REPORT

Technical workshop on dairy value chain development in Eastern Africa

10 July 2016
1. Background, objectives and method of the workshop

1.1. Background

As part of the COMESA CAADP Regional Agricultural Investment Programme (RAIP), the COMESA Secretariat has developed an investment programme to enhance regional agro-food trade and access to markets for farmers (RIPA-II). This programme will support cooperation among COMESA Member States in strategic agro-food value chains, building upon existing national and regional initiatives. RIPA-II addresses some of COMESA’s priorities, implementation of CAADP at a regional level, as well as its policy for micro-, small and medium enterprises and its aim to enhance private sector participation in policy processes (see 2014 Kinshasa summit and business forum). The programme document for RIPA-II was reviewed at a stakeholder meeting in Lusaka in December 2015, which was a major step in its endorsement process.

One of the selected value chains is the dairy sector. In Eastern Africa, the dairy value chain is a major economic sector. It represents 8 per cent of GDP in Kenya, 6 per cent in Rwanda, and 3 per cent in Uganda. This sector is an important contributor of food and micronutrients and milk consumption plays a crucial role in the fight against malnutrition and stunting. It is also an important source of jobs, especially for women. The dairy sector has considerable development potential in East African countries given the large share of dairy farming in their agricultural GDP and the growing demand for dairy products in urban centres within the region and beyond. However, these opportunities have remained underexploited. Domestic dairy industries cannot fully satisfy the consumer demand for quality, differentiated products due to high marketing and processing costs, substandard raw milk and inadequate value addition capabilities. With low milk productivity and inefficient milk collection systems, many dairy farmers cannot reap the full benefits from their production.

The regional market is fragmented due to various obstacles to cross-border trade in dairy products despite complementarities among countries (for example difference in seasonal fluctuations in milk supply and differentiated dairy products). Likewise, policy-related factors hamper intraregional trade flows of feed from surplus to deficit areas. There are marked differences in dairy farm productivity and value chain development across countries in the region and the diffusion of improved technologies and knowledge/practices remains insufficient. In the future, climate change is likely to make milk production riskier for farmers and hinder milk production growth. At the same time, population growth and urbanisation will put pressure on grazing lands and further constrain potential milk output.

Addressing these bottlenecks (notably quality issues and barriers to trade) and exploiting these opportunities will require innovative partnerships among public, private, knowledge and development actors. RIPA-II aims to establish a platform that will facilitate a regular dialogue, experience sharing, networking and coordination among these actors. This platform should lead to concrete policy/regulatory reforms and investments addressing those issues. These actions will be monitored and evaluated by the stakeholders represented on the platform. This platform will involve representatives of COMESA MS governments, regulators, farmers, processors, consumers as well as experts and technical/financial partners. The East African Dairy Platform, or Regional Dairy Platform for short, is a pilot platform that will initially involve Kenya, Rwanda and Uganda. Priority intervention areas pre-identified under RIPA-II include (1) the

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1 Bingi, S., and F. Tondel, 2015. Recent developments in the dairy sector in Eastern Africa: Towards a regional policy framework for value chain development. ECDPM Briefing Note 78.

regulatory framework as regards dairy product quality, safety, and feed and fodder quality; (2) market information systems for dairy products and other supporting infrastructure and services; and (3) capacity development for dairy value chain operators and institutions.³

1.2. Objectives

Ahead of the launch of RIPA-II, the diagnosis of policy issues and the formulation of possible responses had to be further refined so as to effectively guide the multi-stakeholder dialogue in its initial phase. On 29-30 March 2016, the European Centre for Development Policy Management (ECDPM), in collaboration with the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), facilitated a technical workshop aiming to better identify policy priorities and effective policy instruments within the interventions areas pre-selected under RIPA-II. Under the aegis of the COMESA Secretariat, experts, practitioners, policymakers, regulators and value chain operators engaged in a frank dialogue on current challenges in the dairy sector, identified critical gaps, and discussed appropriate approaches to implement policy responses. They also shared updates on on-going policy and private sector development processes linked to milk quality issues and market information systems in Kenya, Rwanda and Uganda. This meeting served to strengthen the regional network of public, private, knowledge and development actors in the East African dairy sector, building mutual understanding and trust among stakeholders (see the agenda of the workshop and the list of participants in Annexes 1 and 2).

1.3. Method

The multi-stakeholder dialogue was guided by the following questions:

i. What are the respective roles of regulations and incentives in improving milk quality (from farm to processor) in the East African context? To feed the debate around this question, stakeholders began by sharing updates on national policy/regulatory processes and dairy development programmes, lessons learned, and views on current challenges.

ii. What have been the effects of past efforts to upgrade and harmonise dairy product regulations and standards, including the EAC-COMESA product standards and SPS regulations?

iii. What are the experiences with incentive systems for quality management in dairy value chains, including milk quality-based payment systems?

iv. What are the current sources of dairy market information and the gaps in existing MISs? What other supporting services are needed to improve the performance of dairy value chains?

The workshop used a combination of panel discussions, plenary discussions and group discussions to address these questions and fulfil the objectives of the workshop. The discussions allowed participants to learn from each other, co-create propositions for the Regional Dairy Platform, and discussing various factors that may determine the success, or failure, of proposed actions.

³ See COMESA RIPA-II programme document.
2. General perspectives of governments, the private sector and experts on policy issues and current approaches in the dairy sector

This section reports on key challenges, policy issues and current approaches in the East African dairy sector perceived by various stakeholders. Those were discussed in Session 2 (see Annex 1).

2.1. An underexploited potential

In Eastern Africa, the demand for processed food products from the emerging urban middle class is growing rapidly. This trend concerns dairy products in particular. At the same time, milk consumption by low-income households has been rising steadily. These dynamics are faced with a number of problems. First, at the regional level, dairy production has not kept up with the demand—a sizeable share of the consumption of dairy products is met by extra-regional imports. East African dairy processors generally have difficulty in securing a stable supply of quality raw milk. Second, despite the establishment of the East African Community Customs Union several years ago, non-tariff barriers to trade continue to hinder the movement of dairy products and feed products for dairy cows across borders. Intraregional trade in dairy products is trending upwards, for example, between Kenya and Uganda (in both directions) and from Kenya and Uganda to Rwanda, but it remains far from the potential of intra-regional trade complementarities. Third, dairy value chains have come short from attaining adequate quality and food safety standards. Fourth, due to widespread inefficiencies in milk marketing systems and also a lack of supporting infrastructure and services, a large number of East African dairy farmers earn little money from raw milk sales and insufficiently invest in productive assets (such as cooling tanks or improved breeds) to raise their productivity and the quality of raw milk. Too many of them still operate on a subsistence mode.

