Protection of biodiversity in concession of sustainable palm oil

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Abstract. The increasing population growth is in line with the increasing world demand for vegetable oil. In 2050, the world population is projected to reach 9.8 billion people. With this population, the world's vegetable oil needs reach 310 million tons. Total vegetable oil production in 2018 was only 200.8 million tons. The oil crops biologically have a potential to produce vegetable oil much more than with other plants in the same area of land. It means that it is economically more efficient than others. However, an unavoidable fact is that the expansion of oil palm plantations in Indonesia has encroached on forest areas, destroying biodiversity, and threatening environmental sustainability. Of the 9.1 million hectares of deforestation occurred in 2001 to 2016, 2.1 million hectares or 23% of the national deforestation turned to oil palm. In addition, of the 16.8 million hectares of Indonesian palm oil cover, 3.4 million hectares or 20.2% of oil palms are in forest areas. This article aims to diagnose the norms of biodiversity protection with the approach of protecting high conservation value areas and high carbon stocks in oil palm plantation concessions. Normatively referring to the concept of sustainable palm oil plantations, companies are obliged to protect areas that have high biodiversity values and high carbon stocks in their concession areas and are prohibited from being converted. This norm is very important to protect biodiversity in oil palm concessions. Unfortunately, Indonesia's positive law does not yet have an optimal legal framework to protect this area, so it is necessary to strengthen specific norms and policies to protect biodiversity in sustainable palm oil plantation concessions.

1. Introduction
The increase of the world's population to reach 9.7 billion in 2050 exposes human beings to the challenge of meeting food and energy needs. This figure has increased by more than 2 billion people compared to the world's population in 2019, which was 7.7 billion [1]. With the increase in population and supported by an increase in income, food and energy consumption will also continue to go up. In 2050, global
vegetable oil demand is projected to reach 250 to 350 million tons. It means that it is almost double from 2019 which was only 170 to 180 million tons [2].

In general, 85% of the world's vegetable oil is produced from 4 main crops namely, 35% from palm oil, 27% from Soybean, 15% from Rapeseeds, and 9% from Sunflower [2]. Based on the results of publications from the Palm Oil Alliance, a land area of only 7.4% of palm oil can contribute to 39.6% of the world's total vegetable oil [3]. In simple terms, oil palm becomes a more efficient crop because it can produce 5 to 8 times more oil with the same land area than other crops. In one hectare of land, Palm Oil can produce 3.8 tons per year, while Soybean can produce 0.5 tons per year, Rapeseeds can produce 0.8 tons per year, and for Sunflower 0.7 tons per year [2]. Economically, it must be recognized that palm oil is the most efficient vegetable oil crop. However, ecologically, oil palm is a plant that has a deforestation footprint and poses a threat to the preservation of biodiversity. In the period 2001 to 2016 Indonesia's total deforestation reached 9.1 million hectares, 23% of the total deforestation or 2.1 million hectares turned into oil palm plantations [4].

In the midst of the dilemma between the interests of fulfilling the world's vegetable oil and the interests of environmental sustainability, there is a middle way to cope with it, called sustainable palm oil management. The existence of a certification system in the Roundtable Sustainable Palm Oil (RSPO) scheme consists of various stakeholders from the palm oil industry ranging from producers, processors, producers of derivative products, distributors, financial service institutions, Environmental non-governmental organizations (NGOs), and social from producing countries and palm oil consumers. The RSPO aims to promote the development and implementation of international standards for sustainable palm oil [5]. One of the interesting norms in the RSPO is the protection of areas with high biodiversity value and high carbon stocks (HCV and HCS) [6]. In practice, this norm can reduce the risk of loss of biodiversity as a result of oil palm plantation expansion. This is because the norms prohibit the development of new palm oil in HCV and HCS areas. These areas are required to be identified, managed, and enriched for sustainability. In addition to being contained in the RSPO, the norms for protecting the area of hearts are also generally mandated in the provisions of the Environmental Impact Assessment (EIA) and Indonesia Sustainable Palm Oil (ISPO).

