah Kapal Tentang Pengelolaan Sampah Di Atas Kapal Dalam Upaya Pencegahan Pencemaran Laut, not all ship's

crew members know about the regulations contained in Marpol 73/78 Annex V. The position of Chef whose work produces a lot of food waste on board is very lacking in understanding the implementation of Marpol 73/78 Annex V. (Sitorus & Siahaan, 2021)

The polluted and worrying condition of Bali's sea has made two American surfers determined to clean up marine debris. They then founded an organization called 4Ocean. 4Ocean is an organization that cleans up trash in the ocean. The large amount of land waste that flows into the ocean, combined with the existence of shipping companies that do not comply with waste disposal regulations, has resulted in increasingly large amounts of waste piling up in the ocean. 4Ocean then cleans up the trash in the ocean by employing people to clean up the trash in the ocean, such as ship captains and trash cleaners. The waste is then taken to land and recycled and then made into various products. Even though it cannot completely clean up all the trash in the ocean, 4Ocean's role is at least to reduce pollution in the ocean due to the increasing amount of trash entering the ocean caused by humans and shipping activities. This journal will focus on the role of 4Ocean in cleaning up rubbish in the sea, especially in several areas in Bali, using international organization theory and also green political theory.

This research employs International organization theoretical framework to capturing the role of 4Ocean as international actors, on case study of cleaning up marine debris in Bali, Indonesia. To understand the importance of maintaining natural ecosystem particularly marine biodiversity and its impact to global ecosystem, which also affecting global politics, this research uses Green Political Theory (GPT) approach to support the International Organization Theory.

METHOD

Theoretical framework:

1. International Organization

An international organization is a group of countries that found an alliance with the same purpose. However thereby not all international organizations are

alliances from some countries but many of them are also formed by individuals with international scope. Sometimes international organization is not considered important by the country because the country still becomes the main actor in politics however. Although this, international organizations hold an important role in international relations. International organizations sometimes still become permanent state instruments that follow state influence and the form of the country because the country is a law subject which makes the international organization. (Mathematics, 2016)

International organizations have been starting to make an important contribution to the world of international relations dynamics since the 19th century, then become a big factor in international relations along with the appearance of many other new international organizations consequence of the development of the globalization era. International organizations started developing rapidly during the world war. The moment of war conditions made countries think about finishing their problem in a conducive way not through war. After World War II, many countries became independent consequence of decolonization these countries rallied strength together with form organization. At this time international organizations develop more rapidly supported by development technology which is also increasing.

Modern international organization is classified into two, namely Intergovernmental Organizations (IGOs) and also International Non-Governmental Organizations (NGOs). IGOs are organizations based on international government while NGOs are organizations based on Non-Governmental Organizations (NGOs). Although based country international organizations are more dominant in diplomacy by a country, it doesn't become a barrier to the importance of international organization-based non-governmental organizations especially in

the era of globalization like nowadays. (Setiawan, 2021)

The international organization is considered important to help the country run its important functions. One of the functions is to become a bridge to change policy become action. In international relations, functions, and objectives carried out by the international organization show what they want to do and will be influenced by the role played. International organization also has an important role in the field of international organization itself, for example the World Trade Organization (WTO) plays a role in arranging the run of the trading process, apart from that there is the organization United Nations Children's Fund (UNICEF), The role of this organization is for protection and welfare children, There are many others international organization like international organization which has role in sustainability environment like Greenpeace, Waste4change and what will be discussed in this article is the 4Ocean organization that cares to rubbish and cleanliness sea.

4Ocean is an organization based on a Non-Governmental Organization, founded in Bali by two United States citizen surfers. The goal is to clean the trash in the sea and then process it to become valuable various types of products.

2. Green Political Theory (GPT)

Before the era of modernization, people were afraid of nature, but in this modern era, humans emphasize the ability to conquer nature. The green perspective then restructures various aspects such as consumerism to a world order based on the exploitation of nature by certain groups. One of the issues raised by green political theory is how social-environmental relations are not only important for humans but are also constitutive. (Barry, 2014)

There are several current issues facing our environment, including global warming, food waste, loss of biodiversity, plastic waste pollution, deforestation, air pollution, melting ice sheets and rising

sea levels, ocean acidification, food and water insecurity, textile waste and also overfishing. (Karmagatri, 2023) All of these actions can damage the environment and are also acts of environmental exploitation. The issue of the climate crisis has become a global topic of conversation and is often on the agenda discussed at international meetings. Climate change (global change), global warming, and ozone layer depletion have become important agendas in international environmental politics. (Sitti Nurbaya, 2018)

Environmental politics has two main pillars. The first is the limited resources on earth and the second is the relationship between humans and non-humans or the natural environment. These two pillars ultimately become the driving force for reviewing the economic, social, and political policies that have been implemented so far.

