

## Rural Entrepreneurship as a Response to Climate Change and Resource Conservation

**Authors :** Omar Romero-Hernandez, Federico Castillo, Armando Sanchez, Sergio Romero, Andrea Romero, Michael Mitchell

**Abstract :** Environmental policies for resource conservation in rural areas include subsidies on services and social programs to cover living expenses. Government's expectation is that rural communities who benefit from social programs, such as payment for ecosystem services, are provided with an incentive to conserve natural resources and preserve natural sinks for greenhouse gases. At the same time, global climate change has affected the lives of people worldwide. The capability to adapt to global warming depends on the available resources and the standard of living, putting rural communities at a disadvantage. This paper explores whether rural entrepreneurship can represent a solution to resource conservation and global warming adaptation in rural communities. The research focuses on a sample of two coffee communities in Oaxaca, Mexico. Researchers used geospatial information contained in aerial photographs of the geographical areas of interest. Households were identified in the photos via the roofs of households and georeferenced via coordinates. From the household population, a random selection of roofs was performed and received a visit. A total of 112 surveys were completed, including questions of socio-demographics, perception to climate change and adaptation activities. The population includes two groups of study: entrepreneurs and non-entrepreneurs. Data was sorted, filtered, and validated. Analysis includes descriptive statistics for exploratory purposes and a multi-regression analysis. Outcomes from the surveys indicate that coffee farmers, who demonstrate entrepreneurship skills and hire employees, are more eager to adapt to climate change despite the extreme adverse socioeconomic conditions of the region. We show that farmers with entrepreneurial tendencies are more creative in using innovative farm practices such as the planting of shade trees, the use of live fencing, instead of wires, and watershed protection techniques, among others. This result counters the notion that small farmers are at the mercy of climate change and have no possibility of being able to adapt to a changing climate. The study also points to roadblocks that farmers face when coping with climate change. Among those roadblocks are a lack of extension services, access to credit, and reliable internet, all of which reduces access to vital information needed in today's constantly changing world. Results indicate that, under some circumstances, funding and supporting entrepreneurship programs may provide more benefit than traditional social programs.

**Keywords :** entrepreneurship, global warming, rural communities, climate change adaptation

**Conference Title :** ICGCC 2017 : International Conference on Global Climate Change

**Conference Location :** San Francisco, United States

**Conference Dates :** September 28-29, 2017