
ANALYSIS OF COMMUNITY'S WILL AND WANT TO USE FUEL WOOD IN DILI CITY, TIMOR LESTE

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Abstract

Firewood as traditional energy source are used by community in rural area. Firewood problems need serious attention and it is necessary to do the research about firewood. because 80% of the rural area in Timor Leste still using firewood as an energy sources. This research was conducted in May-June 2014 at Becora village, Lahane Oriental village, and Comoro village as targetted villages. The objectives of the study were to identify prespectives of community of Dili city on firewood consumption and activities of community in Dili city using firewood as priority energy. This study were using interview method and questionnaire's filling to respondents on the three targetted villages. Results of this study showed that community at Becora village, Lahane Oriental village, and Comoro village use firewood as an energy sources priority for household consumption. Firewood which utilizes by community were taken from natural forests in Timor Leste, and the precentage of common used species Ampupu woods 80%, Asam woods 5%, Kesambi woods 5%, Bakau woods 5%, and Lamtoro woods 5%.

Keywords: *traditional knowledge, firewood, household, Dili City, precautionary attitude*

INTRODUCTION

Forests as a nation's wealth resource gifted by God Almighty need to be managed and utilized properly, for the benefit of the people at large. The current forest area in Timor Leste which has become a permanent forest area RTK (Forest Land Registration) is 745 175 ha, and the forest area in the city of Dili is 13 529 ha with the current population of the city of Dili reaching 193 563 people. Forests function as protectors and regulators of water systems, as well as other ecological functions, forests also have social and economic functions that can be directly enjoyed by the people at large, namely they can provide products in the form of firewood for the Furniture industry, as well as carpentry, paper, pulp, plywood, as well as energy. The forest resource that is often used in Timor Leste is wood as firewood. In the city of Dili, especially in the village of Lahane Ocidental, there is a home industry for the production of medium and small scale bread or paung where the main raw material in the production process of this bread is using

firewood. According to Santoso (1983), firewood is the oldest traditional energy resource used by humans, especially in rural areas. The issue of firewood needs serious attention, bearing in mind that a portion of the Timor Leste population who live in rural areas (80%) still use firewood as an energy source. In addition to household consumption, firewood is also used as an energy source for people's industries, such as: making coconut sugar, smoking tobacco, burning lime, making bread, burning wine and bricks.

In developing smallholder industries, the role of wood as an energy source cannot be abandoned because firewood is the best fuel (Irawan 1990). One of the considerations for maintaining the use of firewood as fuel by industry, especially the bakery industry and for household consumption, is because firewood provides better production quality compared to the use of other fuels. Thus, the demand for firewood will continue to increase. Increasing community consumption of firewood will result in reduced forests and high damage.

Forests have a protective function which is intended to regulate water management, prevent floods, prevent erosion and maintain soil fertility, and their function will be disrupted if they are damaged. Therefore, forests need to be maintained and preserved to avoid damage such as forest and land fires, shifting cultivation, illegal logging and livestock grazing, so that the condition of the forest can function according to its function for the welfare of the community. The city of Dili is the capital city of Timor Leste which was only established in 2002. Many people from various ethnic groups come to Timor Leste, especially the city of Dili to look for Nafta to support their families and both domestic and foreign workers.

Firewood is a source of livelihood and welfare, so that the City of Dili accommodates all kinds of activities for the people of Timor Leste. In the past 14 years, there have been many problems both in terms of people's lives and environmental problems that have not been resolved. Environmental damage that is a problem in the city of Dili is the destruction of the natural *Eucalyptus alba* forest that grows naturally on the mountains of Timor Leste. The destruction of the *Eucalyptus alba* natural forest is due to the use of firewood as household fuel and the needs of the small and medium scale bakery industry which is taken from the forest. Therefore, research on the use of firewood in the city of Dili needs to be carried out in order to obtain data and information that can be used as material for consideration in meeting the demand for firewood and reducing community pressure on forests. The purpose of this study was to identify the perceptions of the people in Dili City towards the use of firewood and to identify community activities in using firewood.

LITERATURE REVIEW.

Become a destination for the community as a place to connect life. In addition to the utilization of other forest products, the search for firewood in the forest is considered to be able to provide a field. In general, respondents know the function of the forest for their lives, but along with population growth and high unemployment rates in the City of Dili, the forest is a job for their current life.

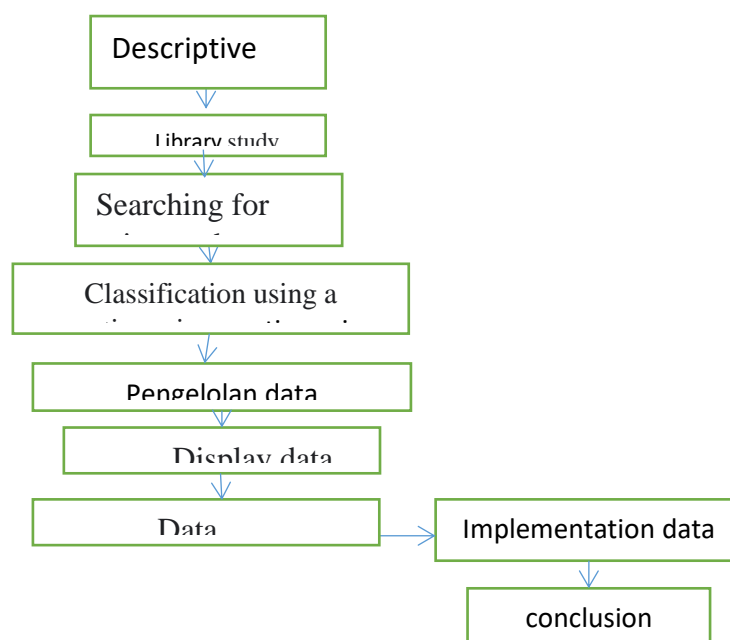
According to several bread-making industries (Badrudin 1983). using firewood as fuel for bread processing For the bread-making industry and household consumption, a lot of firewood comes from the forestry and plantation sectors, because for these industrial needs quite a lot of fuel is needed.

