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RESEARCH ARTICLE

ANALYSIS OF FACTORS RELATED TO WASTE DISPOSAL AT SUCO BAHU POSO ADMINISTRATIVO BAUCAU, MUNICIPIO BAUCAU

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ABSTRACT

The problems studied in this study are factors related to waste disposal. The municipality of Baucau has not yet completely overcome the problem of garbage in the city of Baucau. The local government is aware of this problem. But have not found the right long-term solution. Research on factor analysis related to waste disposal in Suco Bahu, Municipio Baucau aims to identify and analyze the relationship or correlation between community knowledge, community leaders' participation, community perceptions, community participation, infrastructure, and waste disposal. This research is a quantitative analytical study with a Cross-Sectional approach. The independent variables in this study are factors related to waste disposal which include: community knowledge, participation of community leaders, community perceptions, community participation, and infrastructure. The population in this study are residents who live around a garbage disposal site (TPS), all residents who live in markets, kiosks, and shops, as well as people living on the side of the highway. The sample in this study was 109. The sampling technique used the Proportionate random sampling method. The research instrument was a questionnaire and an observation sheet. Primary data is obtained through interviews and observations while secondary data is from the Village Hall (Suco) Bahu. Data analysis using chi-square test P value 0.05. The results of the study show that; "There is a significant relationship between people's perceptions of waste disposal, with a Prevalence Ratio (RP) of 8.83 and 95% CI: lower 1.492 and upper 38.666, there is a significant relationship between community participation and waste disposal, with a Ratio Prevalence (RP) 1.296 and 95% CI: lower 1.484 and upper 4.980. There are also results of research that show no relationship between community knowledge with the waste disposal with a Ratio Prevalence (RP) of 0.869 and 95% CI: lower 0.409 and upper 1.857, participation of community leaders with garbage disposal with 1.136 Ratio Prevalence (RP) and 95% CI: lower 0.410 and upper 3.880, infrastructure with garbage disposal with 0.051 Ratio Prevalence (RP) and 95% CI: lower 0.73 and upper 2.557,

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INTRODUCTION

Almost every day I see garbage strewn on every side of the road, ditches, rivers, and around the forest near the city. Even though minimal trash boxes are available in every corner of the City. I ni show that lack of awareness among residents about the importance of maintaining cleanliness in their environment. Increasing people's purchasing power for various types of staples and technological results as well as increasing businesses or activities supporting economic growth in a region also make a major contribution to the quantity and quality of waste produced (Sholeh, 2011). According to the World Health Organization (WHO), waste is something that is not used, not used, not liked and something that is thrown away that comes from human activities and does not happen by itself (Chandra, 2006). Meanwhile, public health experts from America also contain various principles, namely that there is an object or solid material, there is a direct or indirect relationship, and the material in question is a material that is no longer used and is not useful in any form (Notoatmojo, 2013).

Stack quantity and quality data rubbish in cleavage world report by the World Bank entitled "What a Waste: A Global Review of Solid Waste Management", reveals that the amount of solid waste in world cities will continue to increase by 70% from this year to 2025 from 1, 3 billion tons per year to 2.2 tons per year. The World Bank report also said that Japan in 1995 was 1.47 kg/capita/day. The amount of waste is much larger than in countries in Asia, where most of the waste does not reach 1kg/capita/day. The cause of the high waste production in Japan is that it has experienced mass production, mass consumption, and also mass disposal. From the above data, the majority of accumulation occurs in developing country cities, as is the case with neighboring Indonesia, which is the country with the population most. Based on data from Jambeck (2015), two to five n countries dispose of plastic waste by dumping it in the sea. Indonesia is in second place with (187.2) million tonnes, the Philippines (83.4) million tonnes, Vietnam (55.9) million tonnes, and Sri Lanka (14.6) million tonnes annually. Disposal of garbage in any place is proof of the low participation of the community in keeping the environment clean.

Because the management and disposal of waste is not only the responsibility of the government but also the responsibility of the community. This community participation is needed to increase the feeling of *belonging* (*sense of belonging*) in every activity process. Besides that, through their participation in every activity, the community has the opportunity to develop personal skills, leadership, and accountability through a *learning-by-doing process* (Slamet, 1993). Another thing that contributes to waste disposal and management is the limited land for a waste disposal site. The limited transportation facilities provided by the city government, low economic potential, then the very low involvement of government officials in terms of organizing efforts for proper waste management and disposal, are reasons for disposing of waste or hiding waste in any place (Anonymous, 2007). Likewise, the level of community education which is calculated from the average length of schooling is a prerequisite for the degree of public health, both directly and indirectly through the economy (Notoadmodjo, 2011). Low income affects the level of public education which causes low knowledge which includes behavior towards environmental hygiene that is positively correlated with the way household waste management is a medium for causing disease (Riswan, 2011). Vice versa, low education affects the level of people's income. The lower level of income causes the fulfillment of household waste management to be not carried out properly and can cause illness. The people in Timor Leste, in their daily lives, have the same habit of disposing of garbage in developing countries in general. This is also the case with the general situation in the city of Dili and its surroundings accumulation of domestic waste produced by households in the form of food scraps, materials, and equipment that are no longer used, packaging materials, paper, plastic, etc., and then waste from trading places such as markets, supermarkets, shops, stalls, in the form of merchandise that is damaged, fruit, vegetables, paper, plastic, cardboard and so on, thrown in any place.

Even though the government has issued various policy regulations to prevent people from throwing garbage in random places as stated in the legal basis, *decree lei no33/2008 Kona ba ijene orden publica, decree lei no 2/2017 kona ba residuos solidos urbanos, decree lei no 5/2011 kona ba actividades negocio, codigo penal second sex crime sira hasoru ambiente (artigu da -215) hasoru meu ambiente*. Even though the local government (*municipio*) has provided various garbage disposal sites in various corners of the city, the community still does not use these trash cans to dispose of waste. Furthermore, to avoid legal insufficiency in environmental matters, the government pays little attention to it, in Article 61 paragraph 1 of the 2002 RDTL constitution that: Everyone has the right to a living environment that is humane, healthy and ecologically balanced and progressive to protect it and to improve it for the benefit of future generations. In connection with article 61 of the RDTL constitution, law number 5 of 2011 was developed, which still uses Indonesian legislation number 23 of 1997 as a basis for regulating the environmental management of Timor Leste. Even though government policies have been issued, there are still violations committed by the community, because the policy does not have binding legal force, causing the public to be unaware of the policy. The same thing happened in the city of Baucau, where the waste problem was of great concern. Year after year the problem of waste is increasing, but the government in this case has not provided adequate waste disposal sites. Most of the people in *Suco Bahu* have a habit of throwing garbage in ditches, beside the main road, and dumping it in the forest around it. the *Sucos*. So that the garbage that has not been carried away by the flow of the sewer water, causes various problems, including the environment around it looking very dirty, lots of flies, lots of rats and mosquitoes, and even spreads an unpleasant smell. Then it can cause several diseases such as ISPA, diarrhea, malaria, skin diseases, dysentery, scabies, and so on. Data at *Serviço Saúde Municipio Baucau* shows that in the work area of *Centro Saúde Kunitária Riamare* in 2016 there were 3526 cases of ARI, 4689 skin diseases, 7308 acute diarrhea, 598 dysenteries, 2541 scabies, and in 2017 there were 2312 cases of ARI, 5038 cases of skin disease, 857 cases of acute diarrhea, 635 cases of dysentery, and 633 cases of scabies.

According to Lawrence Green's theory, (2003) which analyzes human behavior at the health level, this study refers to the habits of individuals in disposing of garbage, which is influenced by 3 factors, namely predisposing, driving, and enabling factors. The motivating factors include the participation of *Suco* (Village) government officials, then regarding the level of family income in disposing of garbage, supporting *factors* include the facilities available at Suco Bahu.

Formula problem: Based on the description above, the researcher is interested in conducting research with the title " Analysis of factors related to waste *disposal* in Suco Bahu, Posto *Administrativo* Baucau, *Municipio* Baucau ".

Based on the background above, the problem can be formulated as follows:

- Is there a relationship between family knowledge and waste disposal?
- Is there a relationship between the participation of the apparatus government or community leaders with waste disposal?
- Is there a relationship between people's perceptions and waste disposal?
- Is there a relationship between community participation and waste disposal?
- Is there a relationship between facilities and infrastructure with waste disposal?

LITERATURE REVIEW

Theoretical basis

Definition of Knowledge: Humans are always looking for the truth for a piece of new knowledge and it is this knowledge that influences a person's attitude and behavior. As (Budiman and Agus, 2013) explain the definition of knowledge. According to the constructivist approach, knowledge is not a fact of a reality that is being studied, but rather a person's cognitive construction of objects, experiences, and their environment. Knowledge is a continuous formation by someone who is reorganized every time because of new understandings. Knowledge can be obtained by someone naturally or intervened either directly or indirectly (Budiman and Agus, 2013).

Factors Influencing Knowledge: Knowledge can affect a person's behavior and attitude, but many factors can affect the knowledge itself. Meanwhile, (Budiman & Agus, 2013) explains the factors that influence knowledge including; Education, Information, Social, Culture and Economy, Environment, Experience, and Age.

