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## Environmental and Quality Assessment Along the Post-Harvest Value Chain for Export-Quality *Capsicum* Products in Peru

MARCUS NAGLE<sup>1</sup>, MARIA ISABEL MATUTE GIRON<sup>1</sup>, KARLA PEÑA PINEDA<sup>2</sup>, MATTHIAS JÄGER<sup>3</sup>,  
JOACHIM MÜLLER<sup>1</sup>

<sup>1</sup>University of Hohenheim, Dept. of Agricultural Engineering, Tropics and Subtropics Group, Germany

<sup>2</sup>National Institute of Agricultural Innovation (INIA), Peru

<sup>3</sup>Bioversity International, Colombia

### Abstract

With declining commodity prices and the existence of niche markets for differentiated products in Europe, a window of opportunity exists for varieties of crops which are unexploited. This is the case of some varieties of chili peppers (*Capsicum* spp.) in Peru. A more diversified base of *Capsicum* products may increase incomes of farmers whose livelihood depends mainly on over-exploited varieties. Currently pests and diseases are becoming more frequent, making small farmers increasingly vulnerable to harvest losses and economic instability. Income augmentation among farmers can be addressed by securing revenues per cultivated area unit, one approach being the cultivation of varieties with an enhanced value. This poverty reduction strategy is considered to be more environmentally friendly than other strategies such as the extension of production area, which is unfeasible in many contexts (especially due to availability of land, a limiting production factor in developing countries), and less counterproductive to the environment as a result of deforestation which extension often entails. Products with enhanced value are those for which a niche market has been identified, however to reach such a market, especially in Europe, standards and consumer requirements must be fulfilled and guaranteed on the side of the exporting country. This study was aimed at assessing good agricultural practices (GAP) and good post-harvest and manufacturing practices (GMP) along the value-chain of *Capsicum* products followed by an environmental impact evaluation by means of Life Cycle Assessment in order to identify bottlenecks and shortcomings found along the value chain that hinder compliance with necessary certifications for these value-added products to be sold in EU markets. The importance of compliance of quality assurance and environmental certifications is that of being able to ultimately obtain higher prices for value-added-differentiated products and thus higher income to actors along the supply chain, among them small scale farmers.

**Keywords:** *Capsicum* products, export certifications, life cycle assessment (LCA), Value chain assessment