

Report from the CTA-ILRI African Dairy Value Chain Seminar, 21-24 September 2014, Nairobi, Kenya

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Sub-Saharan African countries have seen their dairy industries take very different development pathways. Southern Africa is generally characterised by large family-owned dairy farms connected to large dairy processors. East Africa has tried to foster the parallel development of large dairy processing firms and raw milk value chains involving smallholder dairy farms and small traders. West African countries have experimented with small- and medium-scale processing of local milk but most dairies also process imported milk powder. All over the continent, the challenges of collecting and adding value to milk from itinerant pastoral herds remain daunting. Overall some African countries are net exporters of dairy products while others are net importers.

The thriving economic development of Sub-Saharan African countries, the emergence of an African middle class and the subsequent increase in demand for dairy products have led large dairies from the European Union (EU) to make investment plans with a view to developing African dairy industries. Moreover, all over Africa, consumers, civil society and development agencies are encouraging dairy industries to seek more sustainable modes of production. The impacts of dairy value chains on the environment and on local employment have to be balanced with their economic performances. Value chain stakeholders are also looking for more social responsibility, smallholder or gender inclusiveness, or sustainable labelling in addition to economic efficiency.

The African Dairy Value Chain Seminar was organised from 21 to 24 September 2014 in Nairobi, Kenya, by the International Livestock Research Institute (ILRI) and the Technical Centre for Agricultural and Rural Cooperation (CTA) with funding support from the CGIAR Research Programs on Policies, Institutions, and Markets and on Livestock and Fish.

The objective of the seminar was to gather the different stakeholders that are involved in dairy value chain development in Africa in order to share viewpoints, and experiences of using methods and tools for dairy value chain analysis and development. Participants involved representatives of small farmers, private dairy processors through a partnership with the East and Southern Africa Dairy Association (ESADA), milk consumers, stakeholders working closely with government officials, and several researchers from national, international research organisations and from ILRI. All the content shared during the seminar is available [here](#).

Looking over the dairy fields – general analysis

The participants recognised that there were several different vantage points to view the dairy value chains, which were currently not necessarily identical or even compatible. For example, Kelly Boucher-Aburi, Project Development Director, Tetra Pak Eastern Africa, Kenya, told participants that Africa had enough milk to respond to its demand. The challenges were in disseminating the technology that would allow the milk to be processed and delivered to African consumers, and its quality maintained along the chain. Indeed, milk worth US\$2.6 million was being wasted every year on the continent. She exhorted participants to think of solutions to identify the holes in the value chain where interventions should help plug out milk waste.



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Paul Goodison, an independent ACP-EU agricultural trade expert based in Belgium, explained the key challenges for Africa in the future abolition of milk quotas in the European Union. The resulting increased milk production is likely to lead European dairies to look for new markets for their dairy products and African markets will probably be in their focus thanks to increasing demand for dairy products coming from Africa's economic growth and urbanisation. This interest could potentially lead to large foreign direct investment into the African dairy sector by European companies in search of market outlets.

However, experience shows that trade policy tools exist and are being successfully used in some countries (e.g. in Egypt with fiscal incentives and in Nigeria with import licences linked to a minimum level of local sourcing). While in the short term the abolition of EU milk quotas might pose great challenges to the dairy development in Africa as it is likely to increase milk powder imports and promote business models that are not necessarily inclusive, it also provides concrete opportunities in the long term for the development of more competitive African dairy value chains through transfer of technology, transfer of know-how and North-South partnerships. Whether African



stakeholders and governments see this turn of events as a danger or an opportunity will be a question of understanding correctly all the complex and interconnected issues at stake, and also choosing to take the right response at regional, national and local levels. Rather than opposing the two development models (imported milk powder vs local sourcing), the discussion highlighted the possibility of combining them. In the long term, sourcing local milk from smallholders should not be seen as just a Corporate Social Responsibility issue but more importantly as a sustainable business approach and a way to create 'shared values'.

The seminar was built around three recurring themes that were understood as key to fostering a sustainable dairy value chain development in Africa: smallholder involvement, private sector investment and gender empowerment.

Indeed, in an African context, dairy development has to build upon the strengths and address the weaknesses of the continent's largely smallholder dairy production base. Dairy development cannot happen without strong producers and strong producers' organisations. The participants emphasised the critical need to strengthen the capacities of the producers and their organisations. Various cases were presented including in India and Indonesia where dairy farmers seem to be much better equipped and structured. The seminar identified that some government initiatives were already supporting dairy smallholders on the continent. But more incentives should be found to help them follow existing policies and to create ownership of new dairy development technologies and processes. The seminar identified in the end that the real focus should be put on the basics of agricultural development: extension and access to funds.