However, it is interesting to observe the impact of the ratification of the Law no. 11 year 2020 on Job Creation (the Job Creation Law) which revised several provisions on environmental and plantation protection. The basic idea of the creation of the Job Creation Law is to facilitate investment and cut various regulations that are considered to hinder investment. One of the norms that has significantly changed is the disappearance of the EIA provision for plantation business permits [7]. This is certainly the latest challenge for the implementation of HCV and HCS protection norms in Indonesia.

The article aims to analyze efforts to protect biodiversity in oil palm concession areas. The article consists of three main parts, namely, the first part will describe how to protect biodiversity in oil palm concession areas under the RSPO, through the EIA and ISPO schemes. The second part will describe the challenges of protecting biodiversity in oil palm plantation concessions after the ratification of the Job Creation Law. Finally, it will analyze the taken steps to strengthen the protection of biodiversity in oil palm concession areas.

2. Research method
This research is a normative legal research. It is conducting a study of various norms in the legislation related to sustainable palm oil. Those legal norms then analyzed and examined to strengthen those norms in practice aspects and expected to be more binding legal force.
3. Result and discussion

3.1. How to conserve biodiversity in palm oil concession

Not all high biodiversity area is in conservation areas. There are various schemes that can be implemented to protect areas with high biodiversity outside conservation areas. Based on gap analysis research by the Ministry of Forestry in 2010, it was found that there were 105 million hectares of area categorized as important and buffer ecosystems outside conservation areas [8]. The area is designated as an Essential Ecosystem Area (KEE) which is divided into several schemes such as (a) the Biodiversity Park Area; (b) Wetland ecosystems; (c) Community Managed Conservation Areas (AKKM); (d) Biodiversity Park; (e) High Conservation Value Areas.

In particular for oil palm concession areas through the renewal of criteria and norms in the 2018 RSPO, there is a norm of protecting HCV and HCS areas in oil palm concession areas. This provision is regulated in Criterion 7.12 which is generally the norm for no deforestation. The formulation of 7.12 norms is “New plantings do not cause deforestation or replace any area required to maintain or enhance High Conservation Value (HCV). High conservation values and high carbon stock forests in the managed area are identified, maintained and enhanced” [6]. So, if it refers to this norm, every plantation business actor who wants to expand new plantation land is not carried out in HCV and HCS areas that cause deforestation. On the other hand, the area is managed through identification, treatment and enrichment.

In addition to the RSPO, provisions related to the protection of HCV and HCS are also implicitly contained in the ISPO and AMDAL provisions. In the ISPO norms, which were updated in 2020, there are principles of environmental, natural resource, and environmental management. Further provisions are described in criterion 3.7 which requires plantation business actors to identify, socialize, and maintain protected areas and HCVs in accordance with statutory provisions. According to criterion 3.7.1, plantation business actors are specifically required to carry out conservation of biodiversity in the areas they manage [9].

3.2. The challenging after the enactment of omnibus law

After the ratification of the Job Creation Law using the omnibus law method, it revoked 2 laws and changed 82 multi-sectoral regulations including the Environmental Law and the Plantation Law [10]. It became a new challenge related to the protection of biodiversity in Indonesia. In its journey, the Job Creation Law has drawn many protests and criticisms because it is considered to tend to only prioritize investment interests and business opportunities. One of which is oil palm plantation commodities, as part of plantation sector. This section will describe two crucial aspects - namely the ease of investment and the abolition of EIA provisions for plantation businesses.

3.2.1. The ease of investment. There are several changes to the provisions of the Plantation Law which can be clearly identified as an effort to facilitate the entry of investment in the plantation sector. Changes in the provisions of Article 14, for example, in the previous Plantation Law, the Central Government set limits on the maximum and minimum area of land use for plantation businesses by considering 9 aspects, namely: (a). type of plant; (b). availability of suitable agro-climatic land; (c). capital; (d). factory capacity; (e). population density level; (f). business development pattern; (g). geographical conditions; (h). technological development; and (i). land use based on the function of space in accordance with the provisions of the legislation in the field of spatial planning [11]. After the ratification of the Job Creation Law, the provisions of Article 14 were later amended, the consideration of the limitation of land use was reduced to only: (a). type of plant; (b). availability of land suitable for agro-climatic conditions [10]. From this change, it can be seen that there is an elimination of economic and social aspects in considering the determination of land area boundaries. This change also shows that spatial planning aspects are missed to
be considered. This has the potential to open up opportunities for land use that is not in accordance with the function of space in plantation activities.