Kind of Knowledge: Community understanding of knowledge in the context of health is very diverse. Knowledge is part of health behavior. An explanation of the types of knowledge (Budiman & Agus 2013) includes the following:

Implicit Knowledge: Implicit knowledge is the knowledge that is still embedded in the form of one's experience and contains factors that are not real, such as personal beliefs, perspectives, and principles. Knowledge of a person is usually difficult to find and transfer to another person either in writing or orally. Implicit knowledge often contains habits and culture and can even be unconscious. Example: someone knows about the dangers of smoking to health, but he smokes.

Explicit Knowledge: Explicit knowledge is the knowledge that has been documented or stored in a tangible form, which can be in the form of health behavior. Real knowledge is described in health-related actions. Example: someone who already knows about the dangers of smoking to health and turns out he doesn't smoke.

Knowledge Stages: It takes stages of the ability to understand the information to gain knowledge.

The stages of knowledge according to Benjamin S. Bloom (1956) in (Budiman and Agus, 2013) there are six stages, namely Know, Understand, Application, Analysis, Synthesis, and Evaluation.

Knowledge Level Measurement: Measurement of the level of knowledge can be measured through questionnaires or questionnaires which are explained (Arikunto, 2006) that knowledge measurements can be obtained from questionnaires or questionnaires that ask the content of the material to be measured by research subjects or respondents. The depth of knowledge we want to know or measure can also be adjusted to the level of knowledge mentioned above. While the quality of knowledge at each level of knowledge can be done by scoring.

Knowledge Level Criteria: According to (Budiman & Riyanto, 2013) a person's knowledge is divided into three levels based on the percentage value as follows:

- The level of knowledge is in a Good category if the value is $\geq 75\%$.
- The level of knowledge in the Enough category if the value is 56-74%.
- Less knowledge level category if the value is $\leq 55\%$.

So someone who has good knowledge about waste disposal here is defined as having knowledge consisting of understanding waste, types of waste, sources of waste, factors that influence waste production, and tools used in waste disposal, so they will also have good behavior (Azrul Azwar, 2002:52). Cognitive knowledge is a very important domain in shaping one's actions. (Soekidjo Notoatmodjo, 2003:122). Knowledge can be obtained through education, both formal and non-formal, and requires complex cognitive processes. With education, there is a learning process that will produce good results, if it is supported by adequate facilities. One of the important things in this facility is the source of information and the media. To find out a person's level of education, a test or interview can be carried out using a questionnaire (Prawitasari, 2008), community knowledge about garbage disposal will influence people's behavior when they are going to dispose of garbage.

Community Behavior: Human behavior towards the environment is related to how humans give meaning to the environment. Therefore, according to Soemarwoto, (1989), there are three kinds of human behavior towards the environment, namely destructive behavior, awareness behavior, and environmental preservation behavior. Often there are aspects of human ignorance/incomprehension acting towards the environment, either due to lack of information or lack of communication, which in them is the cause of environmental damage. This is generally the case for rural residents who are far from information and communication and poor people living on the outskirts of cities or communities along rivers. Information in the environment is said to be something that provides knowledge, and this can be in the form of physical objects or even in the form of behavior (Soemarwoto, 1988).

Humans are part of the ecosystem mentioned above, in their life they have links with other living things, namely plants and animals. This dependence implies that all components have an equally important role so that the existence of all living things and their well-being must also be maintained. There are three things that humans can do to maintain a balance between attitude correction (namely: human attitudes towards the environment), corrections to the technology used, and natural corrections (ecosystems). The interaction between humans and other components in the ecosystem, where humans need to be balanced by adjusting harmony, between people's attitudes, the use of technology and natural corrections, and accompanied by institutions (Soerjani, 1990). Correction of human attitudes towards the environment can be seen in human life in society, that is, there is a process of influence influencing the mind through dialogue, both direct and indirect dialogue. (Koentjaraningrat, 1974), said that the knowledge and understanding obtained can be used as a reference for individual attitudes towards an object, so that knowledge of a program

or activity for individuals will usually result in spontaneous participation. By having a good attitude, one can be expected to participate well too.

Factors Influencing Behavior: The theory of Lawrence Green and friends, (1980) states that human behavior is influenced by two main factors, namely behavioral factors (*behavior causes*) and factors outside of behavior (*non-behavior causes*). Furthermore, the behavior itself is determined or formed from 3 factors, namely:

- Predisposing factors (*predisposing factors*) include knowledge, attitudes, and so on.
- Enabling factors include the physical environment, availability or unavailability of work safety facilities or means, training, and so on.
- Reinforcing factors (*reinforcement factors*), these factors include laws, regulations, supervision, and so on (Notoatmodjo, 2003).

Attitude: According to (Ashidiqy, 2009), Notoatmodjo explains that attitude is a reaction or response of someone who is still close to a stimulus or object. Meanwhile, Bimo Walgito explained that attitude is an organization of opinions, a person's belief about a relatively stable object or situation accompanied by certain feelings and provides a basis for that person to make a response or behave in a certain way he chooses. Zimbardo and Ebbesen explain that attitude is a predisposition (a state of being easily influenced) towards a person, idea, or object that contains *cognitive, affective, and behavioral* components. Furthermore, Dobb stated that attitude is essentially hidden behavior that occurs consciously or unconsciously. Hidden behavior is added with other factors from within the individual such as encouragement, will, and freedom will lead to *overt behavior*.

Enabling Factors: The continuation factor of the predisposing factor, where the motivation for behavior change can be realized. These factors include:

- The availability of physical facilities is a factor that influences a person which is reflected in his practice or actions.
- (*Reinforcement Factor*) Factors obtained from the closest people and the existence of social support given to these individuals.

Community Participation Concept: The notion of participation by many experts is usually interpreted as an effort of community participation in an activity, which is linked to development will be an effort of community participation in development. According to (Made Pidarta, 2006: 340) participation is the involvement of a person or several people in an activity. Involvement can be in the form of mental and emotional as well as physical involvement in using all the abilities it has (taking the initiative) in all activities carried out and supporting the achievement of goals and responsibility for all involvement. In the same meaning (Siti Irene, 2011: 50), Participation is the involvement mental and emotional of a person in a group situation that encourages them to support the achievement of the goals of the group and takes responsibility for the group. Participation is the determination of the attitude and involvement of each individual's desires in the situation and condition of the organization, so that in the end it encourages the individual to participate in achieving organizational goals, and take part in every shared responsibility (Inu Kencana, 2003: 132). Community participation or citizen participation is a process when citizens, as individual beings as well as social groups and organizations, take part and influence the process of planning implementation, and monitoring of policies that directly affect

their lives Sumarto, (2003: 17). Sumarto, (2003: 18) community participation means that the community participates, that is, follows and accompanies the government because, in reality, it is the government that until recently has been the main designer, organizer, and payer in development. The community is expected to be able to participate because it is primarily organized and funded by the government and is meant for the greatest possible welfare of the community itself, and the people at large. Sunarti, (2003: 76-77) argues that a person who participates experiences involvement of himself or his ego which is more than involvement in work or tasks, which means involvement of thoughts and feelings. The successful implementation of regional autonomy is inseparable from the active participation of community members. The concept of community participation is directly related to the idea of democracy, whereby the basic principle of democracy "of, by and for the people", will: "give every citizen the possibility to climb the ladder of the social scale and thereby according to law pave the way for people's rights to negate all inborn privileges, and wants the struggle for excellence in society to be determined solely by one's abilities. (Bintoro Tjokroamidjojo 2007: 5) suggests the notion of participation in the development process, in particular the economic field, namely:

- Involvement in determining the direction, strategy, and development policies carried out by the government. This does not only take place in the political process but also in the social process, namely the relationship between interest groups in society.
- Involvement in carrying the burden and responsibility in the implementation of development activities in the form of contributions in the mobilization of development financing, harmonious productive activities, social supervision over the course of development, and others.
- Involvement in reaping the results and benefits of development equitably.

Based on the description above, it can be explained that participation is the involvement of community members in the development and implementation of development programs or projects carried out in the local community.

Community Participation Concept Tradition: (Siti Irene, 2011: 56) identified three traditions of the concept of participation when it is associated with the practical development of a democratic society, namely political participation, social participation, and citizen participation. The description is as follows.

- Political participation is often associated with a democratic political process, which involves the interaction of individuals and organizations. Political participation is associated with political democracy which puts forward the principles of representation and indirect participation.
- Social participation is more oriented toward development planning and implementation. This participation is positioned as community involvement, especially those related to the development process in data consultation and decision-making at all stages of the development project cycle, from evaluation to assessment, implementation, monitoring, and evaluation.
- Community participation emphasizes the direct "participation" of citizens in decision-making in government institutions and processes.

Based on the description above, it can be explained that the forms of participation include political participation, social participation, and community participation.

Dimensions of Community Participation: According to (Josef Riwu, 2007: 127) in community participation, there are two important dimensions. The first dimension is who participates. Community participation can occur at four levels, namely first, participation in decision-making. Second, participation in implementation. Third, participation in utilization. Fourth, participation in the evaluation. Namely; Participation in the decision-making process, participation in

the implementation, participation in taking the benefits, participation in the evaluation, and participation in the decision-making process. Based on the description above, it can be explained that the dimensions of participation include participation in decision-making, participation in implementation, participation in utilization, and participation in evaluation.

