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Development and Implementation of a Holistic Assessment Scheme in the Scope of REDD: Results of a Case Study in Madagascar

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Abstract

On behalf of the Federal Ministry for Food, Agriculture and Consumer Protection (BMELV) of Germany the Institute for World Forestry of the Johann Heinrich von Thünen-Institute (vTI) developed in collaboration with several project partners operational methods for the assessment of means of forest protection with regard to REDD in a pilot study in Madagascar.

The poster shows that implementing a viable REDD regime involves (i) initiating a system for the assessment of forest carbon stocks and their changes over time, (ii) quantifying the amount of reduced CO₂ emissions, which qualifies for accounting, and (iii) identifying and ranking of the relevant causes for human impact on forests, in order to derive effective measures to combat forests destruction.

The Institute for World Forestry developed an efficient inventory method for the objective periodical determination of deforestation and forest degradation and its resulting release of carbon from regional to national level. The method is based on the use of remote sensing data in combination with terrestrial inventories. Furthermore, contributions on the causes of deforestation and forest degradation (DD) in Madagascar and their potential of reduction were acquired on a regional level through interviews on the spot and through the application of statistical analyses identifying the main drivers of DD. The results of the pilot study show, that the developed methodology is applicable for reliable conclusions on a country's forest biomass stock and its development. The results for three assessment areas located in tropical wet evergreen, deciduous and dry forests in Madagascar are demonstrated and comprehensively discussed.

Keywords: Deforestation, degradation, driver, inventory, Madagascar, REDD, socio-economic

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