

# Regoverning Markets

Small-scale producers in modern agrifood markets

## Innovative Policy

**Kenya**

**Policy innovations in small-scale milk markets in Kenya and East Africa**

Nicholas Hooton and Amos Omore  
International Livestock Research Institute

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## **Regoverning Markets**

Regoverning Markets is a multi-partner collaborative research programme analyzing the growing concentration in the processing and retail sectors of national and regional agrifood systems and its impacts on rural livelihoods and communities in middle- and low-income countries. The aim of the programme is to provide strategic advice and guidance to the public sector, agrifood chain actors, civil society organizations and development agencies on approaches that can anticipate and manage the impacts of the dynamic changes in local and regional markets.

## **Innovative Policy series**

Innovative Policy is a series of short studies from the Regoverning Markets programme addressing a specific policy innovation in the public or private sector that improves the conditions for small-scale producers to access dynamic markets at national, regional and global level.

The case studies were coordinated by:

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# 1 Introduction

The policy innovation described in this paper is the proactive engagement of government, regulatory and service delivery actors in supporting the previously ‘informal’<sup>1</sup> raw milk market actors in Kenya and more widely in East Africa. The way this engagement has happened in Kenya suggests that alternative models of dairy development, relevant to local conditions and needs, could successfully be applied to bridge the informal-formal gap in the region and elsewhere. Lessons drawn are as much about the particular approach taken by actors seeking to achieve the policy change as they are about the specific policy change itself. Conventional views of dairy development and regulatory policies have been successfully challenged. The attitudes and behaviour of all sector actors have clearly changed, and aspects of legislation changed ahead of a new Dairy Policy. This paper concludes that collaborative, evidence-based stakeholder action can not only result in policy changes supporting better linkages between small-scale farmers and markets at national level, but also help stimulate regional-level policy change for pro-poor dairy development.

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<sup>1</sup> Alternatively referred to as ‘traditional’. Both terms applied here to refer to traders who are at variance with accepted international norms that often stress cold-chain pathways and pasteurization of marketed milk prior to sale. They may or may not have legal status depending on the policy environment where they operate.

## **2 The situation before the policy innovation**

In Kenya, traditional milk markets from some 800,000 small-scale dairy farmers through small-scale milk vendors (SSMVs), including mobile milk vendors and milk bars, supply over 85% of the market [8, 10]. This smallholder dominance is seen in neighbouring countries, such as Tanzania (98%), and in many other developing countries, such as India (83%) [2]. Although most milk in Kenya passes through informal market channels, previous government policies were unsupportive of the farmers, traders and consumers who make up these channels, which sell cheaper milk for poor consumers, satisfy traditional tastes, and offer better prices for farmers. Prior to the policy change, there was harassment and rent-seeking behaviour as the larger powerful players sought to increase their small market share. The main regulatory body – the Kenya Dairy Board<sup>2</sup> (KDB) – acted as ‘policeman’, trying to stamp out this trade. SSMVs could not acquire licences or access training in milk handling, yet continued operating because of overwhelming consumer demand. Licences when issued were linked to payment rather than meeting appropriate quality and safety standards, which was the main excuse for their exclusion. The unfavourable policy environment was broadly similar in Uganda and Tanzania where, as in Kenya, officials relied on a western industrial model of processed/packaged milk to ensure quality and safety, actively discouraging or ignoring SSMVs [3, 5, 8, 10, 11 12].

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<sup>2</sup> The role of KDB is to regulate, develop and promote Kenya’s dairy industry.

### **3 New approaches in dairy marketing policy in Kenya and East Africa**

#### **3.1 Kenya**

A change in attitude and behaviour towards raw milk marketing has been evident in Kenya since around 2000, reflected in marked changes in implementation of dairy marketing regulations by KDB. By mid-2004, this was translated into practical changes, with the Minister of Livestock changing subsidiary legislation that was within his powers under the existing *Dairy Act*<sup>3</sup>. This change paved the way for piloting of alternative approaches supportive of informal small scale-milk traders. A new Dairy Policy, currently in the parliamentary process, now clearly acknowledges the role of SSMVs in the development of the sector [6], including measures for the development of low cost appropriate technologies for small investors<sup>4</sup>, training on safe milk handling, work to improve processing standards in the informal sector, and provision of incentives and establishment of a supportive certification system. With the new policy going through the parliamentary process, the changed attitude and behaviour of policy implementers have been noticeable for some time now. KDB and local government officials work collaboratively to advise and support SSMVs in complying with regulations [4, 6, 12]. The issuing of licences is linked to compliance, and there are significantly improved relations between traders and regulators. KDB, in partnership with NGOs and private actors, is piloting approaches to support business development services (BDS) providing quality assurance services, including training linked to certification, more effectively [4]. This approach is designed to be self sustaining through fees charged for services rendered by service providers, paid by traders<sup>5</sup>.

