

LITERATURE REVIEW

UNITED NATIONS AND INDONESIAN GOVERNMENT FOR MANAGEMENT DEFORESTATION CASES IN KALIMANTAN ISLAND

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ABSTRACT

For a long time the cause of deforestation in Indonesia, especially in Kalimantan island has invited several parties to take part in handling this deforestation cases. One of them is the United Nations or UN, it is known that the cause of deforestation in Indonesia is very worrying because it will have an impact on climate change, disaster nature and ect, that threatens the safety of humanity and nature. The UN unit collaborated with the government of Republic of Indonesia to follow up on this deforestation case. This study use qualitative research methods with a SLR approach based on a database that publishes articles in the form of accredited journals international. The aims of this study is to map the involvement of the UN in handling deforestation in Indonesia. The results is that REDD+ as ideal scheme from UN which must involve all stakeholders for manage forestry in Kalimantan Island, by involving local communities, utilizing technology, as well as inter-sectoral coordination that must be improved. The existence of REDD+ which was coined by the UN and Indonesia together since 2010 and also other countries preserved nature and life in the forest in a sustainable manner.

Keywords: Deforestation, UN, REDD+, Kalimantan Island

ABSTRAK

Sejak lama penyebab deforestasi di Indonesia khususnya di Pulau Kalimantan telah mengundang beberapa pihak untuk ambil bagian dalam penanganan kasus deforestasi ini. salah satunya adalah Perserikatan Bangsa-Bangsa atau PBB, diketahui penyebab deforestasi di Indonesia sudah sangat mengkhawatirkan karena akan berdampak pada perubahan iklim, bencana alam dan lain-lain, yang akan mengancam keselamatan manusia dan alam. PBB dan Pemerintah Republik Indonesia bekerjasama untuk menindaklanjuti kasus deforestasi ini. Penelitian ini menggunakan metode penelitian kualitatif dengan pendekatan SLR atau studi pustaka berdasarkan database yang menerbitkan jurnal internasional terakreditasi. Penelitian ini bertujuan untuk memetakan bentuk keterlibatan PBB dalam menangani deforestasi di Indonesia. Hasilnya adalah REDD+ sebagai skema ideal dari PBB yang harus melibatkan banyak unsur pemangku kepentingan dalam pengelolaan hutan di Pulau Kalimantan, dengan melibatkan masyarakat lokal, pemanfaatan teknologi, serta koordinasi antar sektor yang harus ditingkatkan. Keberadaan REDD+ yang dicetuskan oleh PBB ke Indonesia sejak tahun 2010 dan juga negara-negara lain untuk menjaga kelestarian alam dan kehidupan di hutan secara berkelanjutan.

Kata Kunci: Deforestasi, PBB, REDD+, Pulau Kalimantan

INTRODUCTION

The forest is a place to supply food for all living things in the world. Forests provide a

balance for all the ecosystems and biodiversity that demand forests, as well as being home to various types of animals but due to excess exploration activities for economic factor, infrastructure build,

war, nuclear weapon, have caused the current forest to be damaged or deforested within \pm 300 years (Keenan et al., 2015; Ramadhini & Sukojo, 2017). Deforestation is the destruction of forests or the reduction of areas that have forests with a variety of factors both by human factors, namely the expansion of agriculture and plantations, mining coal, iron ore, gold, nickel, and etc, the conversion of land into housing and degradation which can later lead to disruption of biodiversity, global climate change, and deprivation of the rights of the livelihoods of local communities around forest areas (McNicol, Ryan, & Mitchard, 2018; Seymour & Harris, 2019).

The case of deforestation in Indonesia has been going on for a long time in Indonesia, the Forest Watch Indonesia Sustainability Report (FWI, 2014) reports that from 1996 to 2000 Indonesia's forest damage reached two million hectares per year, this figure was high in 2012, 2009-2013 when deforestation rates increased to 1.2 million hectares in this period. Despite this, Indonesia continues to reduce this number, as the country with the highest deforestation rate in the world (Arif, 2016). Kalimantan Island has an area of 544,150 km² or 28% land area of Indonesia, this is the third-largest Kalimantan island in the world after Greenland Island and Papua Island including Papua New Guinea (KEMEN-PUPR, 2017).