Typology of Community Participation: Development is a process of planned and desired change. At least development in general is the will of the community which is manifested in the decisions taken by its leaders, which are then compiled into a plan which is then implemented. Development may only concern one area of life but may be carried out simultaneously in various interrelated areas of life. According to (Harun, 2011: 249) the typologies of community participation are:

- Passive/manipulative participation with the characteristics of the community being told what is happening or has happened, unilateral announcements by project implementers without regard to community responses, and the information needed being limited to professionals outside the target group.
- Informative participation has characteristics in which the community answers research questions, the community is not allowed to be involved and influence the research process and the accuracy of research results is not discussed with the community.
- Consultative participation with community characteristics participates in a consultative manner, there is no opportunity to make joint decisions, and professionals are not obligated to submit views (as input) or follow-up.
- Intensive participation has the characteristics of the community providing sacrifices or services to obtain rewards in the form of incentives or wages. The community is not involved in the learning process or experiments carried out and the community has no stake in continuing activities after the intensive is stopped.
- Functional participation has the characteristics of the community forming groups to achieve project goals, forming groups usually after major decisions have been agreed upon, in the early stages the community depends on outsiders but gradually shows its independence.
- Interactive participation has a characteristic where the community plays a role in the analysis for planning activities and forming institutional strengthening and tends to involve interdisciplinary methods that seek a variety of perspectives in a structured and systematic teaching and learning process. Communities have a role to control over (implementation of) their decisions, so they have a share in the whole process of activities.
- Self-mobilization (Mandiri) has the character of the community taking the initiative freely to change the system and values they have. Communities develop contacts with other parties to obtain the necessary technical assistance and resources. Communities have control over the utilization of existing resources and or used.

Based on the description above, it can be explained that the typology of community participation includes passive or manipulative participation, informative participation, consultative participation, intensive participation, functional participation, interactive participation, and self-mobilization (independent).

Forms of Community Participation: Community participation also means the direct involvement of citizens in the process of decision-making and control as well as coordination in defending their social rights. (Keith Davis, 2013: 34) stated that the forms of community participation are in the form of:

- Mind is a type of participation where participation is participation by using the thoughts of a person or group that aims to achieve something desired.

- Power is a type of participation where participation is by utilizing all the energy that is owned as a group or individually to achieve something that is desired.
- Mind and Energy is a type of participation where the level of participation is carried out together in a group in achieving the same goal.
- Expertise is a type of participation where in that case expertise is the most desired element to determine a desire.
- Goods is a type of participation where participation is carried out with an item to help achieve the desired result.
- Money is a type of participation where participation uses money as a tool to achieve something desired. Usually, the level of participation is carried out by people from the upper class.

Factors Influencing Community Participation in Waste Management

According to (Yulianti, 2012: 10) several factors influence the community to participate in the participation process are:

- Knowledge and expertise. The knowledge base possessed will affect the entire environment of the community. This makes the public understand whether or not the stages and forms of existing participation;
- Community work. Usually, people with a certain level of work will be able to spend more or not even spare the slightest time to participate in a particular project. Often the underlying reason for society is a conflict between commitment to work and the desire to participate;
- Level of education and illiteracy. This factor is very influential on the desire and ability of the community to participate and to understand and implement existing levels and forms of participation.
- Gender. It is well known that some people still think that this factor can influence people's desire and ability to participate in the opinion that men and women will have different perceptions and views on an issue;
- Belief in a particular culture. Communities with a high degree of heterogeneity, especially in terms of religion and culture, will determine the participation strategy used and the methodology used. Often held beliefs can conflict with existing concepts.

Definition of Perception: Etymologically, perception comes from the Latin word *perception*; from *percipere* which means to accept or take (Sobur, 2003: 445). Furthermore, according to (Leavit in Sobur, 2003:445) perception in a narrow sense is vision, how one sees something, while in a broad sense perception is a view or understanding, namely how one perceives or interprets something. Meanwhile (Miftah Toha, 2003: 141) states "Perception is a cognitive process experienced by everyone in understanding information about their environment, both through sight, hearing, appreciation, feeling and smell". Jalaludin (Rachmat, 2007:51) states that perception is an observation of objects, events, or relationships obtained by inferring information and interpreting messages. Meanwhile, (Suharman, 2005: 23) states: "perception is a process of interpreting or interpreting information obtained through the human sensory system." Perceptions are objects around which are captured through the senses and projected to certain parts of the brain so that they can observe an object (Husaini, 1978:103). Perception is the core of communication, while interpretation (interpretation) is the core of perception, which is synonymous with *decoding* in the communication process (Mulyana, 2002:167). Perception is called the core of communication because if the perception is not accurate, effective communication will not occur. To better understand perception, here are some definitions of perception according to experts:

- *Desiderato*, perception is the experience of objects, events, or relationships obtained by inferring information and interpreting

messages. Perception is giving meaning to sensory stimuli (*sensory stimuli*) (Rachmat, 1996:51).

- Branca defines perception as a process preceded by sensing (Walgito, 2002:45).
- Moskowitz and Orgel, perception is an *integrated process* from the individual to the stimulus he receives (Walgito, 2002:46).
- Epstein and Roger, perception is a set of processes by recognizing, organizing, and understanding sensory absorptions received from environmental stimuli (Sternberg, 2008:105).
- Joseph A. Devito, perception is the process by which we become aware of the many stimuli that affect our senses (Mulyana, 2002: 168).

From several senses above, it can be stated that perception is a person's view or response to a phenomenon or a particular object that is perceived by the senses, both the senses of sight, hearing, feeling, and smell. With individual perception can understand the state of the surrounding environment. Even so, the perception of one individual is certainly different from that of another individual depending on the point of view of each individual in which some individuals perceive something well or positively or negatively.

Factors Influencing Perception: According to Kenneth E. Andersen, attention is a mental process when stimuli or sets of stimuli become prominent in consciousness when other stimuli weaken. Stimuli are considered because they have prominent characteristics, including movement, the intensity of stimuli, novelty, repetition, biological factors, and sociopsychological factors (Rachmat, 1996: 51-54). Meanwhile, according to Twikromo, the factors that influence a person's perception include: **One's** understanding or understanding of an object, experience, knowledge one has, principles or beliefs, environmental conditions, and needs.

The Process of Forming Perceptions

According to (Miftah Toha, 2003:145) The process of forming perceptions is based on several stages, namely:

- Stimulus or Stimulus; The occurrence of perception begins when a person is faced with a stimulus or stimulus that is present in his environment.
- Registration; In the registration process, a symptom that appears is a physical mechanism in the form of sensing and a person's condition for influencing through his sensory organs. Someone can listen to or view the information sent to them, then list all the information sent to them.
- Interpretation; Interpretation is a very important cognitive aspect of perception, namely the process of giving meaning to the stimulus it receives. The process of interpretation depends on the way of deepening, motivation, and one's personality.

In examining the process of forming perceptions, it is strongly influenced by functional factors that determine a person's perception that originate from needs, past experiences, and other things including what we call personal factors (Rachmat, 1998:55). Furthermore Rakhmat explained what determines perception is not the type or form of stimuli, but the characteristics of the person who responds to the stimuli. Perception also includes cognitive (knowledge), which includes the interpretation of objects, signs, and people from the point of view of the experience concerned (Gibson, 1986:54). Tjahjorini (Sugiharto, 2001:19) argues that a person's perception is determined by two main factors, namely experience and personal factors. Perception according to (Slameto, 2010: 102) is a process that involves the entry of messages or information into the human brain. Through human perception, they continually make contact with their environment.

The factor of the availability of trash bin facilities: A trash can is a container made of zinc, plastic, cement, or wood, to store waste before it is collected in a landfill (Nilton et al, in Andri, 2015). According to (Sarujd, 2006), waste bin facilities at the residential level that need attention are:

- Local storage (*onsite storage*) Local waste storage must ensure that rats, flies and other nuisance animals do not nest and do not cause odors. Therefore the requirements for waste containers must get attention.
- Garbage collection. Guaranteed cleanliness of the residential environment from waste also depends on waste collection organized by the government or by village administrators or management
- If managed by a *real estate* for example. The continuity and regularity of waste collection at the collection point guarantee the cleanliness of the residential environment. Population growth and changes in people's consumption patterns have increased the volume, type, and characteristics of waste that are increasingly diverse.

The impact of increased human activity further resulted in increased waste. This can lead to a decrease in environmental quality due to inadequate waste management.

Definition of Garbage: According to (Indonesian News Agency 2015), waste is generally defined as goods or objects that are thrown away because they are no longer used. Garbage is also interpreted as residual material, both from animals, humans, and plants that are no longer used and released into nature in solid, liquid, or gas form. Many types of waste are adjusted based on the source, nature, form, or origin of the waste. Garbage when released in the liquid or gaseous phase can be regarded as emissions. Emission is usually linked with pollution. Garbage is waste generated from a production process both industrial and domestic (household). Garbage in Law No. 18 of 2008 concerning Waste Management is the residue of human daily activities or natural processes in the solid or semi-solid form in the form of organic or inorganic substances that are biodegradable or non-degradable which are considered no longer useful and are disposed of into the environment. Garbage comes from various places. Places that can generate waste, namely:

- The garbage from residential areas A settlement will usually produce those that tend to be organic, such as food waste or garbage that is wet, dry, plastic ash, and others.
- Waste from public places and commerce A public place is a place where many people gather and carry out activities. These places have considerable potential in producing waste, including trading places such as shops and markets. The type of waste generated is generally in the form of food scraps, rotting vegetables, dry waste, ash, plastic, paper, cans, and other waste.
- From this definition, it is clear that waste is the result of human activities which are disposed of because they are no longer used and are disposed of as waste. Thus, waste contains the principle that there is an object or solid material that is no longer used and disposed of in nature, whether related to humans directly or indirectly.

