

SUSTAINABLE PLANNING AND SETTLEMENT ENVIRONMENTAL MANAGEMENT IN BONEN, BAUMATA VILLAGE KUPANG DISTRICT

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ABSTRACT

The physical, socio-cultural, community knowledge, technology and community legal awareness aspects of the legality of land rights are the deciding factors in realizing sustainable plantation and settlement management. These aspects have not been fulfilled by the community in the Bonen area of Baumata Village, Kupang Regency. Therefore, it is considered an important academic role to carry out community service activities with the aim of providing solutions to sustainable management of plantation land and settlement environments in the Bonen area of Baumata Village, Kupang Regency. The method of carrying out this service is through the stages of preparation, outreach, practice, care, supervision and reporting. The approach used is the case and socio legal approach, then an analysis of activities is carried out. The results of these community service activities include increasing community knowledge about land preparation practices, planting care / maintenance of plants, making and utilizing compost fertilizer, simple technology for using water with a drip system, structuring the settlement and sanitation environment, and public legal awareness about land ownership rights in provide legal certainty. Thus, the results of the plantation can be of economic value and environmental management of the settlement can improve the degree of public health and environmental aesthetics, in order to support community life in the Bonen area of Baumata Village, Kupang Regency.

Keywords: *Bonen, land, management, plantation, settlement.*

INTRODUCTION

Humans as settlers or the local community are citizens of a village or city, a tribe of a nation formed because of the existence of 'social relationships' between the members of the group. Community is a family that lives together in such a way that they feel a common interest. The community can be reviewed from social and physical aspects. From the social aspect, the community is a community unit that is bound by the prevailing values within it. The ties can be in the form of kinship, neighbors, friends, or broader ties that are formal or informal. While from the physical aspect, community is a certain geographical area in a settlement. As a binder of the area are the socio-cultural characteristics of the settlers and natural and artificial physical environment in the area²⁰³.

Physical settlements are not limited to dwellings, but are a unified structured environmental infrastructure. The relationships that are formed can be reflected from human

²⁰³ Mulyati, A., and M. Najib. *Settler Social Interaction Patterns Against Settlement Spatial Planning*. LP Research (Palu: Tadulako University, 2005).

activities in the settlement environment through patterns regulating and maintaining the balance of nature²⁰⁴. In line with this, the plantation and settlement environments are man-made artificial environments. Therefore, the environment needs to be maintained and conserved so that it provides benefits for its inhabitants. This statement is in line with Salim²⁰⁵, and Soemarwoto²⁰⁶ which basically states that the environment needs to be preserved, optimized for its function, and conserved so that it does not experience degradation, has implications for providing or as a source of life for its inhabitants, including humans.

Plantation land management is the process of overseeing activities that occur in the garden through the stages of planning, organizing, actuating, and controlling²⁰⁷. These stages can work well if there are no land rights issues, facilitation of plantation development and plantation location according to local spatial plans and areas²⁰⁸.

The Bonen Kopu and Bonen Villages of Baumata Village are dry areas located in the water source area that need to be treated to meet the clean water needs of the people of Kupang Regency and Kupang City. The availability of water in the region is also as capital in plantation management. Problems arise when community behavior around the Bonen hamlet of Baumata village often cuts trees for building material needs, thus threatening water sources. In addition, extensive livestock raising threatens the trees around the water source and creates dirty animal odors because some are imprisoned and some are released to roam around, are inefficient²⁰⁹, reduce aesthetics and damage neighboring plants, causing discomfort among fellow villagers. The community also uses chemical fertilizers that pollute

²⁰⁴ Muhammad Najib. 2010. Potential and Problems in the Development of Tourist Settlement Areas in the Salena Hamlet of Palu. *Journal of Space*, 2 (1): 10

²⁰⁵ Salim, Emil. *Environmental Development*, fourth edition. (Jakarta: LP3ES, 1991).

²⁰⁶ Soemarwoto, Otto. *Environmental and Development Ecology*. Second printing. (Jakarta: Jambatan, 1995).

²⁰⁷ Terry, George R, Leslie W, Rue. *Principles of Management*. (Jakarta (ID): Bumi Aksara, 2011).

²⁰⁸ Deilla Tsamrotul Fuadah and Ernah. 2018. Management of Palm Oil Plantation Based on ISPO Principles in PTPN VIII Cikasingka, West Java. *Indonesian Journal of Agricultural Sciences*, 23 (3): 191-192.

