

## Concept note: ENHANCING THE IMPACT OF RESEARCH FOR DEVELOPMENT

### I. CONTACT INFORMATION

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Organization Name	PROINPA Foundation
Organization Address	Av. Elias Meneces km 4, El Paso, Cochabamba, Bolivia
Organization Website	<a href="http://www.proinpa.org">www.proinpa.org</a>
Organization Type	Non profit, private research organization
Telephone / Fax	(591-4) 431-9595 or 431-9600
Organization description and date established	Independent foundation, created in 1998. It aims to generate, promote and diffuse technological innovations to improve the food security of Bolivian rural families and the competitiveness of productive chains of Andean crops and others.

### II. PROJECT DETAILS

Title of Proposal	Stimulating innovation through public private partnership responding to small-scale farmers needs
Project Duration using Grant Funds (in months)	24 months
Countries of implementation	Bolivia

### III. PRIMARY CGIAR CENTER PARTNER

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CGIAR Center Name	International Potato Center (CIP), <a href="#">Papa Andina Initiative</a>
Position at Center	Papa Andina Initiative leader
Telephone / Fax	(51-1) 349-6017
City	Lima
Country	Peru

### IV. OTHER PARTNERS

1. Name of other Partner Organization(s)	Through a Stakeholder Platform already established several partners will be involved in the project: ( <a href="mailto:plataformaandibol@gmail.com">plataformaandibol@gmail.com</a> )
Name and Type of Organizations	APEPA: Farmer Association ( <a href="mailto:apepasuraroma@yahoo.es">apepasuraroma@yahoo.es</a> ) Kurmi: NGO ( <a href="mailto:kurmi@entelnet.bo">kurmi@entelnet.bo</a> ) PROSUKO: Development project ( <a href="mailto:emorales@accelerate.com">emorales@accelerate.com</a> ) FONEM: Private business promotion project of Swiss Contact ( <a href="mailto:franz.miralles@swisscontact.bo">franz.miralles@swisscontact.bo</a> ) RICAFRUT: Medium scale processor ( <a href="mailto:ricafрут@hotmail.com">ricafрут@hotmail.com</a> ) DEZE: Broker/Export company ( <a href="mailto:dezelta@extremate.com">dezelta@extremate.com</a> ) ACSEX: Food processing company ( <a href="mailto:acsex@accelerate.com">acsex@accelerate.com</a> )
2. Name of other Partner Organization(s)	ESRC Innogen Centre at the Open University, London and at the University of Edinburgh
E-mail Address	<a href="mailto:J.C.Chataway@open.ac.uk">J.C.Chataway@open.ac.uk</a> and <a href="mailto:james.smith@ed.ac.uk">james.smith@ed.ac.uk</a>

## V. PROJECT QUESTIONS

### 1) PROBLEM DEFINITION:

The project seeks to stimulate innovation through the development, and analysis, of knowledge partnerships as a mechanism to respond to small-scale farmers needs in gaining better yields and access to markets for potato products in the Bolivian Altiplano.

In six communities of the districts of La Huachaca (300 families) and Escoma (200 families) in the Bolivian Altiplano (high plateau), small-scale farmers depend on native potato production for their subsistence and commercial activities, either selling their potatoes directly or processing them into Chuño or Tunta (dehydrated potato using traditional techniques). They usually sell their products to local markets or traders who commercialize them for urban markets. However, the potato crop is often affected by abiotic (frost, drought, nutrient deficiency) and especially by biotic stresses (potato weevil, diseases). Yields are low, from 3 to 6 t/ha and tubers are often damaged and of inferior quality resulting in low prices and reducing farmers' income. Farmers have limited opportunities to access the services, information and knowledge needed to improve crop productivity and to participate in new market opportunities with better added value for their products. These limitations become more important when farmers are confronted with globalization and market integration as consumers demand food of higher quality and greater variety. For these reasons, technology generation should develop sustainable agro-ecological production processes, which also meet stricter processing and marketing requirements. This innovation process will entail bringing together an array of public and private partners.

Considering that native potato varieties are a unique resource and a comparative advantage for farmers in the high Andes to participate more pro-actively in the potato market chain and access new market opportunities, the basic hypothesis is that developing market niches for native potato based products, and innovative production technologies, should improve to the incomes and well-being of small-scale Andean farmers.

### 2) OBJECTIVES:

Stimulate innovation through public-private partnership for increasing the productivity of potato based cropping systems through innovative, improved and locally adapted technologies and for improving market access for small-scale farmers with better added value products in order to raise their income and well being, taking advantage of potato biodiversity in the Altiplano of Bolivia.

