

## Land degradation observatory in Ecuador: research network that contributes to decision-making for sustainable land management

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### Abstract

Land degradation in Ecuador is a long-standing issue that compromises the fundamental functions of ecosystems. Its direct causes include a range of anthropogenic activities, such as unsustainable agricultural practices, which affect various natural resources, including water, flora, fauna, and soils. In this context, the Land Degradation Observatory [ODT], by its acronym in Spanish) of Ecuador has been developed as a research network linked to universities and national and subnational public institutions. Its aim is to coordinate and highlight initiatives for monitoring and studying land degradation and recovery processes. The objective is to contribute to a better understanding of degradation processes and dynamics, as well as to design Sustainable Land Management practices to support decision-making in territorial management. The members are organized into territorial nodes, within which studies are coordinated on similar landscapes, such as highlands or dry coastal plane. Each node includes local monitoring sites that are designed to analyze the dynamics of biophysical variables in different specific contexts of degradation and sustainable land management practices. Additionally, working groups focused on specific topics, including remote sensing, water resources, or soils, among others, are integrated into the network. Through this network, monitoring protocols, research agendas, and a dedicated website will be developed.

**Keywords:** Land degradation indicators, Monitoring, Protocols, Land degradation neutrality

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