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Linking Gene Banks and Small Farmers to High Value Markets — the Example of *Capsicum* Diversity in Peru and Bolivia

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Abstract

A key strategy in reaching Millennium Development Goal 1, which aims at eradicating poverty and hunger, is the generation of additional income; this is especially fundamental for improving the livelihoods of poor farmers. According to a recent assessment, 1.4 billion people still live in extreme poverty. In Latin America, 123 million people subsist on less than US\$2 per day, with poverty pockets in the Bolivian and Peruvian Andes, and in the Upper Amazon.

Except for major crops such as wheat and maize, most crop diversity in its centre of origin is still poorly studied, let alone utilised. This is also the case for *Capsicum*, which most likely originated in the Interandean valleys in Central Bolivia, despite the clear interest in this crop from both consumers and farmers. Local project partners in Peru and Bolivia have already collected and conserved native *Capsicum* materials, and have made improvements in local cultivation and processing. Nevertheless, the introduction of high-value varieties targeting specific niche markets, selected from genebank materials, is beyond their reach, as this requires a multidisciplinary approach, including the diversification of existing value chains. In the past decade, socio-economic research and development work has been increasingly oriented towards market studies and upgrading value chains. So far, this work has focused on linking farmers to commodity markets, but has neglected the exploitation of high-value materials conserved in genebanks for differentiated products.

This new GTZ financed project will combine innovative germplasm-selection methodologies with multidisciplinary market and value-chain assessments in order to demonstrate how chili pepper farmers' income can be increased by exploiting diversity that is currently underutilised. The research is designed to bridge the gap between supply and demand by bringing together different types of research institutions that can provide critical knowledge. Although the project focuses on a specific geographic region and crop, this case will demonstrate approaches and technologies to address constraints to effectively harnessing agricultural diversity around the world. Farmers growing mangoes in India or sweet potatoes in Uganda are also struggling with declining commodity prices, and are looking for opportunities to increase their incomes through a transition into high-value, high-quality markets.

Keywords: Agricultural biodiversity, high value differentiation, neglected and underutilised crops, value chain analysis, capsicum