ASU SCHOOL of SUSTAINABILITY

ARIZONA STATE UNIVERSITY

In Partial Fulfillment of the Requirements for the Degree of

Master of Art

Natalia Rodriguez

Will defend her thesis

Perceptions of Climate Trends among Mexican Maize Farmers

Abstract

Perceptions of climate variability and change reflect local concerns and the actual impacts of climate phenomena on people's lives. These are the basis of people's decisions to act, and they determine what adaptive measures will be taken. But perceptions of climate may not always be aligned with scientific observations because they are influenced by different socio-economic and ecological variables. To find sustainability solutions to climate-change challenges, researchers and policy makers need to understand people's perceptions of it so that they can account for likely responses. Anticipating responses will enable decision-makers to create policies that support effective adaptation strategies. In this study, I analyzed perceptions of drought variability as a proxy for perceptions of climate variability and change. I identified the factors that contribute to the perception of changing drought frequency among Mexican maize farmers in the states of Chiapas, Mexico, and Sinaloa. I conducted Chi-square tests and Logit regression analyses using data from a survey of 1092 maize-producing households in the three states. Results showed that indigenous identity and receipt of credits or loans were the variables that most strongly influenced perceptions of drought frequency. The results suggest that climate-adaptation policy will need to consider the social and institutional contexts of farmers' decision-making, as well as the agronomic options for smallholders in each state.

Friday, March 27, 2015
9:00 a.m.
Wrigley Hall 401

Faculty, students, and the general public are invited.

Supervisory Committee:
Dr. Hallie Eakin, co-chair
Dr. Rachata Muneepeerakul, co-chair
Dr. David Manuel Navarrete, member