

ZERO WASTE PROGRAM (THROUGH KANG PISMAN SCHOOL) AS AN IMPLEMENTATION OF ENVIRONMENTAL LOVE EDUCATION AT INSAN MADANI ISLAMIC BOARDING SCHOOL

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Abstract

The research background is based on the problem of low waste management in the city of Bandung. Waste management is important because the accumulation of waste results in various bad things that have an impact on people's health and the environment. The aim of the research is to obtain a description of the Zero Waste program (through the Kang Pisman School) and to find out the Implementation of Love the Environment Education implemented in the Insan Madani Islamic boarding school. Collecting data from research using observation and interview techniques. This research uses a quantitative approach with descriptive research methods. The object of this research is the Insan Madani Islamic Boarding School Santri. The results of the research show that the Zero waste program (Through the Kang Pisman school) is suitable for students at the Insan Madani Islamic Boarding School. Because, through this zero waste program, students will know how to reduce, separate, and utilize what is there. After the students get used to doing "Kang Pisman" then little by little, the impact of the accumulation of garbage in the city of Bandung is quite reduced and the students have a soul of love for the environment.

Keywords : Zero Wasted, Waste Management, Love the Environment

INTRODUCTION

Today, human existence is inseparable from garbage. Almost all human actions have the potential to produce waste. Consumption of an object is the activity that has the most potential to produce waste. In particular, household/residential waste management is still a problem in many cities in Indonesia. One of the causes of this waste problem is population growth and increased urban activity in various industries, including the housing, business, and trade sectors. The rapid growth of cities is accompanied by increasing

urbanization, which increases the number of city dwellers and has an impact on waste production as well. If not handled appropriately, this problem can endanger economic, environmental, and health factors (Zayadi & Hayat, 2018).

As one of the big cities in Indonesia, Bandung still has problems with waste management. Citing information from the West Java Tribun, Bandung City produces 1,600 tons of waste every day, of which 150 tons are plastic waste. In terms of household waste production, Bandung City produced 1048.96 tons of waste from settlements every day in 2018. The information and quotes above show how important the waste problem is for Bandung City. Due to its significant impact on many aspects of life, including garbage can be considered a cultural issue (Widiyanto, Pratiwi, & Yuniarno, 2017).

Waste management is a problem that cannot be solved as long as there is a human population. In 2016, when the population reached 261 million, 65.2 million tons of waste were disposed of annually (Badan Pusat Statistik Indonesia, 2020). This waste includes waste generated in residential areas as well as domestic waste generated in homes. Not only big cities with high productivity, but also Islamic boarding schools in Bandung City, West Java Province (Song, Li, & Zeng, 2015).

Widespread management of domestic waste from housing needs to be done to reduce the problems caused by waste. Proper handling and disposal of waste generated is an important component of household waste management. The solution to the problem of waste management would be better started from the scope of a household scale or an institution. (Hayat, dan Zayadi, 2018)

Domestic waste from housing continues to grow, so management needs to be done to reduce derivative problems from the presence of waste. Household domestic waste management needs to be carried out systematically by reducing the waste produced and proper handling. The solution to the problem of waste management would be better started from the scope of a household scale or an institution. The idea of *zero* waste can be used to solve the problem of waste in households. In essence, the *zero* waste approach in waste management consists of recycling waste to reduce its volume (Aulia, Isnaini, & Khumairoh, 2017).

Various programs and strategies have been implemented to try to address the problem. Household waste management with TPS 3R approach (*Reduce, Reuse, Recycle*) is one of the schemes. The waste processing site using the 3R approach (*Reduce, Reuse, Recycle*)

hereinafter abbreviated as TPS 3R is a place to carry out environmental scale collection, sorting, reuse, and recycling activities. This is in accordance with Bandung City Regional Regulation Number 9 of 2011 concerning Waste Management. The amount of waste at this time is increasing due to the increasing population and lifestyle standards. According to El Haggar (2007), the more advanced and prosperous a person's life is, the higher the amount of waste produced. The impact of this man-made cause damage to nature and narrowing of land, this mistake is visible which is like expanding urban development land and consuming 38% of agricultural land, forest clearing and so on. It is very important to implement solutions to address environmental problems from an early age. The increasingly deplorable state of nature forces humans to think and identify fundamental problems that have turned nature into a very sad critique of life. According to Lynn White, Jr., in 1967, religious issues became the basis of environmental problems (Sakcharoen, Ratanatamskul, & Chandrachai, 2021).