#### Specific objectives:

1. Develop and adapt novel and ecological sound technologies to improve native potato production to respond to market demands taking into consideration local knowledge;
2. Implement and validate innovation systems approaches to promote interaction and collaboration among stakeholders of native potato market chain;
3. Enhance impact-oriented technological development processes using stakeholder platforms to monitor and provide feed-back to the research process;
4. Analyze the role of platforms for stimulating innovation in terms of stimulating appropriate innovations and improving the relevance of research for development and generating benefits to the partners involved.

### 3) PROJECT IMPLEMENTATION:

The implementation steps will be organized around the partnerships and technological development processes, and at the end of the project mechanisms for sharing experiences in a broader context will be developed.

#### a) Promoting innovation and collaboration through public-private partnerships

PROINPA and CIP through Papa Andina Initiative will support the facilitation of stakeholder platforms and analyze their efficiency in enhancing collaboration for an impact oriented technology development process.

1. Give support to the facilitation of stakeholder platforms<sup>1</sup> strengthening interactions among stakeholders in order to facilitate communication and create a favorable context for more efficient collaboration. This process will be based on the Participatory Market Chain Approach (PMCA) ([Bernet et al. 2006](#)) and will follow several steps:

- Actor mapping (identifying key-stakeholders) for characterization and identification of strength and weakness;
- Identification and analysis of new market opportunities for products with better added-value;
- Facilitation of interaction among actors and building the stakeholder platform to promote commercial, technological and institutional innovations;
- Monitor the innovation-development process with platform members making the required adjustments and involving new partners if new knowledge or expertise is required;
- Promote the innovations developed through public events and the media in order to enhance public and policy awareness.

2. Analyze how the platform contributes to facilitate farmers' and others public and private actors' participation to technological and commercial innovation processes, and improves the efficiency of agriculture research for responding to development needs.

The analysis will be carried out in collaboration with the ESRC Innogen Centre at the Open University (OU) and the University of Edinburgh who have already collaborated with CIP/Papa Andina in the CG Centre-CSO collaboration study. OU would host and work with a PhD student on this analysis. OU is one of the leading centers for the study of innovation and development in Europe and ESRC Innogen Centre is recognized internationally for its work in this area.

#### **b) Implementation of a technology development process**

1. PROINPA in collaboration with CIP through its Research Division on Integrated Crop Management will develop a catalog of technologies for seed production and improved crop production based on a previous analysis on crop production constraints at project sites. Technological options will include innovative approaches, such as aeroponics for seed production and microorganisms to stimulate plant growth and health, and improved traditional technologies such as use of manure, compost and biols for soil fertility management. These options will be analyzed and evaluated with farmer communities and platform members.
2. Selected technologies will be tested, modified and adapted using participatory methods involving farmers' communities in the entire development process.
3. Progress and results will be analyzed and discussed with stakeholder platform members and the feedback will be used to modify the approach/technologies accordingly, involving, if required, new partners for responding to newly identified constraints.
4. Based on the experiences and results obtained, PROINPA and local development organizations would initiate and facilitate a technology dissemination process. They would also further continue to accompany the process of technology development.

#### **c) Promoting a process of collective learning among CSO and CGIAR centers**

The project itself will represent a collective learning amongst CSO and a CGIAR center. In addition the experience gained and results achieved will eventually be shared with other

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<sup>1</sup> Stakeholder platforms are entities that provide a space for potato producers, service providers and market chain actors to come together, share their knowledge, interact and collaborate

partners in Bolivia and the Andean region using Papa Andina methodology for knowledge sharing and evaluation called [Horizontal Evaluation](#) (Thiele et al, 2006). This methodology provides practical suggestions for improvement, which may often be put to use immediately; it promotes social learning among the different groups involved and it stimulates further experimentation with and development of the methodology in other settings.

### **Status of the project:**

A stakeholder platform and some initial ecological sound technology development work exists already in six communities of La Huachaca, through the implementation of activities supported by Papa Andina. These activities jointly implemented by PROINPA, KURMI (local NGO), 300 farmer families grouped in APEPA (formal farmer organization), Papa Andina and other members of the platform “Andino-Boliviana”, started on September 2006.

Hence, in this case, the project would be a new phase of ongoing activities. The new elements for this phase would be:

- Intensified technology development using an innovative approach to solve crop production constraints, aiming at an appropriation of the development process by farmers;
- Monitoring, analysis and evaluation of the results of this process by platform stakeholders to concentrate the activities on viable and beneficial technologies to obtain desirable outcomes;
- Analyze how the platform contributes to the innovation process.