²⁰⁹ Nono Ngadiyono, I Gede Suparta Budisatria, Endang Baliarti, Panjono, Tri Satya Mastuti Widi, Muhammad Danang Eko Yulianto, Bayu Andri Atmoko. 2019. Integrated Cattle Farming Development and Assistance Cattle Group in The Kandang Kalimasodo. *Journal of Community Service and Empowerment*, 3 (2):213.

the environment²¹⁰. The problem that becomes important is the weak legal awareness of the community in the management of land titles, in order to guarantee land rights.

This service uses several concepts including, (1) education; (2) independent agriculture; (3) empowerment; (4) legal awareness; and (5) environmental sustainability.

1. Education is a process carried out by a person to find his true identity, which is carried out through observing and learning behavior so that later giving birth to actions and behavior.
2. Self-help in a large Indonesian dictionary is interpreted in terms of strength or power alone²¹¹. Then agriculture is a type of production activity which is based on the growth process of plants and animals²¹², so that independent agriculture is a production process that employs animals or plants with their own abilities²¹³.
3. Empowerment discusses how individuals, groups or communities try to control their own lives and strive to shape the future according to their wishes ". So that the role of empowerment is very significant to increase the ability of individuals in realizing self-help agriculture²¹⁴.
4. Legal awareness is self-awareness without pressure, coercion, or orders from outside to comply with applicable law. Generally legal awareness is associated with legal compliance or legal effectiveness with other words, legal awareness concerns the issue of whether certain legal provisions really function or not in society²¹⁵. Legal awareness is the awareness found in human beings against existing laws, that is, which will be manifested in the form of compliance and non-compliance with the law. Through the psychiatric

²¹⁰ Ekamawanti, Hanna. Artuti., Herkulana. 2019. Initiation of Biological Technology to Farmers For Supporting Revegetation of Ex-Shifting Cultivation Land. *Journal of Community Service and Empowerment*, 3 (2): 186.

²¹¹ KBBI Online, Understanding Swadaya accessed via <https://kbbi.web.id/swadaya>, on October 22, 2019.

²¹² Soetriono, Anik Suandari and Rijanto. *Introduction to Agriculture*. (Malang: Bayumedia, 2006).

²¹³ Sarifudin, Saleh Aldino, Muhammad Fachry, Muhammad Alqaroni, Annisa Septian Nur'ihyani. 2019. EDPERDAY (Independent Agriculture Education): Efforts to Empower Agricultural Youth in Organic Vegetable Education Land. *Journal of Community Service*, 5 (2): 307.

²¹⁴ Riza Risyaniti & Roesmidi, *Community Empowerment*. (Sumedang: Alqaprint Jatinangor, 2006).

²¹⁵ Soerjono Soekanto, *Legal Awareness and Legal Compliance* (Jakarta: Rajawali, 1982), p.53.

process, humans distinguish which behaviors should be done and which should not be done²¹⁶.

5. Environmental preservation, that is, the environment needs to be maintained, optimized for its function, and conserved so that it does not experience degradation, with implications for the continued availability of natural resources both now and in the future²¹⁷.

This community empowerment activity is expected to have implications for increasing the economic value and welfare of the community²¹⁸.

MATERIALS AND METHODS

1. Activity Stages

- a. Preparation phase; include (consolidation of field activities), land, water equipment and participants.
- b. Socialization; conduct outreach by conducting outreach in the form of delivering information to the public directly with informative and persuasive so that people know, are willing and able to implement new innovations²¹⁹. Counseling related to the environment, law (legality of land rights), fertilizer production and planting of tillers, vegetables, control.
- c. Practice; The practice of environmental management, manufacture of fertilizers, land preparation, arrangement of wells and water extraction equipment, seedling, control.
- d. Care; Forest land maintenance and plant maintenance structuring residential areas and controlling activities.
- e. Supervision; Supervision of activities.

²¹⁶ Paul Scholten: *Algemeen Deen*, p. 166 N.V. Uitgeversmaatschappij W.E.J Tjeenk Willink 1954, Quotations taken from Sudikno Mertokusumo's book, *Raising Public Law Awareness*, First Printing, First Edition (Yogyakarta: Liberty, 1981), p. 2.

