

INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH

TROPI-DRY Human, Ecological and Biophysical Dimensions of Tropical Dry Forests (CRN2021)

Tropical dry forests (TDFs), with their high agricultural and touristic potential and ideal conditions for human settlement are extremely vulnerable. This research network is developing a comprehensive knowledge basis of the human and biophysical dimensions for TDFs in the Americas.

Goals

- Understand ecology and diversity of TDFs and the climatic and socio-economic drivers of their development and degradation
- Document long-term trends in extent, biomass and integrity of secondary and primary TDFs
- Develop innovative links between government agencies, scientists, and communities to promote sustainable management of TDFs

First results

- The first-ever map of TDFs in the Americas shows their extent and conservation/deforestation trends. In Costa Rica this mapping serves as a legal basis for conservation monitoring.
- Dry forests are highly fragmented by touristic and agricultural development, and conservation policies need to reflect this better: TROPI-DRY proposes the creation of TDF conservation networks and payments to local communities for the environmental services they provide.
- Phenology monitoring shows that close to the equator, the dry season is now shorter and dry forests have become more productive. Farther north and south, dry seasons last longer and dry forest growth has slowed. Productivity of dry forests is increasing in Brazil and decreasing in Bolivia.
- Data are being compiled how rural communities use natural resources in dry forests in Brazil.
- These results are creating a solid basis for the sustainable management of dry forests across the American continent.

Principal investigator and lead agency

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Associate organizations

Lund University, Malmo University (Sweeden), Universidad Tecnologica and Pedagogica de Colombia (Colombia), Technische Universität Bergakademie Freiberg (Germany)

Links to other IAI projects

TROPI-DRY collaborates with the *Collaborative Research Network* on soil microbe-plant interactions (CRN2014) and with the *Small Grants Project for the Human Dimension* on conservation policy impacts in tropical dry forests in the context of other social and natural drivers of land use (SGP-HD008).

Project web site: http://tropi-dry.eas.ualberta.ca

List of publications: http://tropi-dry.eas.ualberta.ca/2_datapub.html or http://iaibr1.iai.int/bs?publications/CRN2021.pdf

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Installing of phenology monitoring station, Minas Gerais, Brazil



Serra do Cipo National Park, Minas Gerais, Brazil



Mata Seca State Park, Minas Gerais, Brazil





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