

# Study on Community Participation in The Land Clearing without Burning in Gambut Sub-District, South Kalimantan

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## Study on Community Participation in The Land Clearing without Burning in Gambut Sub-District, South Kalimantan

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### ABSTRACT

In connection with the Environment Minister regulation number 10 year 2010 about the Mechanism of Pollution Prevention and Environment and Life Damage chapter II, Article 3 (1) said that all of business and activities that use the forest or land should implemented land clearing without burning (LCWB) and is expected that all participating land preparation activities to implemented these policies. This study was conducted to determine the level of community perception on LCWB and the land waste utilization by the community in Gambut Sub-district, South Kalimantan, Indonesia. The results showed that 15 respondent (49.83%) already knew about land clearing without burning. Low level of community participation is caused by community understanding about CLBW still low. About 64 % of respondents was included in the good category because the community has an interest to cultivate a waste from land clearing to decrease environment contamination. About 60 % of the community thought that LCWB waste can be used for various purposes. Waste types which usually utilize by community was grass and rice husks. The wastes were used as organic fertilizer and animal feed without further processing.

**Key words:** Participation, land clearing without burning, waste

### INTRODUCTION

Forest and land fires damage control on plantations company was relatively more easy, because in the regulation of Agriculture Minister number 26, year 2007 said that ability statement have facilities, infrastructure and systems for opened land without burning and fire control have been set by the government so that all forms of deviation will be easily controlled and sanctions with more assertive (Kementerian Pertanian, 2007). In addition, Environment Minister regulation number 10 (2010) about contamination or environment damage prevention mechanism who related wit forest fire damage which is caretaker of a business or activities that use the forests or land shall did land clearing without burning (CLWB) or zero burning policy (Kementerian Lingkungan Hidup, 2010).

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Land burning can have either negative or positive impacts for the environment and living organisms. The positive impact of land clearing used fire is for burning the tree and it facilitates seed reaches the ground, it can then destroy the damaged stands so that the cost is low, but the negative effects are invaluable, because if the forest was burned then some stands will be reduced or lost and there is the possibility of one plant species that are rare or typical lost and destroyed, then can decrease the number of biodiversity. Real impact of land clearing by burning is in the form of air pollution due to smoke. For that we need land preparation that is more effective, efficient, and optimized so that the sustainability of land can also be maintained and the human need for land can be fulfilled. Fires damage didn't happened only on dry land, but also in wet land like peat land, especially in the dry season, when the wetlands experiencing drought. Peat land processing in a large scale with make drainage ditches led to loss of ground water and then has added a risk fire damaged during the dry season. The irreversible drying

characteristics of peat change the peat to no longer able to absorb nutrients and water (Saharjo, 2003; Purwanto, 1996; Vanwijk, 1995).

The community that already performs plantation activities get used to open land by burning because it is relatively easier and cheaper. They have no other alternative because they thought that land clearing without fuel would be difficult to implemented, so that the farming community will continue to use fire in every preparation of land for agricultural activities. Considering 99% of the causes of fire damage in the forest and land is due to human activity, among which 32% comes from plantations activities and 27% of the area of the community field (Dinas Pertanian dan Hortukultura, 2010), so an effort to controlled this situation must not be separated from community who lived around the forest or people who has activity in forest areas. So, that the engagement or participation of community needs to be improved in order to guarantee the success of efforts to control forest or land fires damage, and also protect the forest resources.

Following up on the activities that have been carried out by community who applied land clearing without burning method, there will be wastes to leave. Therefore the researcher want to know the extent of participation and community understanding of

the utilization of waste after preparing land by the community. The importance of this research was conducted in order to provide research, data or information and increase the understanding of the local community and the parties concerned as a data based for determining policies relating the efforts to reduce the hotspot with waste utilization in the land processing.