2.2. Challenges related to the prominence of the informal sector and the inadequacy of regulatory systems

The informal sector, which is based on mostly small-scale, generally unregistered economic operators, represents a large proportion of the dairy market in East African countries, roughly between 60 and 90 per cent. In Uganda, for example, the market share of the informal sector currently stands at 65 per cent. Across countries, the share of the informal sector has been slowly declining over the past decade. Under current circumstances, the informal sector plays a very important role: it organises the collection of milk from scattered small-scale producers and brings it to consumers at a relatively low cost, thereby allowing low-income households to access this nutritious food. It also sustains the livelihoods of many smallholder farmers and small-scale traders, with the majority of which being women.

The pervasiveness of the informal, however, has drawbacks as well. This market environment makes it difficult for dairy cooperative (or cooperative societies), the cottage industry and medium-size processors to emerge and thrive. As the milk supply fluctuates seasonally, informal traders are able to offer higher prices during the dry season, which often disrupts milk procurement for formal market intermediaries (this is the well-known “side-selling” problem). Generally, the informal market makes it difficult for formal actors to enter long-term supplier-buyer relationships with farmers, which is yet necessary to upgrade the value chain. In addition, formal actors have to follow rules and norms in place while incurring government taxes

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4 The precise definition of the informal sector and the denomination itself are subject to debates, as was mentioned during the discussions. Discussing this definition, however, is beyond the scope of this report (especially as this debate is currently less polarized than it used to be) and is left to future reflections.
and other levies to public authorities, which raises their costs compared to informal actors. At the same time, these cooperatives and medium-size processors have to compete with well-established, large processors and with competitive products from major international exporters.

During Session 2, experts also reminded stakeholders that the informal sector is a source of public health risk. Raw milk sold through informal marketing channels often is contaminated with pathogens or contains animal drug residues with undesirable effects on human health. Milk contaminated with brucellosis is particularly harmful for pregnant and lactating women. Poor milk quality in informal markets can also have negative side effects on the formal marketing system and consumer markets (cross-contamination, reputational risk and so forth).

In the past, in several instances, policymakers and industry actors sought to address these competitive and public health concerns by implementing a stronger, essentially regulatory approach (with regulators as “policemen” setting and enforcing rules and norms) to suppress the informal market. However, this approach has had quite limited success, both in terms of reduced informality and public health risk and as well as in developmental terms. It might have increased the regulatory burden on enterprises following the rules, however. More recently, a consensus has emerged according to which, while the negative consequences (and their root causes) of the informal sector must be addressed, the solution consists in progressively integrating informal actors into the regulated marketing system, rather than excluding them from the dairy value chain. In other words, ‘building a bridge between the informal sector and the formal value chain’, as one of the participants put it. Another participant, from the dairy industry, said that it is important to police the informal sector, it is also important to invest in it. This is even more justified as the informal is evolving and seizing new opportunities such as the introduction of automated milk dispensers.

On the other hand, regulatory authorities in the dairy sector are often insufficiently equipped to address the double challenge of (a) policing and supporting the development of the formal value chain and (b) addressing the informal sector problem. Regulatory agencies have too limited capacity in terms of staff and financial resources to effectively enforce regulations. Their effectiveness is also undermined by the fragmentation of the regulatory system as a whole. Several ministries and agencies are actually involved in the dairy sector, between farms and consumers, as the Ugandan regulator explained to other stakeholders. The institutional framework is too complex and it needs simplification to gain in effectiveness. These factors contribute to the policy-practice gap in the whole sector. At the regional level, progress in the harmonisation of regulations and standards has been slow and remains an unfinished business.

2.3. Turning challenges into opportunities

From the moment the challenges above were exposed, the general tone of the discussions was constructive. Among stakeholders, there was a sense that the policy dialogue should move towards “win-win” solutions bridging the regulatory gap and responding to the recognition that the informal marketing system has to be “embraced” by public policies while strengthening public health.

“Embracing the informal sector” should not be equated with “lowering standards”. Neither does it mean adopting dual standards, a set of quality and food safety standards for formal dairy enterprises and another, less demanding, for informal traders. Rather, it means encouraging informal actors to aspire to quality and food safety standards in effect. Regulators, working with other stakeholders (science, business and development partners) should sensitise informal actors to quality and food safety issues and demonstrate to them the benefits they could reap from adopting standards in effect. The involvement of the private actors in this process, notably those closely interacting with the informal sector, would be a crucial factor of
success. Generally, stakeholders recognised that on the supply side of the informal market, changing behaviour and promoting good practices for milk handling and marketing should be part of the solution.

As a stakeholder from Uganda explained, it is generally thought that low-income households cannot access milk from formal marketing channels. Yet, this perception is changing, considering that many in the low-income population can purchase products like bottled beer. Promoting a shift in mind-set among this population, making it more aware of food safety risks, and thereby expanding its demand for safe milk is another part of the solution. This is about consumer education and it would increase the benefits from milk consumption in terms of nutrition.

A third way to systemic change that is relevant to the Regional Dairy Platform, as some stakeholders recognised, is the “retooling” or “rationalisation” of regulatory systems. Policymakers and regulators have to find a better balance the “stick” (enforcement of rules) and the “carrot” (incentives) (probably in favour of the latter). They also have to simplify their regulatory frameworks and achieve better coordination between different ministries and agencies involved in regulating dairy markets. For example, health ministries often work separately from agricultural/livestock ministries to address the same or closely linked issues of food-borne disease outbreaks or to determine trade-offs between food safety risks and economic development. Better coordination between these two policy sectors could improve the coherence and thus the impacts of their policies. Besides improving the effectiveness of regulatory systems, this should also alleviate dairy enterprises from an excessive regulatory burden, if any. This “retooling” was seen as a key aspect of effective cooperation at the regional level and the development of the regional market.

2.4. Capacity building for farmers and entrepreneurs with potential

Developing the capabilities of farmers, cooperatives, processors, and other dairy value chain operators was a central concern among workshop participants. Not only to tackle the challenges mentioned above, but also to become competitive vis-à-vis the international market, as an international expert underscored. Supporting informal actors (particularly to assure hygienic milk production and meet regulations in effect) is not an easy task for policymakers and development partners. Approaches relying on business development services providers and other intermediaries offer promising opportunities.

While many stakeholders wondered how the Regional Dairy Platform could foster the adoption of better technologies, the discussions also led them to consider business and social innovations requirements for developing the value chain and integrating informal actors. Sectorial innovation platform were discussed a useful means to tackle capacity building challenges although solid evidence is needed before attempting to scale up this type of tool. Besides the strengthening of producers and value chain associations, the community animal health centre was mentioned by a stakeholder as a useful tool to promote throughout Eastern Africa.

As some stakeholders remarked, many development partners are involved in the East African dairy sector. In many occasions, they have sent incoherent messages to dairy producers and their interventions have gone in different directions. Better coordination and harmonisation of development assistance is needed in the dairy sector.
3. Current challenges and approaches of regulators

This section reports on national dairy regulators’ approaches to deal with the challenges previously discussed. These approaches were discussed in Session 3 (see Annex 1).

