

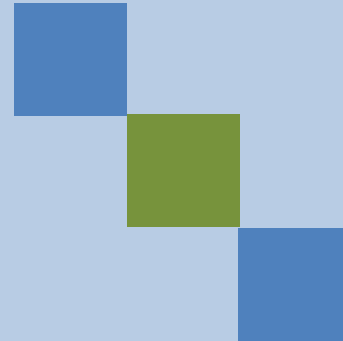
Non-Tariff Barriers and Regional Standards in the EAC Dairy Sector

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Introduction

The dairy industry of the East African Community (EAC) is one of the largest in Africa, and is an important part of the region's agricultural economy. Thousands of small farmers take part in the production of dairy products, and millions of consumers benefit from the health benefits brought by dairy products. In recent years, East African countries have been working to design and implement a set of regional health and production standards in order to help the dairy industry reach its full potential. Most stakeholders agree that standards should be developed by East African countries, because standards are important for health reasons and are necessary for maintaining a healthy population in the long-term. However, since almost all consumers in East Africa boil the milk before drinking it, the health risks from bacterial infection are actually quite low. Therefore, while standards are important, they need to be developed for the long run such that, in the short run, they allow small-scale producers to prosper.

Since imposing standards that small-scale producers are incapable of implementing is not useful from either a health or economic development perspective, dairy standards must be designed carefully, taking into account the technological and economic constraints in the region. This policy note examines the role that standards can play in promoting the healthy consumption of dairy products while at the same time helping the vibrant dairy industry to modernize and develop. The note begins by discussing the East African dairy industry and the current attempts to design standards, and concludes by outlining ways in which the World Bank and other stakeholders can work together in order to design and implement useful and long-lasting dairy standards that would take into account both health and economic considerations.

The Dairy Industry in East Africa

Although the East African dairy industry is quite large, dairying is a domestically

focused activity, with only 10 percent to 20 percent of milk sold and distributed through formal channels and less than 1 percent of the region's milk products being exported. This domestic focus is mostly due to the unique production and transportation challenges facing the sector. Raw milk is a difficult product to trade, especially given the tropical temperatures in Africa and the lack of refrigeration infrastructure. Dairy products that are more easily tradable include milk powder, UHT milk, and luxury products such as cheese and yoghurt. Although intra-regional trade is in its infancy and the highly perishable nature of dairy products makes the development of a functioning regional market difficult, dairy trade has been growing strongly over the past several years, and the potential for expanding trade in dairy products exists.

In this context, agreements on production, transportation, and health standards relating to dairy products are essential, since low-quality dairy products can have negative health consequences and can reduce demand across the emerging regional dairy market. From a production and health perspective, standards specify quality of dairy products in terms of fat content, purified water content, and bacterial count. From a transportation perspective, cross-border trade in dairy products is limited to a large degree by the technological capacity of the industry in each country, and growth in the dairy market can even be a catalyzing factor for bringing more advanced technology to the region. For example, producers with access to refrigeration systems are more likely to be able to transport and trade dairy products across relatively long distances. In markets where producers and consumer groups can agree on appropriate health and production standards, the consumer is more likely to receive a healthy product and producers can maintain access to a growing

market. The rationale for designing and implementing a regional standards regime, therefore, is strong.

At the same time, implementing poorly designed standards can come at a high cost to market efficiency and product quality, and implementing standards that will not be upheld in practice is counterproductive. For example, laboratories might test milk to try to ensure the quality of dairy products, yet the vast majority of milk is consumed locally beyond the reach of formal conformity assessment procedures—80 percent of milk producers are part of the “informal market,” which is comprised of milk vendors, milk shop owners, and mini-processors. Conforming to standards is oftentimes costly for producers, and the average East African consumer would not be able to pay higher prices for milk if these costs were passed on. The fact that implementing standards will come with a price tag is an important first step in designing standards that will be mutually beneficial across the region, and increases the importance on designing standards that will strengthen the dairy market instead of constrain it.

A further issue is that standards may be misused. Vested interests sometimes try to manipulate standards and conformity assessment procedures in order to advance the sales of their own products and block market access for their competitors. Although international trade is only a small portion of overall dairy distribution, the influence of vested interests is particularly visible in this area. Dairy quality is assessed during border crossing procedures and the imposition of standards may be used as non-tariff barriers to trade. Harmonizing standards assessment procedures across the region could therefore help to facilitate the cross-border trade of healthier dairy

products given that the standards to be harmonized are carefully calibrated to the realities of the regional dairy industry.

Despite the need to overcome the challenges facing the dairy industry, implementing standards will not, on their own, develop the dairy industry to a world-class level or expand intra-regional trade. Like many issues in development, the utility of regulatory and oversight measures for economic growth is determined by their specific details. Standards that are designed taking into account the specific situations of producers and consumers can promote efficiency and safeguard public health, but poorly designed standards can lead to inefficient markets and can be sources of rent seeking for vested interests. The effective design and implementation of standards depends on the careful calibration of the standards with the needs of the countries setting them.

