

Abstract

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A REVIEW OF NATIONAL EMISSIONS INVENTORIES FROM SELECT NON-ANNEX I COUNTRIES: Implications for Counting Sources and Sinks of Carbon

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A total of 176 countries have ratified the United Nations Framework Convention on Climate Change, thereby agreeing to limit emissions of greenhouse gases that threaten to interfere with the Earth's climate. While compliance procedures are being developed, the best indicators of implementation of the Convention are the emissions inventories of greenhouse gases that member countries must submit to the Convention as part of their national communications. We review some of the first emissions inventories from non Annex I (developing) countries. We focus on land-use change and forestry because these activities are responsible for the major emissions of carbon in many non-Annex I parties, and because they are the only activities with the potential to remove carbon from the atmosphere and sequester it on land. The review shows first, that some developing countries have already begun to reduce emissions and second, that there are significant discrepancies between the data used in the emissions inventories and the data available in international surveys. Conceptual uncertainties also exist, such as distinguishing anthropogenic from nonanthropogenic sinks of carbon, and these will require political rather than scientific resolution. We discuss several options for counting terrestrial sources and sinks of carbon in light of the Kyoto Protocol.

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