3.1. Harmonisation of regional dairy policies and regulations

Concerning milk and dairy product standards, significant achievements pioneered by the national bureaus of standards of EAC Member States culminated in the adoption of regional standards for the EAC, which have been under consideration as common COMESA-EAC standards. These common standards are intended to remove current bottlenecks impeding intra-regional trade in dairy products.

A major concern among stakeholders is the failure to implement or enforce standards specified at the national level, which also serve for the certification of goods being traded across borders. Weak implementation of standards, regulations and procedures at the national level ends up creating non-tariff barriers to trade. At the same time, there are different views among stakeholders as to whether it is realistic to set regional standards in line with international standards at the actual stage of development of the dairy sector in Eastern Africa.

Efforts to harmonize dairy policies in Eastern Africa date back to 2004 through a project supported by ASARECA and implemented by the International Livestock Research Institute (ILRI). In collaboration with the EAC and COMESA, priority areas for this work were identified. They included: customs procedures, import controls and other product market regulations; product quality and food safety standards; sanitary requirements; and, integrating the informal milk trading sector into the formal milk value chain (Omore and Waithaka, 2011). Another priority area was capacity strengthening in a range of areas, notably laboratories.

Since 2006, the ASARECA-ILRI project has facilitated regular meetings among leaders of statutory dairy regulatory authorities in East Africa to share lessons on ways to rationalize and harmonize dairy policies and standards in the dairy industry and promote, inter-alia, free trade in milk across borders. This was done through a forum known as East Africa Dairy Regulatory Authorities Council (EADRAC). The membership of EADRAC comprised the dairy boards of EAC countries. This forum proved quite effective in facilitating reductions of non-tariff barriers (NTBs) within EAC countries (Gelan and Omore, 2011). The sharing of lessons learned among national regulators was an effective approach for policy harmonisation. This process produced training manuals for smallholder producers and traders, and it eventually led to the business development services model (in particular for training and certification) piloted by the Kenya Dairy Board.

3.2. Regulatory approaches for informal markets

For a long time, informal markets have been largely discouraged or ignored by public policies due to a lack of risk assessments on which to base alternative public health standards. Consequently, there were no appropriate guidelines to manage the quality of milk sold by small-scale informal traders. Efforts of the ASARECA-ILRI project culminated in 2006 with the piloting of a new institutional mechanism involving the

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6 Stronger laboratory capacity is needed in countries that do not have a long history in dairying like Rwanda. Laboratories are in charge of testing dairy products and they must have the capacity to do so.
commercialised supply of training and certification. This mechanism recognised that much of the needed change could be achieved through accreditation of private services providers by responsible regulatory authorities. Recognition of trading licenses for small traders across countries would then ease the flow of raw milk between countries.

This scheme allows raw milk sales by small-scale traders within quality and food safety once accredited private services providers have certified them. Thus it favours their integration into the formal supply chain. The project produced training guides for each set of actors in the dairy marketing chain. Concomitant with these pilots have been actions by a wide range of stakeholders in each country to make the policy environment more favourable for small-scale milk traders. The new policy instruments that have contributed to the more favourable environment include: for examples, the Dairy Act (2004) administered by the newly formed Tanzania Dairy Board in 2005; a change in subsidiary legislation and the advancement of the Dairy Bill in Kenya—although the latter is still awaiting a parliamentary debate and its enactment.

During this session, some stakeholders expressed the view that the private sector should self-regulate to a greater extent than it currently does. Other participants thought that only government regulatory action can address the current challenges related to milk quality in the region. It appears that the capacity of the private sector to self-regulate depends on a number of factors, including its level of organisation (with dairy farm cooperatives, dairy sector associations/platforms, and so forth). When the private sector is not well organised, self-regulation is difficult to envisage while reaching farmers with regulatory information and guidelines can be a difficult task. In Rwanda, the Rwanda National Dairy Platform promotes self-regulation with a quality assurance mechanism that involves the certification of value chain operators. But this is done in close collaboration with the Government. The Government’s dairy sector strategy aims to strengthen linkages between smallholder producers and larger processors through targeted extension outreach, which complements the regulatory approach.

As already mentioned, one of the panellists said that dairy regulators and their partners can also act on the demand side of informal markets, by scaling up the promotion of safe milk consumption. This can be done through safe milk consumption campaigns and school milk programmes.

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4. Private sector dynamics in milk marketing and quality management

This section reports on discussions held in Session 4 about dairy enterprises’ approaches to improve the performance of their supply chains and better manage dairy quality and food safety (see Annex 1).

4.1. Selected developments and innovations in the private sector

During the session focused on the private sector, three participants presented their initiatives in Kenya, Rwanda and Uganda to illustrate how private actors cope with the challenges analysed above (improving milk quality, building reliable relations with dairy farmers, creating more value added and engaging in cross-border trade). Presenters included a medium-size for-profit processor from Kenya, a large cooperative from Uganda and a dairy development programme in Rwanda. Several other private actors attended the workshop and shared their experiences as well, including a small Kenyan cooperative society.

Unstable raw milk supply and poor quality are major hurdles faced by these cooperatives and processors. The quality of the milk they source from farmers, bulking centres and cooperative societies is compromised by several factors, including high bacterial counts, pathogenic bacteria, preservatives like hydrogen peroxide used in excessive amount, animal drug residues, and adulteration with water. These factors hinder the processing of milk into safe, quality dairy products (cheese in particular). They can also cause food-borne diseases. One example of pathogenic bacteria is Brucella, which causes the zoonotic infection called brucellosis. Furthermore, antibiotics contained in milk contribute to increased antibiotic resistance.

The representative of Happy Cow Ltd, a medium-size Kenyan processor, explained how her company is tackling head-on the problem of inadequate raw milk quality. The improvements it has made to its milk procurement process include:
- As part of the improvement in its cold chain, Happy Cow acquired cooling tanks with a plate heat exchanger, which allows for faster refrigeration;
- Training and “coaching” of the staff of cooperatives that supply milk, with an emphasis on hygienic milk handling, testing and other aspects of quality management (the sustainability of capacity building rests upon good cooperative governance);
- Sensitisation and training of dairy farmers;
- Milk testing at several critical points on several criteria: primary bulking centres, reception of the milk at the cooperatives’ storage facilities, and processing plant;
- Use of hygienic containers to collect and haul milk from the farms to the cooperatives (bacterial deterioration occurs in large part during the collection process and transportation);
- Milk traceability system;
- Separation of morning and evening milk;
- Sensitisation among its employees and partners.

With these measures, Happy Cow has made significant gains in terms of milk quality and has reduced post-harvest losses. After having strengthened its supply chain, it is now working with its suppliers to put in place a milk-pricing scheme based on quality factors. Happy Cow intends to pay the cooperatives it works with a premium for lower levels of bacteria counts, added water and other factors negatively affecting milk quality.

