

COFFEE PRODUCTION, WATER USE, AND WATERSHED PROTECTION IN HONDURAS: A COMMUNITY CASE STUDY

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Coffee production has been expanding in western Honduras over the past three decades. Today it is the major export commodity and source of income for the region. The expansion of coffee has involved clearing of montane forests, damage to fragile watersheds, and increasing demands for water to process coffee. The region is part of Central America's *corridor seco*, which experiences periodic, severe droughts. At the same time, the frequency of hurricanes and torrential rainfall appears to be increasing. In this context, water management and watershed protection pose critical challenges for human well-being and agricultural production. This study explores how one coffee-growing community has endeavored to protect its main watershed, reduce deforestation, and manage spring-fed water systems to meet human and agricultural demands. The steps taken by coffee producers and farmers have included creation of a community-based watershed reserve, adoption of low-water use coffee processing facilities, and retention ponds to capture waste water. Several cooperatives have also established tanks to supply water for washing coffee during the harvest, which falls in the dry season when water is scarcest. Despite success in transitioning to more conservative use of water, the combination of recent droughts interspersed with torrential rainfall events has strained community capacity to manage extremes of water shortage and excess. Precipitation from recent hurricanes Eta and Iota has caused landslides, damaged water system infrastructure, and destroyed roads and bridges. The situation is further complicated by precarious political contexts, economic stress, the current global pandemic and high rates of outmigration. The discussion examines the challenges faced by the community, especially coffee farmers, and their efforts to manage water, mitigate exposure and develop resilience.

PRESENTER BIO: Dr. Tucker is a Professor of Anthropology and Latin American Studies. Her work focuses on community-based approaches for natural resource management and adaptation to climate change. She is working with coffee farmers in Honduras to explore options for climate change adaptation and sustainable water and forest management.