

ECONOMIC IMPACT OF THE SLV RESEARCH CENTER

-SAN LUIS VALLEY-

PROJECT OVERVIEW

- The purpose of this internship was to examine the economic impacts of the San Luis Valley Research Center.
- The San Luis valley is a region in Southern Colorado that is made up of six counties (Rio Grande, Saguache, Alamosa, Conejos, Mineral, and Costilla). Fresh potato production makes up 5% of the valley's total annual output. Additionally, Colorado is the nation's 6th largest producer of potatoes.
- The San Luis valley Research Center supports local farmers through a variety of programs including breeding, field testing, post harvest biology, and seed certification.
- Each of these programs allows producers to increase efficiency and thus overall economic success.

INTERNSHIP GOALS

- My primary goal for this internship was to analyze how funds brought into the region by the Research Center affect the regional economy.
- Additionally, I was interested in how each of the programs at the Research Center enabled farmers to increase their overall productivity and profit.
- I also wished to learn more about the day-to day operations of a farm and about rural life in general in order to facilitate better communication between academic institutions and producers.
- Finally, I hoped to identify opportunities for further research and establish a format for similar research at other Research Centers in the Colorado State University system.

Educational Benefits

- Through this internship, I was able to apply economic theory to real world applications through use of secondary data and IMPLAN modelling software.
- This internship allowed me to meet with local producers/stakeholders to better understand the needs and challenges facing Colorado's agricultural communities.

Analysis

Methodology

- Interviews were conducted with Research Center personnel to determine income sources.
- Since an economic impact considers "new dollars" coming into a defined region (in this case the San Luis Valley), funding was then sorted by in region sources (such as grants from local farming organizations) and out of region sources (such as nationally funded grants, revenue from out of region sales, and funding from the University).
- Out of region funding was then sorted into what industry it was spent in, such as wholesale trade, retail trade, and employment.
- This information was then entered into IMPLAN modeling software to analyze the impacts of these "new dollars" in the six-county region that makes up the San Luis Valley.

Results



What I Learned

- I learned how to use economic impact models to analyze how new dollars brought into the region by the Research Center impacted the local economy, and how the multiplier effect led to greater impact than the original dollar amount due to economic linkages.
- During this same time frame, the Research Center also supported on average 2.15 new jobs in the community.
- From 2000 to 2020, an average of 47.75% of all potato acreage planted in the valley was planted in varietal developed by the research Center's breeding program.
- The Potato Crop Management program's studies on fertilizer application rates/amounts, plant spacing, and field practices that allow growers to determine management practice that maximize productivity
- New temperature monitoring developed by Plant Postharvest Biology contributed to a 40% decrease on rejections in the 2020 growing season compared to the 2019 growing season
- The Seed Certification Service -in addition to certifying seed potatoes-provides training on potato disease recognition to local growers. Additionally, they provide evapotranspiration reports to local farmers via internet and phone.

Next Steps

- Identifying crop performance of varietals grown in the Valley but not developed by the Research Center would provide a "next best alternative" to allow for an estimation of the financial contribution of Research Center varietals.
- A survey would allow for the valuation of services provided for free (such as weather data and disease identification training) by the Seed Certification Service.
- Interviews can be conducted with local potato storage warehouses to determine a more specific dollar-value associated with their implementation of technologies and practices recommended by the Plant Postharvest Biology program
- Field management practices recommended by the Potato Crop Management program can be analyzed to determine possible savings and increased profit due to implementing the practices compared with alternative management practices.