

Innovation alleviating poverty in the Andes

“Scientists invent,” says André Devaux.

“We need technical innovation that goes beyond science: the creative idea plus its implementation. That’s what innovation systems are all about.” Devaux is coordinator of the Papa Andina initiative, a CIP Partnership program, that uses

innovation as its main driving force

(see Box 4). The innovation Devaux

innovation as its main driving force (see Box 4). The innovation Devaux is talking about includes many areas of intervention, from seed technology and integrated crop management to processing and marketing. "CIP doesn't have expertise in all of these areas. We have to develop strategic alliances with key partners to cover that much ground."

One such partner is the rural development group known as ADERS (Asociación para el Desarrollo Sostenible

del Perú), run by Celfia Obregon Ramirez. Obregon is particularly familiar with the plight of the smallholder farmers who produce yellow potatoes in the very high Andes, above 3,500 meters. Yellow potatoes – valued by Peruvian consumers over white potatoes for their floury texture and rich flavor – are among the very few native potatoes always available in Peru's rural and urban markets. Even so, most of the farmers who grow them live in extreme

poverty, largely because of the inequity and inefficiency in the traditional potato supply chain.

In 2002, when Obregon was considering new avenues for ADERS, yellow potatoes seemed to be a sure bet. Not only were they grown by the poorest of the poor, their potential for development was obvious. "The product is excellent, demand is good, and the prices of yellow potatoes don't drop like they do with white ones," she explains. "It

Papa Andina – what is it?

BOX 4

Papa Andina's overriding mission is to improve the livelihoods of subsistence and small-scale producers by helping them to respond to the changing political and social contexts in which they operate. Papa Andina was conceived within the new multiple actor paradigm of technology innovation. It is a "learning" project developing national capacities through collaborative learning with partners, progressively incorporating new ideas, adapting them to local circumstances and finding new ways to achieve goals. Papa Andina brings together a heterogeneous group of partners, including agricultural and development institutions, private sector stakeholders, farmers and numerous other players in the potato market chain.

Papa Andina generates synergy in research and promotes technology spillover amongst national partners in Bolivia, Ecuador and Peru. It is governed by a coordinating committee that includes representatives from the Swiss Agency for Development Cooperation, the project's major funder, CIP and the ministry of agriculture of each country. They are joined by a member of the lead institution in each of the participating countries: the PROINPA Foundation (Fundación para la Promoción e Investigación de Productos Andinos) in Bolivia, the Ecuadorian National Program for Roots and Tubers, and INCOPA (Proyecto de Innovación Tecnológica y Competitividad de la Papa en el Perú) in Peru. Two CIP staff complete the committee: André Devaux, who is based in Lima, and Graham Thiele, a social scientist who operates out of CIP's Ecuador office. Both of them coordinate the actions of the project with national partners.



At 3500
meters in
the high
Andes,...

PAPA ANDINA

was clear to me that we could make a real difference by simply marketing our product better.”

With her knowledge of potato production in Peru, Obregon chose Huanuco as the place to start. “Huanuco has the best yellow potato on the market: Amarilla Tumbay, the queen,” she explains. At the same time, Obregon’s familiarity with CIP made it clear who she should work with. “I knew that with CIP’s expertise and backing, we had a winner. So I went to see André.”

Obregon’s conviction was right. The proposal she and

CIP put together won a competition convened by INCAGRO (Innovación y Competitividad del Agro peruano), a competitive fund of Peru’s Ministry of Agriculture. Co-funding was provided by Papa Andina’s strategic partner INCOPA (Proyecto Innovación Tecnológica y Competitividad de la Papa en el Perú).

Success in San Pedro de Cayna

“It’s rewarding to see the signs of progress among you,” says Obregon two years later, to a group of producers from San Pedro

de Cayna, in Peru’s Province of Ambo, who have come together to exchange their experiences. “Your enthusiasm and determination have allowed you to make headway.”

These yellow-potato growers still use ancient methods of cultivation, rotating their crops to allow their fields to rest and using animal manure as fertilizer. Thanks to the INCAGRO-INCOPA project, the farmers have seen productivity in their fields grow by 45%, on average. The benefits are evident throughout the small community. “A few years ago



...potatoes
are part of
the diet of
all the
family

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there weren't even telephones in Cayna," continues Obregon. "Now the roads have improved and you even have your own radio station," said Obregon at the meeting.

One of the workshop participants, Pedro de la Cruz Ramirez, is also president of the Empresa Comunal de Servicios Agropecuarios San Pedro de Cayna. This producer association evolved out of a participatory research group in postharvest practices to become the trading company and service provider of the community.

De la Cruz is presenting the results of the INCAGRO-INCOPA project at the workshop. The audience includes potato farmers from nearby areas who have come to learn from their neighbors' achievements. "I'm impressed by what you have accomplished for yourselves and your community," says Leonidas Acosta Valdiviezo of Chaglla. "I'd like to do the same for my community. What is the key to your success?"

De la Cruz responds without hesitation. "In the first place, organization and planning." De la Cruz goes

on to explain that the first priority of the communal group, made up of 45 families, was to produce quality seed. They developed a seed system using disease-free material supplied by CIP's highland station in Huancayo. From there, they went on to build a distribution and storage facility, from which they are now able to sell their product directly in Lima without depending on intermediaries. This means more profits for the producers as well as much better market prices for consumers.



The Cayna producers aim to refine their knowledge and capabilities to produce starter seed and services for others in the region. "Since the project began we have learned a lot. We've had the opportunity to participate in training events here and elsewhere," explains de la Cruz. "With CIP's help, we hope to learn even more. If we can begin to supply high-quality seed to our neighbors, we can cover much more ground."

