

Gender Analysis for the Assessment of Innovation Processes: The Case of Papa Andina in Peru

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SYNOPSIS OF PROJECT DATA

Project name:	Papa Andina
Country/region:	Papa Andina works through a range of strategic local partners in each country: the PROINPA Foundation (Bolivia); the National Potato Program, INIAP (Ecuador); and the INCOPA Project (Peru) ¹
Starting date:	Papa Andina (1998); Peru PMCA (2001)
Closing date:	Ongoing
Project financing:	Initially Swiss Agency for Development and Cooperation; also New Zealand Aid Programme, McKnight Foundation
Implementing agency:	Partnership Program hosted by the International Potato Center (CIP)
Website:	http://www.papandina.org/

CONTEXT

Across the Andean region, small-scale farmers face the challenge of gaining access to dynamic new markets for high-value produce while remaining resilient amid the forces of climate change and globalization. The Papa Andina regional initiative, anchored in the International Potato Center (CIP), promotes innovation that leads to the development of market niches and value addition, particularly for the native potatoes grown by poor smallholders in Bolivia, Ecuador, and Peru (box 7.22). The assessment of gender issues plays a critical role in Papa Andina's two principal approaches to engage market chain actors: the Participatory Market Chain Approach (PMCA) and stakeholder platforms (see also TN 1 and IAP 1 in module 4):

Box 7.22 New Market Niches and Value Addition for Small-Scale Growers of Native Potatoes in the Andes

Papa Andina led to the creation of T'ikapapa, the first commercial brand that supports the sale of native potatoes under strict quality standards. T'ikapapa connects small-scale potato farmers in the Andes with high-value niche markets in urban centers, exports its products to other countries within the region such as Venezuela, explores potential European markets for high-end potato products, and partners with an increasing number of nongovernmental organizations and private operations to further promote native crops.

Source: Author.

- **The PMCA** is based on the participatory approach to stakeholder collaboration in agricultural R&D known as Rapid Appraisal of Agricultural Knowledge Systems (RAAKS; see also box 7.11) (Engel and Salomon 2003). The PMCA fosters commercial, technological, and institutional innovation through a three-step process that builds interest, trust, and collaboration among participants, improves farmers' links to markets, and stimulates pro-poor innovation.
- **Stakeholder platforms** (see also TN 2 in module 1) are spaces and events where public and private stakeholders interact, share reciprocal interests, build trust, and join in common initiatives. Often such platforms are developed as a result of PMCA and continue after the approach has been implemented; in other cases, the PMCA works through platforms that already exist.

Both the PMCA and stakeholder platforms facilitate the articulation of demand and supply for innovation-linked services and reduce transaction costs in marketing the produce of many small farmers (Bernet et al. 2008). In the Andes, PMCA has been validated in two complete cycles, both in Peru and Bolivia (2003–04). The method has been shared with other organizations in these countries, which has led to further testing. In Peru, the Intermediate Technology Development Group, an international NGO, subsequently used the method in the cheese, coffee, and cacao subsectors. Starting in 2005, PMCA was introduced and tested in potato, sweet potato, and vegetable commodity chains in Uganda.

OBJECTIVES AND DESCRIPTION

A key feature of Papa Andina is that it brings together many participants in the AIS, including smallholders, market agents, and agricultural service providers, many of whom did not know one another or who actively distrusted one another, and helps to identify new opportunities for all of these stakeholders to collaborate and innovate. Papa Andina recognizes that gender analysis and female farmers' active involvement in assessing innovation processes and systems are central to developing sustainable, profitable agricultural market chains that are well integrated into the wider innovation system. In turn, this system-level integration is important for gender equality and the empowerment of resource-poor women and their families.

Each phase of the PMCA incorporates specific gender-related assessments and activities (table 7.10). Flexibility in the duration of each phase and in the use of specific tools (quantitative surveys, focus groups, and so forth) is necessary (Bernet et al. 2008).

INNOVATIVE ELEMENT

From a gender perspective, Papa Andina has three innovative elements. *The first innovative element* is that the PMCA and stakeholder platforms enable women to share their findings and customs with other members of the AIS through events and activities that highlight women's knowledge of genetic diversity. When women participate in events such as family competitions, their roles in the farming household, the wider community, the market chain, and the AIS are recognized and reinforced (box 7.23).

The second innovative element is that the empowerment of women farmers has resulted in systemic changes.

Through the PMCA, women's involvement and the involvement of different groups of women are systematized in the following ways:

- **Representation.** Smallholders, female and male, representing their communities at events return to their communities and share their findings and innovative ideas.
- **Replication.** Initial farmers, now acting as representative farmers, work with R&D partners to replicate knowledge-sharing events and activities with more farmers in their area who grow native potatoes. For example, a woman farmer in Puno shared information with representatives of 12 communities in the Lake Titicaca basin. In this way, innovative ideas for making coffee from dried potato and adding value to freeze-dried potato products spread to at least 10,000 farmers in those areas.
- **Communication and recognition.** Native potato product ideas and technologies were also shared between women farmers in Peru and women's groups and R&D institutions in Uganda, Bolivia, and Ecuador (Horton 2008; Kaganzi et al. 2009).