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<sup>3</sup> This subsidiary legislation is contained in *Kenya Legal Notice 102* of 13<sup>th</sup> August 2004.

<sup>4</sup> For example, a milk can that does not spill milk when a trader falls from a bicycle was developed with the participation of the small milk traders.

<sup>5</sup> Thus making it possible for the regulator to only focus on their accreditation and quality assurance.



### 3.2 Regional changes

As well as changes in other countries in the region to engage with their own informal sectors<sup>6</sup>, there is good progress towards harmonized regional dairy marketing policies. In particular, a regional ECAPAPA<sup>7</sup> programme has been working with dairy regulators from Kenya, Uganda, Tanzania and Rwanda to promote uptake of new institutional approaches and appropriate technologies developed in Kenya to transform informal milk markets in the region [5]. In 2006, the regulators agreed basic requirements to rationalize and harmonize regional policy and standards, and to pilot new approaches incorporating BDS<sup>8</sup>. The agreements emphasize the use of common training materials and approaches for capacity building of informal milk traders before their certification, which is to be recognised across borders in the region [5, 7].

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<sup>6</sup> For example, Tanzania's passing of a new *Dairy Policy* in 2004, recognizing and engaging with the informal sector through the nascent Tanzania Dairy Board created from the Act.

<sup>7</sup> ECAPAPA is the Eastern and Central Africa Programme for Agricultural Policy Analysis – a programme of the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA).

<sup>8</sup> Based on the approach already being piloted in Kenya in line with the new policy.

## 4 The impact of new dairy marketing policy approaches

As described, whilst the written policy in Kenya is still going through what could be a lengthy parliamentary process, there is a clear shift in stated approaches by the KDB, reflected by changes in policy implementation at field level. Studies have begun to quantify the specific impacts of these changes in behaviour and implementation on dairy sector stakeholders. Wambugu et al. [12] found improved relations between traders and regulators, with regulations enforced through dialogue rather than policing. They found SSMV numbers increased dramatically since 2001. This positive engagement has the overall effect of decreasing transaction costs for traders<sup>9</sup>, and expansion of business through higher volumes of milk sold<sup>10</sup>, with knock-on effects for producers able to supply milk to a more efficient market, and for consumers purchasing milk [11]. Based on the initial assessment by Salasya et al. [11], the policy implementation change has resulted in a reduction in SSMV transaction costs of some 38%. The overall impact of the reduced transaction costs is an estimated a 13% reduction in the consumer price of milk, likely to lead to a 15% increase in milk consumption by rural and urban poor (with consequent impact on improved nutrition and on real incomes)<sup>11</sup> as well as creating more employment opportunities along the milk market chain. This implies that policies aimed at reducing transaction costs associated with informal milk marketing can increase the welfare of poor consumers, particularly in the short run<sup>12</sup>.

Further work to assess both influence pathways and economic impact of the policy changes is currently underway, looking at the case of Kenya<sup>13</sup> and East Africa<sup>14</sup>. These studies will shed more light on the distributional impacts of the policy changes reported here.

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<sup>9</sup> Transaction costs for SSMVs may be reduced through various effects, such as more open operating as licensed traders, less milk spoilage through access to training, fewer bribes paid, fewer losses through confiscated milk and containers.

<sup>10</sup> Upcoming ILRI monitoring report on the pilot project of training and certification of small-scale milk traders in Kenya.

<sup>11</sup> These initial conclusions are be qualified by the realization that certain underlying assumptions on the tradability of milk need to be tested.

<sup>12</sup> Besides short-term gains in improved market access through SSMVs, other impacts on producers may need other institutional changes and more long-term approaches, accompanied by investments in technology.

<sup>13</sup> Upcoming ILRI study for the CGIAR Standing Panel on Impact Assessment.

<sup>14</sup> Upcoming ECAPAPA study.

## **5 Key factors contributing to the policy innovation**

Two specific studies [1, 6] together with components from other work [5, 11, 12] have helped to map activities and influences leading to the policy change.