Leonardo Espinoza Ramirez has been supervising the Cayna producers. He is the manager of the producer

group and one of the new generation of potato technicians that have emerged from training programs run by CIP and its partners. As well as seed-multiplication techniques, Espinoza has taught fundamental concepts such as integrated pest control and crop planning to the farmers.

As well as technological expertise, however, encounters with other groups in the potato market chain have been crucial. "We have INCOPA to thank," says Obregon. "INCOPA and CIP." The INCOPA project, which

is coordinated by Papa Andina for CIP, has helped develop stakeholder 'platforms' made up of different groups in the potato market and supply chain, from researchers to producers to chefs. Despite their diversity, all have one thing in common: their desire to help small-scale growers improve the competitiveness of Peruvian potatoes by taking advantage of new and emerging market opportunities. They expect to do so using the participatory market chain approach (see Box 5).

INCOPA brought the

Boiling potatoes in the Andean Highlands

C. GRAVES

Cayna producers to Lima, where they met buyers in the wholesale market and the big supermarkets. The farmers understood the quality criteria behind market demand and adapted their practices to meet them.

The Cayna growers now know that it is crucial to plan their plantings to ensure that they will not be flooding the market when demand is low. They have also begun to select their potatoes, delivering them in graded, pre-weighed bags to eliminate steps in the chain that were raising costs and damaging the product from

handling. “This was possible thanks to the mutual confidence built up through the INCOPA interchanges,” says Obregon. “The people who are buying our product are sure that they are getting what they are paying for.”

Clear impact

The Cayna growers are enthusiastic about their success. They have significantly increased their average yearly family income from sales of Tumbay. Above and beyond the boost to their livelihoods, they have made gains that are far less tangible, but equally important. “We’ve had success and failures,” says de la Cruz. “But we’ve gained confidence and the community believes in us.

They have seen that our success also benefits them.”

The producers of San Pedro de Cayna are enthusiastic about the future. They are looking at new products – such as processed potatoes for purée – and are thinking about training programs that will help them share their knowledge with other farmers.

“You know it all by heart,” says Obregon, summing up the technical expertise they have gained. “With your effort, experience and enthusiasm, we can take off from here, adding value to our potatoes and giving them the value they deserve.” A brighter future for the farmers of Cayna is just beginning to unfold.

Canchan’s ability to withstand the disease has broken down.

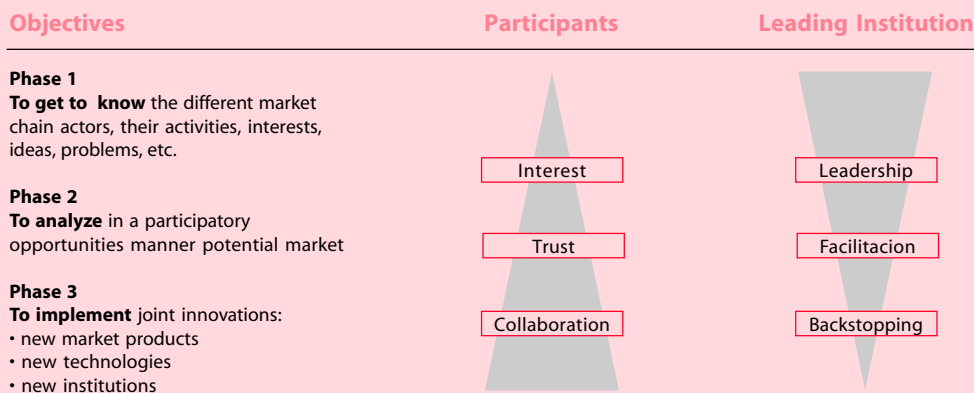
Box 5 Papa Andina's participatory market chain approach

Papa Andina's innovative participatory market chain approach (PMCA), developed in conjunction with CIP's Impact Enhancement Division, is a demand-driven research and development model that aims to identify, analyze and implement joint market opportunities through a participatory research process along its three phases of implementation.

PMCA seeks to generate group innovations in a shared decision-making process that defines and implements joint activities. Commercial innovations that bring added value to native potatoes drive technological and institutional innovations that are achieved through its implementation.

The first phase begins with diagnostic research, accomplished through extensive interviews. These interviews allow researchers to get to know and understand the key people and groups in the market chain and to understand their interests, problems and ideas. Based on this research, small working groups are then formed of members with shared areas of interest.

The working groups exchange ideas and experiences in meetings, collectively identifying and evaluating challenges and opportunities with a strong demand-oriented focus. "This is



when everyone talks about their problems,” says CIP’s André Devaux. Specialists may be called in to support the process, but the idea is that the members of each group select the problems they feel are most pressing, the best opportunities and together agree on actions to take. In the process, confidence and trust is built amongst the many people involved. “It can be summed up in two words,” Devaux concludes. “Collective learning”. In the final stage of this second phase, identified market opportunities are presented by each working group and discussed with a wider audience, which allows new people to be integrated into the research and development process.

The third and final phase concentrates on implementing the activities needed to take advantage of the market opportunities the groups have envisioned. Guided by the lead institution, with support from CIP, this process may take from three to six months. The

commercial innovations obtained may come as new or improved products or services, such as two new brands of yellow and native potato chips, ‘Papy Bum’ from Peru and ‘Lucana’ from Bolivia.

At the end of the process, the participants present the positive outcomes of their activities. More than just a ceremony, the event is actually intended to capitalize on the project’s outcomes to help the actors move forward with their initiatives. By inviting media representatives, politicians and donors, the organizers generate interest in the larger community and fuel continuing support. “The idea is that we pass full responsibility over to the actors,” says Devaux, “helping to ensure that they have what they need to sustain the innovations, of which they are now the proud owners”.