Religion creates a wrong way of thinking about nature. Religion is considered to embody moral principles that condone irrational actions committed by humans against nature. Therefore, it is not an exaggeration if education is the most basic, effective, and long-term effort to overcome environmental damage. Boarding School needs to be a more suitable place to instill awareness and shape the personality of its students because it is a faith-based educational institution. In addition, the learning methods applied are not only limited to the classroom. As a result, Boarding School must integrate environmental education.

One of the Islamic boarding schools that has a contribution in the environment is the Insan Madani Islamic boarding school. In collaboration with the environment and hygiene agency in the Kang Pisman (Reduce, Pisakan and Utilize) program, Kang Pisman said, taking from the term 3R. Religion is said to contribute to a wrong human perspective on nature. Religion is considered to uphold moral principles that condone man's arbitrary actions against nature. Therefore, it is not an exaggeration if the most basic, effective, and long-lasting effort to address environmental damage is through education. Boarding School should be an institution that is better able to instill awareness and shape the personality of its students because it is based on religion. In addition, the learning technique used is one that is not limited to the classroom. So it is necessary to include environmental education in boarding school (Rambe, Sari, & Rambe, 2021).

METHODS

The research uses a qualitative approach with descriptive research methods. According to Moleong Qualitative research is research that aims to understand the phenomenon of what is experienced by research subjects. Such as perception, motivation, and action holistically by describing it with words and language specifically natural. In this study, researchers act as instruments as well as data collectors. Other instruments used by writers are tools, note books or notes and document tools. (Semiawan, 2010). Then in the research that the author did there were data collection techniques, data presentation and conclusions.

According to Sugiyono, data analysis techniques are the process of systematically searching and compiling data obtained from interviews, field notes, and documentation by organizing data into categories, describing it into units, synthesizing, arranging into patterns, choosing which ones are important and will be learned, and making conclusions so that they are easily understood by oneself and others. Furthermore, according to Silalahi, data analysis is the process of simplifying data and presenting data by grouping it in a form that is easy to read and interpret. Data analysis has two purposes, namely summarizing and describing the data and making inferences from the data for the population from which the sample is drawn. According to Miles and Huberman in Sugiyono stated that analysis activities consist of three lines of activities that occur simultaneously, namely data reduction, data presentation, and conclusions.

The author sets research objectives based on the formulation of the problem, namely describing the implementation of environmental love education in Islamic boarding schools of civil servants. The initial step taken is data collection by making observations at the research location will take place. This research was carried out at the ren insan madani boarding school on February 12, 2023 and March 23, 2023. Data analysis techniques are qualitative techniques.

RESULTS

Zero Waste Program (through Kang Pisman School) as Environmental Love Education at Insan Madani Islamic boarding school

In implementing an urban waste management policy or program, it is necessary to pay attention to factors that can support the success of a waste management policy or program. Azwar argues that there are 2 factors that affect urban waste management in this case the Kang Pisman Program (Zaman, 2015), namely:

- 1) Waste Factor
- 2) Community Participation Factors

In line with Azwar, Suarna believes that the implementation of waste management in urban areas, in this case the Kang Pisman Program, is influenced by 6 factors, including:

- 1) Social & Political Factors
- 2) Financial Factors
- 3) Existence of Non-Governmental Organizations (NGOs)
- 4) Coordination between government and non-government agencies

