

Sustainable Management of Highland Resources

Sustainable management of highland resources and access to basic services for poverty reduction in alpacaraising communities in Peru

Project Informative Newsletter - Canchis Highlands PIN#3

Introduction

The purpose of our Project Informative Newsletters (PINs) is to provide regular information on the projects implemented in the Peru, as well as details of their implementation process. The idea is to improve communication with our members and counterparts as well as with other institutions and people interested in the projects, whose contributions are essential for achieving a greater impact.

On this occasion, we are pleased to present the latest bulletin on the project Sustainable management of highland resources and access to basic services for poverty reduction in alpaca-raising communities in Peru, the scope of action of which includes 22 highland communities and 9 producers' associations in the Canchis province of Cusco. The project's strategy was to encourage peasant families to manage their natural resources in an integrated manner and gain access to basic services, thus reducing their poverty rates.

This project was implemented by *Practical Action* between 2006 and 2010, in partnership with Solaris Peru and the Instituto Nacional de Innovación Agraria (National Agricultural Research Institute), with financial aid from the Big Lottery Fund, the European Commission, the McKnight Foundation and Fontagro, with a budget of US\$2,075,998.

The purpose of this bulletin is to share the main results of the experience gained in the project, providing criteria for the construction of natural resource management models applicable to other regions with similar characteristics. We have already started applying such criteria in new projects in response to future challenges, under the conviction that we can rely on your support and participation to that end.

Alfonso Carrasco Director Regional Office for Latin America **Practical Action** ractical Action began implementing the project Sustainable management of highland resources and access to basic services for poverty reduction in alpaca-raising communities of Peru in April 2006. The project covered 22 highland communities and 9 alpaca farmers' associations with more than 6,500 people in the Canchis province, situated between 3,500 and 5,700 metres above sea level. These organizations are comprised of native Quechua communities whose social and economic status is classified as one of the most vulnerable groups in Peru, given their constant exposure to extreme weather conditions, including hailstones, frost, cold fronts, heavy rainfall and droughts that occur at different times during the farming production cycle.

Implemented between April 2006 and March 2010 and aimed at encouraging peasant families to manage their natural resources in an integrated manner and gain access to basic services, the project reduced the poverty rates in the area, focusing on three components: *production*, with Kamayoq extension farmers trained in alpaca-raising and the production of improved native potatoes; *health*, providing training to improve the standard of living of the families by gaining appropriate access to safe water supply services; and *education*, improving children's access to better education in keeping with the rural context, placing emphasis on natural resource management, farming activities, safe water and basic sanitation.









Experiences in the Highlands of Canchis



With the participation of grassroots organizations, local governments and the population of the communities in the Canchis province, the project achieved the following results:

- Kamayoq Training: two promotions of 85 Kamayoqs specialising in alpaca-raising (35 men and 50 women) and 30 specialising in native potato crops. Kamayoq are peasant farmers trained to provide technical assistance services.
- **Improved Alpaca Breeding:** 535 women were trained to improve their alpaca-breeding practices: 697 good quality breeding stock to be shared by the families were introduced and 1.524 female alpacas were selected for quality reproductive management purposes; 97 alpaca shearing areas and 104 shepherds' huts were built, for the benefit of 400 families in 17 communities. As a result, alpaca fertility rates increased between 15 and 29% and birth rates between 15 and 20%. The mortality rate among baby alpacas (up to nine months) dropped between 7 and 12%. Furthermore, 854 families enjoyed the benefit of sprinkler irrigation systems. incorporating 451 hectares of cultivated pastures under irrigation.
- project promoted the organization of artisan associations, providing training on participatory productive chains and participatory surveys of market systems. Nine organizations of alpaca fibre artisans received training on marketing issues and value added factors (processing of alpaca fibre). A market opportunities group was formed, comprised of leaders of the 11 associations and communities within the project area.
- Improved Production of Native Potatoes: 470 beneficiaries of 12 communities benefitted from six business plans. Through the implementation of a revolving seed fund, 24.5 tons of native potato seeds were distributed to a total of 470 beneficiaries in 12 communities. Nine participatory experiments were held, as a result

- of which the potato yield increased from 3.5 to 6 tons per hectare.
- **Education:** 14 educational institutions formed a network of rural highland schools incorporating healthy practices; 38 teachers were trained on learning strategies in integral and logical-mathematical communication and a total of 743 children worked with educational materials related to alpaca and native potato farming activities. 14 institutional education councils were established and improved to promote the participation of parents in the schools.
- Water and Sanitation: 570 families in highland communities benefited from the construction of safe water supply systems, with the installation of 546 water fountains (546 fountains, 218 catchment areas and 26 reservoirs). Training was provided to 418 families on adequate hygiene practices and safe drinking water. 13 sanitation service management boards and a water committee in six communities are managing their water supply services in a sustainable manner and are promoting healthy family competitions.
- Irrigation Systems: 515 hectares have been adapted for irrigation, for the benefit of 1,022 families.
 62 family irrigation systems,
 82 multi-family systems and 14 integral systems were set up.
- Construction of Highland Bridges: six pedestrian bridges were built, to benefit 357 families directly and 846 indirectly, particularly primary school children.
- Communication and Information: the project placed priority on the production of communication materials. A total of 30 training videos of the project's experiences were produced, as well as a regular radio and television programme called Kamayuqkunaq yachayñin (eight radio programmes and a television programme a month) were broadcasted in Sicuani. During the last two months of the project, televised videos (reports and documentaries) were broadcasted in the city of Cusco.
- Publications: A total of 10 books were produced on the project's three components (production, health



and education). The following were some of the materials used by the project:

- A primer on appropriate alpacashearing techniques.
- A handbook on controlled alpaca mating.
- Alpaca and Ilama judging handbook.
- School textbook on alpacas for students.
- Teaching cards on alpacas for students.
- Ludo on alpacas for students of Grades.
- School textbook on native potatoes for students.
- Teaching cards on native potatoes for students.
- Ludo on native potatoes for students.
- Two recipe books for cooking with native potatoes.
- Primer on the preparation and use of biol.
- Canchis native potato catalogue.
- Project systematization.

Practical Action

Soluciones Prácticas in Latin America

Practical Action is an international technical cooperation organization that contributes to the sustainable development of poor populations through research and the application and dissemination of appropriate technologies.

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