

CLAG Field Report

UNDERSTANDING VOLCANO-BASED TOURISM FROM A SYSTEMS
PERSPECTIVE ON OMETEPE ISLAND, NICARAGUA

Chelsea L. Leven
The University of Montana
Missoula, MT

M.S. in Resource Conservation
Department of Society and Conservation
International Conservation and Development option
Natural Resource Conflict Resolution Certificate Program
W.A. Franke College of Forestry & Conservation

September - November 2018

On April 19, 2018, only two days after receiving the Conference of Latin American Geographers (CLAG) Field Study Award to support my research in Nicaragua, unrest erupted across Nicaragua when police killed student protestors in Managua. Since then, clashes between Nicaragua's leadership and governmental opposition have resulted in hundreds of deaths, negative impacts upon public and private services, the unhinging of the economy, and devastation of the tourism industry.

My originally proposed research sought to better understand the dynamics of the social-ecological system on the volcanic island of Ometepe. My research objective derived from the interesting mix of the presence of significant natural hazards combined with tourism growth that directly related to one source of hazards—volcanos. However, the unanticipated events at the national level have helped to focus my research specifically upon describing the current system state with the loss of volcano-based tourism.

The country's crisis delayed my research. Ultimately, I deemed it safe to conduct field work based upon frequent communication with local colleagues and friends on Ometepe. I have chosen to conduct these activities in three communities, based upon the varied ways in which tourism functions in these communities combined with the diversity of volcanic hazards.

The role of tourism has become particularly salient for many residents, who have adjusted their lives significantly in response to the loss of volcano-based tourism as a main economic driver on the island. While great hardship has resulted from the national crisis, I have found that residents are also eager to talk about the effects of lost tourism. My preliminary research notes indicate that residents are finding opportunities, such as improving their engagement with subsistence forms of living, strengthening social connections, and creatively considering new business developments.

Funding from CLAG has helped to support this study by assisting with international and in-country transportation expenses, plus the supplies, rental spaces, and catering necessary for conducting the participatory research activities and foundational field work. The bulk of my data collection consists of a series of visual, conceptual mapping exercises, in which small teams of participants identify components such as actors and livelihoods, and describe the interactions between them. These activities have been very deliberately structured, based upon ten weeks of preliminary field work.

As I write this report, I have just completed the second large-group research activity. Excitingly, participants have willingly brought their varied life experiences to the table, sharing and engaging in a manner that has produced rich conceptual maps of their system and animated discussion. Furthermore, participants have expressed personal appreciation for the opportunity to engage with others from their community on a topic that is on their mind. In addition to the international exchange that is happening through this study, early participant feedback indicates that this study is also fostering local collaboration and communication.

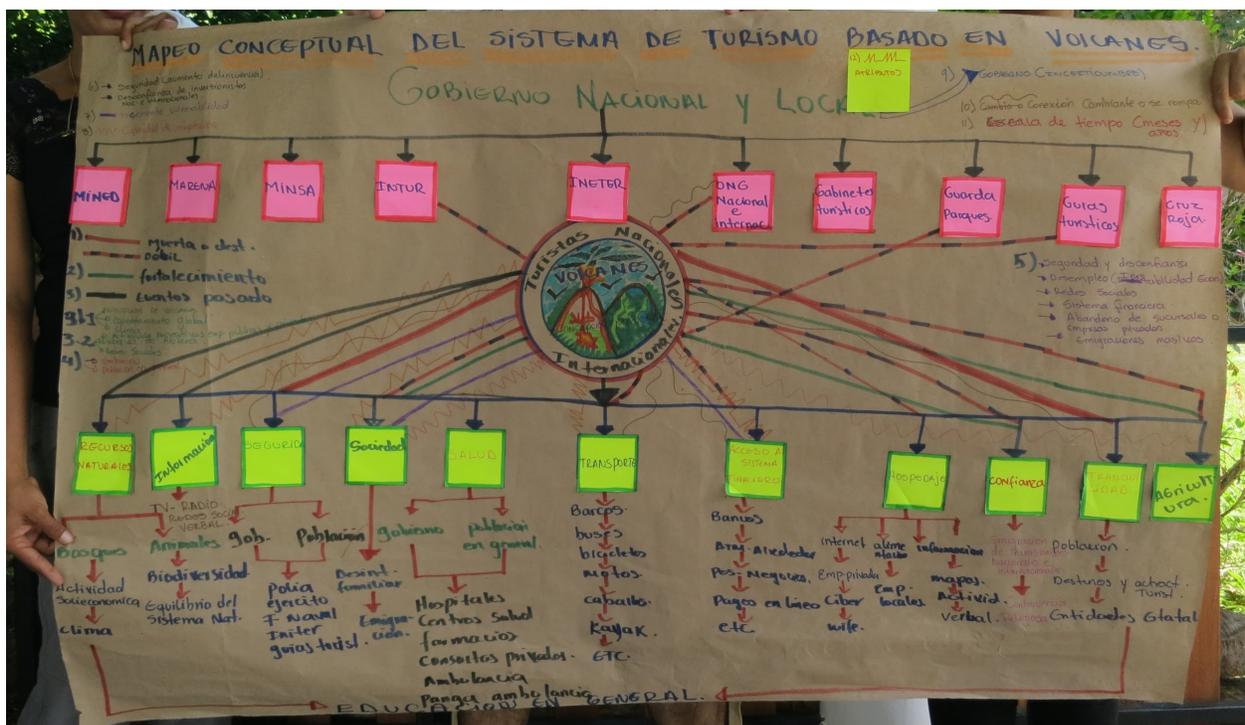
I am facilitating these research activities alongside the director of the local chapter of Fauna & Flora International (FFI). On Ometepe, FFI focuses upon species protection and agricultural practices. FFI hopes that the study will help illuminate how tourism can better support their goals.

