

Conservation Importance of Independent Smallholdings in Safeguarding Biodiversity in Oil Palm Plantations

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Abstract : The expansions of independent smallholdings in Indonesia are feared to increase the negative ecological impacts of oil palm plantation on biodiversity. Hence, research is required to identify the conservation importance of independent smallholder oil palm plantations on biodiversity. This paper discussed the role of independent smallholdings in the conservation of biodiversity in oil palm plantations and to compare it with High Conservation Value Forest as a conservation standard of RSPO. The research was conducted from March to April 2016. Data on biodiversity were collected on 16 plantations and 8 private oil palm plantations in the Districts of Kampar, Pelalawan, Kuantan, Singingi and Siak of Riau Province, Indonesia. In addition, data on community environmental perceptions of both smallholder plantation and High Conservation Value (HCV) Forest were also collected. Species that were observed were birds and earthworms. Data on birds were collected using transect method, while identification of earthworm was determine by taking some soil samples and counting the number of individual earthworm found for each worm species. The research used direct interview with oil palm owners and community members, as well as direct observation to examine the environmental conditions of each plantation. In general, field observation and measurement have found that birds species richness was higher in the forested HCV Forest. Nevertheless, if compared to non-forested HCV, bird's species richness was higher in the independent smallholdings. On the other hand, different results were observed for earthworm, where the density was higher in the independent smallholdings than in the HCV. It can be concluded from this research that managing independent smallholder oil palm plantations and forested HCV forest could enhance biodiversity conservation. The results of this study justified the importance of retaining forested area to safeguard biodiversity in oil palm plantation.

Keywords : biodiversity conservation, high conservation value forest, independent smallholdings, oil palm plantations

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