

# **DEFINITION OF CURRENT AND FUTURE WATER DEMAND FOR TWO COMMUNITIES OF NORTHERN PACIFIC COSTA RICA AS A MEANS OF SUPPORTING LOCAL WATER MANAGEMENT**

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## **RESUMO**

Guanacaste, in northern Pacific Costa Rica, is a compelling case study because of its limited current and future water supplies, existing conflicts, critically endangered tropical dry forests, and rapidly urbanizing population. The purpose of this study is to identify current and potential water demand in two communities that share a common source of water. A Water Demand Index (WDI) was developed and evaluated for these communities. The index considers four components that interact and explain water demand: Access to water resources, Water Use, Water Management Capacity and Environmental issues related to water resources. Future water demand scenarios were created through a Formative Scenario Analysis. Both current and future demand were developed through participatory processes and expert consultation. Instruments and strategies were designed with the local organizations and institutions responsible for water management. Local decision makers are acquainted with WDI and future water demand scenarios as instruments to improve their management.

**Palavra-Chave:** water demand; water demand index; scenarios; local management