²¹⁷ Salim, Emil. *Environmental Development*, fourth edition. (Jakarta: LP3ES, 1991).

²¹⁸ Ibrahim, Princess. Sapira., Azis, Rosdiani., Akolo, Ingka. Rizkyani. 2019. VCO Making-Training To Increase Community Income. *Journal of Community Service and Empowerment*, 3 (2): 198.

²¹⁹ Eddy Pumomo, Nugraha Pangarsa, Kuntoro Boga Andri, and M. Saeri. 2015. The Effectiveness of Counseling Methods in the Acceleration of Rice Technology Transfer in East Java. *Journal of Learning Technology and Innovation*, 1 (2): 192.

f. Report on the results of activities.

2. Activity Approach

- a. Case approach. This approach is carried out by examining phenomena in society related to the legal issues encountered²²⁰.
- b. Socio Legal Approach, which sees the law through a combination of normative analysis and non-legal science approaches. The nature of this approach is prescriptive, namely providing solutions to legal problems by combining normative analysis and non-legal approaches / social aspects, especially those relating to the management of plantation land and the residential environment.

3. Activity Analysis

The method used in the analysis of activities is qualitative analysis, which describes quality data in the form of regular, concise, logical, non-overlapping, and effective sentences in order to obtain scientific relevance related to the management of plantation land and the residential environment using reasoning that is both deductive and inductive²²¹.

RESULTS AND DISCUSSION

The implementation of this activity is carried out within a period of 3 months, carried out with the first two patterns of socialization regarding the lighting of livestock waste handling for fertilizer production, socialization of cleanliness of the living environment, how to grow vegetables using artificial fertilizers in training. The second is carrying out technical activities in the form of: land preparation, installation of equipment to drain water to the place of cultivation, electricity and water installation. land preparation for fertilizer production and when composting and processing vegetable cultivation and vegetable planting and care / maintenance.

²²⁰ Bahder Johan Nasution classifies the approach into 6 types of approaches namely; The law approach or Statute Approach, historical approach, conceptual approach, comparative approach, political approach and philosophical approach. See Bahder Johan Nasution, *Legal Research Methods*. (Bandung: MandarMaju, 2008), p. 86.

²²¹ Abdulkadir Muhammad, *Law and Legal Research* (Bandung: PT.Citra Aditya Bakti, 2004), p. 127.

1. Land Preparation

The land used for community service activities is a People's garden with an area of 1500 m². On the land there are water wells with a depth of 10 meters with a water level of 3 meters. The well was used for training activities to grow vegetables and distributed using an electric dynamo that was previously installed. Furthermore, the land was prepared using 3 manure beds to prepare vegetable growing beds.

Prepare for making beds with a length of 10 meters, leber 1 and a half meters, prepared to grow vegetables. Also used to make fertilizer taken from untreated animal waste which is used for training materials for making manure.

2. Planting Care / Maintenance Plants

a. Papaya

Papaya plants should be planted before seeding first, then after about one month old, then moved to the field (holes that have been prepared with a size of 50x50x40). Papaya plants are very sensitive to pests and fungi, bacteria and viruses and nematodes. There are various types of pests that will attack the papaya plants starting from the roots, stems, leaves and fruit. there is a pest called by the name of the Mite Pest that might be known by agricultural people. This pest is very fine with a length of 0.8 mm and live together. These pests suck the cell fluid in the leaves and fruit which results in leaf loss and fruit defects or sores. There are also pests that are commonly referred to as Aphids, these aphids are soft bodied, greenish or reddish, have an antenna and live in groups. This pest is also a vector of mosaic and ringspot virus diseases. Papaya plants have fibrous roots, hollow stems and are generally not branched with plant height can reach 10 meters. Single leafed and large with also hollow petiole. Papaya flower is a compound flower This plant has three types of flowers, male flowers, female flowers, and perfect flowers.

b. Mango

Mango plants in Indonesia, in general, are still planted in the yard and as a side crop, thus the expected quality of ga is still far from good as well as the amount of production produced. Mango plants are bred with seeds, grafts, grafting and grafting. Plants that are propagated from new seeds can bear fruit after the age of 6-7 years, even more. While plants derived from grafting, grafting, and connecting, the plants will bear fruit faster, about 3 years from when the seedlings are transferred to the field.