In developing smallholder industries, the role of wood as an energy source cannot be abandoned because firewood is the best fuel (Irawan 1990). One of the considerations for maintaining the use of firewood as a fuel by industry, especially the bakery industry and household consumption, is because firewood provides better production quality compared to the use of other fuels. Thus, the demand for firewood will continue to increase.

in Timor Leste is firewood According to Santoso (1983), as a basic need the use of firewood for household consumption for cooking and producing bread or paung as a necessity for breakfast for the family and important events people definitely eat paung as a tradition of life for the people of Dili City There are medium and small-scale home industries for making bread or paung where the main raw material in the bread-making process is using firewood, firewood is the oldest traditional energy source used by humans, especially in rural areas. The problem of firewood needs serious attention, bearing in mind that some of the Timor Leste population who live in rural areas (80%) still use firewood as a basic need for cooking and making all activities such as cooking, frying, producing bread or paung in all things the people use. firewood as a basic need for the people of Timor Leste in general.

METHODE PENELITIAN

Time and Place of Research This research was conducted in May–June 2014 at the Research Location Map of Becora Village, Lahane Oriental Village and Comoro Village, Dili City, Timor Leste as the research target. The area of the City of Dili is 48 268 Km2 with a height of 11 meters with a population density of 4000/Km2 .
The materials and tools used in the research are:



The data analysis phase used the descriptive data analysis method, namely by analyzing primary data and secondary data. Data Collection Primary Data Collection. Conducting systematic observations of the use of firewood used by the community by using a questionnaire to 100 respondents and the second is by survey method where researchers directly visit each respondent by interviewing the community in Becora Village 23 family heads, Lahane Oriental Village 13 family heads, Comoro Village 64 family heads. Secondary Data Collection Literature study which is an effort to obtain all forms of data and information that can support the preparation of research reports obtained in the municipal government of Dili, Timor Leste.

RESULTS AND DISCUSSION

The more the number of family members, the greater the need for firewood because the volume of ingredients that must be cooked also increases. This is like the need for firewood for cooking, which is influenced by the amount of food that is cooked and a household that has larger family members, the consumption of firewood is also greater. From the results of simple linear regression analysis and correlation analysis between firewood consumption, presented by Madjid (1998), Dewi (1996), David et al (1996) states that the high consumption of firewood is caused by the availability of trees that can be used for firewood.

The community's desire to use firewood is the oldest traditional energy resource used by the community, especially in rural areas. The problem of firewood needs serious attention, bearing in mind that the majority of the Timor Leste population who live in rural areas use firewood. According to Santoso (1983),

One of the people's wishes for firewood is that a culture of always maintaining the use of firewood as fuel by industry, especially the bread-making industry and household consumption, is because firewood provides better production quality compared to the use of other fuels. Thus, the need for firewood will continue to increase which is used by many people (Irawan 1990).

The results of a comparison of firewood consumption in the city of Dili show that the consumption of firewood is greater. This consumption may be caused by differences in socio-economic factors, such as employment status, income and number of family dependents.

n_i : number of samples per village

n : the total number of samples

N_i : number of population per village

N : total population

Table 1 Data on the recapitulation of the number of family heads in the village target in 2014 using firewood.

No	Village	Head of family
1.	Becora	3.097
2.	Lahane oriental	1.734
3.	Comoro	8.700
4.	Total	13.531

Table 2 Recapitulation data for the number of samples in 3 villages

No	village	Ni	ni	N
1.	Becora	3097	1000	23
2.	Lahane oriental	1734	100	13
3.	Comoro	8700	100	64
total		13531	-	100

CONCLUSION

Firewood still has an important role as a source of household energy and the bread-making industry for the people of Dili City, Timor Leste today. Consumers of firewood are generally people with low and middle income levels. Firewood is an important fuel that was chosen long ago by the people of Timor Leste as the main fuel for households and household businesses such as: the business of making white bread, the business of making tempeh and tofu, the business of making wine, and other businesses. Firewood was chosen as household fuel because firewood is easy to obtain, easy to buy, easy to burn and easy to use so that 80% of the people of Dili, from low to middle class, still use firewood as the main source of energy in the household.

1. Communities in Timor Leste mostly use firewood as a basic need, which is increasing according to Budiyanto 2009, especially in rural areas. This is due to population growth, industrial development and the scarcity of fuel oil so that people tend to use firewood as the main fuel instead of kerosene.
2. Producing bread or paung using firewood due to community habits
3. From the lower middle class, in general, they use firewood for important party events or (events of celebrations and activities), most of them use firewood for cooking.

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