Based on the explanation above, several of them are felt by various parties as a result of this deforestation (Hadiyan, Yuliah, & Pambudi, 2017). Impact of deforestation is loss of 499 trillion rupiah, this huge loss was only calculated in the period 2006-2015 distributed throughout Indonesia (ICW, 2017). Besides, Indonesia is also the largest contributor to greenhouse gas emissions in the world, reported by the Ministry of Forestry for 2000 of 1.72 Gton CO₂e, and is predicted to increase in 2020 to 2.95 Gton CO₂e (FWI, 2014). The area of forest that stores this natural wealth is not spared from deforestation, for the period 2009-2013 including 3 provinces that received the worst deforestation on the island of Kalimantan, namely Central Kalimantan with an area of 619 thousand ha, then East Kalimantan 448 thousand ha, and West Kalimantan amounting to 426 thousand ha (FWI, 2014, 2018; Zulkarnain & A., 2015).

The problem of deforestation on the island of Kalimantan is largely due to economic activities, namely as a supplier of paper raw materials, and

the expansion of palm oil which have been started from 2000 until the end of 2017, where in 17 years the forest area was up to 14% or around 6.04 million hectares which changed into a plantation area of 88% and the wood industry of 12% (Alisjahbana & Busch, 2017; Gaveau et al., 2018; Margono et al., 2014). Based on these data, of course, radical handling of the problem of deforestation on Kalimantan Island is needed, so that it can prevent prolonged deforestation which can cause problems later on. Until now deforestation on the island of Kalimantan is still ongoing various reasons were brought up to meet the growing needs of life, long-standing deforestation on Kalimantan Island has made several parties, especially from the United Nations (UN) work together with the Indonesian government to reduce cases of deforestation that occurred on the island of Kalimantan. The existence of the United Nations is certainly very much expected to contribute more to Indonesia especially in Kalimantan on this deforestation problem. Although data shows a decrease in deforestation, on the other hand deforestation continues to occur even on a small scale.

The author wants to analyze and study more deeply through the study of literature review, regarding the real contribution of the United Nations in dealing with deforestation on the island of Kalimantan so that later it can be a recommendation to stakeholders in sustainable forest management. So that deforestation on the island of Kalimantan can be controlled by the Indonesian Government. This study aims to determine the extent of the involvement of the United Nations in reduction deforestation together with the Indonesian Government for sustainable forest in Kalimantan Island.

MATERIAL AND METHOD

This study uses a qualitative method with a literature review approach. According to (Hall et al., 2012; Kitchenham et al., 2010) the literature review approach used is the Systematic Literature Review (SLR), based on a predetermined database where there are several choices only of accredited journal international, in order to researchers to limit articles to only published issues from a range time for 2015-2019.

Database

This research only limited by using 2 (two)

databases namely the first is Science Direct and Taylor and Francis Group, where the two databases that the author has determined are databases that already have a good reputation for providing journal articles international and are recognized by academics internationally. This research also uses keywords as a way to facilitate and minimize the scope the search for relevant articles, namely United Nations and Deforestation as well or use combination of these keywords.

Research Question

To compile this research, the researcher has one research question (RQ). The research question will help researcher to limit this research and be the basis for the preparation is what is the contribution of the among United Nations and Indonesian Government in handling deforestation in Kalimantan Island.

Paper Selection

Trougth SLR approach the researcher uses several stages, the first stage is the researcher looks for articles that are relevant to the keywords in the database that the researcher has determined. Then the second stage is the researcher does the analysis and identifies the output of the article. At this stage there will be a selection phase (elimination) of articles that have been found in the first stage, by going through the procedure below, as follows: Elimination of paper titles that are not following the keywords that are set. Elimination of papers using method the Systematic Literature Review approach. Elimination of papers whose output is not in the form of journal articles and proceedings. Eliminate paper that does not open access journal. The results obtained by researchers after the second stage will be carried out the in-depth analysis in the third stage to find articel more relevant.

