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The Participatory Market Chain Approach: Stimulating pro-poor market-chain innovation

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Innovation in the food and agriculture sector is frequently short-circuited by a lack of trust and communication between actors in the market chain. To overcome these problems and stimulate innovation, the Participatory Market Chain Approach (PMCA) brings together small farmers, market agents, and service providers for an intense process of facilitated interaction. The PMCA uses a flexible three-stage participatory process to improve communication, build trust, and facilitate collaboration among participants so that they can jointly identify, analyze, and exploit new market opportunities.

The PMCA focuses on innovation in products, technologies, and ways of working together. By carefully selecting market chains and partners, and building in social responsibility, the PMCA can lead to favourable outcomes and impacts for poor farmers, typically the weakest link in the chain. The PMCA requires facilitation and technical support from professionals with good social skills, research experience, and marketing knowledge, based in a neutral research and development organization. To ensure that impacts are sustained, the PMCA is best used as part of a broader programme of market chain development.

Introduction

Food systems are evolving rapidly in developing countries. Supermarkets and sales of packaged food are expanding fast, impacting on production and the marketing practices and livelihoods of small farmers. There is a new consensus that agricultural research and development (R&D) should help small farmers link up with profitable markets. The Participatory Market Chain Approach (PMCA) was developed to address this need. The PMCA differs from other market chain approaches because of its focus on stimulating innovation and long-term partnerships among farmers, market agents, and service providers. It pays particular attention to engaging private sector actors, who are critical in identifying and making use of new market opportunities.

The PMCA was developed by the Papa Andina Initiative and its partners, the Foundation for Promotion and Research on Andean Crops (PROINPA) in Bolivia, and the project for Technological Innovation and Competitiveness (INCOPA) in Peru, to improve the competitiveness of small potato producers in the Andes. The Papa Andina Initiative was keen to address one of the principal constraints to agricultural innovation: a lack of trust and knowledge sharing among different actors in the market chain. So, in 2003, Papa Andina carried out a 'Rapid Appraisal of Agricultural Knowledge Systems' (Engel and Salomon, 1995) in Peruvian potato market chains. Based on this experience, the PMCA was developed to facilitate pro-poor market chain innovation. A key feature of the approach is that it brings together small farmers, market agents, and agricultural service providers who don't know each other or who distrusted one another (Bernet et al., 2006).

This Brief should interest R&D professionals wanting to help small farmers participate in dynamic markets. And, it provides useful information for donor agencies looking for more effective ways to intervene in market chains to reduce poverty and promote sustainable development.

The method

The PMCA has three phases, each with its own objective (Figure 1, *overleaf*). This generic structure should be tailored to local conditions.

The PMCA engages those who make their living from a market chain ('market chain actors') and public and private service providers (researchers, credit providers, and development workers). It facilitates group processes in which market opportunities are identified and assessed, and innovations developed.

Three types of innovation may result:

- *Commercial innovations*, such as new or improved products
- *Technological innovations*, such as new production or post-harvest practices
- *Institutional innovations*, such as new ways for small farmers to work with market agents or service providers.

Experience with the PMCA in different countries indicates that it is sufficiently robust and flexible to help facilitate pro-poor innovation in many different types of market chain, and under a range of different geographical, social, and economic conditions. However, the PMCA should be led by skilled facilitators, belonging to a neutral R&D organization, who must pay careful attention to creating tangible benefits for actors participating in the process.

Considerations for applying PMCA

Using the PMCA entails a holistic way of thinking about farming, marketing, and innovation, and a willingness to conduct joint R&D activities with partners in the market chain. Diverse stakeholders – with different interests – are involved, so good facilitation is key for building collaboration and trust.

Ideally, the R&D organization that takes on this facilitating role should have the following characteristics:

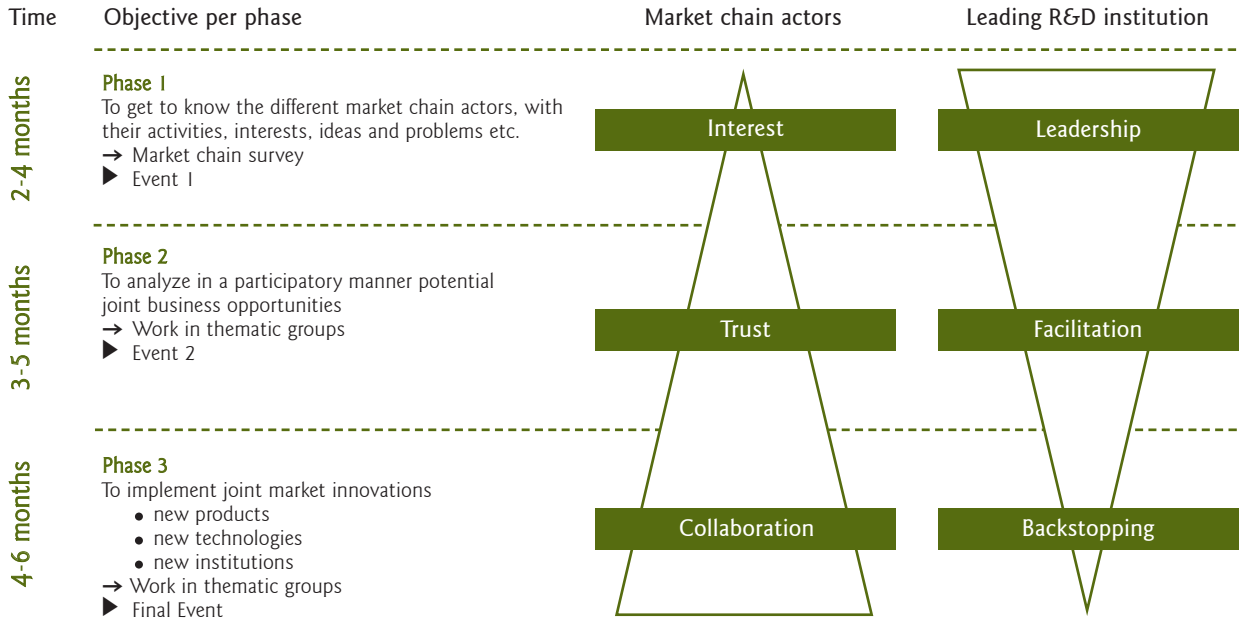
- Skilled PMCA facilitators
- A strategic vision to guide the overall process
- An openness to engage with private sector market actors
- Sufficient independence from any particular group of market actors (i.e. a neutral facilitator)
- Flexible funding to support different types of activities identified in the R&D process.

If these characteristics are lacking, the R&D organization involved can progressively build its capacities by using the PMCA over a period of time. During this period, an experienced PMCA practitioner and trainer should provide support and mentoring.

It is important to identify a market chain where the PMCA promises good results. This is generally where there are:

- *High transaction costs and potential to reduce these through innovation.* A market chain completely dominated by a

Figure 1: Structure and objectives of the three phases of PMCA



single monopoly purchaser, for example, does not offer such an environment.

- *Potential for product differentiation and adding value.* A market chain for a low-value commodity with limited potential for improvement or processing may be a poor choice.
- *Good prospects for accruing substantial benefits for poor and primarily poor producers.* For example, in the Andes, we compared different market opportunities for potatoes and concluded that native potatoes grown by small farmers in highland areas offered the best prospects for the poor.
- *Long-term interest and commitment of facilitating R&D organizations in the market chain.* The PMCA is most appropriately applied as part of a broader and longer term programme for market-chain development.

Planning for the PMCA requires considerable administrative flexibility. As the PMCA is used to stimulate innovation processes; specific activities are impossible to predict at the outset. They emerge from the participatory process itself, driven by opportunities identified by the private and public actors involved. It is not advisable to begin using the PMCA until adequate funding has been secured. Whilst costs vary from case to case, an average cost for one application – taking about 12 to 16 months – is in the order of US$25,000–30,000, in addition to staff time provided by participating R&D organizations. A substantial commitment is needed from the facilitating organization with at least one person assigned for 50% of their time during the PMCA.

Partners might be able to share costs and, as the project generates encouraging results, it may be possible to leverage further investment, both from market chain actors and interested donors. However, ensuring continuity in innovation processes and engaging small farmers in new marketing activities might require additional long-term funding (see *Follow-up*).

Applying PMCA

The PMCA involves three phases with specific objectives and activities. Each phase ends with an event where results are presented to and discussed with a wide group of stakeholders (Figure 1).

The R&D organization that facilitates the PMCA (the *facilitator*) initiates the process by identifying key market chain actors and supporting organizations. It carries out exploratory, diagnostic market research to get to know these actors and their activities, problems, and priorities (PMCA Phase 1). This is the basis of forming 'thematic groups' that focus on the market opportunities which have been identified. Facilitators lead group meetings to analyze market opportunities (PMCA Phase 2) and to carry out R&D activities needed to develop specific innovations (PMCA Phase 3).

As the participatory process advances, from Phase 1 to Phase 3, the facilitator progressively hands over responsibilities to market chain actors. It is important that these actors take ownership of the innovations by the end of the PMCA process, when all innovations are presented to a wide audience in a final event.

Making demonstrable progress with market-chain innovations helps keep market chain actors motivated and actively engaged throughout the PMCA application. For this reason, its is essential that there is early progress in generating visible outputs for which the group feels responsible, and that the whole process is completed within a reasonable amount of time – 14–18 months at most.