Current Efforts to Harmonize Standards in East Africa

The current effort for setting and harmonize standards in the EAC has been supported by a USAID-funded regional trade integration project. The rationale given for imposing standards on dairy products is that the consumption of raw milk poses health hazards, and regulating the production and transport of dairy products can lead to positive health outcomes across the region. Specifically, milk and other dairy products may cause harm if the microbial quality is poor and if zoonoses, diseases transferred from animals to humans, are present. A study by Omore et al (2005) illustrates the potential health risk of consuming Kenyan dairy products, in which the microbial quality is generally poor and exceeds the international health standards by a large margin. This is due almost exclusively to

the hot climate, the long distance some milk is transported, and the lack of refrigeration technology. Illustrating these trends, Omore et al (2005) found that, in general, the bacterial count of milk in Africa increased as distance from the milking site increased.

The new EAC dairy standards are largely based on the Codex Alimentarius, which are held as the best international standards. Although the health dimension of dairy standards is important, however, basing standards on the Codex Alimentarius is problematic since the Codex assumes that consumer incomes and production infrastructure are equivalent to Western levels. In practice, this means that dairy products have to be produced, stored, transported, and labeled in specific ways that adhere to the standards. For example, in developed countries people mainly consume fresh pasteurized milk, whereas in East Africa, most milk is consumed raw. Nevertheless, eight common EAC standards now exist for raw milk, pasteurized milk, UHT milk, powdered milk, sweetened and condensed milk, butter, yoghurt, and dairy ices and ice cream. None of these standards have been implemented and, apart from a few large-scale export-oriented producers, most traders, producers, and processors will not be able to comply with the standards.

There is also the question of whether the health hazard posed by high bacteria levels in East African milk is as dangerous as some critics claim. The argument for strong health standards is based on how milk is prepared for consumption in Africa. In developed countries, milk is almost always pasteurized, a process which removes much of the bacteria content. In Africa, most milk is consumed raw. While there is no doubt that contaminated milk is dangerous to the health of people consuming it, however, this observation does not take into account

differences in Western and African consumption habits and practices. Indeed, the consumption habits of EAC consumers have so far prevented the low quality of milk to become a health risk. In Africa, nearly all milk is boiled before it is consumed, which reduces the health risk of drinking bacterial pathogens to very low levels. According to a survey conducted by Omore et al (2005), 100 percent of urban households and 96 percent of rural households sampled boil their milk before consumption.

In addition, most dairy sector policies and project interventions in the EAC region have been guided by a view that equates dairy sector competitiveness with modern value chain development. Until recently, small-scale milk traders who account for over 80 percent of total milk trade were largely overlooked in planning project strategies and were effectively regarded as something that needed to be stamped out to make room for improved linkages with modern dairy processors. While this negative view of small-scale traders has since moderated as result of policy dialogue with donor projects and other changes that came with market liberalization, small-scale milk traders continue to be regarded by many in the EAC region as a transitional part of the dairy landscape only. Consistent with this view, dairy projects have traditionally focused their efforts on improving linkages between small farmers and formal dairy processors. Due to these efforts, there has been a significant change of policy in Kenya (and to a lesser extent in Uganda), to endorse small-scale milk traders.

Because of the preference of most consumers in East Africa for low cost raw milk, a major challenge for value chain projects has been to make formal sector dairying more attractive. Indeed, one primary reason why small-scale informal milk traders are most popular among the

rural and urban poor is because of more favorable pricing compared with formal sector channels. Dairy processors throughout the EAC region have so far been unable (or unwilling) to pay price premiums that would reward a farmer's investment in quality and various kinds of project support have been needed to promote the upgrades needed for formal sector marketing instead. Among other things this has meant showing farmers the financial benefits of improved silage making and better livestock care, training of farmers in animal husbandry and milk hygiene, establishment of artificial insemination service points, and work with dairy producer groups to identify market outlets and negotiate reliable supply contracts with dairy processors.

Field work conducted in East Africa during December 2009 identified several problems with the standard-setting procedure. First, the standards setting process was driven mainly by international donors and the technical agencies, and did not consider the economic environment in which the small producers that make up the vast majority of the dairy industry operate; small producers account for 80 percent of the region's dairy production. Although some of the larger dairy producers in East Africa participated in the meetings, small producers and vendors were rarely consulted—the standards setting process involved mainly dairy technologists.

Second, some East African countries participated in the standards setting process without knowing about the quality of their milk, the needs of their small producers, or the technological and capacity challenges they would face in implementing and adhering to the new standards. Similarly, no assessment of economic and wider social impacts on small-scale producers or consumers was made. Therefore, while the emphasis on health and safety has been well

intentioned, the actual process has not taken into account the wider context of long term and sustainable development in the region.