In Kenya, a key influence was found to have been a coalition of actors forming around the collaborative Smallholder Dairy Project (SDP). Implemented by the Ministry of Livestock and Fisheries Development (MoLFD), Kenya Agricultural Research Institute (KARI) and the International Livestock research Institute (ILRI), this research and development project engaged with a range of dairy industry stakeholders in concerted efforts firstly to understand the constraints affecting Kenya's milk market, and subsequently to implement a strategy to change the policy environment to be more conducive for small-scale farmers' and traders' engagement in the market. The research characterised the sub-sector, highlighted the importance of the informal market, and addressed issues such as employment generation as well as approaches for quantifying and managing public health risks, amongst other activities. SDP's partners, representing public (government and KDB), private (farmers and traders), and civil society organizations (farmer advocacy groups and NGOs), actively drew on SDP's innovative research which demonstrated novel institutional approaches and appropriate technology for quality assurance that safeguards both public health and the livelihoods of the poor who depend on the market. Other research actors were also arguing for reform of KDB to play a more developmental role [3]. Crucially, SDP and its partners developed and implemented a strategy for influencing pro-poor policy change as an objective of the project, beyond the research activities.

The changes in Kenya had important knock-on effects on the regional policy change, but this was also very much influenced by the activities of the ECAPAPA project – predominantly through facilitated discussions between regulators, provision of country-based and regional research evidence, and exposure to the training and BDS approaches being piloted in Kenya [1, 5].

## 6 Conclusions and key lessons

Whilst specific distributional impacts are yet to be fully quantified, the policy change process described here has highlighted some key lessons in terms of approaches to changed mindsets, implementation and written policy – especially when this challenges conventional approaches.

The story is above all one of wide-ranging and robust evidence being generated through highly collaborative and participatory approaches. Collaborative in that all research work done by teams of people from different organizations (with a core team comprising MoLFD, KARI, ILRI and others); participatory in that research was in general informed by or done with extremely close participation of stakeholders. This meant that findings were highly relevant and were also effectively linked into the policy process.

Key lessons<sup>15</sup> from the Kenya case highlight the importance of:

- Collaborative approaches:
  - Between government actors and research actors throughout the project.
  - In research, to ensure robust, relevant evidence that is widely accepted.
  - Tactical collaboration with a variety of stakeholders for widespread communication and advocacy.
- Broad-based research linking socio-economic and technical evidence – identifying changes that are likely to have impact on poor people’s livelihoods and addressing technical constraints to achieving these changes – thereby addressing both politicians’ and regulators’ concerns.
- Continuous and innovative communication of findings throughout the activity to change mindsets in favour of innovative policy approaches.
- Investment in understanding the political context and opportunities so that effective influencing strategies can be implemented.
- Linking specific approaches (action-research/pilot approaches) from one country with facilitated face-to-face discussions between peer regional regulators can lead to evidence-based relevant changes in regional-level policies.

Appropriate models that emerge for dairy policy change elsewhere may vary depending on the specifics of the sector. However, where traditional milk markets are dominant, based on consumer demand, policies that engage with and develop these traditional markets (rather than ignore or seek to stamp them out) are likely to be most appropriate for small-scale producers, market agents and consumers.

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<sup>15</sup> These lessons and the analysis behind them are discussed in detail in Leksmono et al. (2006) [6] and Hooton (2007) [1].

## 9 References and resources

1. Hooton, N. (2006). *Regional policy change in dairy marketing and seed trade policy in East Africa: An analysis of influences*. ILRI/ODI (in collaboration with ECAPAPA) Process and Partnership for Pro-Poor Policy Change Case Study Report. <http://www.pppppc.org/Project/CaseStudies/Case-study-4.asp>
2. ILRI (2005). *Bridging the regulatory gap for small-scale milk traders*. ILRI Briefing Paper. [http://www.ilri.org/ilripublication/Uploaded%20Files/200481194330.03BR\\_ISS\\_BridgingTheRegulatoryGapForSmallscaleMilkTraders.htm](http://www.ilri.org/ilripublication/Uploaded%20Files/200481194330.03BR_ISS_BridgingTheRegulatoryGapForSmallscaleMilkTraders.htm)
3. Karanja, A. (2002). 'The dairy industry in Kenya: the post-liberalization agenda.' Paper Presented at the Dairy Stakeholders' Workshop; Norfolk Hotel, Nairobi, 27<sup>th</sup> August, 2002. Tegemeo Institute of Agricultural Policy and Development.
4. KDB/SITE (2006). *Proceedings of Improving Milk Quality and Marketing (IQAM) Project Review Meeting*. SITE Enterprise Promotion and the Kenya Dairy Board. August 2006.
5. Kurwijila, L. and A. Omore (2007). *Promoting uptake of new institutional approaches and appropriate technology to transform milk markets in the ASARECA region: Process, achievements and lessons learnt*. ECAPAPA, Entebbe and ILRI, Nairobi.
6. Leksmono, C., J. Young, N. Hooton, H. Muriuki and D. Romney (2006). *Informal Traders Lock Horns with the Formal Milk Industry: The role of research in pro-poor dairy policy shift in Kenya*. ODI/ILRI Working Paper 266. ODI, London. [http://www.pppppc.org/content/files/documents/Kenya\\_dairy\\_policy\\_WP\\_final.pdf](http://www.pppppc.org/content/files/documents/Kenya_dairy_policy_WP_final.pdf)
7. Lore, T.A., L.R. Kurwijila and A. Omore (eds) (2006). *Hygienic milk production: a training guide for farm-level workers and milk handlers in Eastern Africa*. International Livestock Research Institute, Nairobi, Kenya.
8. Muriuki, H., A. Omore, N. Hooton, M. Waithaka, R. Ouma, S.J. Staal and P. Odhiambo (2003). *The Policy Environment in the Kenya Dairy Sub-Sector: A Review*. SDP Research and Development Report 2. SDP, Kenya.
9. Omore, A., T. Lore, S. Staal, J. Kutwa, R. Ouma, S. Arimi and E. Kang'ethe (2005). *Addressing the public health and quality concerns towards marketed milk in Kenya*. SDP Research and Development Report No. 3. Smallholder Dairy (R&D) Project.

