

# **ECOSYSTEM RESTORATION: A CASE STUDY OF COSTA RICA'S PAYMENT OF ENVIRONMENTAL SERVICES (PES)**

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Master Thesis submitted in fulfillment of the Degree.

Master of Science

in SUSTAINABLE DEVELOPMENT, MANAGEMENT AND POLICY

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Vienna, 25.06.2003

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## ABSTRACT

Various regulatory and market-based instruments are being applied around the world to address the ongoing decline in environmental quality, which has implications for the wellbeing of humans generally and which disproportionately impacts economically disadvantaged nations. This paper focuses on Payment for Environmental Services (PES) schemes, which seek to promote the conservation and restoration of ecological systems by providing economic incentives to those parties/nations who provide the world with a net ecological surplus and disincentives to those who run an ecological deficit.

Costa Rica represents an ideal case study due to the country's admirable efforts in tropical forest conservation and restoration, alongside economic growth. Questions remain, however, regarding the role played by the PES scheme in achieving these outcomes: the answers to which are valuable both for other nations and for augmenting the scheme domestically. The research question – How does the Payment for Environmental Services (PES) scheme contribute to changes in land management in Costa Rica? – is addressed through an in-depth desktop analysis of the case study, the Costa Rican PES program, as well as a series of expert interviews.

The findings reveal that Costa Rica's PES scheme has positively influenced forest coverage and encouraged landowners to adopt sustainable practices to a limited extent. Without the scheme, the incentivized areas would have been significantly more vulnerable to the adverse effects of illegal deforestation. However, the PES program acts as a complementary element in a broader framework rather than the primary driver of changes in land resource utilization. Successful implementation of PES schemes therefore relies on factors such as environmental education, institutional capacity, legal frameworks, and social justice. Costa Rica serves as a model, as its well-informed and educated population has embraced and complied with environmental regulations and strategies. However, it is crucial to address the unique contexts and challenges faced by each country to ensure the effective and sustainable implementation of PES schemes.

Keywords: Payment for Environmental Services (PES), Costa Rica, sustainable land use