Despite these problems, there have also been some positive developments which indicate that there is the potential to implement real policy changes that can better address long term development issues. For example, there has been a significant change of policy in Kenya (and to a lesser extent in Uganda) to endorse small-scale “informal” milk traders. These informal markets are important to the rural and urban poor because of more favorable pricing compared with formal sector channels. Therefore, evidence exists showing that enabling small producers to more effectively join the formal dairy sector could affect both health and economic considerations in the short and long run.

Policy Recommendations

These issues taken together demonstrate clearly that the current effort to implement dairy standards has not been successful. To the end of formulating standards that will promote health, welfare, and economic development into the future, stakeholders should consider the following policy issues.

In the context of the problems with the current set of dairy standards, a review of the standards designed so far should be undertaken to focus on the usefulness and viability of specific standards. A useful first step would be to review the standards to ensure that they meet both public health and market demands, especially with regards to maintaining the economic viability of small-scale producers. Standards which are not viable for economic or technological reasons, and that cannot be addressed by government or donor group assistance, should be jettisoned. Future efforts to set standards should take an incremental approach, recognizing the limitations that small producers have in terms of their ability

to enact standards as well as the importance of small producers to the East African dairy industry.

Regardless of the outcome of the review, the policy process that led to the adoption of the harmonized EAC standards should be improved. East African countries and the donors that support them should avoid importing policy measures designed for OECD countries without adjusting them to the realities in East Africa. In OECD countries regulatory Impact Analysis (RIA) is increasingly being used to improve the knowledge base of policy makers. RIA considers economic and social factors that need to be explicitly considered when designing policy initiatives. RIA is a relatively new concept in developing countries. The use of RIA to document the economic and social impact should be considered in the EAC to comprehend the full consequences of measures affecting trade. Donors and international organizations with analytical expertise, like the World Bank, would need to support the development of a type of RIA suitable for East Africa.

After this review is carried out, in the short run the EAC could first focus on implementing the already agreed principle of mutual recognition of quality marks. The licensing system should also be reviewed and discussed, with an eventual transition to a system based on annual licenses. This system could also have increased efficiency by making it electronic or internet-based. In the medium term, if public health and/or market demand is established for another set of standards, these could be developed with the assistance of donors and international organizations. The FAO and the WHO could be consulted on the development of a standard for the unique product of the region: raw milk destined to be boiled before consumption. The implementation and

conformity assessment procedures should be in accordance with the realities in the EAC region. However, it should be recognized that national agencies in East Africa must want reform; once requested, the assistance of donors and technical organizations will become more important.

In the longer term, East African countries should continue to expand their fundamental capacity building effort. This will form the basis of increased regional trade. Work on standards quality should be a cornerstone in capacity building but the approach should be incremental rather than an attempt to radically upgrade the industry. By creating the building blocks for quality in the supply chain little by little, East African dairy industries will in the long run be able to implement standards consistent with the international best practices in the Codex Alimentarius. An incremental approach is necessary especially given the questionable utility of a “top-down” approach to standards design. East African policy makers have generally attempted to learn from the most advanced dairy industries in the world, such as the United States and the EU. Due to technological and capacity constraints, however, the value of this is doubtful. Many developing countries have dairy industries that operate more efficiently than in the EAC and under more similar conditions regarding production, trade, processing, and consumption. India, for instance, has achieved phenomenal growth in dairy while relying on smallholders. An incremental approach to quality could be based along the following principles, taken from studies of the development of the Indian dairy industry:¹

- **Recognition of the crucial role of the informal market:** An

estimated 70 percent of the marketed milk in India is sold in the informal market even after decades of rapid development. Demand for higher quality and diversified products is rapidly increasing as the Indian middle class expands. Yet the informal market and small-scale producers will constitute the backbone of the dairy industry for decades to come.

- **Listen to demand:** Most demand for milk, including from middle and upper income segments, is for traditional products such as dahi, paneer, butter, ghee and Indian sweets. Demand for Western style products and quality has remained low. The laissez-faire approach of the Indian government towards the informal sector has allowed the dairy industry to respond constructively to demand and to expand. Today, India is no longer a net importer of dairy product, but a net exporter. Indeed, in 1998, India surpassed the United States to become the world’s largest milk producer.
- **Improve quality from the bottom up:** India has chosen to work on quality improvement by investing in production and trading practices in the long and often uncoordinated supply chains rather than attempting to upgrade the industry to Western standards. The focus on quality has been on basic hygiene issues, adulteration and similar simple quality issues for which basic capacity building is more important than the implementation of advanced food safety standards.

¹ Babcock Institute for International Dairy Research and Development (2006); Candler & Kumar (1998).

By expanding the East African dairy industry while solving basic quality problems first and at a speed that allows consumer demand to pay for the upgrading process, the process to design and implement standards that can address health and development issues for the long run can begin.

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