

Tropical rivers in rural areas are likely to have good water quality, but current trends indicate that increasing development pressures could have a deleterious effect on these water systems. One potential strategy for counteracting the negative impacts of development is the devolution of watershed management into the hands of local users, particularly in isolated areas where funds and enforcement of environmental policies are limited. However, it cannot be assumed that local communities naturally make effective resource managers. A careful examination of the presence or absence of social and institutional characteristics necessary for effective resource management must be carried out.

This research focuses on two neighboring Bolivian communities located on the Upper Acre River in the department of Pando. The objective was to determine how these culturally distinct communities utilize and manage river resources, including riparian areas, and to evaluate whether features favorable to collective action for the protection of these resources exist.

Results indicate that when designing watershed management plans, it is important to question our assumptions about how local communities use water resources and which water quality concerns are the most salient. Neither community made as extensive use of river resources as might be expected of Amazonian river-dweller. Furthermore, water quality in the Acre River was perceived to be poor by most households, but most concerns were based on pollution commonly associated with urban areas. Households were generally conscientious about maintaining riparian buffers when creating agricultural fields near water bodies and expressed a clear understanding of the value of riparian areas. However, whether these strategies will be effective water protection mechanisms in the midst of rapid development is questionable. Finally, individual consciousness about water protection had not coalesced into formal management rules within or between communities, and is unlikely to do so without motivation by outside actors.

**Keywords:** aquatic resources, watershed management, development, land use change, tropics

**Challenges:** Population Growth and Land Use Change

**Issues:** Public Perceptions, Values and Attitudes toward Water Issues, Sources and Impacts of Emerging Contaminants