Law enforcement on plastic waste pollution in coastal area assessed from article 29 verse (4) law number 18 of 2008 concerning waste management (study in Buton regency of South Sulawesi)

La Gurusi

Abstract
This study examines the process of law enforcement against plastic waste pollution in the Coastal Area of Buton Regency and knows the factors that prevent law enforcement against plastic waste pollution in Buton Regency. The problems formulated in this study, namely law enforcement against plastic waste pollution in the Coastal Area of Buton Regency and factors that prevent law enforcement against plastic waste pollution in Buton Regency. This research uses empirical legal research method with qualitative analysis method. The result of this study is that law enforcement against plastic waste pollution does not materialize. The factor that inhibits law enforcement is that there are no regulations or legal provisions that form the basis of the government to apply sanctions on people or other legal entities that commit acts of plastic waste pollution in Buton Regency.

Keyword: Law Enforcement, Plastic Waste Pollution, Waste Management.

1. Introduction

The 1945 Constitution of the Republic of Indonesia recognizes that every person has the right to live in physical and spiritual prosperity, to have a place to live and to have a good and healthy living environment and to have the right to obtain health services (Undang-Undang, 1945). Based on this constitutional right, the state, through the government, is obliged to protect and manage the environment which can ensure the availability of environmental carrying capacity for the public interest. Because of this obligation, the government through Law Number 18 of 2008 concerning Waste Management to address the national waste problem. Even so, the waste problem is still difficult to solve. In the preamble to the Law on Waste, it is stated that the increase in population and changes in the consumption pattern of the community have resulted in an increase in the volume, type and characteristics of increasingly diverse waste.

The problem of waste is increasingly frightening because along with industrial development and uncontrolled population growth, especially in developing countries, the quality of the world environment is increasingly concerning, and some cannot be repaired and restored back to normal (irreversible environmental damage) (Syarif, 2018). One of the waste problems that are currently of national and international concern is the increasing production of plastic waste. The research results of Jenna Jambeck, a researcher from the University of Georgia, United States, published in 2015, stated that Indonesia is the second largest contributor of plastic waste in the world. At that time, the weight of plastic waste contributed reached 187.2 million tons (Putri, 2019). Even,
According to Greeneration's research, Indonesians use an average of 700 plastic bags per year. This does not include waste from other plastic items, drink bottles and food containers, whose numbers have increased significantly. Plastic waste is a serious threat to ecosystems that live on land and in the sea.

One of the bad effects of plastic waste pollution in the sea is the death of a sperm whale (Physeter macrocephalus) along 8 meters on a Porto Cervo beach in Sardinia, Italy. In the whale's stomach, 22 kg of plastic waste was found consisting of electric cables, plastic plates, plastic bags, fishing nets and plastic detergent wrappers (Hananto, 2019). The same thing happened in Indonesia, precisely in Wakatobi Regency, Southeast Sulawesi, a sperm whale measuring 9.5 meters long and 437 cm wide was dead. The results of identification of the whale's stomach contents carried out at the Wakatobi AKKP Campus, the plastic waste found in the whale's stomach was in the form of 750 gr plastic cups (115 pieces), 140 gr hard plastic (19 pieces), 150 gr plastic bottles (4 pieces), plastic bags. 260 gr (25 pieces), 740 gr wood chips (6 pieces), 270 gr flip-flops (2 pieces), 200 gr nylon sack (1 piece), 3,260 gr rapia rope (more than 1000 pieces). The total wet weight of the waste is 5.9 kg (Wahyu Chandra Kamarudin, 2019). Ecosystem damage will have a major impact on environmental balance.

The plastic waste crisis, both globally and locally, needs to find a solution, otherwise this problem will become a time bomb which at times will have an even worse impact on human life and the ecosystems that live on it. From a legal aspect, Law Number 32 of 2009 concerning Protection and Management of the Environment and Law Number 18 of 2008 concerning Waste Management, have regulated the responsibilities and obligations of individuals, both individuals and corporations, to protect and protect the environment. However, we still find several environmental cases that occur in the midst of society, both by individuals and corporations. In Buton Regency, especially in coastal areas, there are still piles of plastic waste scattered on the shoreline. This condition raises the question of what is the law enforcement process against plastic waste pollution in the Coastal Area of Buton Regency and what factors impose law enforcement on plastic waste pollution in the Coastal Area of Buton Regency.