In international relations, green theory is called *Green International Relations Theory*. Its characteristics are almost the same as other international relations theories. *Green Politics Theory* focuses on the increasingly severe environmental crisis. *Green Politics Theory* assumes that when humans maintain environmental balance they will be able to save the environment from crisis so that they can protect humans themselves. Therefore, sustainable efforts for protection are one of the targets of this theory. (Yusran & Asnelly, 2017)

4Ocean is an organization and company that runs its business based on green political theory. In cleaning up trash in the ocean, 4Ocean utilizes advanced technology but still uses tools that are friendly to the marine environment so that it does not disturb the marine ecosystem. The waste produced is then processed into environmentally friendly products, thereby reducing the accumulation of waste which can lead to the climate crisis. Waste is a long-term threat to environmental sustainability. 4Ocean turns waste into products with economic value. 4Ocean contributes to the

community's economic growth while maintaining environmental sustainability.

Literature Study

The author uses several previous studies to obtain information about the support of an international organization called 4Ocean for preserving the marine environment by routinely cleaning up marine debris.

The first literature study was a thesis written by Dyah Ratna Adhelya entitled *Peran 4ocean dalam Menangani Krisis Sampah Plastik di Laut Indonesia Periode 2015-2020*. This thesis discusses the big role of 4Ocean in helping Indonesia reduce plastic waste in the Indonesian seas. Indonesia has worked hard to overcome the marine debris crisis, this is demonstrated by Presidential Decree No. 83 of 2018 concerning marine waste management and making waste a long-term threat, however, these efforts have not been optimal and are still hampered by several problems, so 4Ocean has a big role in helping Indonesia reduce plastic waste in the ocean. This thesis provides the author with a lot of information about the international organization 4Ocean. The similarity with the current research is that it uses the international organization 4Ocean as the main actor in international relations which discusses the role of 4Ocean in reducing the impact of the plastic waste crisis in Indonesian seas, but the periodization is different. This thesis uses the 2015-2020 period, while the author conducted research in the 2022-2023 period. The author chose Bali because Bali is one of the icons of marine tourism in Indonesia. On the other hand, Indonesia is one of the largest archipelagic countries and wants to become a maritime axis, but the sea is polluted with a lot of rubbish. This thesis is supported by theory and understanding of the role of international organizations as well as theories of maritime security and environmental security, different from the author's theory which uses green political theory. This thesis also uses library research methods and qualitative methods. (Dyah & Adhaleya, 2020)

The second literature study is a journal entitled *Perlindungan dan*

Pelestarian Lingkungan Laut Menurut Hukum Internasional, written by Dewa Gede Sudika Mangku and published by Tanjung Pura Law Journal. This journal discusses in detail the protection of the marine environment by international maritime law. According to the author, the issue of marine environmental sustainability, especially in the form of its protection and preservation, has received serious attention in the international world, especially in international law. Through the UN Convention on the Law of the Sea or UNCLOS 1982, maritime defense rules are detailed in its articles. The Law of the Sea Convention has 45 articles that regulate important aspects of marine protection and conservation, such as Article 192 which explains the obligations of states to protect and preserve their marine environment, supported by Article 193 which regulates the protection and conservation of the marine environment. The marine environment is the right of a country to control its maritime resources. Articles 194-196 then state the actions that must be taken by the state to prevent, reduce, and control environmental pollution so that pollution does not move from one area to another. (Mangku, 2020) . What this journal has in common is that it discusses marine environmental protection related to the rules of international maritime law, the Convention on the Law of the Sea or UNCLOS 1982, but this journal discusses in more depth the regulations made by the International Maritime Organization (IMO), which is an organization part of UNCLOS 1982.

