



# BUILDING COLLECTIVE AWARENESS FOR HANDLING DOMESTIC PLASTIC BOTTLE WASTE IN THE UNIVERSITY OF INDONESIA VOCATIONAL EDUCATION PROGRAM

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**Abstract.** This research discusses various issues related to the process of building the collective awareness of the academic community of the UI Vocational Education Program regarding the domestic plastic bottle waste management system, starting from the process of building a will to change, policies and regulations, education and training systems, governance systems and infrastructure, systems evaluation, comparative study, changing habits and building culture. This research also describes various obstacles that hinder the sharing of collective awareness into a new culture in terms of domestic plastic bottle waste management within the UI Vocational Education Program. This study uses a qualitative approach with in-depth interviews with a predetermined sample with the condition that it represents the academic community of the UI Vocational Education Program (purposive sampling method). From the results of the study, it was found that collective awareness of cleanliness in general was quite high but had no impact on awareness of building a plastic bottle management system specifically. The obstacles are: the absence of a general policy on the impact management system and regulations regarding the management of domestic plastic waste, the lack of education for the academic community and training for cleaners, the absence of comparative studies and the uneven distribution of infrastructure for trash cans with a type separation system, making it difficult to change habits and build a new culture of a plastic bottle waste management system within the UI Vocational Education Program. Thus the need for a grand.

**Keywords:** Collective awareness, Grand design of Policy, education, infrastructure, comparative study, culture

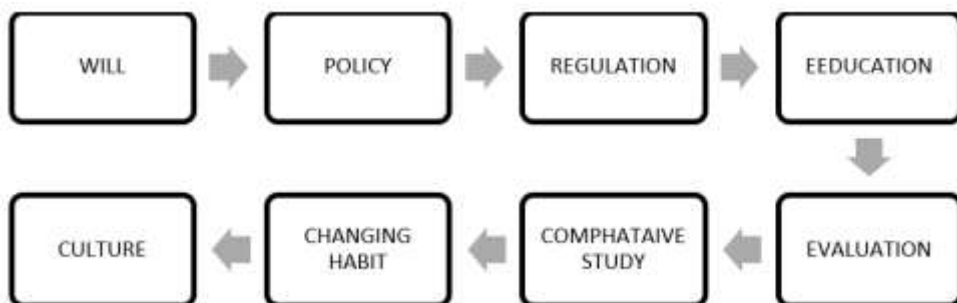
## 1 Introduction

Indonesia is the 2nd largest waste producing country in the world after the People's Republic of China, and around 14% of the 54 million tons of waste it produces is plastic. Plastic waste is usually in various forms, including bottled drinking water. Plastic waste is a hazardous material for both the environment and living things, this is because plastic is a

chemical substance that is a pollutant and is difficult to decompose through natural processes. To decompose plastic it will take tens of years, one of the plastic materials is poly vinyl chloride (PVC), which is a carbonyl chemical from the final processing of fossil fuels which is not directly friendly to the environment or human health.

Environmental damage due to plastic waste is a serious threat to the survival of mankind in the future, related to the decline in the carrying capacity of the environment due to reduced ecosystem quality and disruption of the life cycle. There needs to be serious handling of the waste management system, especially plastic bottles, which starts from the micro (domestic) environment, so that a good pattern is developed in handling plastic bottle waste. For this reason, this paper will focus on the problem of Handling Domestic Plastic Bottle Waste in the Vocational Education Program at the University of Indonesia

The formulation of the questions that were constructed included: 1. has the awareness of the academic community been awakened regarding the management of plastic bottle waste in the UI vocational education environment? 2. What is the problem for the establishment of a plastic bottle waste management system within the UI vocational education program? 3. What efforts are being made to build a plastic bottle waste management system within the UI Vocational Program? To answer these three questions, a research scheme was created with a qualitative approach, and the method used was in-depth interviews with predetermined respondents with the condition that the respondents are considered to represent the academic community and its supporting ecosystem within the UI vocational education program environment such as: Lecturers, Students, Structural Officials, Staff, Security, Office Boy, Canteen Management Tenants. The research instruments are as follows: 1. Exploring individual and collective awareness of the plastic bottle waste management system, 2. Grand design of Policy and regulation, 3. Education and training, 4. System and infrastructure, 5. Evaluation, 7. Comparative study 8. Steps changea, 9. Building culture.



## 2 THEORETICAL OVERVEWS

**Collective Awareness.** To find a textual approach to collective consciousness in this study, we try to explore Durkheim's definition, Durkheim defines collective consciousness as "**the totality of beliefs and sentiments common to the average citizen of the same society**" (Durkheim, 1893).

Sometimes, these collective agreements last for years, generations, and even ages. Examples of ideological collective consciousness, patriotism, nationalism, gender norms, religious values, class consciousness, and group thinking. Awareness of the importance of cleanliness in general in the vocational academic community is quite high, this is due to the pretty good quality of education, and individual habits that have accumulated to become common values. sm, nationalism, gender norms, religious values, class consciousness, and group thinking.

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**Grand Design of Policy.** Grand design is basically an integrated mindset through a systematic approach so that it can be simulated and tested for mathematical-empirical validity in preparing an operational road map for public services. In this case there is no systematic policy regarding waste management at the vocational education program level, what is new is the restriction on the use of stereo foam food packaging with paper-based packaging or easily recyclable materials.