Stabilising and enhancing the raw milk supply requires acting on a number of factors. Besides the side-selling problem explained previously, private stakeholders highlighted the need to improve feed production, conservation and trading, and the need to invest more in rural extension and professional training.
4.2. State of dairy market information systems and remaining gaps

Stakeholders present at the workshop generally agreed that the paucity of accurate, timely and consistent information on dairy markets and trade (as well as related sub-sectors such as feed) is an obstacle to the development of an efficient and inclusive regional market. Several market information systems (MISs) currently operate in Eastern Africa, using various “business models” (which are more or less successful). Some are operated by governments/public agencies (agriculture/livestock ministries, trade ministries, customs agencies and so forth), some are private initiatives, and a few are public-private partnerships. A few of these MISs provide information at the regional level.\(^8\)

A good example of a private MIS that has already been applied to dairy and has regional coverage is Esoko (formerly TradeNet), a company based in Ghana and present in nearly 20 African countries.\(^9\) Among the various services it offers, Esoko delivers agricultural price information, weather forecasts and agricultural extension services through Short Message Service (SMS). Recently, in Malawi, Land O’Lakes collaborated with Esoko to disseminate takeaway messages from a radio show on dairy production, marketing and farm management.\(^10\) Two examples of regional MIS in Eastern Africa are the Regional Agriculture Trade Intelligence Network (RATIN) and the Agricultural Input Market Information and Transparency System (AMITSA). The EAC, COMESA and the IFDC jointly established AMITSA to enhance farmers, traders and other value chain actors’ access to agricultural input market information as well as technical advice on input use (seeds, fertilizers and crop protection products). Esoko implements AMITSA’s mobile-phone-based messaging system.

At the workshop, ESADA and the East African Farmers Federation (EAFF) presented their initiatives to develop regional information systems for the dairy sector. ESADA launched the International Dairy Enterprise Alliance (IDEA) Knowledge Portal in 2014, in partnership with Land O’Lakes International Development’s Cooperative Development Program (CDP).\(^11\) IDEA, which was established in 2012, is presented as a ‘learning network’ supporting dairy enterprises in developing countries. This network includes cooperatives, input providers, other value chain actors, public institutions, NGOs and development partners.

The IDEA Knowledge Portal is an Internet site that disseminates information (on dairy technology, markets and policies), knowledge products, and management and business development tools for dairy value chain actors.\(^12\) It targets specifically dairy farmers and cooperatives in Eastern Africa. It aims to enhance their access to relevant information and provide them with tools to develop their business. With the CDP, IDEA also organised in-person seminars/workshops to further disseminate knowledge and strengthen networks of value chain actors. According to ESADA, East African cooperatives need to be better equipped to integrate smoothly into increasingly commercially oriented dairy value chains. And the IDEA website is a key resource for cooperatives that are up against this challenge. ESADA considers that the IDEA portal could be a cornerstone of a future regional MIS.

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10 This activity was part of the Malawi Dairy Development Alliance, a programme sponsored by USAID.
11 This five-year programme, which was sponsored by the United States Agency for International Development, worked with vertically integrated dairy cooperatives in Kenya, Uganda, Tanzania and Ethiopia to enhance their competitiveness, increase their revenues and profits, and provide more benefits to farmers.
For the past few years, the EAFF has been developing an agricultural information system with regional coverage. This MIS is actually part of a collective marketing scheme called ‘e-Granary’. The e-Granary features an online trading platform relying on EAFF’s network of farmers on the sell side. It collects information from EAFF’s members, provides information to them, and supports trading activities. The e-Granary collects information on farm-level crop output (forecasted, before harvest, and actual, after harvest), product quality and input needs. It thus serves as a tool for group buying, for inputs, and group marketing, for products. The e-Granary is also intended to facilitate inventory management at the level of participating warehouses as well as payments to farmers. Participating members can supply price information through the MIS, which complements secondary sources of market information. As for other MISs, EAFF’s e-Granary relies heavily on phone-based messaging to exchange information among farmers, other value chain actors and the online platform. EAFF is currently developing a similar information system for dairy called ‘e-Dairy’, which is intended to facilitate transactions among dairy farmers, raw milk buyers and value chain services providers.

Agricultural MIS are crucial for farmers and other market intermediaries in agro-food value chains to make good decisions concerning production, input procurement, marketing and farm/business management. Market information is also important for policymakers and public administrators to plan, implement, and monitor and evaluate the effects of public policies. As part of a regional approach to dairy value chain development, ensuring that all value chain actors, particularly farmers and SMEs, have adequate access to dairy market information is a priority.

However, the discussion should not be limited to production, price and trade information. Information and communication technologies (ICTs) offer many opportunities to improve the functioning of markets/value chains and the effectiveness of policies, in synergy with MISs. At the firm level, they can facilitate supply chain management and quality management. Like with EAFF’s e-Granary, ICTs allow for new business opportunities for small value chain actors. Like with the IDEA Knowledge Portal and Esoko, they can enhance the dissemination of knowledge and tools for producers, serving as an additional vehicle for rural advisory services. ICT-based information systems can help bridge gaps between public and private actors by more effectively disseminating information on policies, regulations and standards in effect, and by allowing value chain actors to supply feedback on policy failures (for example, in Eastern Africa and elsewhere, systems are being established to report barriers to trade contravening free trade agreements, normal trade procedures, transportation rules and so forth).

Developing information systems that effectively support dairy value chain development requires discussions and coordination/cooperation at the regional level. In the case of market information, for example, an effective regional MIS must be based on common standards and procedures for generating, sharing and reporting data. Although there are promising, privately led initiatives (notably Esoko, the IDEA Knowledge Portal and the EAFF’s online trading platform), establishing and maintaining sustainable information systems in the agro-food sector have proven to be difficult tasks. Another challenge is to ensure that smallholder farmers in rural areas have adequate access to these information systems, that the information delivered is relevant to them, and that they have the tools (including the devices) and the skills required to make good use of this information. Even if agricultural information systems must be demand-driven and have a good economic/business case, as several participants stressed, they usually require some support from public actors, at least at their development stage. The Regional Dairy Platform could play a useful role by facilitating a discussion on these challenges and the elaboration of policy solutions.

13 In the case of dairy, such a tool would be particularly useful to collect data on dairy cow holdings.
5. Propositions for the Regional Dairy Platform

On the basis of the presentations and plenary discussions summarized above, workshop participants split up in groups to discuss the agenda of the Regional Dairy Platform and specific actions that it could lead. Group discussions were centred on the issues of regulation of milk quality, infrastructure and services supporting the functioning of dairy markets, and institutional capacity development in the dairy sector. These discussions were also structured along two distinct lines: interventions supporting primarily the development of domestic value chains (the ‘rationalisation’ of the dairy value chain); and interventions directly easing the intraregional trade of dairy products. The following sub-section lists ideas for what the Regional Dairy Platform could do as participants put them forward.

