

Eco-Literacy:

Fostering Community Behavior Caring for the Environment

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Abstract—Environmental development is one of the pillars of the Sustainable Development Goals (SDGs) which aims to manage natural resources and the environment in a sustainable manner. Currently, both household and industrial waste are one of the causes of environmental damage due to environmental pollution. This study aims to describe the environmental literacy activities organized by Kampong Recycle, Jember to foster environmental awareness behaviour. This study used a qualitative approach with descriptive methods, in order to obtain a description of environmental literacy activities in household waste management. The informants of this study were the managers of the Kampong Recycle and the Kampong Recycle Community. The data analysis technique used the Miles and Huberman model, namely through the stages of data reduction, data presentation, and conclusion drawing. The results showed that literacy activities related to household waste management by Kampong Recycle involved all levels of society, both children, adolescents and adults. Environmental literacy activities include waste class activities, recycling camps, recycling gardens and waste recycling skills.

Keywords—eco-literacy, waste management, environmental development

I. INTRODUCTION

The existence of a sustainable environment greatly affects the sustainability of human life. Human behaviour and activities in managing resources are one of the factors in building a sustainable environment. Humans are the main actors who take advantage of natural resource management to support their survival. However, human behaviour and activities in the use of natural resources sometimes make people forget other aspects such as environmental aspects. At present, various development processes are often carried out solely to pursue economic growth, without paying attention to sustainable environmental aspects that cause environmental damage.

Environmental problems actually arise from human behaviour that does not pay attention to environmental sustainability. This ignorance is caused by humans who tend to only exploit the environment excessively to meet their daily needs, so that it can disturb environmental harmony. According

to Capra's life web view, a systems-based approach that recognizes the web of life consists of living systems that function as networks and interact interdependently with other living systems in organizational patterns, structures, dissipation, and nested cyclical processes [1-5]. This shows that humans and the environment are an interdependent unit, forming an ecosystem of life that affects each other.

Referring to the geosocial system theory, humans have two roles or positions at once, namely as subjects and objects. Humans as subjects, namely humans in their environment have the function of regulating, processing, mixing, concocting, and utilizing existing natural and environmental resources wisely and wisely. As for humans as objects, namely humans who are an inseparable part of a system, humans have a role as targets of environmental management.

Under the Department for Environment Food and Rural Affairs (DEFRA) framework, the government forms four main dimensions of the index of environmental indifference. These dimensions include dimensions of water management, personal transportation, energy management and waste management. Referring to the data on the Indonesian Environmental Indifference Behaviour Index Report in 2018, it is known that the value of the waste management dimension has the largest index value among the other dimension values, which is 0.72 (close to 1). This shows that the level of indifference to waste management in Indonesia is high. The high level of indifference to waste management is shown in the behaviour of households in Indonesia regarding the handling of waste management. More than half of households in Indonesia use environmentally unfriendly methods when managing waste, such as burning 53 percent of trash which will cause air pollution or throwing garbage into rivers / gutters 5 percent and 2.7 percent carelessly. In addition, to reduce plastic waste by carrying their own shopping bags, it is still a little done by households in Indonesia. As many as 81.4 percent of households in Indonesia rarely carry their own shopping bags when shopping.

In an effort to foster environmental awareness behaviour, it is necessary to provide an understanding of the importance of preserving the environment, one of which is through education. Through an educational approach, the main goal to be built is

to change people's behaviour. Education not only provides knowledge, but forms a positive attitude so that people can behave in accordance with the knowledge they have. Awareness of protecting this environment is very important. It is hoped that the planting of awareness of protecting the environment through education can become a means of socialization and understanding for local residents about the environment and waste. Education is expected to build a sustainable society that has awareness of the importance of environmental sustainability [6].