2. Research Methodology

This study uses an empirical research model, namely legal research that analyzes and examines the work of law in society. The work of law in society can be examined through the effectiveness of law enforcement. Location of research on Law Enforcement Against Plastic Waste Pollution in Coastal Areas in View of Article 29 Paragraph (4) of Law Number 18 Year 2008 concerning Waste Management in Wasuemba Village, Pasarwajo District, Buton Regency, Southeast Sulawesi. To solve legal problems in this study, researchers used qualitative analysis.

3. Discussions

3.1. Law Enforcement against Plastic Waste Pollution

Increased waste production is closely related to the culture and behavior of the community, especially in coastal areas. Garbage is an important problem in coastal areas because it can damage the ecosystem that lives in it. This is because most people still perceive that waste is the residue from the use of an object, both organic and inorganic, that cannot be utilized. So that the community in managing waste still relies
on the final approach (end-of-pipe), where garbage is collected, transported, and disposed of to the beach. In fact, garbage dumped into the sea causes severe damage to the ecosystems that live in the sea.

In general, the uncontrolled high waste production causes damage to the areas that support human life. The decline in the quality of water and soil due to waste also has an impact on the quality of life of the people living around it. To maintain and protect the quality of the environment, the state is required to take a role in regulating and managing waste. Article 1 number 1 of Law No. 32 of 2009 on Environmental Protection and Management affirms that environmental protection is a systematic effort by the government to preserve environmental functions and prevent environmental pollution and / or damage which includes planning, utilization, control of maintenance, supervision and law enforcement. Efforts to protect the environment are carried out through preventive and repressive measures.

Damage to the coastal environment due to plastic waste can be prevented through the Command and Control (CAC) instrument. The CAC concept requires government involvement to make it happen. This is because the CAC instrument is an action or government intervention to determine what steps can be taken to prevent environmental damage (Syarif, 2018). However, Soemarwoto said that the CAC approach often encountered obstacles in achieving maximum results because this approach had several weaknesses. First, CAC is considered too basing itself on the view that any anti-environmental behavior can be countered by legislation. This view opens wide the exploitation of laws and regulations corporate interest in managing the environment. Second, CAC is considered to be to-down and instructive so that the preventive policy does not address environmental problems at lower levels. Third, CAC is rigid and bureaucratic. This property is not able to solve the development of environmental damage quickly and precisely (Soemarwoto, 2001). Soemarwoto's view mentioned above is that the CAC instrument can run well if it is implemented properly and measured by the government. In addition, policies to prevent environmental damage must be participatory in nature that involve all elements of society.

In addition to preventive measures, repressive legal measures are important to increase community compliance in implementing laws and regulations to prevent damage to the coastal environment due to plastic waste. Law enforcement is an effort to achieve compliance with regulations and requirements in applicable legal provisions in general and individually, supervision and application of sanctions. The problem regarding waste is very important. In waste management, the central and local governments need policies in the field of regulation that are based on national and regional regulations.

The regulations governing waste management include:

**a. Article 28 H paragraph (1) of the 1945 Constitution of the Republic of Indonesia**

Article 28H paragraph (1) of the 1945 Constitution of the Republic of Indonesia gives everyone the right to have a good and healthy living environment. This article provides a consequence that the government is obliged to provide public services in waste management. This has a legal consequence that the government is the competent and responsible party in the waste management sector. Although waste management is a government obligation, it can also involve businesses and communities engaged in the solid waste sector. In order to carry out waste management in an integrated and comprehensive manner, fulfill the rights and obligations of the community, as well as
the duties and authorities of the Government and local governments to carry out public services, a legal umbrella in the form of a law is required. The legal arrangements for waste management in this Law are based on the principle of responsibility, the principle of sustainability, the principle of benefit, the principle of justice, the principle of awareness, the principle of togetherness, the principle of safety, the principle of security, and the principle of economic value (Mulyanto, 2013).

b. Law No. 32 of 2009 concerning Protection and Management of the Environment

The fulfillment of a good and healthy environment is a human right and constitutional right for every Indonesian citizen. Therefore, the government, local government and all stakeholders are obliged to protect and manage the environment in the implementation of sustainable development so that the Indonesian environment can continue to be a source and life support for the Indonesian people and other living things. So that good and correct waste management is a form of fulfilling a good and healthy environment. With regard to waste management for the government and local governments, it cannot be separated from the principles contained in Article 2 of the PPLH Law which is regulated regarding the principles of state responsibility, participatory principles, principles of good governance; and the principle of regional autonomy. Therefore, waste management is a form of state responsibility through the government and local governments. Where, it takes community participation to carry out its management. In addition, it is strengthened by Article 63 of the PPLH Law which regulates the authority of the government and local governments in environmental protection and management. Where is based on the principles of good governance; and the principle of regional autonomy can be used as a reference in waste management.

