¿Como proteger el medio ambiente con la palma sostenible?

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English abstract

Palm oil production has drastically increased in the last decades raising some concern in terms of environmental impacts, notably when it comes at the cost of deforestation. Environmental impacts can occur all along a value chain, so that assessment tools need to account for the whole production chain. Life cycle assessment is a standardised methodology allowing for the assessment of environmental impacts along a value chain. According to Life Cycle Assessment studies, the agricultural stage of palm oil production systems proved to be the major contributor to most of the potential environmental impacts, notably global warming, eutrophication and acidification. Focusing on global warming impact, main contributors are land use change and peat cultivation, GHG emissions from fertilisers and residues applied in the plantation and methane emissions from palm oil mill effluent (POME) treatment. Impact from POME can be significantly reduced if POME is used for composting or if the biogas from anaerobic treatment is captured with electricity recovery. However, the impact from the plantation establishment becomes overwhelming when non-degraded forests or peatland areas are converted to palm plantations. Together with logging, pulp and paper, and mining, oil palm plantations have driven deforestation in Indonesia. The development of palm plantations remains the most important agricultural driver of deforestation despite the governmental moratorium and the certification schemes, which have been in place since 2011 and 2007; respectively. In order to protect primary forests and peatlands – a mandatory step to avoid irreversible carbon and biodiversity losses, it is paramount to define a sustainable land planning at national and landscape levels, as well as to implement agroecological practices in the plantations in order to sustainably increase yields and limit further land clearing.