

Value-chain development in Uganda: lessons learnt from the Participatory Market Chain Approach (PMCA)

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Abstract

In Uganda and elsewhere, smallholders face barriers hindering their effective participation in dynamic markets. These include financial capital, business skills, organisation and market intelligence. The International Potato Center (CIP) developed the Participatory Market Chain Approach (PMCA), which increases trust, confidence and linkages among chain actors, stimulating innovations and improving market access for smallholder farmers. Through South–South collaboration, PMCA was applied in the potato, sweetpotato and vegetable chains in Uganda in 2007. The present CIP study assesses results of PMCA in Uganda in the context of a global study of PMCA applications. Interviews with chain actors, facilitators, researchers and policymakers indicate that PMCA contributed to knowledge and skills, social networks and capacity to innovate. Chain actors generated commercial, technological and institutional innovations. Some, such as tomato sauce, remained in the prototype phase; others, such as the orange-fleshed sweetpotato crisps, gained commercial viability but disappeared from the market; while others, such as the vegetable appetiser, are present in the market. PMCA stimulated “second-generation” innovations that improved the original ones. The social networks developed have facilitated business development. Women farmers improved their access to markets and earnings, and acquired productive assets, including land. Several organisations have used the PMCA in training, curriculum development and market-chain development. Notably, Uganda’s Ministry of Agriculture has adopted the value-chain approach in its Development Plan. Emerging lessons include need for: business development support after PMCA; synchronising production to demand; and a “seed” fund to support emerging innovations.

Keywords: *value-chain analysis, market chain, social capital, networks, innovation*

Introduction

Agricultural markets play an important role in the economy and livelihood of rural people in developing nations. In the economy of Uganda, agriculture accounts for over 20% of GDP (Uganda Bureau of Statistics 2009) and employs three-quarters of the labour force (Republic of Uganda 2010). The sector is weakly integrated with other sectors such as manufacturing (Juma 2011), as shown by farmers’ inability to respond effectively to market demand. Market intermediaries and other chain actors, on the other hand, are frustrated by high transaction costs, small volumes and uneven quality of supplies of agricultural produce, which hamper their operations. This is detrimental to the growth and development of agricultural markets.

Two broad strategies have been proposed to remedy this situation: i) strengthening relations between the value-chain actors; and ii) strengthening standards, regulations, policies and services to coordinate and support trading activities (KIT & IIRR 2008). In this quest, the

Participatory Market Chain Approach (PMCA), a structured method that focuses on bringing diverse market-chain actors together to stimulate commercial, technological and institutional innovations (Bernet *et al* 2005, 2008) was introduced in Uganda in 2005 (Horton *et al* 2010). PMCA was applied to the potato, sweet potato and vegetable chains with reasonable success. This paper examines the results of applying PMCA in Uganda over the past seven years.

Materials and methods

In keeping with the participatory nature of PMCA, the study was designed and conducted as action research. It draws on a number of information sources, including project documents, key-informant interviews, participatory review workshop reports and direct observations. During this follow-up study in 2011, the authors visited marketplaces and interviewed 18 market-chain actors, PMCA facilitators and other stakeholders to obtain information on:

- Activities carried out by facilitators, market-chain actors and others to develop innovations or promote the development of market chains;
- Results achieved, with particular attention to changes in knowledge, attitudes and skills; commercial, technological and institutional innovations; inclusion, empowerment and wellbeing; institutionalisation of PMCA; and prospects for the future;
- Lessons learnt that could improve future applications of the approach.

Main results

The PMCA exercise generated a number of results, including new knowledge, skills, social networks, capacity to innovate and rounds of innovation that continue until today.

Commercial, technological and institutional innovations

PMCA focuses on generating commercial innovations, which trigger technological and institutional innovations. Some of the innovations that were developed in 2007 are still in use; some have evolved, while others are no longer on the market (Table 1).

Changes in knowledge, attitudes and skills

According to involved stakeholders, the most important and valued outcomes were the interactions and networks that evolved and have been sustained by the actors. These networks have proven to be very valuable, especially in terms of business strategy development, information sharing and learning. Rapid market-research tools have been found to be highly relevant in the actors' businesses. The PMCA facilitators have become skilled "innovation brokers" i.e. in demand articulation, network formation and managing innovation processes.

Inclusion, empowerment and wellbeing

An important lesson was the difficulty to engage smallholder farmers in joint innovation processes, partly because of their geographic dispersion in rural areas, education levels and resource constraints as compared to other chain actors. Also, because the central goal of the PMCA is to generate innovations in the market chain, not in production systems, market agents tended to participate more actively in the PMCA. Nonetheless, the smallholder farmers that participated reaped significant benefits, including access to and participation in larger markets. Their participation in PMCA exposed them to institutional buyers and, with support from the PMCA facilitators and other chain supporters, they were able to accomplish several transactions, boosting their business and income. This has enabled some of the women to increase the acreage under sweetpotato by 40% or more. Many women acquired household assets and now make significant contributions to their families' incomes. For most, the ability to contribute towards their children's scholastic needs is a source of pride, as they value the importance of educating the children. As a result, the women attested that improved income has resulted in increased harmony in the household, and their contribution towards the family's wellbeing is valued more than ever before.