Types of Garbage: According to Hadiwiyo in Sejati (2013), there are several types of waste classification. This classification can be based on several criteria, namely: origin, composition, shape, location, occurrence process, nature, and type.

- Classification of waste based on its origin. Waste resulting from household activities, including hospital, hotel, and office waste
- Waste from industrial/factory activities.
- Waste resulting from agricultural activities includes plantations and forestry, fishery, and animal husbandry.
- Waste resulting from trading activities, for example, market waste and figures.
- Garbage resulting from development activities.
- Highway trash.

Waste Classification Based on Composition

- Uniform trash. Waste resulting from industrial activities is generally included in this group. Waste from offices often only

consists of cardboard, carbon paper, and the like which are still classified as uniforms or similar.

- Mixed waste, for example, waste from markets or waste from public places which are very diverse and mixed together.

Apart from that, the composition of the waste from organic components is still the largest component and causes municipal solid waste to have a fairly high water content. The characteristics of the waste above, then a day when the garbage is left to accumulate, there will be *anaerobic microorganism activity* which causes the garbage to smell bad. On the other hand, waste that is not managed properly will result in the development of various diseases.

Classification of waste according to its shape

- Solid waste (*solid*), for example, leaves, paper, cardboard, cans, plastic, and metal.
- Liquid waste (including slurry), for example, used washing water, spilled liquid, molasses, and liquid industrial waste.
- Gaseous waste, such as carbon dioxide, ammonia, H₂S, and others.

In addition, the classification of waste is based on its type, namely; Food waste, gardens, paper, plastic, rubber and leather, cloth, wood, metal, glass and ceramics, ash, and dust. Broadly speaking, the author will distinguish waste into three, namely as follows

- *Organic Waste*; Garbage which is mostly composed of organic compounds, and comes from plant remains (vegetables, fruit, leaves, wood, etc.), the carrion of animals, feces, and body parts such as bones, and this waste is *degradable*. so that within a certain time, it will change shape and can be reunited with nature.
- *inorganic waste*; Waste that is mostly composed of inorganic compounds and comes from industrial waste, such as plastic, bottles/glass, cans, metal, *etc. degradable*) so that it will always be in its original form in naturally
- *hazardous waste*; This type of waste is harmful to humans. For example batteries, used syringes, toxic waste, nuclear waste, etc. This type of waste requires special handling.

Garbage Sources

According to (Wijayanti, 2009) several places are a source of waste generation. These sources of waste are:

- Waste originating from settlements (*domestic waste*) Waste from these settlements consists of solid materials which are the result of household activities that are no longer used and disposed of. The results of these activities include leftovers, both cooked and uncooked, and used wrappings such as paper, plastic, and leaves.
- Garbage originating from public places Garbage is found in public places such as trash in markets, bus terminals, train stations, and entertainment venues.
- Waste originating from offices Waste from offices, both departments, companies, and so on, is dry and flammable.
- Garbage sourced from the highway. Garbage generally consists of paper, cardboard, dust, leaves, and plastic.
- Waste originating from industry (industrial waste). Waste is included as waste originating from industrial development, for example, packaging waste, metal, plastic, wood, cans, and so on.

Factors Affecting Waste Production: Waste, both in quantity and quality, is greatly influenced by various activities and the standard of living of the community. According to (Mustar, 2012) several important factors affect waste, including:

- The population size influences the production of waste because the more people there are, the more waste will be produced.

This is due to the increase in population, then consumption activities will also increase.

- Socio-Economic Situation, the higher the socio-economic condition of the community, the greater the amount of waste that is disposed of every day. The quality of the waste it produces will be increasingly non-organic.
- Technological Advances Technological advances will increase the amount and quality of waste, this is because the use of increasingly varied raw materials, ways of packing, and increasingly diverse manufacturing products can affect the amount and type of waste.

Factors Causing Garbage Accumulation

According to (Andri, 2015) several factors cause the accumulation of waste, namely:

- The volume of waste is very large and is not matched by the capacity of the Final Disposal Site (TPA) so it exceeds its capacity.
- The distance between the Final Disposal Site (TPA) and the waste center is relatively far so the time for transporting waste is less effective.
- Garbage transportation facilities are limited and unable to transport all of the waste. The remaining waste in landfills (TPS) has the potential to become a pile of garbage.
- Not all neighborhoods have a garbage collection location. People often throw garbage in random places as a shortcut.
- Lack of socialization and government support regarding the management and processing of waste and its products.
- Lack of education and good self-management regarding proper waste management.
- Impact of Garbage on the Environment Garbage that is not managed properly will cause environmental pollution which is very detrimental to humans.

Garbage is the result of industrial and household processes. It is hoped that through industrial and technological activities the quality of life can be further improved. But often the increase in technology also causes a lot of negative impacts. According to (Nasution 2012), waste that is not managed properly will harm the environment. These impacts are:

Air Pollution Garbage that accumulates and is not immediately transported is a source of unpleasant odors which harms sensitive surrounding areas such as settlements, shopping, recreation, and others. Disassembly of large volumes of waste Processing locations has the potential to cause odor nuisance. Besides It is also very possible that pollution in the form of smoke will occur if it is trash burned in installations that do not meet the technical requirements. Methane gas generated from the burning process in the waste heap being in a final disposal site (TPA) makes fire difficult to be extinguished so the resulting smoke will be very disturbing the surrounding area.

Aesthetic Disorders: The greater the population, the more diverse and high human activities due to the times and the demands of the global world, and the greater the amount of waste produced. In general, the waste comes from shops, industries, markets, malls, and others. So that the role of the community is very influential in dealing with waste problems, people are required to have an awareness and caring nature in dealing with waste problems and keeping the environment clean. But in reality, there are still many people who don't seem to care about this garbage problem. To prevent the trash from being scattered and giving a dirty impression. Sanitary agency In fact, several standards for temporary waste disposal sites (TPSS) have been implemented to facilitate the process of collecting and transporting waste to landfills (TPA) without affecting environmental damage, sources of disease, and the beauty of public facilities. Concerning the beauty of public facilities, it is better to pay attention to the comfort and cleanliness of everyone. Cleanliness of public facilities such as markets and malls, a container where many

individuals gather for various types of buying and selling activities, is of course impossible if these activities do not produce waste. So to maintain the aesthetics of the market and mall, efforts can be made by placing temporary garbage disposal units both inside and outside the market and mall area.

Indicators of Traders' Behavior in Disposing of Garbage: Environmental concern is a general attitude towards environmental quality that is manifested in self-determination to express actions that can improve and maintain environmental quality in every behavior related to the environment. According to (Suparno, 2004) an attitude of concern for the environment is shown by respect for nature. The essence of respect for nature is the awareness that humans are part of nature so loving nature also loves human life (Lestari, 2015).

According to (Zulkarnaini, 2009) argues that indicators of trader behavior when disposing of trash are:

- The habit of collecting merchandise trade waste is a livelihood to sustain life. Begin to discipline yourself by carrying out the rules set by the market or something like that and collecting trade waste in one container neatly and then dumping the waste at the main landfill in the market, so that the area around the trading place remains clean.
- Positive results will be seen if this is done every time day so that the nature of the discipline will be embedded in oneself. Sooner or later, environmental care that starts from the smallest side (trading area) will expand to become a wider side (the whole market) and gives pride to everyone who is involved in it. Disposing of trash in its place If you pay attention to throwing garbage in its place, it is now a difficult thing to do for individuals who don't care about the environment.

Yang Efforts Done by Government of Timor-Leste in Waste Disposal and Management: The role of government that has the authority to make wise decisions on every decision made by government officials on behalf of the agency they lead to carry out general functions of government or development aimed at overcoming certain problems or achieving goals in implementing products of statutory decisions that have been drawn up and in the form of certain laws and regulations or the form of a formal decision stipulated by the government, then this thought has been reflected in article 61 of the RDTL Constitution. Regulations regarding environmental management have been stipulated in the RDTL constitution article 61 paragraphs 1 to 3, stating that;

- All citizens have the right to a healthy and ecologically balanced living environment and are obliged to protect and preserve it for the benefit of future generations.
- The state recognizes the need to conserve and value natural resources.
- The state is obliged to develop environmental protection and maintain sustainable economic development.

Previous Research: (Ahid O, 2012) contains the results of previous studies relevant to research that has been conducted by other researchers, to avoid duplication. In addition, it shows that the topic to be studied has never been studied in the same context.

So in this study, there have been previous similar research, however, there are differences between the research to be conducted and the research, as shown in the following table:

- **Research Title:** Knowledge, attitude and mother practice house ladder in sorting trash in Ward Sronol Wetan Subdistrict Banyuwangi Semarang, By Rudjito Riyadi, 2000, Ward Sronol Wetan Subdistrict Banyumanik City Semarang, Research design, Design study with approach cross-sectional, Independent variable: big family, existence servant house ladder, information sorting trash, level education, status profession Dependent variable: Knowledge, attitude and practice, research results show there is a relationship Among information, level education, status

profession with knowledge, attitude and deep practice sorting rubbish.