The third innovative element is that Papa Andina purposefully demonstrated the value of women's involvement in the AIS. The initiative showed that it is possible to involve resource-poor women farmers as key stakeholders in the potato value chain; the participating R&D institutions demonstrated the value added by gender analysis and investing in women's innovation; and the donor agencies played an important role in establishing the need for gender assessment and the integrated involvement of women farmers in R&D as key stakeholders.

BENEFITS, IMPACT, AND EXPERIENCE

A number of gender-related benefits, impacts, and experiences are linked to each of the three phases of the PCMA and to the stakeholder platforms. In *phases 1 and 2*, experiences with gender assessment and gender-related activities in organizing the PMCA and stakeholder platforms have shown how to foster the organization of female and male farmer groups based on common interests and resources. Organizing enables farmer groups to consider the economic feasibility of production and marketing issues beyond the household level. The groups can build their human and social capital to access platforms where support is available from R&D and government institutions as well

Table 7.10 Phases of the Participatory Market Chain Approach and Gender Assessment and Related Activities in Each Phase

Phase	Overall activity ^a	Gender-related assessment and activity
Stakeholders identified Phase 1: 2–4 months	<ul style="list-style-type: none"> – Get to know the market chain actors and other stakeholders—their activities, interests, ideas, problems, and so forth: Step 1: Conduct a 3- to 6-week rapid assessment of the market chain and identify key stakeholders. Step 2: Hold a one-day workshop to define impact groups using the impact filter. Step 3: Hold a final event for phase 1 to share information and secure stakeholders' continued involvement. 	<ul style="list-style-type: none"> – Integrate gender sensitivity training into R&D organizations as they begin their stakeholder identification activities. – Include women farmers as a stakeholder group in the rapid assessment of the market chain. R&D partners, including investors, reinforce the need to address women's specific needs in PMCA. – Initiate family and community competitions for innovation to recognize women's contribution to the value chain (box 7.23). – Among the stakeholders, identify women's groups and male and female leaders who support gender equity and empowerment; encourage them to highlight or discuss issues and benefits for women farmers in workshop events.
Stakeholder platforms engaged Phase 2: 3–5 months	<ul style="list-style-type: none"> – In a participatory manner, analyze potential business opportunities; work in thematic groups of 10–20 persons; establish new stakeholder platforms or strengthen existing stakeholder platforms; R&D organization involved provides facilitator to assist groups. – Using the following tools, each thematic group analyzes potential business opportunities: rapid market appraisal; quantitative market survey; focus groups. 	<ul style="list-style-type: none"> – Platforms bring together female and male small-scale farmers from different communities in the region, market agents, and agricultural service providers to share findings and customs, with support from R&D institutions. Many of these stakeholders will be unfamiliar with each other. – Identify and involve NGOs engaged in related gender analysis and women's empowerment programs. Their involvement may be the key to the success of these platforms. – Gender equity (participation of women representing different ages, classes, and ethnic groups) is included in the platforms and in the selection criteria for the thematic groups.
Implementation of joint market innovations Phase 3: 4–6 months	<ul style="list-style-type: none"> – Implement joint market innovations: work in thematic groups of 10–20 persons; R&D organization involved provides facilitator to assist groups. – Each thematic group uses marketing concept development and business plan to test or implement, monitor, and evaluate their innovations. If necessary, phase 2 activities can be revised (for instance, by adding focus groups to clarify consumer preferences). 	<ul style="list-style-type: none"> – Analyze continued knowledge sharing by women farmers and gender roles and relations within the stakeholder platforms for further technical and institutional innovation at the national and international levels. – Women and men continue to participate in fairs and events outside their communities (regional and national) to demonstrate their knowledge and stimulate participation in stakeholder platforms. – R&D partners monitor/evaluate how individual women farmers have gained confidence to join new and extended networks and to exchange varieties cultivated in other areas of the Andes. – R&D partners monitor/evaluate how male and female farmers have gained individual and collective capacities and skills for communication, negotiation, facilitation, and teamwork. – Encourage ongoing discussion within the project of how market chains empower disadvantaged farmers who otherwise have little opportunity to participate and make decisions. – Encourage ongoing discussion within the project of how women have the chance to interact with other market chain actors and professionals from R&D organizations, thereby increasing their access to knowledge, innovation, contacts, and self-development.

Source: Author.

a. The activities in each phase of the PMCA (described in detail in the “User Guide”; see Bernet, Thiele, and Zschocke 2006) occur consecutively over 9–15 months.

Box 7.23 Innovation Fairs to Assess and Recognize Women's Contributions to Market Chains and the Agricultural Innovation System

Every family and community in the high Andes has developed its own varieties of native potato. Seed of native potato varieties is usually obtained by inheritance, barter, or as a gift. The PMCA partners support local, provincial, regional, and even national fairs—public events where farmers (men and women) have a chance to demonstrate the varieties they prefer to select, store, cultivate, harvest, process, consume, and market. These fairs are opportunities for communities and farmers to highlight the enormous diversity of potatoes they use and explain how they have managed this native potato biodiversity over time. The participants may exchange seed or buy tubers from one another at these fairs.