The third literature study is a journal entitled Peran Pemerintah dalam Implementasi Kebijakan Lingkungan di Kabupaten Sidoarjo, written by Hanif Rachmad Fauzie. Using green political theory, this journal discusses the inadequate efforts of the government in Sidoarjo Regency to control pollution that has occurred for a long time in the Porong River. This non-maximality can be seen from the government's efforts and role in implementing environmental policies that still do not meet targets. In making decisions, the Sidoarjo Regency government has implemented green political theory by

prioritizing ecocentric aspects, the government has also budgeted for the environment and punished industrial players who neglect environmental sustainability regulations. However, on the other hand, the lack of synergy between regional governments and the central government makes it difficult to balance environmental and economic aspects. The industrialization process with the existence of PT. Pakerin (PabrikKertas Indonesia) has an impact on economic growth, but on the other hand, the existence of this factory has caused pollution to the Porong River, Sidoarjo. Industrialization is very important, especially for economists because it can accelerate economic growth, but for ecological circles, industrialization can damage the environment in the long term. (Fauzie, 2022) . The similarity with the author's journal is the use of green political theory with actors from the international organization 4ocean, whereas the previous journal used the role of government actors.

RESULT AND DISCUSSION

Environmental issues are currently often a hot topic in international discussions. The growing effects of the ecological crisis are attracting worldwide attention as it has occurred in all countries. (Samsudin & Hotimah, 2024) Environmental issues are also a concern of regional organizations, especially ASEAN, where Indonesia became ASEAN's chairman in 2023. Quoted Farid in his writing Road To Indonesia ASEAN Chairmanship 2023: Indonesia Foreign Policy Pattern In ASEAN, where in the Bali Concord it was stated that building economic integrity also requires the role of a secure political environment that can provide a strong foundation generated by economic cooperation, as well as political solidarity and security. (Ramadhony & Firmansyah, 2022) This shows ASEAN's focus on economic pillars indirectly related to the environment, especially the green and blue economies.

Environmental issues are an important problem to discuss because they relate to the sustainability of future generations. Khoirunnisa in her writing titled Sosialisasi Peningkatan Pemahaman

Mengenai Climate Change Melalui Sharing Sessions Di Kalangan Remaja Dalam Pembahasan Kasus Kebakaran Hutan Di Riau shows the importance of socialization this global issues to socialized, especially for young generation. (Khoirunnisa, 2023a)

Indonesia is an archipelagic country. Quoted from the website of the Ministry of Transportation, the archipelago has a distribution of around 17,506 islands/archipelagos in the form of land/mountains and stretches of water. (Dephub, 2023) Indonesia is often called a maritime country; therefore, it is not surprising that Indonesia has many tourist attractions that offer the sea as an object, especially the island of Bali which is internationally known for its beaches and sea attractions.

However, on the other hand, the use of the sea for marine tourism has the impact of increasing amounts of rubbish scattered in the sea. Many marine tourism visitors are less aware of the dangers of plastic waste, throwing rubbish out of place and even throwing rubbish carelessly, which ultimately becomes marine rubbish or marine debris. The amount of waste that is increasing every year is the result of human factors that do not protect the earth. Environmental damage caused by human activities has the worst impact because of its long-lasting effects. (Khoirunnisa, 2023b)

According to Purwaningrum in his journal entitled *Upaya Mengurangi Timbulan Sampah Plastik di Lingkungan*, 60-70% of organic waste is produced by humans, and the rest is inorganic waste, namely 30-40%. This inorganic waste is plastic waste consisting of plastic packaging and plastic bags. (Purwaningrum, 2016)

According to Wendi in his journal entitled *Dampak sampah plastik terhadap Pencemaran Pantai Passo di RT. 019/RW 004 Desa Passo Kecamatan Bangula Kota Ambon*, coastal waste has become a global issue because the negative impacts it produces not only impact the marine ecosystem but also affect the economic sector. Plastic waste is the largest waste in the coastal waste category, it is around 10% of the total waste that pollutes the ocean. This is considered to cause lasting

environmental problems. (Luturmas et al., 2023)

Apart from maritime tourism, shipping activities are also a factor causing ocean pollution, including the large amount of rubbish in the ocean. The accumulation of rubbish in the sea has also attracted the attention of international organizations that are concerned about the environment, especially water areas. Pollution in the deep ocean usually comes from land dumped by humans or also from shipping activities. For example, a cruise ship is carrying passengers and the passengers throw rubbish such as plastic bottles into the sea. The most dangerous marine pollution can also come from oil spills from ships sailing in the ocean. Or as a result of oil leaks resulting from ship collisions, especially tankers or oil vessels.