**Education.** Education is all circumstances, things, events, incidents, or about a process of changing the attitudes and behavior of a person or group in an effort to mature humans. Education is carried out through teaching and training efforts. proper education must go through the process of Education and training, education and training is the creation of an environment in which human resources (HR) can acquire or learn attitudes, abilities, skills, knowledge and behavior related to their work.

**Infrastructure.** Infrastructure is one of the important and vital aspects to accelerate awareness building. More than that, infrastructure is also a determining factor in changing behavior. Infrastructure or infrastructure in general is the entire structure as well as basic facilities, both physical and social to support activities in this case related to the plastic

bottle waste management system. the unavailability of infrastructure facilities spurs people to carry out behavior that is not supportive of waste management

**Waste Management Comparative Study.** A comparative study or comparative study is a study comparing two or more conditions, events, activities, programs and others (Sukmadinata, 2012, p. 79). According to Waste Management (2021), waste management is an activity to manage waste from start to disposal, including collection, transportation, treatment and disposal, accompanied by monitoring and regulation of waste management. The new waste paradigm is: "collect-sort-if-transport-waste". The waste that is disposed of is waste that really cannot be utilized, because it has no economic value. Waste management with this new paradigm is carried out with waste reduction and handling activities.

**Culture.** culture is a complex whole which includes knowledge, belief, art, morals, scholarship, customs, and other capabilities and habits acquired by humans as members of society. E.B Tylor (1832-1917), what is meant by culture in the context of this research for waste management means, collective awareness that is built through a process, integrated from various factors such as: efforts to raise awareness by regulation, education, providing infrastructure, conducting comparative studies, creating an evaluation system, changing collective behavior and giving birth to a new culture

### 3 RESEARCH METHODE

in this research used a qualitative approach, with in-depth interview method. The sample of respondents has been determined (purposive sampling) with the condition that the respondents are considered to represent the academic community and its supporting ecosystem within the UI vocational education program, such as: Lecturers, Students, Structural Officials, Staff, Security, Office Boy, Canteen Manager Tenants.

The research instruments used are as follows: 1. Will to cahneg explore individual and collective awareness of the plastic bottle waste management system, 2. Policies and regulations explore various related policies and regulations, 3. Education and training, check whether there is training or education intensively and continuum, 4. System and infrastructure whether the system has strengthened people to make changes in behavior and adequate infrastructure available (support), 5. Evaluate whether there is an evaluation system, for correction and improvement, 7. Comparative study, checking whether or not doing comparative or benchmarking studies 8. Steps of change a, exploring whether it is conducive enough for people to change, 9. building a culture, is it possible to create the desired new culture with the existing conditions?

## 4 DISSCUTION AND FINDING

There is no systematic policy regarding waste management at the vocational education program level, starting from the UI level to the faculty level and the vocational education program there should be a grand policy regarding waste management to regulations governing management systems to more specific. In the absence of governance, the regularity and instruments of change are weak, because there is nothing that can force people, with clear regulations, sanctions and rewards will be born for those who violate and those who comply. It is hoped that from the habit of following the rules it will become a general value, and over time it will become a new culture.

training for cleaning officers by increasing their abilities and positive behavior related to their work, educating the entire academic community on the management of plastic bottle waste, separating it from other types of waste and using BSI garbage machines as a reward, giving practice on uploading systems to new students at OSPEK, for example will be very effective.

## 5 Conclutions

From the results of the study it was found that 1. Individual and collective awareness of the academic community and supporting ecosystems for cleanliness is quite high, but awareness of the plastic bottle waste management system is not very good, this is due to the finding that the separation of types of waste according to the designated place is still not orderly. From the results of the interviews, information was obtained that: the causes of these conditions were: 1. there were no general rules governing waste management, especially plastic bottles, so there were no rules that forced behavior to change,.2. lack of education and training, 2. the distribution of waste bins is still uneven which does separate types of waste according to waste management (infrastructure). 4. There is no evaluation system that provides continuous input for system improvement. 6. there is no comparative study as a stimulus or for benchmarking the established system (good). A clean culture has been built, but to reach the stage of a plastic bottle waste management system it needs to be improved. The management of plastic waste, especially bottled water bottles, is currently a hot topic of discussion considering the increasing use of bottled water in the community which will certainly increase the production of plastic waste significantly, many efforts have been made to try to recycle plastic into various products with economic value, such as

home-scale craft materials, plastic ore industrial scale, to as a material for making fuel. But the most important thing is how to instill awareness in the community in understanding the plastic waste management cycle, especially plastic bottles, from starting to instill a positive understanding of proper waste management in a micro-scale environment. Environmental cleanliness and awareness of the waste management system, especially plastic packaging within the UI vocational education program, is an interesting phenomenon, so that it can be used as a model for a plastic bottle waste management system for the UI environment as a whole.

## 6 Suggestion

Indonesia University and Vocational Education, in particular make a grand design of policy of waste management and regulations that regulate from upstream to downstream, provide adequate infrastructure, including independent waste processing infrastructure. create an evaluation system and socialization as well as optimal education from generation to generation so that a new culture is built on waste literacy

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