5.1. Overview of group discussions

**Policies and regulations**

- The Regional Dairy Platform could support the review and harmonisation of selected policies and regulations (SPS regulations especially) in the dairy and livestock sectors, including various levies and customs duties. At the level of the EAC, harmonised standards were developed but not legally adopted by Kenya, Uganda and Rwanda. Mutual recognition amongst countries of regulations and standards has the potential of significantly improving cross-border trade.
- It could centralise collected data on milk quality attributes and other relevant variables to monitor the performance of the value chain vis-à-vis regulations and standards in effect. This database could serve to inform traders, processors and retailers about the potential of the regional market.
- It could facilitate a regular exchange of experiences among national policymakers with policy reforms aiming to bridge the actual gap between international standards and actual quality and food safety levels in the region, which are due to various local constraints. International standards would be set as eventual goals, but the short-term focus would be on incremental steps taking into account context-specific constraints.
- It could play a role in sensitising COMESA/EAC member states and private actors about how regulations and standards work in practice. It could issue specific guidelines for different categories of actors so as to increase the effectiveness of the regulatory system.
- It could facilitate regular reviews of regulatory enforcement mechanisms to understand better what works and why.
- It could support capacity building activities at the country level to better implement standards (in particular, product testing and certification).
- The Regional Dairy Platform could contribute to better understanding how policies and regulations can strengthen cross-border trade. It could address undue protectionism and the strategic use of trade policy instruments hindering the performance of the regional market.

**Supporting infrastructure and services**

- The Regional Dairy Platform could support the establishment of a regional dairy market information system, including by supporting countries in developing dairy data collection systems and generating information for national food balance sheets. This regional MIS would improve the performance of dairy value chains, allow for more trade opportunities, and support policy planning and coordination.
- It could play a role in strengthening the capabilities of national and regional laboratories so that they can implement rules and standards in effect.
• It could stimulate investments in cold chain capabilities (equipment, capacity, etc.) and other productive investments by providing incentives.
• The Regional Dairy Platform should act as a knowledge “hub” for the dairy sector and ensure that relevant information and knowledge is shared among stakeholders. At this level, relevant information includes, for example, dairy policies, regulations, standards and lessons learned from their implementation.

**Capacity development and institutional strengthening**

• The Regional Dairy Platform could support national dairy-related policy processes, particularly the involvement of “weak” stakeholders, national public-private platforms, and other relevant advocacy initiatives.
• It could disseminate scientific and policy research findings relevant to the issues highlighted above.
• It could support a centre of excellence for the dairy sector (on the basis of the existing Regional Dairy Centre of Excellence) and the dissemination of technical and organisational innovations. It could stir scientific research towards the most pressing needs in relation to inclusive and sustainable value chain development.
• The Regional Dairy Platform could support the development of easy-to-use testing kits for basic milk quality parameters at the first levels of aggregation (milk bulking centres and small cooperatives) and “informal” milk retail outlets.

5.2. Synthesis of group discussions with additional remarks

Many areas need attention if the East African dairy sector is to attain its full potential. However, the Regional Dairy Platform should not attempt to address all of them. It should focus on a few critical ones, where it can add value, namely: capacity building for “weak” actors and transnational linkages; implementation of harmonized regulations, standards and cross-border trade procedures; awareness raising for critical issues across countries; support to regionally accredited laboratories; provision of market information with regional coverage; and guidance to the dairy industry on quality assurance schemes.

The Platform should help connect actors that play key roles in structuring and developing dairy value chains in their countries, including smallholder dairy farmers and small dairy enterprises. Together these actors could formulate a common vision and a joint strategy for the region. They could then pool public and private resources at the regional level to jointly improve regulatory systems, infrastructure and producer services underpinning more productive milk marketing systems and a broader, more inclusive regional market. They could also exploit synergies with other regional policies and programmes such as regional trade facilitation initiatives.

Working together and supported by the Platform, regulators (EADRAC) and industry representatives (ESADA) could lead the way in lifting non-tariff barriers to trade. This work will first require an inventory and a review of what has worked and gaps that need to be filled. EADRAC could provide guidance for the implementation of quality assurance schemes, of corresponding capacity building programmes, and of effective compliance mechanisms. The multi-stakeholder dialogue hosted by the Platform would be tasked with the elaboration of smarter modes of regulations, adapted the different situations. This may mean devising efficient incentives for the informal sector to progressively apply attainable regulations and standards and integrate into formal marketing channels, while still ensuring the supply of affordable and safe milk to low-income consumers. It also means effectively regulating the formal sector to maintain adequate quality and food safety standards, ensure that milk prices are determined transparently, and allow farmers to get a fair share of the value added generated through the value chain.

Stakeholders who attended the workshop initially asked how the Regional Dairy Platform would help countries develop their domestic dairy sectors and how it would add value to existing institutions and initiatives. As discussions progressed, most of them saw opportunities in this platform. This multi-stakeholder platform will ensure that the voices of multiple actors are heard in the policy dialogue. It will facilitate the sharing of national experiences; generate data and analysis helping to better plan policy/regulatory reforms and investments; support and broker policy/regulatory reforms; stir investments towards priority needs and promising opportunities; and assure the monitoring and evaluation of these reforms and investments. It could facilitate the pooling of public resources to jointly improve regulatory systems, infrastructure, and supporting services. Stakeholders generally agreed that the Platform will support policy and investment processes in three intervention areas, namely: (A) regulatory systems, as part of existing policy frameworks; (B) supporting services for dairy entrepreneurs; and (C) institutions and networks underpinning objectives in areas A and B. In doing so, the Regional Dairy Platform should follow the principles of subsidiarity and proportionality. This Platform should be inclusive and involve smallholder farmers and other small-scale value chain operators that make up a large part of the dairy sector.

6.1. Proposed intervention areas and actions

6.1.1. Rationalising regulation and making it more consistent

Discussions in the workshop revealed that a thorough review of regulations and standards in Kenya, Rwanda and Uganda and at the EAC-COMESA level is needed.14 There is insufficient common, up-to-date knowledge on which regulations and standards are applied in these countries, on their effectiveness and on the extent to which they are actually harmonised among countries in the region. The perception of various stakeholders is that these regulations and standards need to be “refreshed” as some of them may no longer be adequate given the current state of technology and product markets.

Activity A.1. Regulations and standards for dairy products

This activity will aim at delivering and disseminating updated and harmonised regulations and standards for dairy products at the regional level. It should prioritise products with a greater cross-border trade potential. It will consist in a series of actions, as follows:

- Review of dairy product standards to identify discrepancies among countries, inadequate specifications or gaps in product coverage for country-level and EAC-COMESA standards i.e., when current standards fail to cover products being sold on the market.
- This review process will require data on the characteristics of products currently on the market as well as currently used technologies and practices. Data on milk quality attributes and other variables in the value chain should be collected and analysed so as to calibrate standards adequately. Stakeholders will then be able to determine whether standards should be revised and adapted to the regional context.
- Revision of and definition of new common standards through a consultative process.
- Unlike standards, very few regulations were harmonised at the EAC level.15 The same review process as for standards can be followed for regulations. Given the greater complexity of regulations, the most relevant regulations will be prioritized before this review and harmonization process.