In its cultivation techniques, then several things to consider are; in its maintenance, namely watering, pruning, fertilizing, and controlling pests and diseases. How to grow manga that has sprouted, ladies first dig a hole approximately 60 cm then 30 cm from the bottom filled with manure either cow, goat, or chicken manure. then put the plant in a hole and cover it with soil that has been mixed with manure. For water use, after the manga seeds are planted in a polybag or Pot it requires only 1 liter of water per day to be about 30 centimeters tall, when mango trees reach 1 meter to 4 meters in height will need more water more or less 4 liters of water. mangoes reach 10 meters high then the manga does not need too much water. once in 2 days, it will be flushed because the root of the manga tree has reached the wet soil in the soil.

Flowering and fruiting time requires a dry season of approximately 4 months. Flowering occurs after approximately 1.5 to 2 months after the dry season. In areas with lots of rain, plants usually experience a lot of disturbances, such as pests and diseases, loss of flowers and fruit. Mango plants need the best temperature around 25°C.

c. Jackfruit

Jackfruit plants are generally bred by using seeds, with root buds, accumulation, and also grafts. To maintain good jackfruit quality, it should be used with vegetative techniques, especially with grafting and grafting. Before the seedlings are planted, make a hole with a

size of 50x50x50 cm or 100x100x100 cm. When planting seedlings should be done at the beginning of the rainy season, which was previously given fertilizer.

Jackfruit plants are suitable for planting on all types of soil, but to be able to grow well, it requires sandy clay soil, suar, contains a lot of organic material, Jackfruit plants prefer tropical or hot climates, with a minimum temperature. Jackfruit plant distribution areas are generally located in the E (dry) climate with a dry month of about 6-7.5 months / year.

Pests often found attacking these jackfruit are: fruit flies, stem borer, and branches, helopeltis ladybugs, leaf and fruit caterpillars, aphid lice, ratococcus scales, and mammals such as wild boar, apes, bats, and ferrets. For stem and branch borer pests, this can be overcome by pruning the affected cabnag, or by closing the scraping wound with cotton which has been dipped in an insecticide solution, can also be sprayed with contact or systemic insecticide. Whereas aphid infestation can be done by spraying decis 2.5 EC or curacron 500 EC. Scales pests overcome by spraying perfume insecticide 400 EC or 2.5 EC decis. While ladybugs and leaf caterpillars, use cascade 50 EC insecticide or 25 EC metador. Whereas for disturbing animals, this can be done by blocking it. Some diseases of jackfruit plants, such as root rot, fungus, flower rot and raw rot, can be done by pruning affected plant parts, or can be done by using eradicating drugs other mushrooms.

d. Orange

How to plant an Orange tree is very different from a jackfruit tree because orange trees only grow in cold weather so the orange tree is very difficult to find in the city of Kupang because in Kupang it has quite hot weather. Oranges also have many types of oranges, among others, namely: large oranges, sweet oranges, oranges, lemon, lime, lime, musk oranges, tangerines and the like.

Soil conditions suitable for this plant are sandy loam and clay. The soil must always be continuous and not store too much water. The best groundwater content is at a depth of 50-

150 cm below the surface of the soil. Suitable soil pH ranges from 5.5 to 6.5. the altitude of the place is at 500-1200 m above sea level, but in the lowlands can still be cultivated but not good. Citrus plants don't like shade or shelter. Sufficient sunlight will make the orange stems stronger. The expected humidity is around 50-85%.

Before the seeds are planted, what needs to be done is to make the planting hole. Making the planting hole is done 3-4 weeks before the seedlings are planted. Holes can be made in sizes 60x60x60cm, or 80x80x70, or 1x1x0.5m. Making holes for citrus plants is recommended not to be too deep, because this will make root growth too deep, consequently complicating fertilization or also with roots that are too deep, the possibility of development is not good because the exchange of air inside is not good.

Planting of seedlings can be done at the beginning of the rainy season (November-December) or it can also be done at the end of the rainy season. Before planting, seeds need to be selected and good seeds planted. The requirements for good seedlings are seedlings whose growth looks healthy (not attacked by pests or disease), as long as the seeds are of clear origin, the roots are healthy and strong, and the growth is not stunted. Planting is carried out by means of; plastic pots that wrap the seeds are torn apart, then put in holes, the holes are closed and watered, and so that plants stand upright, the plants need to be given water.

