

Watershed services in the humid tropics: Opportunities from recent advances in ecohydrology (Conference Paper)

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Abstract

In response to increasing pressures on water resources, watershed services management programs are implemented throughout the tropics. These programs aim to promote land management activities that enhance the quantity and quality of water available to local communities. The success of these programs hinges on our ability to (a) understand the impacts of watershed interventions on ecohydrology; (b) model these impacts and design efficient management programs; and (c) develop strategies to overcome barriers to practical policy development, including resource limitations or the absence of baseline data. In this paper, we review opportunities in ecohydrological science that will help address these three challenges. The opportunities are grouped into measurement techniques, modelling approaches, and access to resources in our hyperconnected world. We then assess management implications of both the knowledge gaps and the new research developments related to the effect of land management. Overall, we stress the importance of policy-relevant knowledge for implementing efficient and equitable watershed services programs in the tropics.