

Construction of the national plan for land degradation neutrality and soil conservation and recovery

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Abstract

Land and soil degradation, affect livelihoods, biodiversity, ecosystem services and the complexity of croplands, forests and woodlands, and is caused by a combination of unsustainable anthropic processes. These degradation processes in Ecuador have had a significant increase in recent decades, and are directly related to low soil fertility, which ends up affecting food sovereignty. Therefore, the Constitution of the Republic of Ecuador, in Article 409 states: «It is of public interest and national priority the conservation of the soil, especially its fertile layer. A regulatory framework will be established for its protection and sustainable use to prevent its degradation, particularly that caused by contamination, desertification and erosion (...)». Also, Article 48 of the Organic Law of Rural Lands and Ancestral Territories, states that «The National Agrarian Authority, considering the aptitude and priority sustainable uses of rural land, will formulate the Plan of Participatory Management, Conservation and Recovery of Soils. This will contribute to the sustainability of the fertility of rural land, increase its productivity and prevent and reduce contamination in all its forms (...)». In this regard, the Ministry of Agriculture and Livestock [MAG in Spanish] has generated a preliminary diagnosis with the main precursors of physical and chemical soil degradation, such as: susceptibility to soil compaction, threat of water erosion, surface *cangahuas*, soil pH, electrical conductivity, toxicity and soil organic carbon, through which it was estimated that of the national land area, 7,514,187 ha are potentially degraded, which corresponds to approximately 29% and that of the area with agricultural, livestock and forestry potential at the national level, 43.4% is potentially degraded, which corresponds to approximately 4,131,447 ha. On the other hand, Ecuador as a country seriously affected by desertification, land degradation and drought, is a signatory of the United Nations Convention to Combat Desertification [UNCCD]. In the last report of the country for 2023 under the guidelines of this convention, it was estimated that approximately 34% of the national surface is degraded. For its part, the Ministry of Environment, Water and Ecological Transition [MAATE in Spanish] as focal point of the UNCCD, with the objective of achieving degradation neutrality, has in its goals the formulation of the National Action Plan for Land Degradation Neutrality [PNA-NDT in Spanish]. In this context, due to the synergies between the Plan of

Participatory Management, Conservation and Recovery of Soils [PMPCRS in Spanish] and the PNA-DNT, the MAG and MAATE, with support from the Land Degradation Neutrality Project [LDN], have been formulating a unified plan preliminarily called «National Plan for Land Degradation Neutrality and Soil Conservation and Rehabilitation», which seeks to promote sustainable development, ensuring the provision of key ecosystem services and food sovereignty.

Keywords: Soil organic carbon, Ecosystems, Governance, Food sovereignty.