Pruning as maintenance, carried out on water shoots that are less profitable for plants, branches behind, branches and twigs that are dry and weathered. Pruning this maintenance should not be done too much, because it will make plants more lush resulting in plants producing less fruit.

e. Spinach

Spinach plants can grow in all types of soil, fertile soil is very preferred, as well as organic matter. In less fertile soils, it is necessary to add fertilizer in order to support its growth. Fertilizers that need to be considered are fertilizers that strongly support leaf growth.

The leaves are used as foodstuffs that are usually served, in certain species can be used as medicine. Spinach leaves contain 85% water, while in every 100 g the leaves contain 44 kcal energy, 4 g protein, 0.4 g fat, 6 g carbohydrates, and several kinds of vitamins, namely B1, B2, and C. Spinach plants including the family Amaranthaceae. The leaves are oval with slightly taper edges with clear veins of leaves. Flowering panicle erects can flower throughout the year.

f. Mustard

Mustard or better known as white vegetable but actually this vegetable consists of several types of mustard greens, the first, is white mustard (mustard jabung). The leaves are wide dark green leaves color, limp and smooth. The stems are short and sturdy. This type is more liked by people because it tastes good. The second is mustard greens. The leaves are wide whitish green and have white petioles. The trunk is short and upright. It feels rather bitter and less favored by people. And the third is Sawi Huma. The leaves are long, narrow and whitish green with long, winged petioles. The trunk is small and slim. It tastes good but not as good as chicory.

Mustard plants can be planted in both the lowlands and highlands. Very like the type of soil that has a high enough organic matter content and also has a good water retention capacity. , mustard seeds can be moved at the planting location that has been prepared. Spacing is usually between rows of 40 cm and within rows of 30 cm. Fertilization is done by giving ZA fertilizer of 5 g / plant or 3 Kw / Ha.

This plant probably originated in Africa, but was first cultivated in Asia. Mascot has been massively cultivated in Eastern Europe, China and Africa. In India this mustard is used as seeds, usually made of oil called Rai. The seed contains 35% oil that can be used in cooking. Spinach plants are annual, upright in shape with height can reach 1 meter, the base of the leaves are stemmed up to 20 cm in length and branched stems. Mustard contains

several vitamins, namely vitamin A at 6.460 IU, Vitamin C at 102 mg, and Vitamin B at 0.09 mg. In addition, mustard leaves are effective in improving the operation of the kidneys.

g. Kale

This plant grows in water and on land. So this plant is divided into two parts, namely ground water spinach (*Ipomea reptans*) and water spinach (*I. Aquatica*). Kangkung type "Cervulaceae", the leaves are shaped like a shield and the tip is tapered, the leaf stalks are long and the flowers are trumpet shaped like those found in the market or kale that grows in the surrounding environment. This plant is a perennial herb that lives in water and also on land. And its growth is pervasive. But these vegetables are open just made into vegetables, but these spinach vegetables also contain vitamins A and C, and some minerals. These vegetables are very good for calming nerves, therefore for those who experience sleep disorders must often consume kale vegetables. Water spinach that is widely planted by farmers is land water spinach and water spinach.

Water spinach has long leaves, the edges are rather blunt and the color is dark green, the flowers are yellowish white or reddish white. This water spinach likes a watery place or pond, a river swamp where the water flows calmly. Water spinach plants can grow in the lowlands to high. Ground water spinach is bred using seeds, and is usually planted at a distance of 15 cm x 15 cm by the way the seeds are ditugal. Water spinach plants are very susceptible to weeds, therefore weeds need to be addressed properly and regularly / scheduled. Soil drainage must be maintained properly, especially to keep the soil from becoming muddy, while water spinach, most of it is bred with stem cuttings. Good cuttings are cuttings with a length of 20 cm. These cuttings are planted at the bottom of the pond with a distance of 20x20 cm and this is maintained so that the planting area is not dry. For fertilizing ZA fertilizer can be given as much as 0.5 - 1 Kw / Ha.

3. Simple Technology for Water Use with a Drip System

Many Bonen people consider water difficult, but after being asked, it turns out that every day all the people in general must not miss activities such as bathing, washing dishes, washing clothes, and other activities that require very much water to meet their daily needs and after bathing or washing, usually the water is immediately disposed of and not used. Water that has been mixed with soap does not mean that water is poisonous but the water can still be used to water vegetables so the way is when watering using soapy water that reaches the roots is by using a drip system, the soap content is left on the surface of the ground then rinsed again with a little clean water to neutralize the soap levels left on the surface and I myself have done it and in fact Lombok, my vegetables remain fertile.