In 2018 Bandung City launched a program called Kang Pisman (Reduce, Separate, Utilize) Waste. Based on the statement of Gun Gun Saptari as General Director of Bandung City Cleanliness PD in an article in Koran Tempo June 29, 2018 entitled "Kang Pisman, Choose and Sort Waste to Create Bandung Zero Waste City", Kang Pisman is a 3R modification program and is actually not much different from the 3R program, it's just that the technicalities are more clarified and use Sundanese elements to be more familiar with the citizens of Bandung City. This program is campaigned by the City of Bandung and is a socialization movement to reduce, sort and make waste have economic value. This program has 3 main focuses and technical implementation based on Kang Pisman's guide webpage in waste handling and management, namely:

- Kang (Reduce)

In reducing the production of household waste, people every day must get used to (1) Reducing the use of plastic bags, Styrofoam and other materials that are difficult to decompose by nature. (2) Reuse items that can still be used. (3) Bring your own shopping bags, places to eat and drink when traveling. (4) Eat and drink moderately and finish it.

- Pis (Separate)

At home, people can divide trash cans into 3 different types, namely (1) Type 1 contains food & plant waste, placed in a closed bucket (2) Type 2 contains paper, cans, cups & plastic bottles, placed in cardboard boxes. (3) Type 3 contains other garbage placed in garbage cans.

- Man (Utilize)

Waste that has been separated, used according to its type, namely: (1) Type 1 waste is processed into biopores, composters, takakura, openwork bricks, biodigesters, BSF maggots, and become fodder and vermicompost. (2) Type 2 waste can be used as waste alms or given to the nearest waste bank. (3) Type 3 waste is taken to the Temporary Shelter (TPS) to be transported to the Landfill Final Processing Site by the Hygiene PD

As for after the launch of this program, the implementation of this program is still in significant progress in several villages/unjt saah, one of which is in the Insan Madani pesntren hut which has become part of the Kang Pisman School Unit combined with a Project-based learning curriculum. This long-term project is certainly accompanied by teachers so that this school can achieve the goal of making education clean from waste or *zero waste* as a form of our love for education.

Basically, the *zero waste* program is not management until no more waste is found, because there are no human activities that do not produce waste. However, this concept emphasizes efforts to reduce to zero the amount of waste entering the landfill. Therefore, the article examines waste management at the household scale based on the concept of *zero waste*.

DISCUSSION

Religious Perspectives on the Environmental Crisis

It goes without saying that human hands are responsible for most of the waste on Earth. For example, China is now the country with the largest food waste due to the mukbang trend there. Indonesians are now following the Chinese habit of ordering more food than they should, which puts China at the top of the list of countries that consistently waste food.

In addition to food waste, there is also plastic waste which until now has been the concern of environmental experts. People continue to be shaken by the incredible volume of garbage. The amount of waste produced annually was only about 2 million tons in 1950. But that figure increased to 381 million tons annually in 2015. Calculations show that waste generation has increased more than 190-fold in the last 65 years.

If humans are not aware of these various waste problems, then this problem will become an unbroken link. The depletion of the ozone layer, the absurdity of the change of seasons, forest fires due to warmer temperatures, and the rising volume of sea water due to melting ice at the north and south poles are just a few of the natural protests that cannot stand human error. So it is not wrong if the water in the ocean, the mountains on land ask God to teach humans a lesson so that earth people are given awareness.

Religious teachings have an important role in the formation of individual personality. Religion has a strong influence on a person's attitude patterns as a reaction to stimulation either from the environment (external) or from himself individually (internally). One of the fundamental purposes of the existence of religion is to teach people about the real way of life. A person whose religious life is weak will become immoral and vice versa, someone with a strong religious life will become a good person. A moral person will always act righteously and have a positive relationship with God, others, and nature. To make the Christian worldview of life a logical alternative to other methods of solving environmental problems (Iswanto, 2015).

