



Borradores de Economía - Unveiling the critical role of forest areas amidst climate change: The Latin American case

Descargar Keep in mind

The series Working Papers on Economics is published by the Office for Economic Studies at the *Banco de la República* (Central Bank of *Colombia*). It contributes to the dissemination and promotion of the work by researchers from the institution. This series is indexed at Research Papers in Economics (RePEc).

On multiple occasions, these works have been the result of collaborative work with individuals from other national or international institutions. The works published are provisional, and their authors are fully responsible for the opinions expressed in them, as well as for possible mistakes. The opinions expressed herein are those of the authors and do not necessarily reflect the views of Banco de la República or its Board of Directors.

AUTHOR OR EDITOR Alonso-Sanabria, Juan David Melo-Velandia, Luis Fernando Parra-Amado, Daniel
The series *Borradores de Economía* (Working Papers on Economics) contributes to the dissemination and promotion of the work by researchers from the institution. On multiple occasions, these works have been the result of collaborative work with individuals from other national or international institutions. This series is indexed at Research Papers in Economics (RePEc). The opinions contained in this document are the sole responsibility of the author and do not commit Banco de la República or its Board of Directors.

Publication Date: Monday, 23 of October 2023 Abstract

Although greenhouse gas emissions from the Latin America (LAC) region are not particularly significant, climate change is a worldwide challenge. Hence, we analyze the main factors that increase and mitigate emissions in LAC countries by emphasising the importance of preserving and safeguarding forested regions. To do that, we estimate a Panel Fully Modified Ordinary Least Square model for Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, and Peru by using a sample period between 1970 and 2018. We find that an increase of 1 % in forested area leads to a reduction of CO₂ (Kt per capita) emissions by 0.23 %. From the policy perspective, our findings draw attention towards the promotion of reforestation and afforestation initiatives. Furthermore, these long term policies will hold substantial significance, given the region's immense potential, with more than a fifth of the world's forest reserves.