In Escoma site, PROINPA and other institutional partners are implementing activities oriented to improve the conservation and sustainable use of Andean roots and tubers. However, activities to implement a platform (or link to an existing one) and to develop ecological sound technologies have not started yet. Hence the project would implement new activities with the community.

### **4) INNOVATION:**

The project will bring together not only producers and researchers but also other stakeholders of the native potato market chain in order to create or introduce innovations based on new market opportunities identified through the application of PMCA. PMCA should help small-scale farmers to gain access to new markets and place a market value on biodiversity and their cultural heritage. Feedback from a variety of stakeholders, representing different interests, experiences and expertise will give a holistic perspective on problems to be solved, and will help in applying new and existing knowledge contributing to the identification and testing of appropriate technologies and provide feedback to relevant stakeholders.

### **5) RELEVANCE AND INNOVATIVENESS OF PARTNERSHIP:**

The partners of this project are CIP (ICM division and Papa Andina), PROINPA, public and private members of the platforms and farmers’ communities. CIP and PROINPA will be the initial driving forces developing the conceptual framework for the project and supporting collective actions through the platforms to guarantee active participation of key actors in a participatory setting. Joint decision-making, inclusiveness and knowledge sharing are the basic principles of a stakeholder platform. The platforms will contribute to develop a space for learning and innovation and help participants to gain important insights, make new interesting contacts and access new knowledge for working more efficiently together.

### **6) EXPECTED RESULTS:**

#### **Technology development process**

- Two innovative potato production technologies developed and tested with farmers;
- Farmers better understand new technologies and use them;
- Increased productivity and quality of native potato crop for Andean farmers – predictions based on experimental results.

### Public-private partnership process

- Interaction between actors of the native potato market chain and R&D organizations strengthened;
- The contribution of the stakeholder platform to improving the capacity for innovation within the native potato production and marketing system documented;
- Stakeholder platform recognized as a space for public and private partnerships to discuss and set up new R&D projects and/or new businesses;
- Two new native potato based products identified;
- Contribution of the platform to improve collaboration between R&D organizations and farmers analyzed and documented.

### Process of collective learning among CSO and CG Center

- Experiences and results of the project documented in working documents;
- A Horizontal Evaluation workshop organized to share experiences and results of these projects with partners from Bolivia, the Andean regions and CG centers.

### 7) REPLICABILITY:

The concepts and approaches tested in this project are part of already on-going activities developed by Papa Andina and CIP in the Andean region to link research and development. The experience gained through this project will allow improving these approaches by integrating new components. Adequate documentation of the processes will facilitate their application and implementation in other contexts and with other commodities in Bolivia by PROINPA, and at a wider scale in the Andean region and globally in collaboration with CIP (i.e. Papa Andina market chain approach is already being validated with CIP in Uganda).

### 8) SUSTAINABILITY:

A main idea of this project is that the function of the platform would mutually benefit the stakeholders. Sustainability will be achieved by:

- Capacity development: strengthening partner capacities in developing commercial and technological innovations to contribute to the appropriation of project's approaches;
- Empowerment of small-scale farmers: ensuring their participation in the innovation process through the stakeholder platform;
- Diversification of native potato products: better exploiting market opportunities and motivating the private sector to invest in the innovation process;
- Promotion of innovations: public events and contacts with media to encourage the public sector to support costs of services, information systems and capacity development required by stakeholders and especially small-scale farmers to become partners in innovation.

Furthermore, CIP and PROINPA will continue to monitor and support the development process, being present in the region beyond the two-year lifetime of the project.

### VI. Proposed Budget (requested and co-financed) in US\$

Personnel	78,000 + 70,000 (co-financing) = 148,000
Research supplies and services	48,000 + 0 (co-financing) = 48,000
Equipment	10,000 + 10,000 (co-financing) = 20,000
Training and knowledge-sharing activities	71,000 + 6,000 (co-financing) = 77,000
Travel	16,000 + 4,000 (co-financing) = 20,000
Communication	4,000 + 4,000 (co-financing) = 8,000
General Administrative Expenses	22,850 + 13,000 (co-financing) = 35,700
<b>Total Project Cost</b>	<b>356,700</b>
<b>Total Co-Financing</b>	<b>107,000</b>
<b>Total GRANT Funding Request</b>	<b>249,700</b>
Details of co-financing and funding sources	CIP will co-finance 52,000 and PROINPA 55,000 \$US