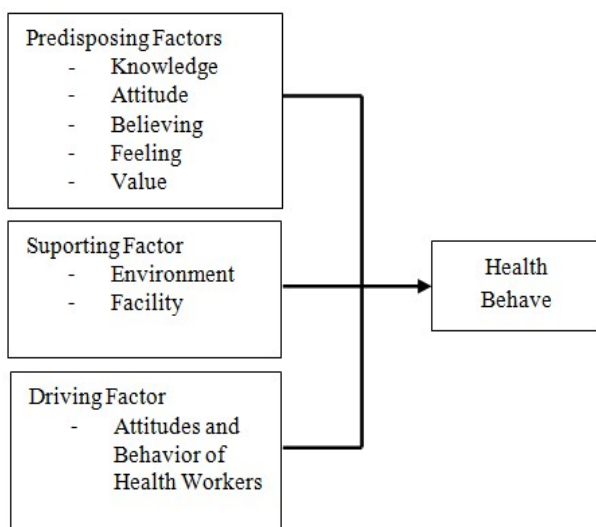
- Connection knowledge, attitude, and mother practice house ladder in sorting trash in housing area Wijaya kusuma 2 RW 05 Katonsari Regency demak) ; by Sri Wahyuningsih, 2008, in the district Demak, Design study with approach cross-sectional, Independent variable: Knowledge and Attitude Variable bound: Practice in waste sorting, with research results showing that there is no connection Among Knowledge with housewife practice in sorting rubbish. There is a connection between Attitudes with mother practicing house ladder in sorting rubbish
- The difference between this research and previous research: What distinguishes the two studies mentioned above and this research are; Differences in research, between researchers and previous researchers; Title of Researcher Analysis of Factors related to Garbage Disposal, Time and The place research, By Alfredo da Cost the Year 2018, Di Territory of the *Suco Bahu, Posto Administrativo Baucau, Municipio Baucau*. Those who throw garbage in random places, the lack of effort from *Suco* (Village) officials in managing waste communally, and the lack of landfills (TPS) and no landfills (TPA).

Information

- The difference between this research and previous studies. Place of research: Research area in the *Suco Bahu, Posto Administrativo Baucau, Municipio Baucau*.
- Independent variables: Community Knowledge, participation of government officials, Community Perception, Community participation, infrastructure
- The dependent variable is the garbage disposal.
- Time Scope
- The time of this research was conducted in November-January 2019

Theoretical framework: Explaining the thoughts of researchers in conducting research, departing from theory (Lawrence Green in Notoatmodjo 2003) a framework of thought is a line of thought that is structured briefly to explain how a classroom action research is carried out from the beginning, the implementation process, to the end. The thinking framework can be arranged in the form of sentences or depicted as a diagram. In the following, the researcher describes the concept of thought in this study, as follows:

Chart I Theoretical Framework

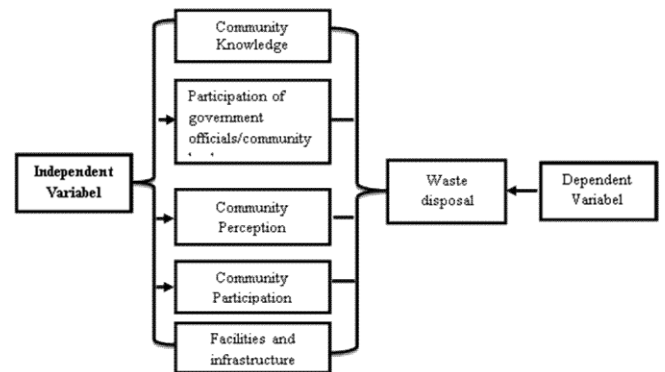


Sumber: (Lawrence Green dalam Notoatmodjo, 2003)

Conceptual Framework: Based on the theory (Lawrence Green, 2003) which was modified by Soekidjo (Notoatmodjo, 2010) so that with all the limited time and costs, the researcher only examined community knowledge, participation of *Suco* government officials, public perception, community participation, and related infrastructure.

with the garbage disposal in the *Suco Bahu Baucau, Timor Leste*. Therefore researchers try to develop a conceptual framework as follows:

Research Concept Framework



RESEARCH METHODOLOGY

Research design: This research is a quantitative analytic study, with a *cross-sectional study design*. The design was chosen because it fits with the research objective of wanting to know the relationship between predisposing factors, namely according to Soekidjo (Notoatmodjo, 2003: 127), in theory (Lawrence green, 2003) behavior is determined or formed from 3 factors, namely predisposing factors (which are manifested in the level of family income), supporting factors (availability or unavailability of supporting facilities), driving factors (participation of *Suco government officials*) with community waste disposal in *Suco Bahu, Posto Administrativo Baucau, Municipio Baucau, Timor-Leste*. By using the *Cross-sectional method* both variables (*independent-Dependent*) will be observed simultaneously at the same time and it is enough to do it once for each respondent so it doesn't take a long time and costs a lot.

Population and Sample

Population: These are all levels of society in the Bahu Suco with a population of 6718, consisting of 5 Aldeia, including Aldeia Ana-ulu with a total population of 1879 people, Aldeia Boele with 1332 people, Aldeia Lamegua 1225, Aldeia Makadai 581 and Aldeia R-ulu 1701, in the area of *Posto Administrativo Baucau, Municipio Baucau*. In this study, priority was given to people who live around landfills, people who live in markets, in kiosks, in shops, and people who live on the side of the main road.

Sample: The sample in this study were fathers or housewives who usually produce and dispose of garbage every day. The criteria for selecting the sample for this study were divided into two, namely inclusion criteria and criteria exclusion. Inclusion criteria are the general characteristics of research subjects in reachable populations. Exclusion criteria were some subjects who met the inclusion criteria but had to be excluded for some reason.

Inclusion Criteria

- 1) There is no resources or facilities available in the *Suco (Village) area* infrastructure for collecting waste.
 - 2) Father or mother and all adult family members aged 16-65 years. Including the category of adults who live in *Suco Bahu, Posto Administratativo Baucau, Municipio Baucau* . (Carson, 1996).
- Education Father or mother and family members graduated from elementary school-university.

Exclusion Criteria

- Father or housewife who is not willing to be a respondent, at the time research is not in place, or a state of illness.

- When the father or housewife was examined, he was not at home.
- Population aged under 15 years and aged 66 years and over.

After surveying the research location by taking into account the above conditions, the number of samples was determined to be 109 people from 6718 populations in the *Suco* Bah u area, consisting of 5 *Aldeia*. Recognizing the various limitations possessed by researchers in terms of manpower, time, and costs, research will only be carried out using the random sampling method, namely random sampling (Soekidjo, 2005: 88)

Sampling Technique: The sampling technique is a method used in sampling, to obtain a sample that is truly under the entire research object (Nursalam, 2001). In this study, the sampling technique used was proportionate random sampling, namely random sampling without regard to strata in the population members based on the proportion of the number in each population group using a lottery method. (Notoatmodjo, 2005). So in this study, the samples were people who lived around landfills, people who lived in markets, in kiosks, in shops, and people who lived on the side of the main road.

Sample Determination: The technique of taking samples from the population of 6718 people in the *Suco* Bahu area, which consists of 5 *Aldeias* namely *Aldeia* Ana-ulu with a total population of 1879 people, *Aldeia* Boele 1332 people, *Aldeia* Lamegua 1225, *Aldeia* Makadai 581 and *Aldeia* Ro-ulu 1701, then the researcher used the determination of sample size using the Slovin formula cited (Lestari, 2016), while the margin of error = 10%. The error rate in this formula is generally used as 1% (0.01), 5% (0.05), or 10% (0.1). With a note of leeway, this error can be selected by researchers (Aprilliana, 2014). as follows:

Description: n = Number of Samples
 N = Total Population
 E = Percentage of Allowance due to sampling error examined
 n = 99 samples (+10 % = 109 samples)

In this study, with a confidence level of 95% or an error rate of 5%, or 0.05, 109 samples were taken for this study. Of the 109 samples above, it can be divided into 5 research areas, 22 samples in each area, including *Aldeia* Ro-ulu 22 respondents, *Aldeia* Ana-ulu 22 respondents, *Aldeia* Lamegua 22, *Boele* 22 respondents, and *Aldeia* Makadai reduced to 21 respondents

Instrument Validity Test: To test the validity and reliability of the questionnaire pre-test was conducted at the *Posto Administrativo* Vemasse with as many as 30 respondents. Cronbach Alpha is used to analyze the reliability test on the questionnaire, namely each variable can be seen in the table below:

No.	Variable	Cronbach Coefficient of Alpha (0.60)
1.	Knowledge (X1)	0.774
2.	Participation of community leaders (X2)	0.777
3.	Public perception (X3)	0.771
4.	Community participation (X4)	0.761
5.	Infrastructure (X5)	0.772
6	Garbage disposal (Y)	0.775

So from the table above, each variable tested for reliability average results more than Cronbach's Alpha value > 0.60 so that the instrument can be used to collect some information. Data Collection Procedures; Observation, Interview or Interview, Documentation, Data Analysis Techniques; To obtain a conclusion of the problem under study then analysis Data is an important step in research. Collected data will be processed and analyzed using the SPSS computer program version 21. Data Processing Process Includes Editing, Coding, Tabulating, Entry; Measurement Scale This study uses the Guttman scale, according to Sugiyono (2016: 96), a measurement scale with this type to get a firm answer, namely: "yes or no" on the Gutman scale there are only two intervals, to analyze

data collected from respondents with firm answers to a problem asked through a questionnaire *provided* by the researcher.

