

Resilience and Vulnerability of River-Side Communities to Environmental Shocks in Loreto and Ucayali Regions, Peruvian Amazon

Laura Donohue

Supervisor: Prof. Oliver T. Coomes

Reader: Prof. Sarah Turner

Department of Geography
McGill University, Montréal (Québec) Canada
2015

Amazonian rivers provide significant opportunities for floodplain agriculture but also bring destructive floods, cause riverbank slumps, and force communities to relocate. This thesis aims to assess the resilience and vulnerability of river-side communities to environmental shocks in the Regions of Loreto and Ucayali of eastern Peru. Using data from the Peruvian Amazon Rural Livelihoods and Poverty Project (PARLAP), this study applies multivariate statistical techniques and mapping to identify patterns in community vulnerability among 919 communities along four Amazonian rivers. I find that riverbank slumping is a greater threat to community stability than large floods, and that the most vulnerable communities are those located in the floodplains without complementary access to land in the upland, often relocating to riskier locations. Sub-regional heterogeneity in environmental shocks and community stability is considerable, and initiatives aimed at reducing rural poverty must consider this variation in adapting strategies to the specific locales they target.



Photo of Amazon river courtesy of Prof. Oliver Coomes.