The Changes took place in Article 14 as mentioned above can also be identified through the amendments of Article 45 of the Plantation Law. Previously, this article stipulated that the acquisition of a Plantation Business Permit (IUP) must meet the requirements of (a). environmental permit; (b). conformity with the regional spatial plan; and (c). conformity with the Plantation plan [11]. Under the provisions of the Job Creation Act, the Article was later abolished entirely and environmental Permit is no longer a requirement for obtaining an IUP. The Job Creation Law in general has abolished the environmental permit regime as a mandatory document that must be owned by business actors and/or related activities [10]. In fact, the Environmental Permit is one of the instruments to prevent pollution and/or environmental damage in accordance with the provisions of Law of the Republic of Indonesia Number 32 of 2009 (UUPPLH) [12]. The concept of an Environmental Permit in the UUPLH was later changed by the Job Creation Act to an 'environmental approval'. A study by Riyanto et al (2020) reveals that, although it is a prerequisite for business licensing, the position of environmental approval is not explicitly formulated. The abolition of environmental permits also means abolishing the administrative lawsuit mechanism. The change in the concept of a permit to an approval is a form of ignoring the precautionary principle [13]. The weakening of environmental protection instruments in order to facilitate investment will have the potential to lead to disorderly plantation management and ultimately have a negative impact on the environment.

3.2.2. Elimination of EIA obligation for plantation business. Several provisions of the Plantation Law were amended by the Job Creation Law and one of them was the abolition of EIA as a condition for obtaining a plantation business permit. Previously, under the Article 67 of the Plantation Law, every plantation business actor was required to maintain the preservation of environmental functions. In order to carry out such obligations, before obtaining IUP, a plantation company must meet several requirements, and one of which is to make an analysis of environmental impacts or environmental management and monitoring efforts. The Plantation Law also expressly stipulates that non-compliance with EIA requirements will have implications for the rejection of a business license application [11].

Under the old Plantation Law, furthermore, plantation business actors who have obtained an IUP are required to apply an analysis of environmental impacts or environmental management and monitoring efforts that have been made. Based on article 68 of the Plantation Law, these business actors are also required to apply environmental risk analysis and environmental monitoring. In article 109 of The Plantation Law then expressly stipulates that plantation business actors who do not fulfill the obligation to implement these instruments are subject to criminal sanctions in the form of imprisonment for a maximum of 3 (three) years and a fine of a maximum of Rp. 3,000,000,000.00 (three billion rupiah) [11].

Basically, EIA is an instrument to prevent and/or damage the environment. It is a pre-emptive tool for environmental management whose presence departs from awareness of the potential negative impacts caused as a consequence of development. The obligation to make and implement EIA for business actors is actually aimed at strengthening efforts to control impacts early or from upstream [12]. The Plantation Law itself recognizes the possibility of a large and significant impact on the environment that can be generated from plantation business activities. It is therefore presented as a condition for obtaining an IUP [11]. Unfortunately, under the Job Creation Law regime, efforts to prevent environmental damage and pollution in plantation business activities have actually experienced a setback. The Job Creation Law no longer requires plantation actors to make an analysis of environmental impacts or environmental management and monitoring efforts as a condition for obtaining an IUP. Unlike the obligations stipulated in Article 67 of the previous Plantation Law, the provisions of the Job Creation Law only requires plantation business actors to maintain environmental sustainability [10]. The article regarding the
obligation to make AMDAL as an instrument for preserving environmental functions has been completely abolished in this Law.

3.3 Reducing the risks and threats to biodiversity in oil palm concessions.

There are two steps that can be taken to protect biodiversity. First, strengthening HCV and HCS norms and second is to provide a mandate to local governments to carry out the identification and management of integration of HCVs and HCS with regional spatial plans.

