Drivers of Land Degradation in Trays Ecosystem as Modulated under a Changing Climate: Case Study of Côte d'Ivoire

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Abstract : Land degradation is a serious problem in developing countries, including Cote d'Ivoire, which has its economy focused on agriculture. It occurs in all kinds of ecosystems over the world. However, the drivers of land degradation vary from one region to another and from one ecosystem to another. Thus, identifying these drivers is an essential prerequisite to developing and implementing appropriate policies to reverse the trend of land degradation in the country, especially in the trays ecosystem. Using the binary logistic model with primary data obtained through 780 farmers surveyed, we analyze and identify the drivers of land degradation in the trays ecosystem. The descriptive statistics show that 52% of farmers interviewed have stated facing land degradation in their farmland. This high rate shows the extent of land degradation in this ecosystem. Also, the results obtained from the binary logit regression reveal that land degradation is significantly influenced by a set of variables such as sex, education, slope, erosion, pesticide, agricultural activity, deforestation, and temperature. The drivers identified are mostly local; as a result, the government must implement some policies and strategies that facilitate and incentive the adoption of sustainable land management practices by farmers to reverse the negative trend of land degradation.

Keywords : drivers, land degradation, trays ecosystem, sustainable land management
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