Then to make sure that when new plants are planted there is no need to water every day and save more water, it is very easy to not need materials to buy but with used items or can be found in the trash, using used bottles first., take a used bottle and then perforate using a 7 inch nail with a small size that is useful as compressed air from the top of the hole then also perforated the size of the bottle is also small using a 5 inch nail if the water flowing out of the bottle cap is very heavy then the bottle is replaced then perforate it even smaller. Then it is tied to the tree and the hole in the lid leads to the roots of the plant.

4. Making and Utilizing Compost Fertilizer

Solid organic fertilizer is one type of solid compost fertilizer, usually derived from organic material, for example from goat manure, cattle, and even household waste. Although now there are many brands of solid organic fertilizer on the market but it is not wrong if we make it ourselves at home. Fertilizers commonly used by bonen residents are fertilizers made from chemicals in the form of urea, ponska and others so that the plants planted are indeed fertile but not healthy to consume and what is still a problem is reducing the value of buying and selling in the market because of the vegetables being planted. Selling process does not

use natural fertilizers so that the quality of vegetables is also reduced. Many Bonen people own plantation land and some even plant vegetables every day but do not have an impact on the economy in the Bonen community households and some claim that they often incur debts when shopping.

Solid organic fertilizer is quite easy to make. The following will explain the process of making organic solid fertilizer using simple ingredients, namely: a) Animal dung (cattle, goats, poultry, etc.); b) Dry leaves; c) Sawdust or husk; d) Well water and e) Starter bacteria (EM4 agriculture) and sugar cane drops (both may be one). First of all, mix dried animal manure with husks, grajen, and dried leaves until the conditions turn red. The mixture of materials is formed in an available landmass with a size of approximately 1 x 1 meter. Certainly the mixture layer reaches 20 meters. Then, two buckets are provided that have a capacity of 5 to 10 liters per bucket. Fill in the first bucket with a mixture of EM4 bacteria and molasses with a mixture of 2 EM4 bottle caps plus 3 cane molasses. Then, the mixture is allowed to stand for about 5 minutes.

In the second bucket, fill with water then mix with a bucket containing a mixture of molasses and EM4 bacteria. Then, prepare a bloat or tool to water the plants and pour the mixture from the bucket into it. Flush into the mixture of livestock manure per layer. Try to water the mixture of livestock manure until the lowest layer and evenly spread to all parts.

After that, the mixture of livestock manure that has been watered is made into 7 to 8 layers interspersed with watering the EM4 bacterial solution. The height of each new layer is the same as the first layer made, which is 20 cm. The final step is to close the mixture of livestock manure with plastic and leave it for about 2 months so that fertilizer can be fermented properly. The guide on how to make solid organic fertilizer above can help utilize the rest of livestock manure to fertilize agricultural land.

5. Settlement and Sanitation Environment

In general, the people in the village of Bonen raise cattle with an extensive system that is off the loose. This condition threatens the trees around the water source and gives rise to a dirty animal odor because it is not caged so that it damages neighboring plants, reducing the aesthetic value of the further impact on the inconvenience of fellow villagers.

The people in the village of Bonen lack livestock forage material and the residents have domestic animals whose stools are stained and do not use the manure as fertilizer. Residents generally keep pets in an environmentally unhygienic manner. So the environmental arrangement is needed, namely the livestock need to be caged, the waste is recycled to meet the needs of forage food, so that the Bonen hamlet area which is clean, comfortable and safe is part of improving environmental sanitation.

6. Community Legal Awareness About the Relief of Land Ownership in Providing Legal Certainty

Relating to the protection of land rights, the Bonen community in general, every household has a very large land but does not have a certificate and this behavior has occurred from generation to generation from their ancestors to the present so that problems often occur between brothers and sisters because of the land left by their ancestors who have distributed or inherited but not certified and want to get more land than others, causing fights between extended brothers, neighbors who feel that the building built by the next house has crossed the land boundary because there is no evidence that causes fights and even killings because they do not want to succumb to one another, and people who claim that they own land in Bonen because the land owner does not have a certificate so that the problem continues continuously to the court.