As a measure to prevent and deal with waste and pollution caused by ships both sailing and anchored at ports, the International Maritime Organization created a special convention for pollution that occurs in the ocean, called Marpol. Marpol is an abbreviation of Marine Pollution and is a patent regulation made by the IMO. Marpol or the International Convention for the Prevention of Pollution from Ships or the International Convention on the Prevention of Pollution from Ship Waste was held for the first time in November 1973, then held again in 1978 by adding special regulations for pollution that occurs when ships experience collisions at sea.

Marpol Convention 73/78 has six annexes, each of which focuses on preventing marine debris pollution. Appendix V to Marpol Convention 73/78 regulates the prevention of pollution caused by waste. Garbage is all types of food, household waste, and household rubbish, except fresh fish. Part of Appendix V regulates the types of ship waste, determines the distance to dispose of waste, and procedures for disposal. Then the most important thing is the prohibition on throwing all types of plastic waste into the sea. Waste that cannot be thrown into the sea according to Marpol 73/78 Annex V is all types of plastic waste, plastic ropes, plastic bags, nylon, and plastic combustion residue from incinerators. Even though Marpol 73/78 regulations are clearly stated, there

are still violations of waste disposal by ships and crew members which result in more and more waste, especially plastic waste, being found in the sea. This can worsen and result in more and more rubbish accumulating in the ocean. Therefore, the role of shipping companies is also needed in educating the crew who work on ships. (AURORA, CA, Harjono, DK, Nadapdap, 2023)

Research conducted by cadets at MT. Serena III shows the results that not all ship crew members understand the regulations for waste disposal by Marpol 73/78 annex V. The crew members still do not separate wet waste from dry waste and then throw the waste into the sea in violation of the waste disposal distance rules stated in Annex V. (Aditya Laksamana Bagaskara et al., 2022). This case is one of example factors that cause pollution in the ocean.

One of the international organizations that is actively involved in preventing and reducing pollution in the ocean is the 4Ocean organization. 4Ocean is an international organization and also a non-profit company that cares about environmental sustainability, especially the safety of the marine environment. This organization was founded in Bali in 2015, it is based in Florida, United States, and has opened branches in several countries such as Hawaii and Guatemala. The appearance of 4Ocean was motivated by concerns about the Bali Sea by two surfers who came to vacation in Bali. They are Alex Schulze and Andrew Cooper.

4Ocean has 4 pillars to support its mission to clean up pollution in the ocean. The four pillars are 1. *Optimizing Technology*. This first pillar is to clean every pound of rubbish in the oceans and on coastlines by optimizing the use of advanced and newest technology to prevent and intercept the dumping of rubbish in the oceans and beaches. 2. *Creating jobs*. This second pillar is to create jobs by providing jobs for ship captains and ship crew who will be tasked with cleaning and transporting rubbish in the ocean every day as well as empowering housewives by making recycled products. 3. *New Global Economics, Education, and Awareness*. The third pillar is providing education and understanding as well as increasing awareness to the public,

companies, and also the government regarding the negative impacts of careless disposal of plastic waste. The fourth pillar is to provide added value in the economic sector by recycling rubbish that has been cleaned from the sea. (Rudyana & Rijal, 2022)

In the process of cleaning the sea, 4Ocean maximizes the use of tools that do not pollute and damage the environment. 4Ocean team uses their hands covered with gloves as much as possible to reach rubbish that is difficult to reach, for example in mangrove forest areas or to pick up stuck rubbish. In areas contaminated with plastic waste or organic materials, 4Ocean uses fishing nets to collect rubbish consisting of rubbish debris so that their hands are not contaminated by dangerous substances that could also harm them. Team 4Ocean also walked along the coastline to pick up rubbish thrown by the waves.

Team 4Ocean in Bali uses outrigger boats or what residents call Jukung to clean up rubbish. They modified two jukung by installing a smart net system which they called a "sea plastic trawl". The net located between the two outriggers then collects the rubbish floating in the sea while the crew ensures that no rubbish is missed on the outside of the jukung.

The Ijo Gading River is the largest producer of plastic waste in Bali, it is around 12% of the total marine waste in Bali. To prevent rubbish from this river from flowing into the sea, the 4Ocean team installed a boom system or floating barrier similar to the one installed on the Samblong River. This river is very polluted in the Bali area even though it is a small river.