On private sector investment, the participants agreed that there were many prospects for private investment in African dairy value chains but these needed to become sustainable businesses in order to succeed in the long term. Partnerships between private and public sector organisations and with farmers' groups and other interested stakeholders were identified as the way forward to foster investment from all parties into dairy value chains. The field visits allowed participants to witness the many direct and indirect ways of building successful partnerships in the dairy sector of Kenya. A call was made to national governments for a stronger focus on achieving greater integration within regional dairy markets. Finally, governments could make a substantial contribution to boosting the dairy sector by promoting the health and nutritional advantages brought by regular and moderate consumption of dairy products, through schools, mass and social media.

Finally, the seminar explored the role of gender in African dairy value chains. Participants made clear that 'gender' was not just about women but rather about fair relationships between different social groups in society and within households. A stronger focus on gender in African dairy value chain development could contribute to resolve family conflicts linked to the production, marketing and consumption of dairy products. Further dialogue was needed to identify the solutions that would make the best impact. Indeed, gender policies and strategies are largely missing when envisaging dairy development. If they are present, then the budget to implement them is missing. This results in an overall lack of concrete or visible actions to strengthen gender equality in African dairy value chains. Some opportunities were identified but very few concrete interventions had been implemented.

Walking through the dairy fields – practical observations

The field visits held on 21 September were meant to learn from various Kenyan experiences of dairy value chain development led by a farmers' cooperative, a joint-stock company, a family-owned dairy processing business and an input supplier. For example, the main objective of the cooperative model from the Kiambaa dairy rural SACCO was to allow its smallholder dairy farmers to gain access to finance. However, its members lacked information on the milk quality needs of buyers, which did not encourage them to invest into a system for testing the quality of the milk they produced.

On the gender side, the Kiambaa experience encouragingly showed that 60% of the milk was being collected by women and that they were also much involved in dairy production.

Another organisational model came from the OI Kalou dairy plant. It is owned by a joint stock company involving some producers but mainly other Kenyan investors interested in putting money into the development of dairy production in their rural home county. The dairy plant builds its relationship with its smallholder suppliers around the four pillars of good services to farmers, good



prices for milk, good equipment to minimise waste and good milk quality for its customers. The OI Kalou experience also showed a growing role for women and that increased milk production led to higher



incomes for farmers. Higher incomes in turn allowed farmers to diversify into other farm and non-farm enterprises so as to spread out their risk and sustain their livelihoods. The Eldoville dairy processing business fostered great opportunities for all its partners to develop further thanks to its focus on producing high-quality processed dairy products for small niche markets in the hotel, restaurant and catering sector. This strategy led to higher margins for all partners involved compared with the Kenyan commodity

milk market. The dairy had developed a dedicated base of smallholder contract farmers who supplied special high-protein and high-fat milk to the dairy's collection centre in exchange for higher prices than on the regular market.

Managed by a woman, the Eldoville dairy model was particularly useful to witness gender transformative interventions encouraging women to take an active part in all the steps of the dairy value chain. Finally, the fourth group visiting Sigma Feeds discovered a state-of-the-art dairy farm and a powerful private company with a recognised brand of feed products and a robust marketing strategy. Sigma distributes its milk to specialty markets and to ice cream processors, thus also tapping the high-value niche dairy markets emerging in Kenya. Through its demonstration of integrated high-value feeds for the feeding of premium-breed cows leading to high-quality milk, the firm also has a positive influence on the dairy development of neighbouring smallholder farmers who see it is a model to aspire to.

A different operational lens was provided by Arona Diaw, Head of sourcing and procurement, Laiterie du Berger, Senegal. Working in the very difficult Senegalese context characterised by strong environmental pressures restricting feed resources and equally strong market pressures with imported low-cost milk powder entering the market, the social objective of the Laiterie du Berger is to develop a dairy industry based largely on milk supplied from smallholder pastoral herders. Its main challenges are to stay competitive against the other dairies using exclusively cheaper



imported milk powder for their dairy products and to foster a sustainable development of all its chain partners. Nonetheless, since 2006, the Laiterie du Berger has managed to grow by 23% every year, and is still collecting half of its milk supply from 800 local suppliers who have slowly increased their production to reach a total of 2,000 litres of milk per day. The dairy collects fresh milk from farmers twice a day and processes it into various dairy products that are now marketed through 10,000 selling points across the country.

