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## GUEST EDITORIAL

### CARBON EMISSIONS AND SEQUESTRATION BY FORESTS: CASE STUDIES OF DEVELOPING COUNTRIES

A research network on Tropical Forestry and Global Climate Change, better known as the "F7 Network," was created by Jayant Sathaye and Willy Makundi of the Lawrence Berkeley National Laboratory (LBNL) to help quantify emissions of greenhouse gases from tropical forests and to suggest and evaluate strategies to reduce these emissions. Originally composed of seven countries, the network later expanded to nine: China, Brazil, India, Indonesia, Malaysia, Mexico, Nigeria, Tanzania and Thailand. Network activities are coordinated by LBNL and funded by the Climate Change Division of the US Environmental Protection Agency. The F7 Network is composed of researchers resident in the countries in question who participate as individual scientists rather than as representatives of their respective governments.

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The F7 Network's founding meeting was held in São Paulo in 1990, followed by meetings in Berkeley (1991 and 1992), Kuala Lumpur (1992), Beijing (1993), Bangalore (1994) and Bangkok (1995). Carbon emissions have been quantified using the COPATH model developed by Willy Makundi and Jayant Sathaye of LBL. In the case of Brazil, a more comprehensive model was used that includes the processes represented by COPATH.

The present special topic issue presents emissions calculations for a subset of the F7 countries (Mexico, India and Brazil). A second issue is expected to include additional country papers and an overview of the results in the context of global change.

The papers in the present issue illustrate some of the variety of situations in tropical forest countries that precludes facile generalizations about land use changes and emissions. Brazil and Mexico are both major sources of net emissions from deforestation. The authors from India report substantial uptakes from silvicultural plantations, resulting in a net carbon release near zero for India's forest sector. The country-specific nature of the information in these analyses represents a tremendous

strength as compared to many "back of the envelope" global calculations that still predominate in discussions of tropical forests' role in the world's carbon budget and the problem of global warming.

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