10. Omore, A., H.G.M. Muriuki, M. Kenyanjui, M. Owango and S. Staal (2004). *The Kenyan Dairy Sub-Sector. A Rapid Appraisal*. SDP Research and Development Report. SDP, Kenya.
11. Salasya, B., R. Rich, I. Baltenweck, S. Kaitibie, A. Omore, A. Freeman and S. Staal (2006). *Quantifying the economic impacts of a policy shift towards legalizing informal milk trade in Kenya*. ILRI Discussion Paper December 2006.
12. Wambugu M., R. Ouma, D. Romney and J. Sinja (2006). *Policy in Practice: A report of a study conducted to monitor and assess changes in attitudes, behaviour and expectations of different actors in milk marketing at field level as result of policy changes*. Kenya Dairy Development Project Discussion Paper, ILRI, Nairobi, April 2006.

Additional resources used:

- ODI/RAPID annotated bibliography from policy process case study:  
[http://www.odi.org.uk/rapid/Bibliographies/SDP/SDP\\_bibliography.html](http://www.odi.org.uk/rapid/Bibliographies/SDP/SDP_bibliography.html)
- Smallholder Dairy Project (SDP) (2004a). *The demand for dairy products in Kenya*. SDP Policy Brief No. 1. Smallholder Dairy (R&D) Project.  
<http://www.smallholderdairy.org/policy%20briefs.htm>
- Smallholder Dairy Project (SDP) (2004b). *Employment generation in the Kenya dairy industry*. SDP Policy Brief No. 2. Smallholder Dairy (R&D) Project.  
<http://www.smallholderdairy.org/policy%20briefs.htm>
- Smallholder Dairy Project (SDP) (2004c). *Competitiveness of the smallholder dairy enterprise in Kenya*. SDP Policy Brief No. 3. Smallholder Dairy (R&D) Project.  
<http://www.smallholderdairy.org/policy%20briefs.htm>
- Smallholder Dairy Project (SDP) (2004d). *Public health issues in Kenyan milk markets*. SDP Policy Brief No. 4. Smallholder Dairy (R&D) Project.  
<http://www.smallholderdairy.org/policy%20briefs.htm>
- Smallholder Dairy Project (SDP) (2004e). *Improved child nutrition through cattle ownership in Kenya*. SDP Policy Brief No. 5. Smallholder Dairy (R&D) Project.  
<http://www.smallholderdairy.org/policy%20briefs.htm>
- Smallholder Dairy Project (SDP) (2004f). *The policy environment of Kenya's dairy sector*. SDP Policy Brief No. 6. Smallholder Dairy (R&D) Project.  
<http://www.smallholderdairy.org/policy%20briefs.htm>

- Smallholder Dairy Project (SDP) (2005a). *Multiple benefits of smallholder dairy production*. SDP Policy Brief No. 7. Smallholder Dairy (R&D) Project.  
<http://www.smallholderdairy.org/policy%20briefs.htm>
- Smallholder Dairy Project (SDP) (2005b). *LPS: a practical alternative for reducing post-harvest milk losses*. SDP Policy Brief No. 8. Smallholder Dairy(R&D) Project  
<http://www.smallholderdairy.org/policy%20briefs.htm>
- Smallholder Dairy Project (SDP) (2005c). *Improving access to knowledge and information in Kenya's smallholder dairy industry*. SDP Policy Brief No 9. Smallholder Dairy (R&D) Project.  
<http://www.smallholderdairy.org/policy%20briefs.htm>
- Smallholder Dairy Project (SDP) (2005d). The uncertainty of cattle numbers in Kenya. SDP Policy Brief No. 10. Smallholder Dairy (R&D) Project.  
<http://www.smallholderdairy.org/policy%20briefs.htm>

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