c. Law No. 18 of 2008 on Waste Management

The Law on Waste Management is based on the large population of Indonesia with a high growth rate resulting in an increase in the volume of waste. In addition, people's consumption patterns have contributed to creating increasingly diverse types of waste, among others, packaging waste that is dangerous and / or difficult to decompose by natural processes is increasingly diverse. The substance of this law is directly related to waste management, namely Article 19 regulates the management of household waste and household-like waste. The article states that the management of household waste and household-like waste consists of reducing waste and handling waste. In terms of reducing waste, it is further stated in Article 20 as follows: Waste reduction as referred to in the following activities: (1) limiting waste generation; (2) recycling of waste; and / or (3) waste reuse. Article 20 paragraph (2) regulates that the government and regional governments are obliged to carry out the following activities: (1) to set a gradual waste reduction target within a certain period of time; (2) facilitate the application of environmentally friendly technology; (3) facilitate the application of environmentally friendly product labels; (4) facilitate re-use and recycling activities; (5) facilitate the marketing of recycled products. Article 20 paragraph (3) regulates business actors in carrying out activities, namely using production materials that generate as little waste as possible, can be reused, can be recycled, and / or can be easily broken down by natural processes. Article 20 paragraph (4) regulates the community in carrying out waste reduction activities, namely using materials that can be reused, recycled, and / or easily broken down by natural processes. Article 22 of Law Number 18 Year 2008 regulates waste management, and it also regulates waste handling, which includes: a. sorting in the form of waste grouping and separation according to the type, quantity and / or nature
of the waste; b. collection in the form of collecting and moving waste from the waste source to a temporary shelter or integrated waste processing site; c. transportation in the form of carrying waste from the source and / or from a temporary garbage collection site or from an integrated waste processing site to the final processing site; d. processing in the form of changing the characteristics, composition and amount of waste; and / or e. final waste processing in the form of safe return of waste and / or residue from previous processing to environmental media. e. The provisions stipulated in the implementation of waste management in Law No. 18 of 2008 concerning Waste Management should be able to deal with problems regarding waste in Indonesia. It has become common that so far waste management still applies the concept of collect-transport-dump (end of pipe). With this law, waste management has adopted the 3R concept: Reduction-Reuse-Recycling (recycling). Likewise with the waste management paradigm, if all this time using the conventional concept, namely waste is considered waste so that it is disposed of this requires disposal costs and ultimately becomes a health threat to the community. So now a new paradigm is being used which views waste as a resource that should be reprocessed so that it generates income which leads to new job opportunities and opportunities to earn new income.

d. Law no. 23 of 2014 on Local Government

Based on the mandate of Article 18 paragraph (2) and paragraph (5) of the 1945 Constitution of the Republic of Indonesia states that the Regional Government has the authority to regulate and administer Government Affairs by itself according to the Principles of Autonomy and Co-administered Tasks and is granted the widest possible autonomy. On the basis of this article and its explanation that the implementation of regional government must be based on the principles of decentralization, deconcentration and assistance tasks. So that there is Law o. 32 of 2004 which regulates the authority of both provincial and district / municipal governments regarding environmental control. Even though the Law was replaced by Law no. 23 of 2014 still gives authority to local governments. In Article 12 of Law no. 23 of 2014 that the authority to local governments (concurrent government) to carry out mandatory government affairs that are not related to basic services, one of which is the environment. With the provision of the widest possible autonomy to the regions, it is directed to accelerate the realization of community welfare by improving services, empowerment and community participation. So that the authority in waste management is a service provided by the local government by empowering the community and waste management based on community participation. This authority is the juridical basis for local governments to formulate regulations related to waste management based on coastal environmental protection. Even local governments are given the authority to set sanctions related to activities that cause environmental damage due to waste.

