

In Partial Fulfillment of the Requirements for the Degree of

## Master of Art Cathy Rubinos

Will defend her thesis

## Institutional Analysis of Water Management for Agriculture in the Chancay-Lambayeque Basin, Peru

## **Abstract**

This research presents an analysis of the main institutions and economic incentives that drive farmers behaviors on water use in a semi arid area of great agricultural importance that is currently experiencing water scarcity: the Chancay-Lambayeque basin, located in Lambayeque, Peru. Farmers are the main users, consuming 90% of the total water available; but they achieve only a 37% level of water-use efficiency. As a result farmers cannot use as much water as they would like to, and many conflicts among users have been caused by this problem. In this study, I describe and analyze how different rules, norms and strategies (institutions) define farmers behaviors related to water use. I use the Institutional Analysis and Development framework and a dynamic game theory model to analyze how physical attributes, community attributes and rules of the system can affect farmers actions in regard to water use and affect the sustainability of water resources. I present an outline for policy recommendation.

Monday, July 22, 2013 10:30am WGHL, 481

Faculty, students, and the general public are invited.

Supervisory Committee:

Dr. Joshua Abbott, Co-Chair Dr. Hallie Eakin, Co-Chair Dr. Abigail York, Member