One million pounds of waste could be generated by 4Ocean per month by 2022 (4ocean, 2023). Meanwhile, on the official 4Ocean website, from 2017 until now 4Ocean has taken around 36,070,186 pounds of rubbish from rivers, coastlines, and oceans. 4Ocean is also working with Coral Gardeners to plant one million coral reefs by 2025. (4ocean, 2023)

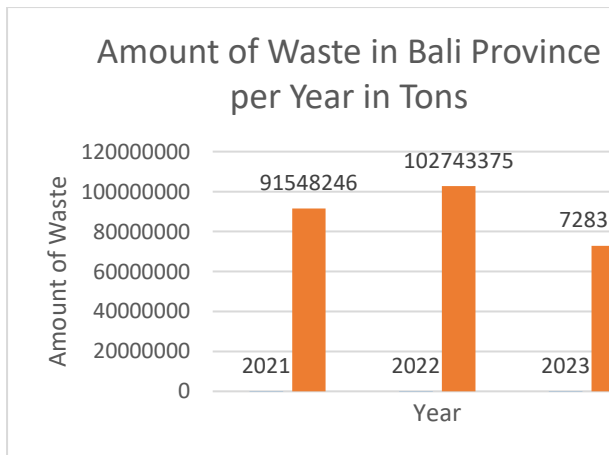


Figure 1: Amount of waste in Bali Province per year in tonnes
Source : (SIPSN, 2023)

According to the Sistem Informasi Penanggulangan Sampah Nasional (SIPSN), the amount of waste generated in Bali province in 2021 was 915,482.45 tons, which then increased sharply in 2022 to 1,027,433.75 and finally decreased drastically to 782,366.86 in 2023.

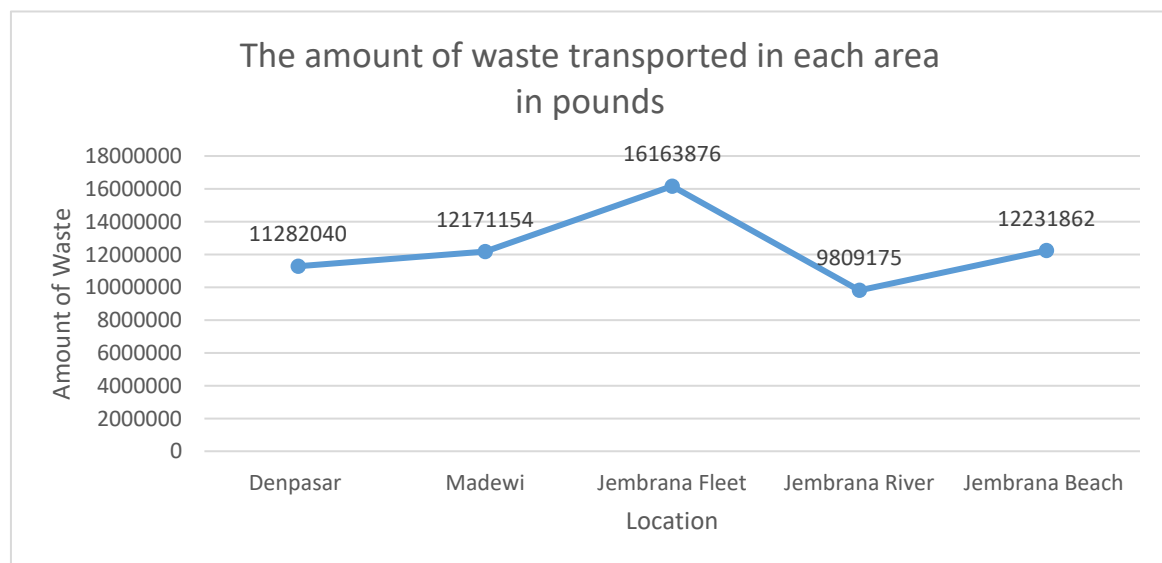


Figure 2: Amount of waste transported in each area
Source: (4Ocean, 2023)

Quoted from the official 4Ocean website, this organization has cleaned up garbage in several areas in Bali. 4Ocean has cleaned up 112,820.40 tonnes of garbage in Denpasar, 12,711.54 tonnes of garbage in Madewi, 121,711.54 tonnes of garbage in the Jembrana Fleet, plus 98,091.75 tonnes of garbage in the Jembrana River and finally from Jembrana Beach 122,318.62 tonnes which have been hauled away by the 4Ocean team.