## MATERIALS AND METHODS

This research was conducted from January to May, 2015, in Kayu Bawang village, Guntung Ujung village, and Guntung Papuyu village, Gambut Sub-district, Banjar District, South Kalimantan province. The object of this research were the owner of farm and the landless farmers. Samples were taken with purposive sampling technique (as many as 30 respondents), followed by interviews. Obtained data were analyzed for the frequency distribution and presented as percentage to describe or illustrate the level of community and local agencies participation for land management activities without burning according to Nazir (1988). The next step was to analyze and process data that is subsequently matched with the scale of assessment in an assessment scale based on Sugiyono (2003) as described in Table 1.

Table 1. Assesment scale

No.	Value Percentage	Assessment Category
1	0% - 19%	Very Bad
2	20% - 39%	Bad
3	40% - 59%	Moderate
4	60% - 79%	Good
5	80% - 100%	Very Good

Source :Sugiyono (2003)

## RESULTS AND DISCUSSION

Table 2 showed the interview results whether the respondent already knew about land clearing without burning (LCWB) and utilization of LCWB waste.

Community participation on knowing/perception about LCWC and its

utilization was 49,83% (Table 2), meaning approximately 15 people knew about LCWB and its waste utilization which according assessment scale can be categorized as moderate category. Eleven people (36,67%) entered into bad category and 4 people (13,5%) entered into very bad category. The low of community participation in LCWC and

its waste utilization is thought to be caused by some factors, among others is the lack of community understanding about LCWB activity and its waste utilization technology.

Table 2. Data recapitulation of knowing and Utilization Phase variables

No	Knowing Phase Variable	Answer Criteria						Description
		a	%	b	%	c	%	
1	Are you(Mr/Mrs) understand about Land Clearing Without Burning (LCWB)?	18	60	10	33	2	7	a. Understand about LCWB b. Less Understood c. Don't Know
2	Are you(Mr/Mrs) know information about processing LCWB waste?	9	30	17	57	4	13	a. Know b. Less Know c. Don't Know
3	Where are you(Mr/Mrs) got information about processing LCWB waste?	7	23	10	33	13	44	a. From the electronic mass media b. Socialization from agencies c. Information from fellow farmer
4	How your(Mr/Mrs) reaction when heard for the first time about processing LCWB waste?	16	53	14	47	0	0	a. Very enthusiastic b. Less enthusiastic c. Not enthusiastic
5	Are you(Mr/Mrs) ever utilize LCWB waste?	15	50	12	40	3	10	a. Always Utilize b. Sometimes Utilize c. Never
6	According to you that waste can be utilize for what?	25	83	3	10	2	7	a. Household, animal feed, organic fertilizer b. Processed Further (briquettes, compost) c. Not utilize
<b>Average</b>		15	49.83	11	36.67	4	13.5	

Community understanding about LCWB and its waste utilization must be improved because farmer must knew positive impact of LCWB. Positive direct impact of LCWB is reducing pollution in environment caused burning activity. Government role is really needed because community need knowledge and understanding about LCWB and its waste utilization.

Table 3 showed the interview results whether respondent already have interest for utilize LCWB waste.

As much as 50% respondent stated that information about LCWB is gained from socialization activity that done by agencies related to government. Moreover, the existence of routine activity such as farmer groups meeting became tools to shared information about LCWB and its waste utilization so that can be accepted by farmers.

The interview result on Interest Phase obtained percentage for 63.5%, meaning 19 people from 30 respondent interested to utilize LCWB waste. Percentage on Interest Phase is considered to be on good scale

assessment, this is because community interested processing waste from LCWB

activity for reduced pollution to environment as a result of burning activity.

Table 3. Data recapitulation of Interest Phase variables

No	Interest Phase Variable	Answer Criteria						Description
		a	%	b	%	c	%	
1	After you (Mr/Mrs) know about utilization LCWB waste. Are you interested to do it ?	12	40	17	57	1	3	a. Really Interested b. Interested c. Not Interested
2	What push you (Mr/Mrs) to processing LCWB waste?	9	30	21	70	0	0	a. Already know that LCWB waste is beneficial b. To reduce environment pollution caused by burning c. Outside answers a and b
<b>Average</b>		10,5	35	19	63,5	0,5	1,5	

Community hoped government role in improved agriculture in Gambut area especially Kayu Bawang Village, Guntung Papuyu Village, and Guntung Ujung Village. Community needed socialization about technology LCWB and its waste utilization. Hoped with the existence of technology innovation to LCWB besides reduced

environment pollution because of smoke that produced by burning activity also can increase community income.