RESULT AND DISCUSSION

The results are based on a database using keywords while for the year of publication of the article, which is only 2015-2019. This period researchers chose with the reason to give more novelty to the actions taken by the United Nations and the Indonesian Government in dealing with deforestation on the Kalimantan Island so that this period will show the novelty that was not done by previous researchers and it gives researchers the limitation to find relevant articles and makes it easy to compile this research.

Result

Using this database, researchers began with stage 1 using keywords that have been set, the results of the database in Science Direct have 62 papers, then in Taylor and Francis Group there are 384 papers that match the keywords. Then the researchers did the elimination again in phase 2 by including the year of publication, as well as the elimination procedure in which found 24 articles for Science Direct, then 40 papers in Taylor and Francis. Researchers returned to a more in-depth analysis which finally found 21 articles that were relevant to answer the problem formulation in the next discussion.

Based on the results of a paper search through 2 databases namely Science Direct and Taylor and Francis Group. The result is that there are at least 36 articles that are relevant in the preparation of this study, the following researchers describe the exposure following the formulation of the problem that has been determined in the previous sub discussion. The explanation in this below:

Table . Result articles using database

| contribution | Definitions | Authors paper with database | | Total |
|---|---|---|---|-------|
| | | Science Direct | Taylor and Francis Group | |
| REDD+ | Reducing Emissions From Deforestation and Forest Degradation, Plus Conservation is a policy derived from the 2007 UN framework. This scheme will provide benefits to forest sustainability and include local communities. REDD + is generally implemented in countries that have large forests such as Brazil Kongo, Guyana, Costa Rica including Indonesia. | (Hartoyo et al., 2016), (Ekawati et al., 2019), (Jespersen & Gallemore, 2018), (Luardini et al., 2019), (Sanders et al., 2017), (Boer, 2019) | (Nagulendran et al., 2016), (Doda & Abuelgasim, 2019), (Siahaya et al., 2016), (Okereke & Stacewicz, 2018), (Schleifer & Sun, 2018) | 11 |
| Zero deforestation policy (Golden Agro Resources) | UN through FAO or UNDP organizations. Strive for effective land use in Indonesia as the country with the highest income through agricultural commodities, especially Palm Oil, Rubber and etc. Many economic motives cause the plantation and mining businesses to expand the land without seeing the negative impact that is caused. Zero deforestation policy can be carried out with implementation starting from a memorandum of land opening, reducing the use of paper and plastic and others | (Mccarthy & Obidzinski, 2017), (Abram et al., 2017), (Goh et al., 2018), (Cheyns, Silva-Castañeda, & Aubert, 2018), (Medrilzam et al., 2017), (Schaaftma et al., 2017). | (Honegger & Reiner, 2018) | 7 |
| Mapping of critical land | The mapping of critical land is carried out to facilitate the handling and determination of policy forecasting by the government. The increasingly critical quality of natural resources encourages each government to map degraded land in several areas so that prevention can be done as early as possible. Critical land can have a negative impact on nature and human life, the use of sensors and satellites, topographic maps, contour maps and land maps are one of the tools used in mapping critical land today. | Khangwelo Desmond Musetshe , Munyaradzi Chitikirira and Willem Nel (2021) | (Li et al., 2015), (Nomura et al., 2018), (Nara et al., 2017). | 3 |

Discussion

Through the database, it can be seen that research that raises REDD + is the contribution of the UN in handling deforestation in Indonesia, using database Science Direct REDD+ is 6 artikel journal and Taylor and Francis Group is 5 artikel journal. Policy REDD + is an international mechanism approved by the UN, the mechanism that is implemented is by sign with the Indonesian government to reforest. This Policy among Indonesia Government with Government of Norway since 2010 as recommend and representative from UN and performance-based commitments in preventing sustainable deforestation. There is a significant amount of funds through this REDD + policy and can be utilized by governments originating from foreign aid, performance-based private sector investment or other agreements that support the reduction of the current rate of deforestation.