Spiritual awareness and passion for everyone is necessary to transcend the paradigm of anthropocentrism and critical and deteriorating environmental situations. This is where the cultural paradigm that views religion as the center of culture confirms that the spirit of religion has a great ability to influence the way people think and behave in order to protect and protect the environment. According to the Islamic perspective, the environment is a component that must be managed properly by the ecosystem. According to Yusuf al-Qardhawi, there are several expressions in Islam related to protecting the environment. 1) The theory of al-istishlah (benefit), 2) Maqashid al-shari'ah (approach to the five basic objectives of Islam), and 3) the Sunnah of the Holy Prophet (peace be upon him) (Safrihsyah, 2014).

Yusuf Qaradawi pointed out that there is a substantial relationship between religion and the environment in his book *Ri'ayah al-Bi'ah fi Shari'ah al-Islam*. Religion can play an

important role in preserving the environment. He asserted that protecting the environment is equivalent to maintaining the five pillars of Islam, and according to the rules of Ushul Fiqh it is obligatory to observe *ma la yatimmu al-wajib illa bihi fawuha* (something that leads to obligation, then something that is legally obligatory).

Man as a microcosm (part of nature) has a high pattern of relations in relation to God and nature. Man, God, and nature have such a high relationship that neither one of them can be separated or eliminated. If it eliminates the divine aspect, secularism will arise and trigger excessive exploitation of nature which will later cause an ecological crisis. Conversely, if it eliminates nature, it will cause humans to be poor in knowledge and civilization.

In a theological perspective, the relationship between man and nature can be divided into two, namely functional relations and structural relations. Structural relations place man on an equal footing with nature before the Creator. It is equality that necessitates active and dynamic relational consequences. At this point man and nature are two of the same thing; a creature created by Allah which is evidence of the existence of divinity (QS. al Fushshilat: 53). As fellow creatures, man and nature are both subject to the rule of Allah Almighty. However, man has a special privilege of reason that makes man a caliph on this earth (Rodin, 2017).

Meanwhile, functional relations affirm to humans that equality of structure does not prevent humans from functioning in the natural environment as a fulfillment of needs. It's just that this relationship provides special conditions for human authority in utilizing nature. Utilization should be in the corridor of mutually beneficial functions. Thus, human needs will be eclipsed by nature¹³. When man can interact 'politely', be it with his fellow man, or with God and nature, then surely more and more can be used from nature. Because when the three elements (man, God and nature) work together, there will be a cycle where they will not damage each other.

The Importance of Faith-Based Environmental Education

The importance of the relationship between man, God, and nature makes religious education an urgent matter. There can be no improvement without action and there will be no action if there is no education. So religious education can be a solution to regrow divinity in a person. And in this case, there is no most appropriate place to study religion except Islamic boarding schools.

In the Big Dictionary Indonesian education means a process in changing the attitudes and behaviors of individuals or groups to try to mature humans through teaching and training. While the Environment has the meaning of the unity of space in all objects, forces, conditions and living things. Environmental education can be interpreted as an effort to change attitudes and behaviors by the community that aims to increase people's skills, knowledge, and awareness about environmental values and environmental issues. Environmental education has been applied to Ponpes Insan Madani as an effort to provide an understanding to students to protect the environment and preserve it through religious doctrine.

Overcoming environmental problems through environmental education (PLH) is not sufficiently applied in schools. There must be 24-hour learning to instill the character of environmental love in the nation's generation. The 24-hour learning can be found in Islamic boarding schools. Boarding School is the oldest educational institution in Indonesia that existed before the birth of the modern education system. Its existence is deeply rooted and influential for society, both in moral ethics and religion.

In addition to focusing on deepening religious science, Boarding School are also inseparable from scientific studies that integrate faith and scientific morality. Do not forget also learning about socialization as a provision when entering the community. Boarding School is also a religious educational institution that is used as a reference by the community in terms of behavior. In addition, Boarding School also acts as a social institution that is able to mobilize self-help and community self-initiative and improve the environment in terms of spiritual or physical.

The purpose of Islamic boarding school education is not only to obtain worldly interests but everything must always be associated with worship in the form of devotion to God. Through this goal, Islamic boarding schools have the view that the Islamic perspective includes formal and social worship. Formal worship is worship that he performs directly to God. Meanwhile, we can see social worship from its behavior to other living things including the surrounding environment.