In 2015, the water quality index in Bali Province received a score of 50-59 from the Ministry of Environment and Forestry in 2017. From 2015 until now 4Ocean has cleaned the sea in Bali as a whole, such as the coast, rivers, and oceans. The way 4Ocean works is by installing nets in the sea to prevent garbage coming from the coastline or from rivers from entering the deeper

ocean. 4Ocean also cleans rubbish from the deep sea using ships. 4Ocean employs full-time crew members. They work to clean up garbage every day from Monday to Sunday so the ship's crew also operates the ship which is used to transport cleaning garbage workers and also transport garbage to land. After that, the garbage that is pulled out from the ocean is then collected on land to be cleaned and processed into various kinds of recycled products that have economic value. The most famous product from 4Ocean's recycled garbage production is bracelets.

Apart from bracelets, 4Ocean also makes necklaces, clothing, and other items made mostly from recycled materials. 4Ocean uses a portion of its profits to help remove plastic waste from the ocean by removing one pound of garbage from oceans and shorelines for every bracelet sold. The

garbage collected by workers is separated into two types: valuable and non-recyclable. Recyclable waste is turned into bracelets, which are then sold alongside clothing and other products. Waste that cannot be recycled is sent to waste management authorities or waste-to-energy plants to be converted into renewable energy. Funds raised through the sale of recycled products will be used to fund clean-up efforts and provide equipment in marine debris clean-up operations.

Apart from being an international organization based on non-governmental organizations, 4Ocean is also a non-profit company that has developed clean-up operations in Indonesia, Florida, Guatemala, and Haiti. However, 4Ocean locations in Bali and Haiti still contain a lot of waste that cannot be recycled, which results in accumulation. Apart from that, 4Ocean is still not well known to the general public, especially among Indonesians. In the journal *Japan Kerjasama Jepang-ASEAN dalam Mengurangi Marine Debris ASEAN di Kawasan Indo Pacific*, Rifki said that ASEAN and Japan collaborated to establish environmental security and approached the community as a form of promoting waste management activities. (Studi et al., 2023) Cooperation is needed from various parties to support the 4Ocean program, starting from the local community which can help in the production of waste recycling, and also support from the government to provide operational equipment for cleaning up waste at sea.

CONCLUSION

Household waste is one of the largest waste producers in Indonesia. More of this waste is thrown away and not processed so it ends up in the ocean. Population growth can also cause increased waste in an area. As a maritime country, many tourists both domestic and foreign, come to visit especially Bali. Marine tourism attracts many visitors to Bali but has an impact on the large amount of garbage that appears. Apart from that, increasing shipping activities also cause pollution in the sea. The lack of awareness of the ship's crew regarding the rules for disposing of waste at

sea is increasingly exacerbating the problem of the waste crisis in the world, especially in Bali. Handling the waste crisis that causes pollution in the sea is a global problem that has even been regulated in international maritime law. The Indonesian government has also made regulations regarding the threat of a waste crisis which is a long-term threat to the preservation of marine biota.

The 4Ocean organization is an organization based on non-governmental organizations and a company that aims to clean up garbage in the sea. 4Ocean opened a business based on green political theory, which produces goods from the trash that has been cleaned from the sea. This organization was founded out of concern for the marine waste crisis which has resulted in reduced income for fishermen due to the obstruction of rubbish scattered in the sea. Garbage transported from the sea is then cleaned and recycled. 4Ocean empowers local communities to carry out its projects, such as employing ship crews to transport garbage to land and also empowering local women to produce goods from recycled garbage that has been collected. About one million pounds of garbage can be transported from the sea every month using environmentally friendly equipment.

4Ocean is here to help clean up the plastic waste that pollutes the sea to keep the sea clean from pollution and plastic waste so that the marine ecosystem can be maintained as one of the SDG's goals. The large number of shipping companies that do not pay attention to Marpol regulations, coupled with crew members who have minimum knowledge about the Marpol 73/78 Annex V convention and also the lack of public awareness regarding disposing of waste, make 4Ocean's workload even higher due to the increase in garbage from land that is washed into the sea and also additional garbage resulting from shipping activities. The cleanup carried out by 4Ocean in Bali can reduce the amount of plastic waste in coastal waters and improve environmental conditions for both marine life and local fishermen who depend on the sea to survive.

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