Table 1: Status of innovations stimulated by PMCA, 2007 and 2011

Innovation	Type	Status in 2007	Status in 2011
Potato group			
Improved packaging and branding of potato crisps for high-end market (TomCris)	Commercial	In local market	In local and export markets
Sealing machine for packaging (TomCris)	Technological	In use	In use
Contractual arrangements between Tomcris and farmer group	Institutional	Being introduced	Worked for some time, currently not functional
Sorting and grading of potatoes for crisp production (TomCris)	Technological	Being introduced	In use
Sweetpotato group			
New orange-fleshed sweetpotato crisps (TomCris)	Commercial	In market	Not in market
New variety (Naspot1) marketed in Uchumi supermarket and exported	Commercial	In market	In market, volumes sold increasing
Marketing concept for composite flour with OFSP: 2 brands (SOSPPA and Kasawo)	Commercial	Being introduced	SOSSPA in market, Kasawo not in production
Improved package for Kasawo OFSP composite flour	Commercial	In use	Not in use except occasionally in shows
Improved package for SOSPPA composite flour	Commercial	In use	In market
Marketing stall/kiosk for selling clean, sorted and graded sweetpotatoes in Kalerwe market	Commercial	Introduced in Kalerwe	Moved to Matugga, in use
Sweet Potato Market Chain Club for all market segments	Institutional	Formative stage	Did not take off beyond club status(nonfunctional)
Vegetable group			
Contract farming of hot pepper	Institutional	In use	In use
Tomato sauce	Commercial	Prototype	Not in market
Tomato chilli appetiser	Commercial	Prototype	In market
Hot pepper paste	Commercial	Prototype	In market
Pickled hot peppers	Commercial	Prototype	Not in market
Sliced and dried hot pepper	Commercial	Not yet in existence	New, exported

Institutionalising the use of PMCA

PMCA core team members have used various approaches to promote use of the PMCA, including development of concept notes, funding proposals, conducting trainings, facilitating PMCA processes and supporting market-chain actors in various ways.

The PMCA has been institutionalised in the Mukono Zonal Agricultural Research and Development Institute (MUZARDI), which used the PMCA to implement two market development projects: in pineapple and indigenous vegetables. Other organisations that have used the PMCA include Participatory Ecological Land Use Management (PELUM) Uganda and Kenya, Food and Agricultural Organization (FAO), Africa 2000 Network–Uganda and the Royal Tropical Institute (KIT).

Key challenges

- Obtaining funding for PMCA applications by research and development actors can be challenging, leading to partial application of the approach or a loss of momentum. This can impact negatively on social relations that are necessary to develop trust among partners, which is a prerequisite for joint innovation. Where donor funding is scarce, future applications could benefit from alternative funding approaches, such as linking up with social investors.

- Translation of ideas across cultural divides and mediation of different interests and points of view among the chain actors required skilled facilitation. Facilitators had to have a “service attitude” to promote cohesion among the thematic group members.
- Many innovators felt that PMCA ended too soon, especially for the consolidation of institutional innovations, which needed time to become well established.
- Upscaling the PMCA required support from previous facilitators. New facilitators would often find the process abstract and “boring”; hence, many opted out.

Key lessons and recommendations for research, policy and practice

Emerging lessons include need to: i) support business development of launched innovations after completing PMCA, to increase chances for business viability, e.g. linking entrepreneurs to financial institutions, Bureau of Standards to obtain quality marks, among others; ii) support farmers to align production to demand, e.g. through staggered production and collective marketing; iii) support innovation brokers, e.g. process facilitators to strengthen skills and develop a community of practice; and iv) set up a “seed” fund to support emerging innovations. Future applications would benefit from a more engendered focus, as this would improve access to and control of benefits among both women and men market-chain actors.

Conclusions

Despite the many challenges faced, the PMCA was successfully applied in Uganda. This could be in part attributed to the commitment by the coordinators, facilitators and interested stakeholders who refused to give up even in the face of funding constraints. The facilitators, in particular, exhibited a “service attitude” and a desire to see the results of the process, to the extent that they have continuously supported the actors whenever and wherever possible, long after the PMCA process formally ended. Among the market-chain actors, the ability to innovate and change their products in line with changing market conditions warrants special mention. The market actors contacted for this study emphasise that such skills are invaluable, as innovations are constantly needed if one is to survive in the market. For the R&D institutions that have continued to experiment and work with the PMCA, studies have been initiated that should help to refine and adapt the approach to local contexts. A cadre of facilitators is slowly building up in these institutions, supported by the initial PMCA facilitators, who are now viewed as “experts”. In this way, capacity is being developed to expand the application of the PMCA within Uganda and elsewhere in the region. In the quest for sustainable rural development, we believe the PMCA can play an important role in the development of value chains for the betterment of smallholder farmers’ livelihoods in Uganda and elsewhere in East Africa.

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