Some important basic principles in accordance with Law Number 5 of 1960 concerning Basic Agrarian Principles regulations:

- a. First, the State conducts land registration throughout the territory of Indonesia according to the provisions regulated by government regulations so that no matter how small the land owned is only one square meter must be registered with the government to be protected so as not to cause problems regarding land rights. With land that has been registered with the State automatically 100% of the land becomes a property that cannot be contested by others.
- b. Secondly, it must be known with certainty the boundaries of the land owned before registering the land to the government so that problems do not occur in the future. The government will conduct a survey to the location, so it must be confirmed by those who directly border the land, so that in the future when they want to work on or build a house there are no land boundary issues.
- c. Third, after registering the land and from the government also having conducted the Survey, the land is really the property. The Government will issue an official letter in the form of a Certificate in accordance with Government Regulation Number 24 of 1997 Article 32 Paragraph (1). The certificate is a proof of strong rights, in the sense that as long as it cannot be proven otherwise physical data and juridical data contained therein must be received as correct data, of course the physical data and juridical data contained in the certificate must be in accordance with the data listed in the land book and the measuring certificate concerned, because the data is taken from the land book and the measurement letter.

The purpose of registering land is for businesses that lead to legal certainty over land listed in the provisions of the articles governing land registration, in article 19 of the LoGA it is stated to guarantee legal certainty of land rights, the LoGA requires the government to enter into land registration throughout the territory of the Republic of Indonesia which is 'Rech Kadaster' meaning that aims to ensure legal certainty, by holding the registration of

land, the parties concerned can easily find out the legal status of the particular land it faces, its location, area and boundaries , who owns and the burdens attached to the land.

Every human being has the same rights, according to the context of Human Rights so human rights are a set of rights inherent in the nature and existence of humans as God's creatures and are His gifts that must be respected, upheld and protected by the State, the law and the government, and every article for the sake of honor and protection of human dignity and status, contained in Law Number 39 of 1999 concerning Human Rights, Article 9 paragraph (1) which reads that every person has the right to live, defend his life and improve his standard of living, paragraph (2) reads, everyone has the right to live peacefully, safely, peacefully, happily, physically and physically.

The existence of legal certainty over land will have implications for the development of livestock and small agricultural businesses can take place well, maintenance of trees around water sources is maintained and stable animals regularly produce forage agricultural products to support livestock businesses and increase the fertility of land for vegetable business around the cage. Next will overcome the theft of forage feed, the act of cutting down trees so that the river slopes can be maintained. Further implications for increasing the income of families in the hamlet from the sale of livestock in the form of cattle, pigs, goats and chickens, as well as will overcome the problem of forage feed for animals and form the aesthetics of the environment around the water source and overcome the river bank landslides.

Thus, the results of plantations, animal husbandry can be of economic value and environmental management of settlements can improve the degree of public health and environmental aesthetics, in order to support community life in the Bonen area of Baumata Village, Kupang district.

CONCLUSIONS

The existence of legal certainty over land will have implications for the development of livestock and small agricultural businesses can take place well, maintenance of trees around water sources is maintained and stable animals regularly produce forage agricultural products to support livestock businesses and increase the fertility of land for vegetable business around the cage. Thus, the results of plantations, animal husbandry can be of economic value and environmental management of settlements can improve the degree of public health and environmental aesthetics, in order to support community life in the Bonen area of Baumata Village, Kupang district.

SUGGESTIONS

1. To improve and develop the health of agro-ecosystems, including biological diversity, biological cycles, and soil biological activities. Organic farming applies practices that prioritize the use of organic waste in the form of dry leaves, cow dung, goat manure, and chicken manure and do not use fertilizers from chemicals in the form of urea, KCL, ponska, and other chemical fertilizers.
2. Usually the Bonen people let animal dung be spread everywhere and do not utilize it and many animals roam and damage plants, so from this outreach the public can know the purpose and purpose of organic fertilizer derived from animal dung.
3. Bonen Community health principles must preserve and improve the health of the soil, plants, animals and humans as an inseparable unit.
4. Ecological principles: The Bonen community must be based on the ecological system and cycle of life. Work, imitate and try to maintain the system and the ecological cycle of life.
5. Principles of justice the Bonen people must build relationships that can guarantee justice related to the environment and the opportunity to live together.

6. Community Protection Principles Bonen must manage carefully and responsibly to protect the health and well-being of present and future generations and the environment.

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