To be able to carry out sustainable forest

management, of course, not being able to see all sides at the same time, there needs to be the main focus in carrying out a mission to save forests, especially in Indonesia. Indonesian people who live and reside in the forest area can be involved in managing this forest for a large REDD + scheme, also, a policy that is very helpful for REDD + is the issuance of a Presidential Decree No. 19 of 2010 to be the basis for implementing REDD + and South Kalimantan Province was chosen as one of one pilot province from the implementation of this scheme.

The regulation of natural resources in a sustainable manner must, of course, be able to continue continuously and still maintain the quality of resources in order to remain quality. Of course, the scheme undertaken by the Norwegian Government is not only giving donations and contributions, but on the other hand, there are trade-offs that will be felt by all humans including reducing gas emissions, thickening the ozone layer, preventing global climate change, and restoring the function of forests as lungs world. On the other hand, local people will also benefit from the existence of this scheme they will feel helped in terms of social, economic life and access to the infrastructure provided by the government in achieving social capital for them and the community's residents.

REDD+ On the other hand, the existence of REDD + also aims not only to prevent deforestation but also to emphasize all stakeholders and the need for more roles from local communities and traditional communities that can be taken into consideration in their survival. REDD + can be integrated with MRV or Measurement, reporting and verification systems that can carry out careful calculations of effective carbon, conservation of land including social development in the community, multiple benefits in carrying out REDD + consistently and responsibilities can improve people's lives. A local forest located in controlling deforestation and independent in managing forests without excessive private tenure (Felker et al., 2017; Vergara-assenjo, Mateo-vega, Alvarado, & Potvin, 2017). The existence of this REDD + policy is in line with world commitments in limiting global temperatures to only 2oC or below, and will only be achieved when tropical forests are in good condition and there is no excessive deforestation (Abram et al., 2016).

This research on REDD + in Indonesia should be able to be developed and maintained by the Indonesian Government and should not forget to provide space for local communities on the island of Kalimantan. The local community certainly has a big hand that specifically has knowledge and habits in managing forests, especially people who have traditionally lived in the forest area, this can certainly be found on the island of Kalimantan, where some people live in forest areas, on the other hand, this will also save a lot the resources that will be released because the community already has a separate pattern only need support or commitment from the government in the real case of deforestation on the island of Kalimantan.

Commitment and also support can be done in various ways including strengthening local governments and the central government will coordinate on forests and hopefully, there is no overlapping of power, the use of technology to forest areas, as well as a bottom-up approach that allows the aspirations of the community that can be capture and be an analysis of the central and local governments in handling deforestation and does not rule out the need for strict laws against individuals and groups that carry out illegal logging, illegal minning, small scale mining that can damage nature, and other activities (Pratihast et al., 2016).

Thus the ideal REDD + that can be developed in Indonesia, especially on the island of Borneo in preventing deforestation despite various reasons in destroying forests. Even though the economy is the main supporter in the destruction of forests, the long-term impact is very worrying for all parties, not only in Indonesia but also other countries in the world that are highly dependent on tropical forests in Indonesia.

Researchers see that forest sustainability in Kalimantan can be done in various ways not only through REDD + but can also use Zero Deforestation Policy or with a mapping of critical land even though in previous studies the results of the database found only minimal research in discussing these two studies. Researchers suggest that other researchers in the future be able to discuss the Zero Deforestation Policy and the mapping of critical land to be able to provide deeper solutions and strong analysis for the forestry sector in Indonesia and on the island of Kalimantan

in particular.

CONCLUSION

Deforestation has become a problem in countries that have forests like as Brazil, Kongo, Guyana, Costa Rica, especially with tropical countries located in Southeast Asia and Indonesia is one of the countries with the largest forests in the world. The impact of deforestation is very detrimental to all aspects of human life both from the presence of natural disasters, climate change, increase in global temperature, depletion of the ozone layer and others. Assistance to Indonesia by the United Nations through the REDD + cooperation scheme is one that is used to reduce deforestation. The REDD + scheme must be consistently continued by the Indonesian government in caring for and also protecting Indonesia's forests, especially on the island of Kalimantan, so that the disasters caused by deforestation can be overcome.

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