ABSTRACT

TITLE:	Room to Grow: Improving Farmer Livelihoods Through Increased Quinoa Production in Colorado
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ABSTRACT: Quinoa, a pseudocereal traditionally cultivated in the Andean highlands of South America, has gained recent global recognition for its high nutritional content and ability to grow in areas characterized by low precipitation and poor soil quality. Keen to health food circles in North America and Europe, demand for this super food has skyrocketed in recent years. While some producers of this lucrative crop are experiencing increased profits from the demand, many of the poor farmers in Bolivia, Peru, and Ecuador who produce the majority of the world's supply are experiencing a slew of negative impacts. This paper examines the impacts of greater quinoa consumption ex situ on Bolivian farmers and argues that an increase in the production of quinoa in the United States is necessary to relieve some of the negative impacts. Interviews and background data collection concerning the past and current efforts of quinoa cultivation in the Rocky Mountain region of Colorado (the most feasible region in the United States to produce quinoa) provide insight into the possibilities of increasing production. It was found that high elevation basins in the Colorado Rockies with summer temperatures not exceeding 95F have the right environmental requirements for successful quinoa production. It was also found that quinoa prefers nitrogen-rich soils, making it a good rotation crop for nitrogen-fixing legumes and grains. Additionally, as climate change and drought continue to challenge agriculture in the region, an examination of the adoption of organic farming techniques will be used in order to emphasize the importance of drought-resistant crops in current organic farming operations in order to increase overall profit and productivity. Due to the information-intensive nature of organic farming practices, adoption can be spread more efficiently through external agencies promoting the practice. Externally sponsored demonstration gardens that teach organic farmers how to grow quinoa could be an effective adoption strategy.