Article 29 paragraph (1) Law no. 18 of 2008 confirms that everyone is prohibited from:

- a. importing waste into the territory of the Republic of Indonesia;
- b. importing waste;
- c. mixing waste with hazardous and toxic waste;
- d. managing waste that causes environmental pollution and / or damage;
- e. dispose of waste not in a place that has been determined and provided;
- f. carry out waste handling by open disposal at the final processing site; and / or
g. burning waste that does not comply with the technical requirements for waste management.

In raising public awareness in waste management, law enforcement is needed. Therefore law is a means in which values and concepts of justice, truth, social benefit and so on are contained (HR, 2011). So that the existence of law enforcement is an activity of harmonizing the relationships of values that are outlined in the values / views that are solid and embody actions and attitudes as a series of value translation of the final stage to create (as "social engineering"), maintain and maintain (as "social control"). peace in social life (HR, 2011). In addition, environmental law enforcement is an act and / or process of coercion to comply with the law based on the provisions of statutory regulations and / or environmental requirements (Arifin, 2012). So that environmental law enforcement in the field of waste management is an effort to apply positive law in people's lives so that Law no. 18 of 2008 concerning Waste Management and local regulations regarding waste management which aim to maintain and maintain environmental conditions so that people get a good and healthy environment. Application of Law no. 18 of 2008 regarding Waste Management is deemed not yet effective.

The high amount of plastic waste in the Coastal Coast area is an important note for the waste problem in Buton Regency. One of the issues in the spotlight is the aspect of law enforcement. Enforceability of law is determined by (a) the availability of sanctions that can have a deterrent effect; (b) the availability of 3 (three) types of sanctions, consisting of administrative, criminal and civil sanctions; (c) the availability of a public complaint mechanism and its follow-up on violations of rights experienced by the community; (d) availability of a regulatory oversight mechanism against environmental requirements; (e) the availability of special institutions and apparatuses to supervise compliance, investigate, investigate, prosecute, even court.

It is the authority of local governments to impose sanctions on businesses and individuals who do not manage waste properly. This authority is regulated in Article 29 paragraph (4) District / city regional regulations as referred to in paragraph (3) may stipulate imprisonment or fines for violating the provisions referred to in paragraph (1) letter e, letter f, and letter g. This provision gives full authority to regions to form Regional Regulations that can have a clear effect on companies or individuals.

Abdul, the community of Wasuemba Village, said that the plastic waste that had accumulated on the wasumbe coast was caused by a lack of public awareness of the importance of protecting the environment. In addition, based on tracing legal documents in the Buton Regency Legal Information Document Network (JDIH), the local government does not yet have a regional regulation regarding waste management. Buton Regency only has Perda No. 6/2012 on Garbage Retribution. This is a problem that makes law enforcement weak. Meanwhile, the waste management law mandates local governments to draft local regulations regarding waste management. According to Mr. Abdul, the village government should have a regulation at the village level to regulate criminal sanctions to have a clear effect, so that people no longer throw their garbage everywhere.

In line with Mr. Abdul, La Suri, a resident of Wasuemba Village, said that there are no regulations in the region or in the village regarding the sanctions that are accepted for littering randomly. In addition, La Suri said that Wasuemba Village does not yet have a garbage collection bin. Based on the search for legal documents and the results of the interview, it points to the problem of law enforcement related to plastic
waste pollution in coastal areas because there are no regulations at the regional level or village regulations. Meanwhile, the Garbage Law has authorized local governments to formulate regulations at the level of a Perda to regulate waste management as well as sanctions against actors who dispose of waste inappropriately.

3.2 Factors that Influence Law Enforcement

Indonesia as a rule of law requires law enforcement in all aspects, including law enforcement in the field of waste management. In essence, law enforcement actually lies in the factors that influence it. Lawrence M. Friedman, as quoted by Yuliana, said that the effectiveness and success of law enforcement depends on the three elements of the legal system, namely the legal structure (legal structure), legal substance, and legal culture. This legal structure concerns law enforcement officers, the substance of the law includes statutory instruments and legal culture is the living law of the community. To be able to analyze matters relating to the implementation of the death penalty that are not in accordance with the applicable provisions when viewed from the Indonesian legal system (Yuliana, 2016). Weak law enforcement in the context of plastic waste pollution in Wusuema Village cannot be separated from these three elements.

a. Legal Substance

The legal substance used as a reference in law enforcement efforts against plastic waste pollution in Buton Regency still uses the provisions of Article 29 paragraph (1) of Law no. 18 of 2008 confirms that everyone is prohibited from:

a. importing waste into the territory of the Republic of Indonesia;

b. importing waste;

c. mixing waste with hazardous and toxic waste;

d. managing waste that causes environmental pollution and / or damage;

e. dispose of waste not in a place that has been determined and provided;

f. carry out waste handling by open disposal at the final processing site; and

/ or

g. burning waste that does not comply with the technical requirements for waste management.