Fairs represent an excellent opportunity for farmers to obtain information from one another as well as from R&D partners. In most cases, wives accompany their husbands to the fairs, because women are the farm household members with the best knowledge of the morphological and qualitative characteristics of each potato variety. Family collections can be extensive: A small-scale farming family at one fair presented more than 600 varieties. Women farmers report that the fairs enable them to feel rewarded and recognized for their efforts in preserving and maintaining the extraordinary biodiversity of native potatoes.

Source: Author.

as NGOs. This support can also entail technology transfer to farmers and opportunities to fine-tune technologies to specific conditions.

In *phases 2 and 3*, thematic groups use communication and collaboration to address and break down traditional gender roles, divisions of labor, and power relations. Recognizing women's role in the selective breeding of native potato varieties in different ecosystems and their detailed knowledge of different potato phenotypes helps to counteract gender bias. Communication activities, including the innovation fairs, focus on how Andean women have cultivated native potatoes. These activities enable women to

bring their large store of knowledge to bear on the innovation process for native potato.

In recent years, women farmers in some regions of Peru have established profitable businesses supplying native potatoes to national and/or international markets. Messages about women's advancement in marketing chains and innovations have been highlighted in public-private R&D partnerships and corporate social responsibility commitments involving such companies as Pepsi-Co and its subsidiary, Frito Lay.² New products marketed by some companies have used the image of an award-winning female farmer. These examples have been reported to the author as motivating female producers to participate in the native potato market chain.

LESSONS AND ISSUES FOR WIDER APPLICATION

Several gender-related lessons have emerged from Papa Andina. Donor priorities were an important contextual consideration for incorporating gender assessment in the native potato innovation system. Donor agencies' initial proposal development and planning criteria for gender, empowerment, and working with NGOs stimulated the requirements for gender assessment and the integrated involvement of women farmers in R&D as key stakeholders. As a result, "researchers and NGOs that have worked with Papa Andina are more aware of gender issues and the need to achieve impact at farmer level" (Devaux et al. 2010).

In some cases, the benefits of traditional and newly developed innovations generated by the stakeholder platforms remain highly localized. For example, with support from USAID, one farming community sold a local variety of potato known as "Capiro" to Frito Lay to produce potato chips for the domestic market (the company had previously imported potatoes from Colombia). Farmers earned more than US\$1.6 million in sales, but this success cannot be replicated easily because the domestic market for snack foods is limited. Farmers are also cautioned not to regard this success story as an inducement to grow just one variety of potato. The maintenance of potato diversity remains central to the innovation system and its stakeholder platforms. Although female farmers, especially indigenous women farmers, have brought a wealth of experience to market chains and agricultural innovation, women farmers often struggle to ensure that their knowledge benefits themselves, their families, and their communities. Investment strategies that establish networks of information and knowledge sharing can increase the impact of locally developed and innovative practices

and strengthen the abilities of women and their communities to meet their agricultural and economic needs in a culturally appropriate and environmentally sensitive manner.

Despite women's critical role in the potato market chain, subsistence production, in which women are usually involved, receives less institutional support than cash crop production. The number of female extension officers in public extension systems is very limited (although the only NGO working in the high Andes, Fovida, provides a few female agents). As a result, resource-poor women farmers are less likely than their male counterparts to receive agricultural extension services. Forming links to NGOs within phases 2 and 3 of the PMCA is important to strengthening the innovation system in this regard.

Aside from these relatively specific lessons, Papa Andina offers a number of more general considerations about the successful integration of women into any AIS:

- **Assess the entire system and individual agrifood value chains using a mainstreaming approach that includes the use of gender analysis to recognize women's role and gender relations in production and decision making.** Indispensable tools for gender analysis in innovation assessment are gender-disaggregated data; analysis of women's and men's access to resources such as labor, land, capital, and knowledge; and the engagement of women in capacity-building activities.
- **Ensure that the full range of women's and men's activities, resources, and benefits is reflected in the assessment**

of the innovation system and the continuing activities of the stakeholder platforms.

- **Through networking provided by the stakeholder platforms, identify suitable technological and institutional innovations.** In particular, review the suitability of technologies or institutional arrangements available in other market chains that have become successful and sustainable for women farmers.
- **Identify and respond to socioeconomic factors that may affect the adoption of proposed technological or institutional innovations** (for example, security of resources; tenurial arrangements for land or water; access to inputs such as credit, seed, and fertilizer; and membership in producer groups). Identify activities that are particularly time- and/or energy-consuming for women and address them with targeted investments and supporting interventions.
- **Increase and sustain the supply of information, technologies, and facilities that women may fail to access because of social exclusion** (examples include market information, transport, appropriate tools and equipment, and so forth).

Papa Andina illustrates the centrality of gender issues in sustainable and inclusive agricultural development and the effectiveness of the AIS as a whole. Gender assessment and strategies to ensure the participation of women in value chains are important tools to identify the strengths and diversity of actors in innovation systems. R&D institutions play an especially important role in ensuring that innovation benefits small-scale male and female farmers.