“Modeling Diversity within an Agricultural Community in Peru.”

Victor E. Cabrera
Agricultural Education and Communication
University of Florida

This was a study about ways of improving the Cañete small farmer community (4,800 households, 18,080 ha) through agricultural extension. The analyses included linear programming used to simulate and better understand the current situation of individual households. Based in the linear programming simulations, household land to person index –land in hectares and number of people in household- can explain the household potential risk or potential windfall characteristics in different price scenarios. Potential risk and potential windfall are understood as the variability in incomes found in a household after simulating it in different price scenarios. Higher indexes determined higher potential risk in “bad” price years as well as higher potential windfall in “good” price years. Asparagus is a crop highly recommended to all small farmers by the development agencies. The simulation of the six-year models found out that, only a relatively small segment of the population would be able to raise asparagus. The recommendation of this crop should be on an individual basis, after solving the appropriate model in the appropriate scenario. Aggregation with market purposes should also be based on the individual models rather than the model taken from the survey “average farm.”