Criminal provisions relating to waste management are regulated in Chapter XV of Law no. 18 of 2008 as follows:

Article 39

(1) Any person who unlawfully imports and / or imports household waste and / or household waste type into the territory of the Unitary State of the Republic of Indonesia is punishable by imprisonment for a minimum of 3 (three) years and a maximum of 9 (nine) years and a fine of at least IDR 100,000,000 (one hundred million rupiah) and a maximum of IDR 3,000,000,000.00 (three billion rupiah);

(2) Anyone who illegally imports and / or imports specific waste into the territory of the Unitary State of the Republic of Indonesia is punished with imprisonment for a minimum of 4 (four) years and a maximum of 12 (twelve) years and a fine of at least Rp 200,000,000.00 (two hundred million rupiah) and a maximum of Rp.5,000,000,000.00 (five billion rupiah);

Art 40
(1) A waste manager who violates the law and deliberately carries out waste management activities without paying attention to the norms, standards, procedures or criteria that can cause public health problems, security problems, environmental pollution, and / or environmental destruction shall be punished with imprisonment at the most for a short period of 4 (four) years and a maximum of 10 (ten) years and a fine of at least Rp. 100,000,000.00 (one hundred million rupiah) and a maximum of Rp. 5,000,000,000.00 (five billion rupiah).

(2) If the criminal act as referred to in paragraph (1) results in a death or serious injury, the waste manager is threatened with imprisonment for a minimum of 5 (five) years and a maximum of 15 (fifteen) years and a fine of at least Rp 100,000,000 (one hundred million rupiah) and a maximum of Rp.5,000,000,000 (five billion rupiah).

Article 41

(1) A waste manager who due to his negligence carries out waste management activities without paying attention to norms, standards, procedures, or criteria that can cause public health problems, security problems, environmental pollution, and / or environmental destruction shall be punished with imprisonment for a maximum of 3 (three) years and a maximum fine of Rp. 100,000,000.00 (one hundred million rupiah).

(2) If the criminal offense as referred to in paragraph (1) results in a death or serious injury, the waste manager is threatened with imprisonment for a maximum of 5 (five) years and a maximum fine of Rp. 500,000,000.00 (five hundred million rupiah).

The aforementioned provision does not contain any sanctions for the actions contained in the provisions of Article 29 paragraph (1) letter e which states that everyone is prohibited from throwing garbage not in a designated and provided place. Of course, this provision has both criminal and administrative consequences. However, in the provisions of Law no. 18 of 2008 does not state either explicitly or implicitly the sanctions that can be imposed on people who commit the act of throwing garbage out of place. This weakness is that the Buton Regency area should make a regional regulation regarding waste management and include criminal and administrative sanctions for the actions of people who throw garbage in the sea. As contained in Article 29 paragraph (3) and (4) that further provisions regarding the prohibition as referred to in paragraph (1) letter e, letter f, and letter g are regulated by regency / city regional regulations. (4) District / city regional regulations as referred to in paragraph (3) may impose imprisonment or fines for violating the provisions referred to in paragraph (1) letter e, letter f, and letter g.

b. Legal Structure

The legal structure is a pattern that shows how the law is carried out according to its formal provisions (Yuliana, 2016). This structure can see how the pattern of law enforcement, such as how the courts, law makers and legal process bodies work properly. If we can talk about the legal structure here then we will look at law enforcement institutions such as police, prosecutors, courts and correctional institutions. Law enforcement in Indonesia is highly dependent on law enforcement officials, including the National Police, the Attorney General's Office, the judiciary and related law enforcement agencies as pillars in implementing law enforcement (Ansori, 2017). The damage to ecosystems in coastal areas due to plastic waste is not a priority problem for Buton Regency to overcome. Even though plastic waste has become a global problem, it must be tackled together and requires the cooperation of the central and
regional governments. Likewise, enforcement agencies that are authorized by law to carry out prevention and law enforcement against environmental pollution caused by plastic waste. The weak role of legal institutions is inseparable from the extent of the legal area based on Law no. 18 of 2008.

c. Legal Culture

Legal culture is not just a tool to be used for a specific purpose but is a tradition, an object of exchange of values that is not neutral and influences socio-culture. In addition to the legal substance and legal structure, this legal culture can also be a measure of how law enforcement is effective or not. The law itself is formed from values that are alive and well believed by the community. So that the failure of law enforcement that currently exists is not in accordance with the laws that live in society.