Reshaping the dairy fields – options and solutions

The researchers contributed their tools for dairy value chain analysis and research, tools for capacity development and case studies of African dairy development through a Toolkit fair. The interactions between researchers and dairy development practitioners led the latter to be aware of the possible tools available to help solve their challenges. Researchers in turn got to confront their theoretical analyses to the viewpoints of practitioners active in the field.

Some of the research tools shared¹:

- [Strategic framework for dairy sector development in emerging economies](#) – Jan van der Lee (WUR)
- [VACID Africa's Know-Eat Hub framework](#) – Betty Mutua (VACID Africa)
- [The feed assessment tool \(FEAST\) relevant for analysis and capacity development in dairy value chains](#) – Ben Lukuyu and Emmanuel Kinuthia (ILRI)
- [The role of 'development models' in shaping sustainable value chains in West Africa](#) – Guillaume Duteurtre (CIRAD)
- [Field testing an econometric conceptual framework for innovation platform impact assessment](#) – Jo Cadilhon (ILRI)
- [Gender relations through the market: the impact of smallholders' dairy market participation on women's relative intra-household bargaining position in Selale, Ethiopia](#) – Birhanu Megersa Lenjiso (CIDIN and Radboud University Nijmegen)
- [An institutional analysis of the value chain based on the Global Value Chain Approach \(GVC\)](#) – Serena Ferrari (CIRAD)
- [Food security and nutrition as basic indicators of socio-economic sustainability in a context of innovation. The case of the Laiterie du Berger in Senegal](#) – Abdrahmane Wane (CIRAD and ILRI)

Some of the case studies presented:

- Mapping the camel dairy value chain in Kenya – Dishon Mulo (ILRI)
- Identifying barriers for the development of the dairy supply chain in Malawi – Rollins Jonathan Chitika (AICC)
- Cow milk valorisation for Fulani women in Benin – Yvon Saroumi (FSA/UAC)
- Improving dairy value chain through influencing policy and practice, enhancing women participation and strengthening skills and networks: VSF-G's experience in Somalia – Maurice Kiboye (VSF-G)

Special group story telling sessions were also organised to allow other contributors to share their stories of dairy development, the challenges they had faced and the solutions they had found to address their challenges. A plenary story was given by Meeta Punjabi Mehta (Creative Agri Solutions Pvt. Ltd.) on the useful lessons learned for Africa from India's dairy development. Finally, four practical peer-assist sessions were also organised for participants facing a concrete problem to discuss ideas of solutions with their peers: best options for dairy cattle feed on 30 acres of land in East Ghana; implications of dairy policies on the current and future land and water use in Kenya; licensing and lack of dairy sector regulation as barriers to food safety in Kenya; land insecurity for smallholder dairy producers in peri-urban areas of Niamey, Niger.

¹ Participants travelling from Nigeria and Cameroon could not make it to the seminar because of last-minute logistical complications. Their contributions are nonetheless available on the seminar website along with the other tools presented.

The three main issues identified as entry points to a sustainable dairy development in Africa were: price, access to funds and knowledge. The problem of accessing funds is not only a restriction for smallholder farmers. Large dairy processors and small-and-medium enterprises along the dairy value chains are also finding it hard to obtain the funding they need to invest in their enterprises.



Knowledge on technical innovations but also on business management and processes are essential to get dairy farmers and small agribusinesses organised to face markets.



The solutions to a sustainable dairy development in Africa were discussed by the seminar participants. Although all stakeholders in the dairy value chains should take part in implementing the solutions, the government's role in fostering changes was seen as particularly crucial. One of the solutions put forward was cooperation between dairy stakeholders. First, cooperation and partnerships should be built at international level between Europe (and other industrialised countries) and Africa, but also between developing countries who have various useful experiences of dairy development. Increasing milk

production in Africa and enhancing the competitiveness of African dairy value chains can be achieved through a mix of relevant tools for access to finance, knowledge development, advocacy, diversification of dairy processing and legislations implemented. Shared ownership of these developments along the value chains will help make them more sustainable, thus the renewed importance of a focus on partnerships and cooperation. The environmental sustainability of dairy value chains was touched upon through some of the contributions made during the seminar but participants felt that more emphasis should be put onto that issue for African dairy value chains to become truly sustainable.

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