

Deforestation, forest degradation and readiness of local people of Lubuk Antu, Sarawak for REDD+

Abstract

Reducing emissions from deforestation and forest degradation-plus (REDD+) is considered as an important mitigation strategy against global warming. However, the implementation of REDD+ can adversely affect local people who have been practicing shifting cultivation for generations. We analyzed Landsat-5 Thematic Mapper images of 1990 and 2009 to quantifying deforestation and forest degradation at Lubuk Antu District, a typical rural area of Sarawak, Malaysia. The results showed significant loss of intact forest at 0.9% per year, which was substantially higher than the rate of Sarawak. There were increases of oil palm and rubber areas but degraded forest, the second largest land cover type, had increased considerably. The local people were mostly shifting cultivators, who indicated readiness of accepting the REDD+ mechanism if they were given compensation. We estimated the monthly willingness to accept (WTA) at RM462, which can be considered as the opportunity cost of foregoing their existing shifting cultivation. The monthly WTA was well correlated with their monthly household expenses. Instead of cash payment, rubber cultivation scheme was the most preferred form of compensation.