Phase 1: Familiarization with the market chain and key actors

PMCA Phase 1 begins with a rapid market survey that includes 20 to 40 semi-structured interviews including key representatives of each stage of the selected market chain. These interviews allow the facilitator to get to know the different market chain actors and their activities, interests, problems, needs, and ideas for improving the chain's competitiveness.

All this information is presented at a first event, at the end of Phase 1, where the interviewees and others with a stake in the market chain discuss the survey results. Participants then form thematic groups to begin identifying and exploiting potential market opportunities.

Phase 2: Joint analysis of potential business opportunities

Those actors interested in continuing the interactions are invited to participate in 6 to 10 thematic group meetings during Phase 2. R&D professionals plan and facilitate these group meetings, which should each involve 10 to 20 stakeholders, to ensure active participation and group decision making. The objectives of these meetings are to clarify and evaluate market opportunities and to develop a work plan for exploiting these opportunities in Phase 3.

In the process of identifying and specifying the most promising

market opportunities – from the point of view of those involved and from a development perspective (i.e. potential for poverty reduction) – the facilitators build mutual learning and trust among participating actors. Facilitators also seek to empower participating small farmers by giving them a voice in the decision making process. To support thematic groups' work and decision making, the facilitators may arrange for technical or market studies. At the final event of Phase 2, each thematic group presents its results and a work plan for exploiting the identified market opportunities during Phase 3. Moreover, this event is used by the facilitating R&D organization to engage new actors in the R&D process. These new actors bring knowledge and capacities to complement that of the existing groups to help the project move ahead with innovation in Phase 3.

Phase 3: Development of market-chain innovations

Phase 3 concentrates on the activities needed to develop the innovations proposed by the groups in Phase 2. Such activities may include: product development, improvement of production and marketing standards, or the creation of new working arrangements (e.g. partnerships or contract farming). The time taken to develop the different types of innovation will depend on the time and resources participants can dedicate to the process, and also on the complexity of the problems to be solved. However, to keep motivation and participation at high levels, facilitators should try to finish all Phase 3 activities within a period of 6 months (continuing to meet every two to three weeks). The PMCA process finishes with a final event, where participants present their innovations to a wide group of invited guests, including such 'VIPs' as national policy makers, donor representatives, and the media.

Follow up

The PMCA should initiate a process of innovation that continues after its final event. Often, it leads to the creation of a more permanent platform for coordination between farmers and other market-chain actors. Small farmers, in particular, are likely to need additional assistance in organizing themselves, improving production practices, and developing business activities. Hence, the PMCA is best used as part of a broader programme of market chain development.

In the follow-up period, the facilitating organization assumes a different role, responding to demands from market-chain actors to help consolidate their innovations. Such follow up is particularly necessary where new institutions, created during the PMCA process, require external support to become fully consolidated. To sustain interaction and collaboration initiated during the PMCA process, and to involve new partners, market-chain actors may set in place 'multi-stakeholder platforms' (Devaux et al., 2007), broadening their scope for innovation.

Applications of the PMCA to date

The PMCA was first applied in 2002 in Peru to the potato sector, triggering commercial, technological, and institutional innovations (Box 1). In 2003, the Papa Andina Initiative replicated the PMCA elsewhere in Peru to validate and fine-tune its concepts and procedures. First applications focused on native potatoes grown by small farmers in the high Andes. This led to a marketing concept for selected native potatoes: attractive bags of potatoes sold in supermarkets as the gourmet product, 'Tikapapa'. This product, launched in Lima's leading supermarket chain, has received considerable media attention and has won prestigious national and international awards, including the World Challenge Award in 2008 (www.theworldchallenge.co.uk).

In 2003, Papa Andina shared Peru's PMCA experience with partner organizations as part of a 'Horizontal Evaluation' exercise (Thiele et al., 2006). As a result, PROINPA Foundation staff decided to apply the approach in Bolivia. By applying the PMCA, farm communities developed commercial partnerships with potato processors and supermarkets, making native potato products available to consumers in Bolivia's principal cities.

In 2005, local groups promoting market chain development in Uganda visited PMCA projects in Bolivia and Peru and subsequently applied PMCA in commodity chains for potato, sweet potato, tomato, and hot pepper. In each case, PMCA triggered product development and improved relationships among market-chain actors and R&D professionals. This has led to improved collaboration in other activities as well (Horton, 2008). More recently, the PMCA has been used in potato, coffee, and dairy market chains in Bolivia, Peru and Colombia, and for potatoes in Indonesia.

Box 1. First application of PMCA in Peru

In 2002, Papa Andina's main partner in Peru, INCOPA, began to use PMCA to enhance the competitiveness of small-scale potato farmers in Peru. The following activities were carried out during the three phases of PMCA:

PMCA Phase 1

An initial market chain survey included interviews with 24 individuals from different stages in the potato market chain, and supporting organizations, including non-governmental organizations (NGOs), the national agriculture research institute, and the Ministry of Agriculture. At the final event of Phase 1, nearly 100 stakeholders from the potato sector were present: market-chain actors, researchers, development workers, and representatives from the Ministry of Agriculture. After the presentation of the survey results, three thematic groups were formed to explore potential innovations relating to: (1) fresh potatoes, (2) processed potatoes, and (3) export potatoes.