Table 4 showed the interview results whether the respondent utilize waste from LCWB and whether respondents have been able to evaluate benefit from utilization land waste.

Table 4. Data recapitulation of Assessment Phase variables

No	Assessment Phase Variable	Answer Criteria						Description
		A	%	B	%	C	%	
1	What type of waste that you (Mr/Mrs) often utilize?	2	7	24	80	4	13	a. Wood, Branch b. Grass, Rice husks c. Answers other than a and b
2	According to you (Mr/Mrs) what waste is more beneficial in it usefulness?	6	20	23	77	1	3	a. Wood, Branch b. Grass, rice husks c. Litter, Ferns
3	What factor that you (Mr/Mrs) consider in processing land waste?	21	70	8	27	1	3	a. The level of ease in the process b. Effective and efficient c. Answers other than a and b
4	After all processing waste without burning activity performed, are you (Mr/Mrs) able to evaluate benefit and loss from that activity?	9	30	17	57	4	13	a. Able b. Less Able c. Unable
<b>Rata-rata</b>		9.5	31.75	18	60.25	2.5	8	

The assessment of the correspondence on benefit of waste utilization is considered as good according to assessment scale (Table 1); there were 18 people from 30 respondent stated that LCWB waste can be used for various benefit (Table 4). The interview result from respondent stated that plant types which exist in Kayu Bawang village, Guntung Papuyu village, and Guntung Ujung village at the first time of land clearing were dominated by grass type plant, bush, ferns, and mangrove type (*Rhizophorasp*). Grass waste and rice husks were used by respondent for organic fertilizer. Grass used for animal feed while rice husks was gathered at harvest time and was made into organic fertilizer.

### CONCLUSSION

Conclusions and suggestion are as follow:

1. Community in Kayu Bawang village, Guntung Papuyu village, and Guntung Ujung village as many as 49.83% was already knew about LCWB, as much as 63.5% was interested in processing the waste, and as much as 60.25% was assessed that LCWB waste can be used for various benefit.
2. Waste types which usually utilize by community was grass and rice husks. The wastes were used as organic fertilizer and animal feed without further processing.
3. Further research about utilization of LCWB waste for producing product more

beneficial to increase community welfare is needed.

### REFERENCES

- Dinas Pertanian Tanaman Pangan dan Hortikultura. 2010. *Lusuk Itah (Membangun Informasi Agribisnis)*.
- Kementerian Pertanian. 2007. Undang-Undang Nomor 18 Tahun 2004. Tentang Perkebunan. <http://qiqolanika.blogspot.com/2013/07/pltb-pengelolaan-lahan-tanpabakar.html>(diakses pada 21 Mei 2015)
- Nazir. 1988. *Metode Penelitian*. Ghalia Indonesia. Jakarta
- Purwanto E. 1996. *Kebakaran Hutan, Mengusir Kabut Mengkonvensi Gambut*. Majalah Kehutanan Indonesia volume XIII no 4.
- Saharjo BH . 2003. *Pemanfaatan Bahan Bakar pada Areal Penyiapan Lahan: Dalam Mengurangi Dampak Asap dan Kerusakan Lingkungan*. Fakultas Kehutanan IPB. Bogor.
- Sugiyono.2003. *Skala Penilaian dan Analisa Inferensial*. Yogyakarta: Rosdakarya
- Sugiyono. 2005. *Mektek Tahun XIII No.3, September 2011*. 169
- Van Noordwijk et al. 1995. *Alternatives to slash-and-burning Indonesia*, Summary report of phase 1. ASB- Indonesia Report No. 4. ASB- Indonesia and ICRAF-S.E. Asia, Bogor, Indonesia.

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