In Jember Regency, an environmental care area called Kampoeng Recycle has been developed. Kampoeng Recycle is a means and source of community learning in developing knowledge and skills related to the environment, especially related to waste. Literacy learning activities related to waste are organized in groups by forming study groups in each activity. This is to strengthen people's learning motivation so that they can teach one another and form an effective community communication network in managing household waste [7].

Kampoeng Recycle conducts learning efforts that focus on awareness, providing training in recycling skills and eco-friendly entrepreneurship known as Eco-Literacy. Eco-literacy or often called ecological intelligence is intelligence based on cognitive aspects or an understanding of how nature supports the lives of all living things. Eco-literacy is complex, supported by intellectual, social, emotional and spiritual intelligence. The existence of science, awareness, and life skills in harmony with nature preservation also further supports the success of eco-literacy [6]. This ecological intelligence is an effort to create a sustainable society. Because so far the use of the environment and natural resources that can be passed on to future generations is still the main focus of education, but we often forget to teach about how to build a sustainable society or a sustainable society [2].

Eco-literacy carried out by Kampoeng Recycle aims to provide awareness to the community so that they have attitudes and behaviours in deciding actions with an emphasis on environmental sustainability, especially on the issue of solid waste. An environmentally conscious attitude is the main key in encouraging environmental care behaviour. Awareness is carried out by providing knowledge about the basics of environmental awareness, especially related to waste management.

II. METHODS

This research uses a qualitative approach, because qualitative research can reveal real events in the field and can reveal hidden values. As a theoretical basis in understanding a qualitative approach based on the opinion of Bog and Taylor in Moleong [8], which defines and understands qualitative methods as research procedures that produce descriptive data in the form of written or spoken words from people and observable behaviour. Moleong [8], explains that qualitative research focuses more on the accuracy and adequacy of data. The research method uses descriptive methods. Through a

qualitative approach and descriptive methods to obtain a description of environmental literacy activities in household waste management in Kampoeng Recycle. This study seeks to obtain a description of eco-literacy activities to obtain an overview of individual and group behaviour in waste management. Research informants include the managers of Kampoeng Recycle, and the Kampoeng Recycle Society of Jember Indonesia. The selection of research informants was carried out in a purposeful manner, with the hope that researchers could obtain the required data related to environmental literacy activities so that four informants were obtained, consisting of two managers and two people who were actively involved in the activities initiated by Kampoeng Recycle. The data collection technique was carried out by using interviews and focus group discussions (FGD). The technique of data analysis was carried out following the principles of qualitative research based on the Miles and Huberman model, namely through the stages of data reduction, data presentation, and conclusion drawing. Data collected through interviews and FGDs, processed through a series of data sorting, then presented in the form of an analytical narrative to produce data conclusions that refer to the focus of the problem

III. FINDINGS AND DISCUSSION

The existence of garbage is very close to human life. The paradigm related to waste has changed along with changes in knowledge and technology in waste management. The closest waste generated by the community, one of which is household waste. The waste from household activities is increasingly increasing along with the growth of the community itself. Changes in behaviour and strengthening of people's insights need to be organized massively, in order to foster a society that cares about the environment that is sustainable. The efforts made through education activities are still felt to be the most effective in fostering a community that cares about the environment. Through community-based education, by applying the principles of adult education, it is felt that it will be very helpful in fostering a sustainable environmental system. Educational activities to create a sustainable environment that are being promoted at this time, known as Eco-literacy.

Eco-Literacy can also be said to be a conscious attitude towards the environment, consciously protecting the environment according to the knowledge they have. An environmentally conscious attitude is the main key in encouraging environmental care behaviour. Eco-literacy carried out by Kampoeng Recycle aims to provide awareness to the public so that they have attitudes and behaviours in deciding actions with an emphasis on environmental sustainability, especially on the issue of solid waste. It is in line with the views of some experts that Eco literacy is the development of people's capacity to view the system in the world using their heads, hearts, hands, and souls from an eco-centric point of view [4,5,9-12].