Additionally, I am working with a nonprofit called Guías Unidos, a nonprofit organization dedicated to international exchange and collaboration with a focus on

environmental awareness and personal opportunities. While not engaged in direct research, I have been supporting activities in their learning center and library.

Despite political unrest, I also have been able to continue working with government partners. Specifically, this includes the Instituto Nicaragüense de Estudios Territoriales (INETER), the local town hall, and the tourism board. I have conducted field work with INETER and the town hall to update local hazard maps. We have been observing, for example, how climate change is strengthening storms, producing higher amounts of rainfall and flooding than recorded historically and in the rock record.

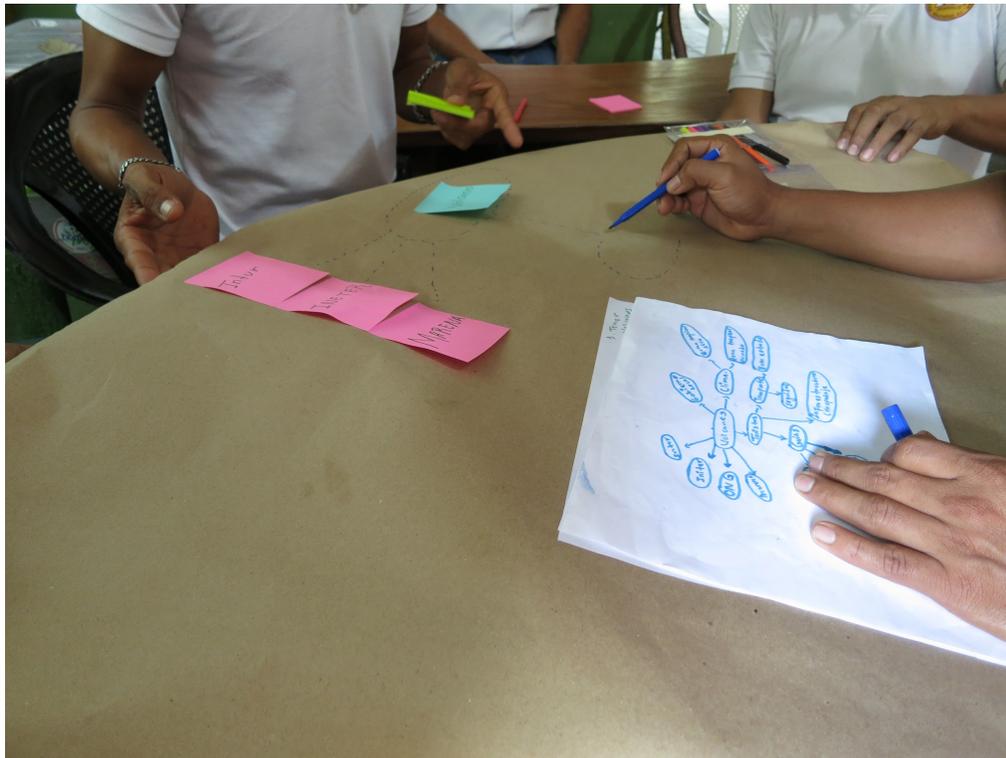
The national crisis in Nicaragua offers a window of opportunity to examine the tourism system and disturbances on the island of Ometepe. I hope that improved systems understanding of tourism can help to (1) promote more effective use of tourism as a tool to improve environmental and human well-being, and (2) improve understanding of a social-ecological system undergoing a crisis, so that future interventions can be more deliberate, sustainable, and successful in the long term. It is with huge gratitude to CLAG that I write this field report, for the financial support that has helped enable me to conduct this research.



One group of participants from Moyogalpa, Nicaragua, holds up their conceptual map of volcano-based tourism on Ometepe Island.



Participants discuss and draft ways in which they can visually represent the significant components and drivers comprising volcano-based tourism on Ometepe Island, Nicaragua.



Participants begin creating a conceptual map of volcano-based tourism based upon their draft.



Following a recent stories of storms, the lake level has risen significantly, causing flooding (water in the foreground).