



Tropentag, September 17-19, 2018, Ghent

“Global food security and food safety:
The role of universities”

Analysis of Smallholder Vegetable Production Systems in the Bolivian Highlands

LAURA KUONEN¹, INGRID FROMM¹, FRANZ MIRALLES²

¹*Bern University of Applied Sciences, School of Agricultural, Forest and Food Sciences, Switzerland*

²*Swisscontact Bolivia, Bolivia*

Abstract

The small-scale, low-input vegetable production in the Bolivian Highlands under harsh climatic conditions is often not profitable, nevertheless, these small-scale farmers supply the vegetable markets in La Paz and El Alto, two of the biggest markets in Bolivia. Information about these producers are scarce, but needed to provide a solid base for interventions in this sector. This study has the goal to analyse and describe the smallholder vegetable production system in the Altiplano of the department of La Paz, Bolivia. It contains a comparison of the vegetable production on open field and in greenhouses. Furthermore, it offers a general overview of the market and it attempts to show important aspects of climate change and gender.

The methodology is based on a survey with 53 open field and greenhouse vegetable producers, on interviews with experts working with these producers and as well as on key informant interviews.

The vegetable production continues to be manual work, few open field producers use tractors for the field preparation. The use of chemical pesticides and of certified seed is common. The most important vegetable crops produced in greenhouses are oak leaf lettuce, butter head lettuce and lambs lettuce. In the open field production crisp head lettuce, onion, broccoli, and cauliflower are the most important crops. The greenhouse vegetable products are delivered to a company, the open field vegetable products are sold to retailers in the markets of La Paz and El Alto. The problems with the market are: fluctuating prices, selling to intermediaries and the stands in the market. The income from crisp head lettuce, broccoli, and cauliflower do not cover the production costs, however, the other three vegetable crops have a positive net income.

The differences between the two production systems are important and need to be considered if action in this sector should be initiated.

Keywords: Bolivia, greenhouse, open field production, smallholders, vegetable markets