For the sake of strengthening HCV and HCS, it is known that norms related to the protection of them outside of conservation areas are still implicitly regulated in statutory provisions. The norms for the protection of high conservation value areas (ABKT) which are the same as HCVs are categorized by the government into Ecosystem Essential Areas (KEE). The term of KEE is mentioned in the Government Regulation No. 28 of 2011 concerning Management of Nature Reserve Areas and Nature Conservation Areas. However, based on the explanation of Article 24 paragraph (1), it is explained that what is meant by KEE are karst ecosystems, wetlands (lakes, rivers, swamps, brackish and tidal areas of no more than six meters, mangroves and peat). Furthermore, related to the implementation of KEE protection, it is carried out based on the provisions of Government Regulations related to forest protection. This is ambiguous because the Government Regulations on Forest Protection regulated in the Government Regulations No. 45 of 2004 which is amended by the Government Regulations No. 60 of 2009, which it does not explain anything related to KEE protection. However, according to B Steni, the legal implications of placing KEE in regulations related to forest protection are an indication that the spatial relationship between conservation area management and KEE [14].

In addition to the KEE scheme, the protection of HCVs and HCS in Indonesian law can also be carried out with the Environmental Strategic Areas (KSLH) approach. This approach is based on the legal regime of spatial planning which categorizes KSLH as a strategic area. Furthermore, in the description of the Government Regulations No. 15 of 2010 concerning the Implementation of spatial planning, provisions related to the KSLH criteria are regulated, namely that there are two of the seven criteria that are closely related to the Conservation of Biodiversity and protected areas that are designated for the protection of ecosystems and extincted flora and/or fauna [14]. To further strengthen the protection related to HCV and HCS, of course, specific regulations related to HCV and HCS are needed to support its implementation in the regions to be more realistic.

Regarding to such schemes than can be pushed to local governments to protect HCV and HCS areas, based on the results of a study from Tropenbos Indonesia, the HCV and HCS approaches should be connected to each other so that they can form a nature protection corridor, not fragmented within the management unit. To realize a corridor between concessions that are connected, according to Tropenbos Indonesia, the Government needs to develop a general strategy to determine areas that can be conserved or cultivated either on a national scale or local government. For example, on a national scale, the central government compiles an indicative ABKT map with review scale up to 1:250,000. Furthermore, this map is detailed by the provincial government with a more detailed scale, namely (1:100,000 scale), then forwarded by the district government with a more detailed scale, namely 1:50,000 or 1:25,000. This map is considered very important as a practical guide for decision-making to assess the suitability of concessions/use rights from the aspect of business feasibility and protection of natural resources inside and outside the forest area [15].

The values contained in the HCV and HCS principles substantially should have been accommodated in the Strategic Environmental Assessment (KLHS) document which is the obligation of local governments in preparing or evaluating the Regional Spatial Plan (RTRW) and its detailed plan, the Long Term Development Plan (RPJP), and the Medium-Term Development Plan (RPJM), up to the level of the Government Work Plan, both at the Provincial and District levels and the Policies, Plans, and/or Programs
(KRP) that have the potential to cause environmental impacts and/or risks. Of course, the existence of KLHS at the national level is very important so that it is followed by lower levels of government [15]. Normatively, there have been various provisions that implicitly provide norms related to the protection of HCVs and HCS. However, with explicit norms, of course, law enforcement efforts can be carried out optimally by reducing irrelevant interpretations. With local government measures that can identify HCV and HCS areas in their area that are integrated into the RTRW, they can maximize the protection of biodiversity in oil palm concessions.

4. Conclusion
It cannot be denied that palm oil is a massive deforestation in Indonesia which is a contributor to Indonesia's GHG carbon emissions. The middle way for this is a sustainable palm oil certification system to encourage oil palm development to be carried out without causing deforestation. Norms for the protection of HCV and HCS areas which are explicit in the RSPO and implicit in the ISPO and various provisions in Indonesia need to be strengthened in order to run optimally in the field. The existence of the Job Creation Law is to facilitate investment and cut some regulations that are considered hindering, such as the abolition of AMDAL for plantation businesses. The idea of abolishment of AMDAL is certainly a challenge and even becomes a threat to the preservation of Indonesia's biodiversity. To answer these challenges, it is necessary to strengthen the HCV and HCS norms in Indonesia's positive law. In addition, local governments need to be encouraged to identify HCV and HCS that are integrated into the RTRW and KLHS so that the management of HCV and HCS in plantation concession areas can be designed in an integrative way to avoid fragmentation that occurs in the management unit.

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