14 Standards for dairy products were harmonized at the EAC level in 2007. COMESA then adopted EAC standards although the former has never “gazetted” them.

15 For instance, regulations concerning reconstituted milk from milk powder were not harmonised.
process starts. This selection-review-revision process will follow guidelines such as those elaborated by the Standard and Trade Development Facility.

- Review of existing draft protocols for import and export documentation, permit issuance and testing of dairy products to identify discrepancies among countries as well as inadequate specifications or gaps in product coverage. This review process will require information on current practices; this process will complement the activities of the COMESA SPS programme concerning dairy trade in Kenya and Uganda.
- Revision and completion of draft common protocols through a consultative process. The revised protocols should integrate the principles of COMESA’s Green Pass and the process should be closely coordinated with COMESA’s SPS and VET-GOV programmes as well as other programmes dealing with trade rules.

Activity A.2. Regulations and standards for dairy feed products
This activity will aim at delivering and disseminating updated and harmonised regulations and standards for dairy feed products that are traded across borders, including compounded dairy feeds and forages. It will consist in a series of actions similar to those for A.1:

- Review of dairy feed regulations and standards to identify discrepancies among countries, inadequate specifications or gaps in product coverage.
- This review process will require data on the characteristics of dairy feed products currently on the market as well as currently used technologies and practices. Data on feed quality attributes and other variables in the value chain should be collected and analysed so as to calibrate standards adequately. Stakeholders will then be able to determine whether standards should be revised and adapted to the regional context.
- Revision of and definition of new common regulations and standards through a consultative process.
- Revision of existing draft protocols for dairy feed import and export documentation, permit issuance and testing of dairy feed to identify discrepancies among countries as well as inadequate specifications or gaps in product coverage. This review process will require information on current practices.
- Revision and completion of draft common protocols through a consultative process. The revised protocols should integrate the principles of COMESA’s Green Pass and the process should be closely coordinated with COMESA’s SPS and VET-GOV programmes as well as other regional programmes and actors dealing with trade rules.

As part of A.1 and A.2, stakeholders will identify needs and opportunities to rationalise institutional, legal and policy frameworks. For example, this may take the form of “soft” forms of regulations, such as codes of conduct, “dos and don'ts” or “good practices” based on various criteria. Other options include enterprise certification schemes like Rwanda’s Seal of Quality, with differentiated approaches across categories of value chain operators. These activities should also include a review of enforcement mechanisms.

Activity A.3. Regulations and standards for other dairy inputs
In the longer term, as needed, the Regional Dairy Platform may facilitate regulatory harmonization processes for inputs other than feed (see priorities identified by the National Technical Working Groups under a previous ASARECA-ILRI-led programme on dairy regulations). This may include in particular regulations and standards concerning breeding stocks and germplasm.

16 The Green Pass is a SPS certification scheme for commodities traded within COMESA. According to this scheme, if a product has been inspected and certified in conformity with SPS rules in a Member State, it can then traded across borders within COMESA without any additional inspections. The Green Pass relies upon mutual recognition agreements among COMESA MS.
Activity A.4. Harmonization of relevant dairy and livestock policies
In the longer term, as needed, the Regional Dairy Platform may facilitate policy harmonization processes. This would concern policies that may hinder the functioning of the regional market such as public subsidies and levies.

6.1.2. Promoting supporting services for inclusive dairy value chain development
The level of development of the dairy value chain differs across the three countries currently involved in the discussions about the Regional Dairy Platform, that is, Kenya, Rwanda and Uganda. However, the performance of the dairy sector (in terms of efficiency and quality) in these countries generally lags that in major producing countries in the international market. At the same time, within these three countries, there are dairy farmers, cooperatives and processors of very different sizes and with very different productivity levels. The development of an inclusive regional market depends upon the achievement of efficiency and quality gains by small-scale dairy farmers and small and medium-size enterprises handling milk in the value chain. It also depends on their ability to seize market opportunities. As discussed during the workshop, COMESA’s programme should also support the capabilities of actors currently operating in the informal sector. This will contribute to enhancing the efficiency of the whole dairy value chain, improving the quality of dairy products and providing for a level playing field for dairy entrepreneurs. It should provide these actors with incentives to integrate with the formal value chains while bridging the regulatory gap between the two sectors. Key limiting factors that the Platform may address are skill shortages among small dairy entrepreneurs and inadequate access to quality producer services.

As part of the “retooling” of the dairy sector, stakeholders will have to exploit the potential of digitization of information and communication technologies, to facilitate the dissemination of knowledge; to enhance the collection, management and reporting of production and market data; and to support supply chain management. This is essential to improve the efficiency of dairy production and marketing systems. In particular, the Regional Dairy Platform will support the development of a regional dairy market information system.

Activity B.1. Establishment of the regional dairy market information system
This activity consists of the establishment of a functional Regional Dairy Market Information System, building upon existing systems. It will involve the following actions:

- Facilitation of a multi-stakeholder consultation involving public and private providers of dairy market information. Both ESADA and EAFF are currently developing solutions to enhance the availability of market information and other types of information concerning the dairy sector. These solutions are proprietary and, to a varying degree, are intended to support trading activities. Other private actors may take part in these discussions, including private providers of agricultural market information such as Esoko. Other public sector Public actors providing market information include agriculture, trade, industry and finance ministries and customs agencies (for cross-border trade data). This consultation should provide policy options to enable the emergence of a regional market information system.

- Follow-up discussions to put in place funding mechanisms for initiatives stemming from the policy options above. This should include project development costs such as feasibility studies, market studies, business plan development, and so forth.

Activity B.2. Scaling up of skill development and advisory services
This activity will consist in putting in place tools supporting skill development and advisory services for small- and medium-size dairy value chain operators. It will involve the following actions:
• Review of the effectiveness of and challenges faced by the training-and-certification programme facilitated by ILRI and ASARECA and implemented by dairy boards in Kenya and Tanzania in the 2000s and other certification schemes such as the Seal of Quality scheme adopted in Rwanda (with support from the Rwanda Dairy Competitiveness Programme II, RDCP II\textsuperscript{17}); identify the pros and cons, opportunities and risks of implementing and scaling up these programmes in the countries participating in the Regional Dairy Platform. Dairy training institutions should be involved in this component of the policy dialogue.

• Development of guidance documentation, tools and dissemination activities to better integrate harmonised regulations and trade protocols into current and future capacity building programmes, training-certification-licensing schemes, and agricultural advisory services. These guidelines, tools and dissemination activities should comprise raw milk and dairy product quality management, quality-based payment systems and other quality assurance mechanisms, dairy supply chain management, cold chain management, regulatory compliance and cross-border trade protocols.

