



Brazil's Amazon Settlement projects as poles of agricultural expansion on dynamic frontiers: The roles of deforestation actors

Gabriel Carrero- PhD (Geography)



TUE, APR 30

12:45 - 1:45

Grinter 376

Tropilunch is a weekly seminar run by graduate students from the Tropical Conservation and Development (TCD) Program. It provides a forum for a range of discussions and presentations related to TCD work and research. Special guests, visiting scholars and practitioners also participate. It happens every Tuesday @ 12:45 – 1:45 p.m. in Grinter Hall, Room 376.

Tropilunch presentations are recorded and posted weekly on TCD's YouTube Channel.

BIO

Gabriel (B.Sc Biology-UFSC, M.Sc. in Ecology-INPA) has been researching human populations in tropical forest environments since 2004 in Brazil and Africa. Since 2007 he has been working with IDESAM (a Brazilian NGO) as a practitioner, developing and implementing projects for fostering forest conservation, environmental governance, and agricultural and forest productive chains based on ecosystem services' sustainability. Working as a Program Director, Gabriel led several initiatives and projects that combined conservation, community development and rural production, such as agroforestry. Gabriel is a Ph.D. student in Geography at the University of Florida, his research focuses on human-environment interactions in Amazonia forest frontiers. The work presented is a result of ten years of work and research in the region.

PRESENTATION SUMMARY

The study focuses on the deforestation role of rural settlement projects in Central Brazilian Amazon basin, showing that such settlements function as regional poles of deforestation. It used mixed methods approach that combines socioeconomic surveys, workshops, a 35-yr time series (based on remotely sensed data) and Generalized Additive Models to assess deforestation rates in the most-deforested settlement project in the Brazilian Amazon, Rio Juma Settlement in Apuí, Amazonas. The results show land-clearing pattern in Rio Juma was heavily influenced by period effects associated with political and economic factors. All sizes of landholdings are deforesting much more than before, as the region evolved from subsistence farmers living in isolated conditions to a regional center of cattle ranching that is market-oriented. The deforestation trajectory in Apuí did not follow the same patterns as those for the Brazilian Legal Amazon as a whole, especially from 2012 onwards, when it increased four times faster more when compared to the region's increase. In Apuí, these patterns seem to reflect policies signaling that illegal deforesters would not be caught due to the paucity of law enforcement. Furthermore, patterns are associated with the arrival of highly capitalized farmers who are amassing significant areas of land in response to opportunities to obtain larger landholdings on a new frontier. The results show that, independent of household profile or time of settlement, period effects affect all actors' land use. This is a significant finding for those concerned to formulate better agriculture policies and programs in Amazonia.