

NATIVE POTATO: COLORS WITH IDENTITY

The importance of the native potato and its economic and cultural significance in the Andean Region

GENERAL INFORMATION

Project name

Technological innovations and niche markets for native potato producers.

Lead researcher

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Duration

36 months

Cost

Total cost of project: USD 1,066,405
USD 500,000 financed by FONTAGRO through a non-reimbursable technical cooperation.

Objective

To develop technological innovations and niche markets to take advantage of the biodiversity of native potatoes and help improve the quality of life of small producers in the highlands.

Challenge

Small producers in Venezuela, Colombia, Ecuador, Peru and Bolivia face a range of technological, organizational and environmental problems that keep them from developing competitive agricultural systems and improving their access to upscale markets.

Strategy

A participatory study with key stakeholders to generate and/or adapt technological, organizational and entrepreneurial solutions for incorporating native potatoes in value chains.

Leader:

Ecuador: National Agricultural Research Institution (INIAP)

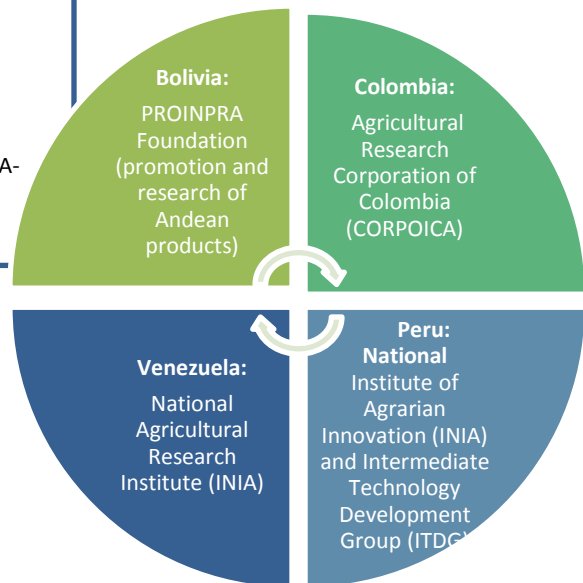
Regional:

International Potato Center (CIP)

Program for Rural Agroindustrial Development in Latin America and the Caribbean (IICA-PRODAR)

Cooperative Program for Technological Innovation in the Andean Area (IICA-PROCIANDINO)

CONSORTIUM



An alternative product, historically cultivated by the inhabitants of the highlands, is the native potato. While these tubers are appreciated for their pleasant intrinsic properties and favorable agricultural properties, their production has traditionally been used for self-consumption or limited local markets, providing little income for the producer. Mainly due to the lack of knowledge on the part of urban consumers about these native tubers, their cultivation was limited, almost to the point of endangerment of extinction.

In FONTAGRO's 2005 call for proposals, a regional Andean platform led by INIAP of Ecuador presented a winning proposal, identifying the need to work with native potatoes to implement technological innovations in the present production systems and incorporate them in value chains through development of new products.

The goal was to attain sustainable growth in producers' income and help improve the quality of life of their families, taking advantage of the biodiversity of the region's native potatoes and serving as a rescue and conservation mechanism for food and cultural resources.

From campesinos to entrepreneurs



The project's main purpose was to help insert small farmers into high value chains. Thanks to the project, new market niches were identified, including restaurants, hotels, gourmet fairs and fair trade, among others. Business plans were drawn up and roundtable discussions were held in which the producers signed business agreements and negotiated fair prices. A niche market was opened with urban consumers that reevaluated the value of biodiversity and brought greater awareness of healthy eating. National and international products and byproducts were developed and promoted with value added, such as canned gourmet potatoes, thickeners, multi-color potato chips, purees, frozen precooked potatoes and starch.

Producer organizations were strengthened and catalogues of native potatoes were generated, as well as recipes and publications on technology and post-harvest, in addition to many promotional materials about the project, which were widely disseminated.

The project also identified better alternatives to the application of highly toxic pesticides, which will lead to improved health for the producers. The technique of positive selection was implemented (enabling improvements in the yield of up to 10 to 20%) as well as the technique of aeroponics cultivation for seed production, in order to obtain improved quantity and quality of the product. Aeroponics is a variation of the hydroponic technique, consisting of suspending the growing potato in a module with the roots permanently irrigated with a nutrient solution.

Results

The project's achievements led to great benefits for the small producers. Production yield increased by 20% in Bolivia and Ecuador and 24% in Peru. In Bolivia, previously unknown varieties that had no economic benefit are now available in the local market and gourmet potatoes previously used only for self-consumption are now sold in supermarkets for up to USD 0.90/kg (ninety cents per kilo).

In Colombia, sales agreements have been reached in the industry and in the hotel sector, and in Ecuador the consortium succeeded in establishing commercial links with upscale restaurants in Quito as well as with large supermarkets. In addition, better prices were obtained (USD 0.55 per kilo for washed/packed native potatoes), indicating that consumers are willing to pay more for this type of product.

In Peru, a native potato value chain was strengthened. It involved two farmer associations, government representatives, NGOs and 18 peasant communities. Supermarkets in Lima signed agreements to sell seven varieties of native potatoes. Also, fairs were held on native biodiversity that has been institutionalized and fair-trade commercialization of potatoes with colored pulp was begun to France and was established.

Lessons learned

The experience of the institutions through the project shows that the best way to solve difficulties and generate technological innovations is participatory research with multiple stakeholders in the chain and empowerment and development of the small producers' strategic capacities for repositioning their products in the potato food chain.