Data analysis: After all the data has been collected, the next step is to analyze the data. The data analysis technique in *cross-sectional research* is to analyze the relationship between variables or differences in prevalence between the groups studied. Analysis can be carried out in the form of hypothesis testing or analysis to obtain relative risk or RR. The relative risk in the *cross-sectional study* is a comparison between factors related to waste disposal. Therefore, the only analysis on community knowledge, participation of community leaders, community perception, community participation, and infrastructure with waste disposal that is calculated is the prevalence/RP ratio, with Bivariate analysis and crosstabulation with a 2x2 table with the following formula. So that the formulation to be used in the study:

Information :

- $a/(a+b)$ = Proportion (prevalence) of subjects who have risk factors that experience an effect.
- $c/(c+d)$ = proportion (prevalence) of subjects without risk factors experiencing an effect;
- RP = variable suspected as a risk factor or not at risk ($RP < 1$ and $RP > 1$), if $RP < 1$ means there is no risk of influence if $RP > 1$ means there is a risk of influence.

From the formula above, the researcher describes the 2x2 table to analyze the data collected from the research results, which is entered into the table below:

Table 3. Table 2x2

	Waste disposal		
	Yes	Not	Amount
Yes	a	b	a+b
Not	c	d	c+d
Amount	a+c	b+d	a+b+c+d

Based on table 1 3 above it can be explained that those related to knowledge, participation of community leaders, community perception, community participation, and infrastructure with waste disposal.

Research procedure

Preparatory stage

In collecting data, researchers carried out the following stages:

- Documentation study, literature study, proposal preparation, and continued with a proposal test.
- Take care of permits to conduct research from the head of the Postgraduate Program in Public Health, *Universidade da Paz* Dili.
- Then apply for a permit to the *Suco* Bahu *Posto Administrativo* Baucau, *Município* Baucau. After that, the researcher took data from the Bahu Village (*Suco*) office.

Implementation Phase

- After getting the respondents, then the sample was asked for *informed consent* as a research sample and explained the purpose of the research to the respondents.
- The research was carried out from November to January 2019.
- Providing questionnaires to the sample to be filled in (Mr/Ms), as well as the researcher assisting in filling out the questionnaire through interviews (*interviews*).
- Research data were collected, then checked.
- The data that has been checked is then processed by a computer program.
- In the final stage, the research report is made.

The questionnaire given by the respondents emphasizes ethical issues including:

- Research consent sheet (*Informed consent*) Before the questionnaires were distributed to respondents, the researcher first explained the aims and objectives of the research and the impact of the respondents during data collection. Mr/Mrs who are willing to be respondents is asked to sign an informed consent form and participate in further research. Meanwhile, those who are not willing to become research respondents are not forced and still respect their rights.
- Anonymity (Anonymous) To maintain the confidentiality of the respondent's identity, the respondent is not required to include his/her name on the questionnaire sheet or include the name in initials. Then the sheet is only given a certain code number.
- Confidentiality (Confidentiality) Researchers guarantee the confidentiality of information provided by respondents Nursalam, (2003: 141). Information that has been collected from subjects is guaranteed confidentiality, only certain groups will be presented or reported on the research results

RESULTS OF ANALYSIS AND DISCUSSION OF RESEARCH DATA

Research Object D e thesis

Municipio de Baucau Monograph Data

No	Aldeia	Number of families	Total Population
1	Ana-Ulu	781	1879
2	Bo Ile	867	1332
3	Lamegua	873	1225
4	Makadai	397	581
5	Ro-Ulu	853	1701
	Total	3771	6718

Research Data Description: The problem of success is related to the problem of handling waste. Garbage in the Suco Bahu comes from various sources, including settlements, shops, offices, roads, parks, and markets. All waste from each source will be disposed of on the side of the road, in the forest, or the river, due to limited landfills (TPS) and the absence of adequate landfills (TPA) to accommodate this waste. To obtain a more in-depth objective of analyzing the factors related to waste disposal in the Suco Bahu *Posto Administrativo* Baucau, *Municipio* Baucau will be discussed and implemented in the following review: Based on the results of research that has been conducted on 109 respondents through distributing questionnaires. To get the trend of respondents' answers to the answers of each variable will be based on the range of answer scores as shown in the following table:

Description of Community Knowledge Variables: The Knowledge variable in this study was measured through 10 questions that had been converted and processed into master data, then analyzed with *Statistical Product and Service Solution* (SPSS) 21 for Windows with the following results: The results of the positive responses of respondents to the questions asked were 22 (43.1) respondents who answered "Yes". This means that the community has good knowledge in terms of waste disposal, and 29 (56.9) Respondents responded negatively by answering "No". A total of 31 (53.4). The community still has low knowledge about waste, they do not know the correct definition of waste, and the community does not know the consequences of improper waste disposal. So the results of calculations using the *chi-square statistical test* processed with *Statistical Product and Service Solution* (SPSS) 21 for Windows produce a P value > (0.05) with a significance value of *Ratio Prevalence* (RP) 0.869. This means that there is no significant relationship between community knowledge and waste disposal.

Description of Community Figures' Participation Variables: The variable participation of community leaders in this study was

measured through 9 questions that had been converted and processed into master data, then analyzed with *Statistical Product and Service Solution* (SPSS) 21 for Windows with the following results: Alternative answers to male respondents regarding the participation of community leaders respectively 7 (50.0) ever, and never ie 42 (44.2). Meanwhile, respondents with female gender each answered 7 (50.0), and respondents who said never were 52 (55.8). There is a *Prevalence Ratio* (RP) value of 1.136 and a confidence level or CI of 0.410.

Description of Community Perception Variables: The public perception variable in this study was measured through 10 questions that had been converted and processed into master data, then analyzed with *Statistical Product and Service Solution* (SPSS) 21 for Windows with the following results: Alternative answers obtained were 6 respondents who said yes 103 people with a percentage of 5.5%, while the number of respondents who responded was Not as many as 103 people with a percentage of 94.5%. This shows that the community sees, perceives, and interprets as well as their understanding or understanding of the problem of waste disposal and processing is very low, and the community is ignorant of the environment. The results of the *Ratio Prevalence* (RP) value obtained were 8,831, and the confidence level or CI was 1,492. This shows that people's perception of waste disposal is very bad.

Description of Community Participation Variables: The level of community participation in waste disposal is 95. %, of community participation in waste disposal, is categorized as poor, and only 14% of community participation in waste disposal is considered good. The *Ratio Prevalence* (RP) value obtained was 5.2, with a confidence level or CI indicating 1,484. This shows that community participation in waste disposal is very poor.

Relationship of Facilities and Infrastructure with Garbage Disposal: The results of the research in table 4.2 above show alternative answers obtained as many as 30 respondents answered Yes, meaning that there is a landfill in the neighborhood, and 79 respondents answered no, meaning that there was no landfill around their environment. So there is still a lack of trash cans provided by the local government. *The Prevalence Ratio* (RP) value is 1.051, with a confidence level or CI of 0.73

DISCUSSION

Relationship Between Education Level With Garbage Disposal: Based on the table above, the probability value (p) is 0.361 which shows that the p-value is > 0.05. This means that there is no relationship between education level and waste disposal in Suco Bahu. There is no relationship between these two variables because there are respondents who have a low level of knowledge but do waste disposal properly. On the other hand, some respondents have a high level of knowledge but still do poor waste disposal. A mother will do a good job of disposing of garbage if she sees her neighbors do it well too. According to the WHO expert team (1984) in Khairunnisa (2011) knowledge is obtained from one's own experience or the experience of others. This is not in line with what was stated by Timmreck (2005). Respondents who received a lot of training, skills, and education will earn more per year than those without training or skills. Respondents who have a higher level of education are more oriented towards preventive action, know more about health problems, and have better health status.

The results of this study are different from the results of research from Hadiya Ridhal, Nopi Stiyati Prihatini 2, M. Firmansyah 3 saying that there is a significant relationship between the level of education and waste facilities in the communities on the banks of the Pepekuran River with a probability of 0.013 (p <0.05). However, in this study, it was seen that there were 26 respondents with a high school education (61.9) and 19 respondents with a university education or equivalent (475). Shows that high school and university education levels are dominant in waste disposal.

