Introduction: tropical rainforests and climate change

Impacts of climate change on topical rainforests are lesser known than impacts on other biomes. Effects of climate change are overshadowed by deforestation, which constitutes a much heavier threat on rainforests. Because the incidence of climate change in tropical forests is subtle and poorly understood, we need to investigate forest dwellers’ perceptions with much greater attention.

Biotemporal signals: a biocultural approach of climate change

Indigenous People and Local Communities (IPLCs) rely on many converging biotemporal signals—be they visual, sonorous, olfactory, tactile, etc.—upon which they organize the calendar of their activities and decide to invest in some activities and not in others. Among the various sources of biotemporal signals that forest dwellers refer to, insects are probably the most accurate and the most fascinating. Insects are sensitive to very subtle fluctuations of climatic conditions humans cannot perceive.

Forest/savannah ecotone: ideal conditions to investigate adaptation to climate change

This ecosystem is characterized by current recolonization of savannas by the forest. Fast afforestation (1 to 3 meters/year) enables diachronic studies on ecosystem change using short time intervals.

Conclusion

By failing to take account of traditional knowledge and to share in a meaningful way the findings of scientific research, the current international policy making environment on climate change ignores much available knowledge and potential, practical adaptive solutions. We advocate in favor of involving IPLCs into the process of assessing the poorly visible impacts of climate change on tropical forests. Through their extensive knowledge and know-how, IPLCs can play a determining role as ‘sentinels’ by providing first-hand, accurate observations and supplementing data that dramatically fail to incorporate anthropological data into the elaboration of predictive models of climate change.

Further readings