Legal law is divided into 2 (two), namely (Friedman, 2010):

a. Internal Legal Culture (legal culture) owned by law enforcement officials (legal structure)

b. External Legal Culture (legal culture) of society in general. Basically, legal culture is greatly influenced by information obtained by the community. The people of Wasuembba Village still think that garbage is placed in the sea for practical reasons and that their house is close to the beach. So that in order to change the legal culture of the community and know the importance of protecting the marine ecosystem, there is still a need for socialization.

5. Conclusion

One of the issues in the spotlight is the aspect of law enforcement. Enforceability of law is determined by (a) the availability of sanctions that can have a deterrent effect; (b) the availability of 3 (three) types of sanctions, consisting of administrative, criminal and civil sanctions; (c) availability of a public complaint mechanism and its follow-up on violations of rights experienced by the community; (d) availability of a regulatory oversight mechanism against environmental requirements; (e) the availability of special institutions and apparatuses to supervise compliance, investigate, investigate, prosecute, even court. It is the authority of local governments to impose sanctions on businesses and individuals who do not manage waste properly. This authority is regulated in Article 29 paragraph (4) District / city regional regulations as referred to in paragraph (3) may stipulate imprisonment or fines for violating the provisions referred to in paragraph (1) letter e, letter f, and letter g. This provision gives full authority to regions to form Regional Regulations that can have a clear effect on companies or individuals. Weak law enforcement in the context of plastic waste pollution in Wasuembba Village is inseparable from the three elements, namely the substance of the law, legal structure and legal culture.

References

Ansori, L. (2017). Reformasi Penegakan Hukum Perspektif Hukum Progresif. Jurnal Yuridis, 4(2).

Arifin, S. (2012). Hukum Perlindungan dan Pengelolaan Lingkungan Hidup Di Indonesia. Jakarta: PT Sofmedia.

Friedman, L. (2010). Sistem Hukum (Perspektif Ilmu Sosial). Bandung: Nusa Media.
Hananto. (2019). lagi, paus terdampar mati dengan perut penuh sampah plastik. Retrieved from https://www.mongabay.co.id/2019/04/02/lagi-paus-terdampar-mati-dengan-perut-penuh-sampah-plastik

HR, R. (2011). Hukum Administrasi Negara Edisi Revisi. Jakarta: PT. Grafindo Persada.

Mulyanto. (2013). Sistem Pengelolaan Sampah Terpadu (Sipengestu) Kelurahan Serengan dalam Kajian Sosiologi Hukum. Jurnal Parental, 1(2).

Putri, G. S. (2019). Laut Dunia Darurat Sampah Plastik, Indonesia Turut Menyumbang. Retrieved from Kompas website: https://sains.kompas.com/read/2017/12/05/170700623/laut-dunia-darurat-sampah-plastik-indonesia-turut-menyumbang?page=all,

Soemarwoto, O. (2001). Pradigma Baru Pengelolaan Lingkungan Hidup, Pembangunan Ramah Lingkungan: Berpihak Pada Rakyat, Ekonomi Dan Berkelanjutan. UGM Press, Yogyakarta.

Syarif, L. O. M. A. G. W. (2018). Hukum Lingkungan Hidup “Teori, Legislasi Dan Studi Kasus.” United States Agency for International Development (USAID), the United States Government, or the Asia Foundation or Kemitraan.

Undang-Undang. (1945). Undang-Undang Dasar Negara Republik Indonesia Tahun 1945.

Wahyu Chandra Kamarudin, J. F. (2019). “ditemukan 5,9 kg sampah dalam perut paus sperma di wakatobi. Kok bisa?” Retrieved from https://www.mongabay.co.id/2018/11/20/ditemukan-59-kg-sampah-dalam-perut-paus-sperma-di-wakatobi-kok-bisa/.

Yuliana. (2016). Dampak Pelaksanaan Hukuman Mati Terhadap Kondisi Kejiwaan Terpidana Mati di Indonesia. Indonesian Journal of Criminal Law Studies (IJCLS), 1(1).