Boarding School has a strategic position in educating the nation's generation who are friendly and care for the environment. So that later it can become an important component or institution in changing community behavior to play a role in environmental conservation. Environmental education taught by Islamic boarding schools results are

much more optimal than other educational institutions. This is because, environmental education in Islamic boarding schools can be directly practiced and get 24-hour monitoring from Islamic boarding school administrators or caregivers. So that this education becomes a habit that is expected to characterize a student (people who are or have studied in Islamic boarding schools) (La Fua, 2013).

From that character, students have actions that are responsible for the environment, such as actions to maintain and clean their environment. Because it needs to be realized, the behavior of maintaining cleanliness cannot be formed by itself. There must be a learning process on how the activities carried out are concrete actions. Such as cleaning the courtyard of Islamic boarding schools, places of worship, mosques, rooms, classes, restrooms, and the surrounding environment so that the environment is clean and comfortable and does not look shabby. Preserving nature is a common task. In the Qur'an surah Al-'Araf verse 56 it is explained that Allah forbids man to do mischief on earth. Similarly, Ali Imron affirms that God did not create everything in vain. Thus, humans as caliphs on earth are tasked with maintaining and caring for the earth to be balanced (Lokanawa, 2013).

There are so many efforts made by Islamic boarding schools to build student awareness of the environment. This is evidenced by the number of Islamic boarding schools that implement eco boarding school. Eco Boarding School is an environmentally friendly conservation activity programmed by the Boarding School community (caregivers and students) so that the Boarding School can show its contribution or participation in environmental conservation. EcoBoarding School first appeared more or less in 2005 when KH. Abdulla Gymnastiar initiated the Daarut Tauhid ecoBoarding School with his team in the city of Bandung, West Java. Daarut Tauhid ecoBoarding School is a village Boarding School model whose physical design and activity plan are in accordance with the principles of sustainable development. The implementation of ecoBoarding School seeks to grow and build awareness of the Islamic boarding school community in managing the environment. This is done by prioritizing the rules of Islamic law. Because preserving the environment in the Islamic concept is an obligation. Because man's duty as a caliph on earth is to prosper the earth and protect the earth from damage (Rodin, 2017).

Referring to the above understanding, the concept of implementing ecoBoarding School aims to form a young generation who care about the environment, and are able to

implement their concern in daily activities through concrete actions and develop human resources with environmental culture.

In realizing Eco Boarding School, there are several indicators that must be set, first the Boarding School policy cares for the environment. Second, the development of an environment-based curriculum. Third, the development of participatory based environmental activities. And fourth, the management of environmentally friendly Boarding School support facilities.

Ponpes Insan Madani is one of the Boarding School that fixes environmental problems by implementing environmental conservation focusing on 3R-based waste processing (*Reduce, reuse, recycle*). In collaboration with the Bandung City Environmental Agency, in addition, Islamic boarding schools also provide assistance to waste management practices for students who have participated in counseling. The counseling begins with questions about waste and the surrounding environment. After that, students get material about waste and its adverse effects if not managed properly. After that, an explanation was given about 3R-based waste making a Waste Unit bank, so that students every week can collect 60-100 KG of waste to be deposited into the Main waste bank, of course, waste that has been sorted by various types of waste. This program runs as a result of Kang Pisman's school which provides training so as to create awareness of the importance of preserving the environment (Marsudi, Usman Arief, 2011).

CONCLUSION

Bandung City is one of the big cities in Indonesia which of course still has problems in waste management. The accumulated garbage causes disease and threatens the health of the residents of Bandung City.

The government has launched a *zero waste* program under the name Kang Pis Man. That is to reduce, separate, and utilize. However, not many Bandung residents know about the program so they have not run it. As a modern cottage, Insan Madani Islamic Boarding School has implemented a *zero waste* program through project activities for its students. So that with the holding of the program, students can protect the environment both in the Islamic boarding school environment and the community environment.

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