Analysis of Respondent characteristics

No	Characteristics	Waste disposal		Total n(%)	P value
		Yes n(%)	Not n(%)		
1	Age :				0.464
	-16-25	15 (48.4)	16 (51.6)	31 (100.0)	
	-26-35	15 (41.7)	21 (58.3)	36 (100.0)	
	-36-45	6 (31.6)	13 (68.4)	19 (100.0)	
	-45-55	10 (52.6)	9 (47.4)	19 (100.0)	
-55-65	3 (75.0)	1 (25.0)	4 (100.0)		
2	Gender				0.259
	-Man	29 (50.0)	29 (50.0)	58 (100.0)	
	-Woman	20 (39.2)	31 (60.8)	51 (100.0)	
3	Education				0.361
	-SD	1 (20.0)	4 (80.0)	5 (100.0)	
	-junior high school	11 (50.0)	11 (50.0)	22 (100.0)	
	-high school	16 (38.1)	26 (61.9)	42 (100.0)	
	-PT	21 (52.5)	19 (47.5)	40 (100.0)	
4	Profession				0.727
	-Doesn't work	18 (42.9)	24 (57.1)	42 (100.0)	
	-Work	31 (53.7)	36 (53.7)	67 (100.0)	
5	Income				0.283
	-<\$115	14 (38.9)	22 (61.1)	36 (100.0)	
	-116-500	30 (45.5)	36 (54.5)	66 (100.0)	
	->\$500	5 (71.4)	2 (28.6)	7 (100.0)	
	Total			109 (100)	

Source: Data processed by SPSS 21, 2019

Factors related to waste disposal

No	Variable	Waste disposal		Total n(%)	Score RP	95% CI	
		Yes n(%)	Not n(%)			Lower	Upper
1	Knowledge				0869	0.409	1857
	-Yes (Know)	22 (43.1)	29 (56.9)	51 (100.0)			
	-Don't know	27 (46.6)	31 (53.4)	58 (100.0)			
2	Participation of Community Figures				1.136	0.410	3,880
	-Yes (Positive)	7 (50.0)	7 (50.0)	14 (100.0)			
	-No(Negative)	42 (44.2)	53 (55.8)	95 (100.0)			
3	Community Perception				8,831	1,492	38,666
	-Yes, good)	48 (46.6)	55 (53.4)	6 (100.0)			
	-Not good	1 (16.7)	5 (83.3)	103 (100.0)			
4	Society Participation				1,296	1,484	4,980
	-Yes (Active)	44 (46.3)	51 (53.7)	14 (100.0)			
	-Not Active	5 (35.7)	9 (64.3)	95 (100.0)			
5	Infrastructure				1,051	0.73	2,557
	-Yes, here)	14 (46.7)	16 (53.3)	30 (100.0)			
	-There is no	35 (44.3)	44 (55.7)	79 (100.0)			
	Total respondents	49	60	109 (100)			

This proves that the length of education is not a guarantee in terms of littering anywhere, so the habit of throwing garbage applies to anyone, regardless of educational status or class. The results of this study are in contrast to the educational concept theory which states that education is an activity for acquiring and imparting knowledge to enable cultural transmission from one generation to the next. Education is a process of developing abilities (behaviors) in the desired direction. Someone with low and high education has the opportunity to obtain more and more information and knowledge. Soekijo Notoatmojo, (2004:98). Another opinion states that education influences community participation, an educated person more easily understands the counseling and lessons given about health. The low level of community participation in terms of raising awareness about the use of trash bins is mainly caused by the low level of education and the level of the economic capacity of the majority of the community. Soesanto SS, (2007).

Respondent's Employment Status: Respondents who have jobs, namely as many as 67 respondents, while those who do not work 42 people. According to Khairunnisa (2011), in general, mothers who have jobs outside the home tend not to care about matters related to household affairs, especially since they already have people who will take care of them.

Produces a p-value > (0.05), namely with a significance value (p) value of 0.727. Means it has nothing to do with a garbage disposal.

Relationship Between Income Level With Garbage Disposal:

Based on the statistical test table above, the probability value (p) is 0.283 which indicates that the p-value > 0.05. This means that there is no relationship between income and waste disposal. This is similar to research by (Sunarti, 2002) in Denpasar which is described in (Mifbakhuddin, 2010) which states that the economic status of the family will greatly affect the ability of the family to carry out waste management in the household, the higher the economic status of the family, the more successful waste management will be. good and vice versa. The same thing the results of Suprpto's research (Putra, 2013) said that the level of family income determines attitude in terms of managing household waste. Likewise (Sulestri, 200) revealed the same thing that a person's income level greatly influences his attitude toward waste management facilities. People with low income tend to be reluctant to manage their household waste, most of them just throw it into the river or burn it directly. However, in this study, the Chi-Square test between income level and garbage disposal in Suco Bahu can be stated that there is no significant relationship between income level and garbage disposal in the community in Bahu Suco with a probability of 0.283 (p > 0.05).

The Relationship Between Knowledge and Garbage Disposal:

Based on the chi-square results, the probability value (p) is 0.869 which indicates that the p-value > 0.05, H_0 is rejected, so there is no significant relationship between knowledge and waste disposal. There is no relationship between these two variables because the respondents have good knowledge. Some had a bad garbage disposal, but some respondents whose knowledge was not good enough had a good garbage disposal. According to the WHO expert team (1984) in Khairunnisa (2011) knowledge is obtained from one's own experience or the experience of others. A mother will immunize her child if she sees her neighbors doing the same thing. Likewise, with the implementation of waste management, the community will dispose of waste properly if they see their neighbors doing the same thing.

Role Relations as well as Community Figures with Garbage Disposal:

And the statistical test results show statistical significance, namely the Prevalence Ratio (RP) value of 1,136 above the P value > (0.05), so there is no significant relationship between the participation of community leaders and waste disposal. There is no relationship between these two variables because the level of confidence or CI shows a number below 0.410. So the participation of community leaders has nothing to do with waste disposal. Even so, from the results of interviews with respondents, it can be seen that the average respondent's answer was never. It is clear that the participation of community leaders or the Suco government in waste disposal in Suco Bahu which directly touches the community is still very minimal, almost all activities, including outreach, data collection, distribution, TPS, and 90% supervision, have never been felt by the Suco Bahu community.

This resulted in low public participation and perception or public awareness and concern for waste disposal because the community was not directly involved by the government as a direct object and subject. Not to mention the facilities and infrastructure provided by the government which is still very limited. Counseling is very important for the community as a means of socialization in providing information to the public so that they want to participate or behave well in terms of sorting and disposing of waste under applicable regulations or rules. Through counseling, the community will receive issues or ideas for activities in sorting and disposing of waste properly, which is important and beneficial for the environment and themselves. However, in this case, many of the people of Suco Bahu are still not aware of or understand, so many people still throw garbage in ditches or rivers, on the side of roads, and in the forest, and have not used the existing TPS. For this reason, counseling, training, coaching, and understanding of the community are needed in disposing of waste properly and correctly. Based on research by Syanopriadi (2007) there is a significant influence between (internal) factors of education and income with community participation in waste management. Besides the education and income factors of the community, community behavior is also strongly influenced by the level of counseling or socialization from the government which is very minimal, thus affecting community participation to behave well in waste management.

Community Perception: From the results of the study, the value of the Prevalence Ratio (RP) was 8,831, and the confidence level or CI was 1,492. This shows that people's perception of waste disposal is very bad. This means that 95% of the population taken represents the existing sample, which is 8 times the risk in terms of waste disposal. Of course, it is a problem for the people in Suco Bahu, *Posto Administrativo* Baucau, and *Município* Baucau. This was influenced by external factors from the respondents, including the participation of community leaders in the Bahu Suco because the community was not directly involved by the government as direct objects and subjects. Community perceptions are strongly influenced by the very minimal level of education or outreach from the government, thus influencing public perception and participation to behave properly in waste disposal.

Society Participation: The results of the study can be seen that community participation in waste disposal in the Bahu Suco, most of

the Suco Bahu's participation in disposing of waste in a place provided by the local government, is still very low, namely only 14% of 109 respondents. While the majority, namely 95%, throw garbage anywhere. All respondents stated that they had never participated in basic waste segregation, or recycled waste into fertilizer, and had never participated in cleaning activities such as community service or clean Friday. The results of statistical tests showed statistical significance, namely the value of the Prevalence Ratio (RP) of 1,296 the level of confidence or CI shows the number 1,296. This means that of the existing population, 95% represents a 1-time sample at risk in terms of waste disposal. Then this low community participation can be seen from the *Prevalence Ratio* (RP) value of 1,296. Of course, this is a problem for the people in *Suco Bahu, Posto Administrativo* Baucau, and *Município* Baucau. The role of the government or community leaders is related to the socialization and dissemination of information regarding waste management. This socialization will provide an understanding to the public that waste management should be carried out by each individual so that problems regarding waste can be overcome starting from the root, namely the source of waste.

Sara na Infrastructure: From the results of the study, the value of the Prevalence Ratio (RP) was 1.051, with a confidence level or CI of 0.73. Even though the RP value is above the P value > 0.05, the CI value is 0.73, meaning that there is no relationship with waste disposal. However, the research shows that trash cans are rarely found in people's living areas. From the number of these facilities when compared to the assumption of waste produced by existing households, the amount is not enough. the distribution of TPS is not evenly distributed, and the use or utilization is not optimal, apart from the results of observations in the field that the available trash cans do not have a separation of wet and dry waste. While the process of transporting waste affects the pile of existing waste, where the means of transportation owned by a dump truck is 1 unit with a total transport capacity of 42 m³ with an average rate per unit of 1 x/day.