PMCA Phase 2

Because of similarities between the issues raised for export potatoes and those for processed potatoes, these groups were merged, leaving two thematic groups for Phase 2. These groups centred their discussions on identifying and clarifying market opportunities for each step of the product marketing chain. The 'fresh potatoes' group rapidly agreed to create a marketing concept for selected potatoes that would be sold wholesale in standardized bags. The 'processed potatoes' group was motivated by a processor's investment interest to focus on developing a new potato chip using native potatoes.

Once they had identified initial market opportunities, the groups shared information and took joint decisions to fine-tune their ideas. To obtain important additional data, the processed potatoes group hired experts to carry out processing trials and to conduct a market study for potato chips in Peru.

At the final event of Phase 2, the groups presented the innovations they proposed to develop during Phase 3. New actors with complementary skills were invited to join the groups.

PMCA Phase 3

Activities became more practical during this phase. Researchers from the International Potato Center (CIP) helped the processed potatoes group to conduct trials using the facilities of a processing firm. Focus group research explored the potential market for native potato chips. The fresh potatoes group formed sub-groups to tackle specific tasks in parallel: for example, different packaging options and collaborating with a wholesale marketing group to design market information products.

Continues overleaf...

All the innovations were launched at the PMCA final event, attended by around 200 people including officials from the Peruvian government and the media. A series of stands representing the different links in the market chain visually presented innovations created by each group:

- A 50-kg branded wholesale potato bag (compared to traditional unlabelled bags of up to 130 kg with potatoes of mixed calibre and quality)
- A potato grader
- Market information bulletins
- Yellow native potato chips
- CAPAC Peru, a market chain association that would own and supervise the brand applied on the standardized potato bags as a means to promote the commercialization of quality potatoes within Peru.

Follow-up

INCOPA's role changed as it started to help project partners consolidate their innovations (e.g., launching yellow potato chips and standardized potato bags). Special support was provided to CAPAC Peru, considered to be a promising multi-stakeholder platform for promoting continuous collaboration among market-chain actors and an advocate for structural and institutional change in the potato sector. The positive experience with PMCA encouraged the INCOPA team to use the method again, focusing on market opportunities for native potatoes.

The social capital created in Peru as a result of the two PMCA applications led to the establishment of Peru's *National Potato Day*, celebrated annually since 2005 on May 30th. This annual event, which stimulates private and public promotion activities and media coverage in favour of the potato sector, inspired the Peruvian authorities to ask the United Nations to declare 2008 the *International Year of the Potato*.

Strengths and limitations of the PMCA

The PMCA not only stimulates innovation, but strengthens capacities for innovation within market chains. PMCA participants learn a great deal about the market chain and gain useful skills for communication, negotiation, facilitation, and teamwork. Positive interaction with other market chain actors also fosters social learning and the development of social capital, enabling market-chain actors and R&D professionals to collaborate effectively in other areas in the future. Participation in the PMCA empowers those involved, including low-income farmers, merchants and processors. It gives them a voice in discussions involving both market chain actors and R&D professionals, and allows them to gain knowledge, contacts, and the self-confidence to negotiate better agreements in the future.

The PMCA does have some limitations. Sometimes innovation processes are more complex than originally envisaged and an extended period of follow-up is required to generate successful innovations with tangible benefits. Farmers may require complementary capacity building (for example in organization and enterprise development) if they are to make full use of the opportunities created by the PMCA.

As innovation processes grow to involve a broader group of actors, it may be difficult to ensure that benefits flow mainly to the poor. For this reason, it is important that social responsibility is kept at the top of the agenda when developing marketing concepts and products with the private sector. In addition, the PMCA requires administrative flexibility. This may raise issues that are out of the control of the facilitating organization, which might be bound by regulations of the host government or donors. Here, broader engagement may create a more enabling environment for the PMCA. Finally, whilst many organizations and actors have benefited from using the PMCA, institutionalizing the approach remains a challenge. For this reason, we are now developing a programme for PMCA capacity development.

Further reading

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About the authors

The authors have been involved in developing and applying PMCA as part of the Papa Andina Initiative's activities in Peru, Bolivia and Uganda with support from the Swiss Agency for Development and Cooperation (SDC) and the United Kingdom's Department for International Development (DFID). Since 2005, they have also been actively involved in PMCA training activities in Colombia, Uganda, Laos, Nicaragua, and Indonesia. For further information, contact t.bernet@cgiar.org.

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