Environmental literacy activities carried out by Kampong Recycle involve all levels of society from children, adolescents to adults. This activity aims to provide comprehensive knowledge and new insights about waste to the community. Kampong Recycle believes that in forming a system that cares for the environment, especially household waste, of course, must involve all parties. Through the involvement of the entire community from children, adolescents and adults, it is hoped that they will be able to be involved and take a real role in carrying out 3R activities (Reuse, Reduce, Recycle). Kampong Recycle packs literacy activities with various approaches, taking into account the targets involved in environmental literacy activities carried out on the basis of life skills, projects, and mentoring.

Kampong Recycle has initiated various activities in an effort to improve the ability of both the knowledge, attitudes and skills of the community towards environmental care, especially household waste. Literacy activities aimed at children are packaged in various forms including the garbage class. In this garbage class, various activities are carried out in order to provide knowledge, attitudes and skills of children to care for the environment. Activities include creative children's markets and fairy tale classes. In creative children's market activities, literacy that is built is related to how children are able to create and innovate through recycled processed products from used goods. Meanwhile, in the fairy tale class, the literacy that is built is related to strengthening children's knowledge of waste management innovations.

A literacy activity aimed at targeting adolescents, Kampong Recycle initiated recycling camp activities. This activity encourages and facilitates young people to care about their environment by providing knowledge related to waste management. Literacy that is built through the Recycling Camp activities is to strengthen youth insights about the recycling cycle of waste closest to the household. Teens who are involved are given the freedom to do hands-on and creative practices related to waste recycling. Practical activity in recycling waste is directed at making household compost in an area that has been set in such a way, namely a recycling garden.

The existence of a recycling garden is integrated with a recycling camp activity aimed at teenagers. The recycling garden is an area created as a means for community practice and innovation. Literacy built in this recycling garden is that teenagers and adults are involved in strengthening the skills to recycle waste. The recycling garden becomes a miniature area filled with various useful forms of recycled products, especially compost for plants. Here various compost products are developed for the development of media for ornamental plants and family medicinal plants.

In addition, in managing plastic waste, Kampong Recycle develops skills in making eco bricks and decoupage. Literacy is built through eco brick and decoupage making skills, namely strengthening the skills to produce products of sale value due to the nature of plastic waste which is difficult to decompose and

has high economic value. Through practical activities to produce a product with sale value, the public will be more enthusiastic and accept the awareness process more quickly. The community is more interested if the activity is not only listening, but also has an element of work so that they can acquire skills. So it is not only understood in classical lectures, but is involved in practical activities. This is in accordance with the behaviour change process, Rogers revealed five stages in adopting a new behaviour, namely awareness, desire, evaluation, effort and acceptance [13].

Eco-literacy activities organized by Kampong Recycle are not only about concepts and knowledge that must be owned and understood by the community, but strengthening attitudes and skills are also instilled in the community. These skills can overcome waste problems, both organic waste that is used as compost and inorganic waste which is used as various creations of economic value products. Kampong Recycle also prioritizes a participatory approach in organizing every implementation of its learning activities such as practical activities for making eco bricks, composting, and decoupage. Thus, the community is not only used as an object of change, but is also involved in the implementation of every activity. This is in line with several research results that the role of organized community initiatives has been able to encourage environmental innovation, community development, social integration, empowerment and social transition [14-16].

IV. CONCLUSION

The Eco-Literacy activities carried out by Kampong Recycle are carried out in several activities, such as garbage classes, recycling camps, recycling gardens and recycling skills. This activity is able to foster participatory environmental awareness in the implementation and management of household waste products. whether organic becomes compost, or inorganic becomes a product of waste recycling skills. The various activities that have been initiated have been able to increase the ability of both the knowledge, attitudes and skills of the community towards an environmentally caring society. Kampong Recycle also prioritizes a participatory approach in organizing every implementation of its learning activities such as practical activities for making eco bricks, composting, and decoupage.

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