As an important stick in the development of national environmental law, it must act as an "umbrella provision" to apply state administration conditions, so that to support the success of environmental law or require a set of environmental regulations it is not valued by society, so a study of the application of environmental law is considered important, because it relates to and directly determines efforts to implement it, moreover some of our environmental laws are still colored by conservative thinking (repetition) which is difficult to break through with innovative thinking insight (progress), insightful thinking in all respects. Furthermore, to protect Timor Leste's environment, cooperation between the government and the community is needed, as well as to make the public aware of all their actions or behavior from all activities such as environmental pollution, pollution, and also other activities, requiring the government's role in environmental development. The most important element in the application of the law is that law enforcement officials are required to be more professional in law enforcement so that there is public awareness of the laws and regulations that have been in force so that they are obeyed. The law in question is as follows:

- *Lei Decree no33/2008 kona ba Ijene orden publica*
- *Decree Lei no 2/2017 kona ba Residuos Sólidos Urbanos*
- *Lei Decree no 5/2011 kona ba actividades negocios*
- *Legal basis Codico penal second sex crime sira hasoru ambiente (artigo da -215) hasoru meu ambiente*
- *Sé mak la see dispozisaun legal ka regulamentar sira protetór ba meu-ambiente, provoka ka realiza direta ka direct emisaun, ta'is, radisaun, estrai ka ke'e, hakoi, tarutu, vibrasaun, injesaun ka depóztu sira, iha atmospheric, iha solu, subsolu ka iha beeterestre, marítima ka subterrânea, include sirarai ketan zone, ka kaptasaun bee sira ne'ebé bele prejudika maka'as ekilibriu sira natural system, sei kondena ho pen prizaun to'o tinan 3 ka multa.*
- *Bainhira ema halo traisaun hodi liberta, fô-sai ka hatama radisaun ionnizaun ka subtánsia sira seluk iha atmospheric, rai, bee, tasi, continental, superficial ka subterranean sira ho kuantidade ne'ebé bele mai hamate ema ruma ka ofensa.*

ENCLOSED

Conclusion

Based on the results of research on factors related to waste disposal in the *Suco Bahu, Posto Administrativo Baucau, Municipio Baucau* in 2018, it can be concluded as follows:

- There is no significant relationship between public knowledge and waste disposal with a *Prevalence Ratio* (RP) of 0.869 and a confidence level of 95% CI: *lower* 0.409 and *upper* 1.857, with the act of disposing of waste at risk of 1 time.
- There is no significant relationship between community participation and waste disposal, with a *Prevalence Ratio* (RP) of 1.136 and a 95% confidence level CI: *lower* 0.410 and *upper* 3.880,
- There is a significant relationship between public perception of waste disposal with a *Prevalence Ratio* (RP) of 8.83 and a 95% confidence level CI: *lower* 1.492 and *upper* 38.666, with the act of disposing of waste at risk 8 times.
- There is a significant relationship between community participation and waste disposal, with a *Prevalence Ratio* (RP) of 1,296 and a 95% confidence level CI: *lower* 1,484 and *upper* 4,980, with waste disposal at risk of 1 time
- There is no significant relationship between infrastructure and waste disposal with a *Prevalence Ratio* (RP) of 1,051 and a 95% confidence level CI: *lower* 0.73 and *upper* 2,557,

Suggestion

For Suco Bahu government officials and NGOs, as well as related agencies and the community

Counseling is very important for the community as a means of socialization in providing information to the public so that they want to participate or behave in disposing of the garbage following applicable provisions or rules. Therefore, values regarding clean living and a culture of disposing of garbage should be instilled from childhood. Teach children or youth by setting a good example in terms of cleanliness and behavior in disposing of trash in its place. Through counseling, the community will accept issues or ideas about waste disposal and processing activities properly, it is important and beneficial for the environment and themselves. Communities must be allowed to be involved in every stage and supported with adequate facilities such as transportation, security, supplies, and so on. In the city of Baucau, it is this community structure that has not been involved in the planning or implementation of waste management activities, the community is only the beneficiary of activities that have been programmed by the government.

The structure and process are not something foreign. This means that everyone should know how to do something. For this reason, counseling, training, guidance, and understanding of the community are needed to dispose of waste properly and correctly. Implement the RDTL Law as stated in article 61 paragraphs 1-3, concerning the environment, as follows:

- Everyone has the right to a humane, healthy, and ecologically balanced environment, and the obligation to protect it and improve it for the benefit of future generations.
- The state recognizes the need to conserve and conserve natural resources.
- States must promote actions aimed at protecting the environment and maintaining sustainable economic development.

Provision of adequate trash bin facilities following the level of community density, and mobilizing community organizations as well as *arte marsiais organizations* and existing NGOs, in terms of regular community service or clean Fridays. Implement the legal basis regarding the rights and obligations of the community in terms of

protecting the environment, issued by the Government of Timor Leste, which is stated in the following decisions

- *Lei Decree no33/2008 kona ba Ijene orden publica*
- *Decree Lei no 2/2017 kona ba Residuos Sólidos Urbanos*
- *Lei Decree no 5/2011 kona ba actividades negocios*
- The legal basis for the Codico penalty for the second sex unit is the crime of *sira hasoru ambiente (meaning da -215) hasoru meu ambiente*
- *Sé mak la see dispozisaun legal ka regulamentar sira protetór ba meu-ambiente, provoka ka realiza direta ka direct emisaun, ta'is, radiasaun, estrai ka ke'e, hakoi, tarutu, vibraisaun, injesaun ka depóztu sira, iha atmospheric, iha solu, subsolu ka iha beeterestre, marítima ka subterrânea, include sirarai ketan zone, ka kaptasaun bee sira ne'ebé bele prejudika maka'as ekilibriu sira natural system, sei kondena ho pen prizaun to'o tinan 3 ka multa.*
- *Bainhira ema halo traisaun hodi liberta, jô-sai ka hatama radiasaun ionnizasaun ka subtánsia sira seluk iha atmospheric, rai, bee, tasi, continentalál, superficial ka subterranean sira ho kuantidade ne'ebé bele mai hamate ema ruma ka ofensa corporalgrave ne'ebé rekere tratamentu medico ka sirirjiku ka prodús konsekuensi ne'ebé la bele fila ba kotuk sei kondena ho pen prizaun husi tinan 2 to'o 8 ka multa.*

RERERENCES

- Anonymous. 2010. Waste Management Mistakes in Mindset and Lifestyle.
- Arikunto, Suharsimi. 2006. Research methodology. Yogyakarta: Literature Development.
- _____. 2010. Research Procedures A Practice Approach revised edition. Jakarta: PT Rineka Cipta.
- Ashidiqy, 2009. Analysis of Factors Associated with Community Behavior in Disposing of Household Waste in the Miranggen River.
- Anonymous. 2008. Total population and the average volume of a daily waste dump in big cities in Indonesia, 2005 – 2007.
- Ashidiqy, MR (2009). Analysis of Factors Associated with Community Behavior of Disposing of Household Trash in the Mranggen River Final Project Undergraduate Program in Public Health, Semarang State University.
- Budiman. 2011, Health Research, Edition I, Reflika Aditama, Bandung Indonesia
- Ernawati, 2016. Evaluation of Plaza Traditional Market Management Policy Bandar Jaya, Central Lampung.
- Green Lawrence W. (1980). Health Education Planning A Diagnostic Approach USA: Mayfield Publishing Company
- Green, LW Kreuter, "Health Promotion Planning, An Educational and Environmental Approach", 2nd Edition, Mayfield Publishing Company, California, 2000
- Jambeck JR (2015). Plastic Waste Input From Land Into The Ocean Science. 347, no 6223
- Lestari, Y and Azka, N, 2009. Waste Management Behavior of Street Food Sellers and Tourist Visitors at Padang Beach. Journal of Public Health Volume 4 Number 2.
- Nasir, et al. 2011, Methodology of health research, print 1, Nuha Medika, Yogyakarta Indonesia.
- Notoatmodjo. 2012, Health research methodology, Revised Edition, Rineka Cipta, Jakarta Indonesia
- _____. 2005, Health Promotion, Theory, and Application. Jakarta: PT. Rineka Cipta.
- _____. 2010, Public Health Sciences. Jakarta: Rineka Cipta
- _____. 2010, Health Behavior Science, Print 1 Rineka Cipta, Jakarta Indonesia

- _____. 2012, Health Promotion and Health Behavior, Print I, Printing II, Rineka Cipta, Jakarta, Indonesia
- _____. 2010, Health Promotion Theory and Its Applications. Printing II, Rineka Cipta, Jakarta, Indonesia
- _____. 2017, Science and Arts Public Health, Print I, Rineka Cipta, Jakarta, Indonesia.
- Notoatmodjo, Soekidjo, "Health Science Society", Rineka Cipta, Jakarta, 2003
- Pangestu, MHT, 1995. Community Participation in the Implementation of Social Forestry Activities (Case Study: KPH Cianjur, West Java), Postgraduate thesis, Bogor Agricultural Institute, Bogor
- Yogyakarta Garbage : Management that Runs in Place, Balairung Gadjah Mada University Student Journal, 39th Edition, Yogyakarta
- Sulestri, IS, 2001, Relationship between Education Level and Attitudes of Housewives with Domestic Waste Management, Environmental Journal, Vol 13 Number 5, Pages 102-121
- Sugiyono , 2009 Quantitative and Qualitative Research Methods and R&D, Alfabeta, Bandung Sholeh, and Wahyu Setyaningsih. 2011. Models boarding house waste management in the sub-district of Sekaran Gunungpati Semarang. Science Forum Journal Social, VOL 38, NO 1 (2011).
- Sulestri, IS 2001. Correlation between Education Level and Attitudes of Housewives with Domestic Waste Management. Journal of the Environment, 13(5): 102-12.