• Follow-up discussions to put in place funding mechanisms for initiatives stemming from the policy options above including project development costs such as feasibility studies, market studies, business plan development, and so forth.

Activity B.3. Upgrading of the regional laboratory network
In the medium-term, the Platform may assess the capabilities of Eastern African laboratories to control the quality of dairy products and assure the smooth implementation of cross-border trade protocols for these products. This assessment would identify capacity gaps at the level of those laboratories as well as opportunities for improving the performance of dairy product testing throughout the region. This activity should take into account COMESA’s plan to establish ‘authorized satellite laboratories’ that will test products traded in the Common Market, underpinning COMESA’s trade dispute resolution mechanism.

6.1.3. Institutional strengthening for effective dairy policy management

Discussions at the workshop highlight the existence of critical gaps in information sharing and coordination among various dairy sector stakeholders. The outcomes of the workshop also show that there is significant value added to realize from regular policy dialogues and greater policy coordination among East African countries. This intervention area focuses on strengthening and creating linkages among existing platforms, innovation systems and institutional and policy frameworks so as to pursue the policy objectives of the Platform.

Activity C.1. Enhancing linkages among national actors
• Revive EADRAC, a forum of dairy regulators, with the participation of other key government organs/agencies in the areas of industry, trade, agriculture, health and food safety (“EADRAC+”). This forum would lead policy processes A.1-4 and assure coordination concerning regulatory matters, for example, cross-border trade protocols. The role of this EADRAC+ would include:
  o Timely exchange of information on dairy policy and regulatory issues;
  o Coordination of regulatory harmonization processes A.1-A.4;
  o Sharing of experiences with the rationalisation and retooling of regulatory systems in the dairy sector, and with the creation of synergies within the public sector for more effective and consistent regulation.
  o Tailored capacity building activities for dairy regulators and other key public actors.

\textsuperscript{17} The RDCP II provides milk-testing kits to dairy cooperatives and milk processors in Rwanda. The Seal of Quality initiative is implemented in partnership with the Government of Rwanda’s Agriculture and Livestock Inspection and Certification Services. The Government has put in place a certification mechanism for handlers of raw milk.
• Facilitate the sharing of information and lessons learned from public-private platforms and partnerships at the national level, in particular, with innovative regulatory approaches, quality assurance systems, and other private-sector-led mechanisms to regulate dairy value chains;
• Share lessons learned and produce common guidance documentation for public procurement of milk, including for school milk programmes and consumer information campaigns.

Activity C.2. Strengthening of the regional dairy innovation system
This activity will consist in a policy dialogue addressing the need for an effective regional dairy innovation system. The objectives of this dialogue will be linked to policy/regulatory activities A.1-4, the development of value chain supporting services B.1-3, as well as other priority actions that may emerge from the overall policy dialogue. In particular, it will aim to rationalise the organisation of scientific and technological research regionally, promote cross-country cooperation in research and development, and establish a knowledge network underpinning an effective regional dairy innovation system. This knowledge network, comprising national one-stop hubs that provide expertise and training services, could be developed from existing knowledge centres like the Regional Dairy Centre of Excellence. Initially, this dialogue will focus on:
• Reviewing the experiences of past/existing national dairy innovation systems, which may encompass different types of research and innovation (R&I) organisations, networks, platforms and partnerships, identifying current and future gaps, and drawing lessons for future R&I interventions in relation to the priorities for the dairy sector reflected in the Platform;
• Monitor advances and bottlenecks in the technological development of the dairy sector, including the economic and social constraints to innovation, adoption and diffusion processes; conduct stocktaking and forward-planning exercises on innovations of particular relevance to the objectives of the Platform.

Activity C.3. Synergies with other regional institutional and policy frameworks
• As relevant, the Platform will establish linkages between policy processes specific to the dairy sector and cross-sectorial policy areas, including:
  o Livestock policy
  o Trade and investment policies (including trade dispute settlement mechanisms);
  o State aid;
  o Antitrust litigation;
  o Cooperative law;
  o Other regulatory matters dealt with at the regional level.
These linkages may range from targeted training seminars to engagement in policy processes in those areas with a view towards making dairy value chains more efficient and inclusive.

The Platform will also seek to:
• Integrate dairy products and feed into the monitoring systems for non-tariff barriers to trade of the EAC and COMESA;
• Facilitate coordination among development partners and alignment of their interventions with the regional dairy sector’s vision and strategy.
6.2. Proposed next steps towards the establishment of the Regional Dairy Platform

The proposed next steps of the process to establish the East African Dairy Platform are:

1. Share the outcomes of the Nairobi workshop at the late July 2016 meeting of COMESA Ministers in Cairo, as part of the presentation of RIPA-II by the COMESA Secretariat;

2. Disseminate the final workshop report to a wide range of public and private stakeholders (including development partners);

3. Discuss and validate a multi-year Action Plan for the East African Dairy Platform at the next stakeholder meeting, including a result framework and the outline of a monitoring and evaluation system;

4. Elaborate a work plan for 2016-17, including short-term priorities to achieve “quick wins” along with lead stakeholders or “champions”.
Annex 1: Agenda of the workshop

Technical workshop on dairy value chain development in Eastern Africa
Amber Hotel, Nairobi, 29-30 March 2016

Tuesday 29 March: Background, framing of issues, and networking
13:30 – 14:30: Registration
14:30 – 15:45: Session 1: Review of the objectives and approach of the COMESA Regional Investment Programme for Agriculture—Priority Area II (RIPA-II)
   • Introduction by ECDPM
   • Presentation of RIPA-II by the COMESA Secretariat
   • Remarks on RIPA-II by:
     Representatives of the ministries of agriculture of Kenya, Rwanda and Uganda
     COMESA Business Council
     ESADA
   • Q&A—moderated by ECDPM
15:45 – 16:00: Break
16:00 – 18:00: Session 2: Overview of challenges, policy issues and current approaches in the East African dairy sector—setting the stage
   • Introduction by ASARECA
   • Remarks by:
     Kenya Dairy Processors Association
     Kirinyaga Dairy Farmers Cooperative
     Rwanda National Dairy Platform
     Ministry of Agriculture, Animal Industry and Fisheries of Uganda
     Pr. George Nasinyama, Makerere University
   • Roundtable discussion—moderated by ASARECA
   • Wrap-up of the day by ASARECA and ECDPM
18:30 – 19:00: Networking cocktail
19:00 – 20:30: Business dinner
   • Remarks by Agri-ProFocus on networking and partnership building for innovation in agro-food value chains
**Wednesday 30 March: Thematic discussions and propositions for RIPA-II**

8:30 – 8:45: Reminder about the objectives and modalities of the discussions
- Remarks by the COMESA Secretariat

- Remarks by:
  - Kenya Dairy Board
  - Ministry of Agriculture and Animal Resources of Rwanda
  - Uganda Dairy Development Authority
  - COMESA Reinforcing Veterinary Governance (VET-GOV) Programme
- Roundtable discussion—moderated by ASARECA

10:30 – 10:45: Break

10:45 – 12:45 Session 4: Quality-based milk payment systems and other private-sector-led approaches to improving marketing performance
- Remarks by:
  - Happy Cow Ltd on establishing a quality-based milk payment system in Kenya
  - Land O'Lakes International Development—Rwanda Dairy Competitiveness Program II on improving efficiency in milk collection and value-added and safe dairy in Rwanda
  - UCCCU on growing a dairy cooperative and assuring quality
  - Dairy Regional Centre of Excellence
- Roundtable discussion—moderated by ECDPM

12:45 – 14:00 Lunch

14:00 – 14:45 Session 5: Strengthening market information systems in the dairy sector
- Remarks by:
  - Ministry of Agriculture Livestock and Fisheries of Kenya
  - ESADA
  - EAFF
  - Technical partner, TBC
- Roundtable discussion—moderated by the COMESA Business Council

14:45 – 15:15 Session 6: A framework for planning and monitoring progress in the implementation of RIPA-II
- Presentation by Wageningen University Centre for Development Innovation
- Q&A—moderated by ESADA

15:15 – 16:00 Session 7-a: Formulation of propositions for RIPA-II’s dairy component through group discussions
- Moderated by the COMESA Secretariat, the COMESA Business Council, ESADA and ASARECA

16:00 – 16:30 Session 7-b: Plenary discussion on propositions for RIPA-II’s dairy component
- Moderated by ASARECA and ECDPM

16:30 – 17:30: Session 8: Wrapping up: A tentative agenda and partnership for RIPA-II’s implementation
- Summary by ASARECA and ECDPM
- Closing remarks by ESADA, the COMESA Business Council and the COMESA Secretariat
### Annex 2: List of participants

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Name</th>
<th>Position</th>
<th>Attendance</th>
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</thead>
<tbody>
<tr>
<td>Uganda Dairy Processors Association</td>
<td>John Anglin</td>
<td>UDPA Secretary</td>
<td>Y</td>
</tr>
<tr>
<td>Uganda Crane Creameries Cooperative Union</td>
<td>Clayton Arinanye</td>
<td>General Manager</td>
<td>Y</td>
</tr>
<tr>
<td>Dairy Development Authority</td>
<td>Agnes Baguma</td>
<td>Dairy Regulatory Services Manager</td>
<td>Y</td>
</tr>
<tr>
<td>EU-GIZ advisory support to the transformation process of the Ministry of Agriculture, Livestock and Fisheries</td>
<td>Alban Bellinguez</td>
<td>Technical adviser</td>
<td>Y</td>
</tr>
<tr>
<td>European Centre for Development Policy Management</td>
<td>Paulina Bizzotto Molina</td>
<td>Junior Policy Officer Food Security Programme</td>
<td>Y</td>
</tr>
<tr>
<td>COMESA SPS Unit</td>
<td>Martha Byanyima</td>
<td>Coordinator</td>
<td>Y</td>
</tr>
<tr>
<td>Innovations for Poverty Action</td>
<td>Claudia Casarotto</td>
<td>Deputy Country Director</td>
<td>Y</td>
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<tr>
<td>Kenya Dairy Board</td>
<td>Philip Cherono</td>
<td>Technical Services Manager</td>
<td>Y</td>
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<tr>
<td>Uganda National Bureau of Standards</td>
<td>David Eboku</td>
<td>Manager Standards Department</td>
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<tr>
<td>Ministry of Agriculture Rwanda</td>
<td>Isidore Mapendo Gafarasi</td>
<td>Director of Veterinary and Laboratory Services</td>
<td>Y</td>
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<tr>
<td>SNV Netherlands Development Organisation</td>
<td>Anton Jansen</td>
<td>Teamleader Kenya Market-led Dairy Programme (KMDP)</td>
<td>Y</td>
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<tr>
<td>Land O'Lakes International Development (Rwanda Dairy Competitiveness Program II)</td>
<td>Dennis Karamuzi</td>
<td>Chief of Party/Country Representative</td>
<td>Y</td>
</tr>
<tr>
<td>Kenya Bureau of Standards</td>
<td>Paul Kimeto</td>
<td>Manager EAC/COMESA Desk</td>
<td>Y</td>
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<tr>
<td>Ministry of Agriculture Kenya</td>
<td>Julius Kiptarus</td>
<td>Director of Livestock Production</td>
<td>N</td>
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<tr>
<td>SNV Netherlands Development Organisation</td>
<td>Reuben Koech</td>
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<td>Kenya Dairy Board</td>
<td>Mildred Kosgei</td>
<td>Senior Dairy Development Officer</td>
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<td>TechnoServe</td>
<td>Annah Macharia</td>
<td>Head of Dairy and Market Facilitation</td>
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<tr>
<td>COMESA Business Council</td>
<td>Kudzai Madzivanyika</td>
<td>Business Policy Advocacy Officer</td>
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<tr>
<td>COMESA secretariat</td>
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<td>Vet. Gov Coordinator</td>
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<td>Directorate of Veterinary Services</td>
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<td>SMAP coordinator, Assistant Director of Veterinary Services</td>
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<tr>
<td>Independent consultant</td>
<td>Brian Milton</td>
<td>Consultant/Advisor in the Agrifood sector specializing in Food Safety and the Dairy sector</td>
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<td>Kenya Agribusiness and Agro-Industry Alliance</td>
<td>Lucy Muchoki</td>
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<tr>
<td>Uganda Dairy Processors Association</td>
<td>Geoffrey Mulwana</td>
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<td>Y</td>
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<td>AgriProFocus - Kenya</td>
<td>Maureen Munjua</td>
<td>Country Coordinator</td>
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<td>Rwanda National Dairy Platform</td>
<td>John Museremakweli</td>
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<td>Kampala International University</td>
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<td>Epidemiologist and Food Safety expert</td>
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<td>Happy Cow Ltd</td>
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<td>Project Manager for Raw Milk Quality</td>
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<td>Wageningen UR Livestock Research</td>
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<td>Peter Ngaruiya</td>
<td>Executive Director</td>
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<td>Kirinyaga Dairy Farmers Cooperative Society</td>
<td>Lucy Wakaria Njiru</td>
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<td>International Livestock Research Institute</td>
<td>Amos Omore</td>
<td>Tanzania country representative</td>
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<tr>
<td>Regional Dairy Centre of Excellence</td>
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<td>Coordinator</td>
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<td>Happy Cow Ltd</td>
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<td>Rwanda National Dairy Platform and ESADA</td>
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<td>Association for Strengthening Agricultural Research in Eastern and Central Africa</td>
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<td>Theme manager</td>
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<tr>
<td>Uganda Dairy Processors Association</td>
<td>Robert Walimbwa</td>
<td>Member UDPA, Brookside/Sameer and ex-DDA</td>
<td>n</td>
</tr>
</tbody>
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