



## The Dairy Sector in Kenya

Kenya's dairy industry is private sector driven. It is the largest agricultural sub-sector and contributes 4% to GDP (KDB, MoALF 2012). The sector is dynamic with high growth figures of marketed milk and investments by dairy societies and processors in amongst others the cold chain, production of long life milk (ESL) and milk powder.

About 80% of Kenya's total milk production (ca. 5 billion litres in 2011, KDB) is produced by smallholders. This poses huge challenges to the industry in terms of cost of production, collection and chilling, seasonal fluctuations in supply, and with regard to the quality of raw milk. There is however a fast growing segment of medium-scale farmers/investors who invest in modern and fully commercial dairy production.

Currently the sector provides nutrition, income and employment for approx. 1.8 million people across the dairy value chain: farmers, transporters, traders and vendors, employees of dairy societies, milk processors, input suppliers and service providers, retailers and distributors.

Kenya has about 30 active milk processors of which the largest are Brookside, NKCC, Githunguri and Sameer who together process ca. 85% of the 1.5 million kilos of milk that is processed daily. Market leader is Brookside Dairy Ltd. Although the market for processed milk and milk products saw a steep growth over the past 10 years, still an estimated 70-80% of all marketed milk finds its way to the consumer through the raw milk market. The industry's growth and competitiveness are constrained by seasonality in milk production,



milk quality issues, a huge knowledge and skill gap, sub-standard service provision and input supply, as well as high fragmentation of the supply chain and lack of inclusive business models. If these issues can be effectively addressed this will boost further commercialisation and growth of the sector, thereby further contributing to creation of wealth and employment across the value chain, and to food security.

Acknowledging this opportunity, SNV has chosen to work in the Kenya dairy sector to help spur the industry into a viable path for sustainable development. In doing so, SNV sees the formal sector for processed milk and milk products as the driver for growth, and advocates for stronger and more inclusive relationships between processors and farmers or farmer-owned dairy societies. In the broader context of food security, KMDP acknowledges the need for more efficient and competitive (dairy) value chains, to assure enhanced access for lower income urban consumers to safe and affordable milk and milk products.

## Kenya Market-led Dairy Programme (KMDP)

SNV's work in the Kenyan dairy sector is through the Kenya Market-led Dairy Program (KMDP). KMDP is a 4.5 year programme funded by the Royal Embassy of the Kingdom of the Netherlands in Nairobi and started at the 1<sup>st</sup> of July 2012. It has two main intervention strategies or pillars.

### **I. To increase efficiency and competitiveness of the smallholder dairy value chain**

Under this pillar, the project works in milk sheds across Kenya, with milk processors and farmers-owned dairy societies or companies - also referred to as Collection and Bulking Enterprises (CBEs) - willing to develop an inclusive business model, by investing in training & extension services (T&E), feed and fodder, improved input and service provision and milk quality. In this model, KMDP also engages with quality input suppliers and service providers, by linking them to the CBEs for members' training and marketing of products and services.

## II. To promote and facilitate innovation and address systemic issues in the sector

Under this pillar, KMDP interventions target stakeholders in the dairy industry that are best placed, willing and able to address systemic issues that hamper growth of the sector, through piloting innovations and best practice solutions. In particular those that address systemic issues related to feed/fodder, milk quality, total farm management and productivity, the skills and knowledge gap, and – also – sector governance. Under this pillar KMDP also operates an Innovation Fund and facilitates international business linkages.

### KMDP's Approach

The programme focuses on stakeholders and partners whose key-concern is to enhance efficiency, productivity and profitability of the industry. Since its start in July 2012, SNV/KMDP has partnered with smallholder-owned dairy societies (CBEs), medium and large scale dairy farmers, commercial fodder producers, milk processors, training institutions, service providers & input suppliers, financial institutions and investors; both local and international. These interventions and partnerships are structured around the following KMDP Agendas.

#### 1. Efficient and Competitive Smallholder Supply Chains

In the smallholder dairy value chain KMDP supports currently 17 farmer-owned dairy societies (CBEs) in North Rift, Central and Eastern, to enhance profitability and to develop a strong service model for their members, with a focus of increased productivity at farm level and feeding. The key interventions in KMDP's DVC Agenda are:

- *Management and Governance:* KMDP supports CBEs with training of Boards, Management and operational staff, including the preparation of strategic plans. KMDP engages SNV Advisors and Business Development service providers to deliver on this output.
- *Training & Extension:* KMDP's approach is to stimulate and facilitate dairy societies (and processors) to set up and equip in-house Training & Extension (T&E) Units or Departments, that are paid through a small "levy" or deduction on the price paid to their members for the delivery of raw milk.
- *Feed and Fodder:* In T&E emphasis is on feeding, feed rationing and fodder supply. The latter both with regards to on-farm establishment and preservation, and by linking CBEs to Commercial Fodder Producers.
- *Linkages with Input Suppliers and Service Providers:* KMDP supports the establishment of business linkages between CBEs and professional and credible input suppliers and service providers. This includes linkages with financial institutions for credit facilities and with training institutions.
- *Linkages with the market:* KMDP's focus is on the formal market for processed milk and forging stronger collaboration between CBEs and processors. This includes stimulating processors to invest in the supply chain for higher productivity and milk quality, but also to support initiatives to develop new products or business models for enhanced access to safe and nutritious milk products by low-income consumers. KMDP partners with DSM/GAIN and a local processor to launch a fortified milk product for the mass market.



#### 2. Systemic Issues and Innovation

The Kenyan dairy sector is characterized by a number of systemic bottlenecks, of which high cost of production and poor raw milk quality are perhaps the most pressing. High cost of production is largely due to low skills and knowledge of farmers and the low quality of feeds and forages, and the seasonality of supply. Addressing these issues requires innovations and investments by dairy value chain actors and input & service providers. KMDP acknowledges that innovations are more likely to be adopted and successfully implemented by those who have the ability (knowledge, resources in terms of land and capital) to innovate and invest.

These are usually not smallholder farmers and therefore KMDP also engages with other stakeholders in the sector, and at different levels and entry points. In doing so, KMDP recognises that the changes and reforms resulting from interventions at these other levels in the dairy value chain will benefit smallholders as well, in terms of an enhanced enabling environment, more inclusiveness in the supply chain and the development of a more robust – and quality-driven - dairy service infrastructure. In this Innovation Agenda, KMDP facilitates the following interventions:

- *Medium-scale Dairy Farmers Model:* Medium and large scale dairy farmers play an important role in adopting innovations, demonstration of best practices, providing critical mass for the development of an effective dairy infrastructure with quality services, input suppliers and investors. They are also key in addressing the issue of food security for a growing urban population. KMDP supports medium-scale Farmer Forums in various milksheds across Kenya, with the aim to capacitate dairy farmers in accessing/sharing best practice Farm Management, to develop innovative business models e.g. for breeding and fodder production and marketing, to engage in agricultural contracting services and in training & demonstration (through PDTs), and to lobby for good policies for the benefit of the entire sector. This segment of professional dairy farmers will also establish business linkages with smallholder farmers and their CBEs, amongst others through milk bulking, sales of fodder, heifers and opening their farms for training and demonstration.



- *Feed and fodder:* The dairy sector's growth is hampered by high cost of milk production, which is largely related to low quality of feed and fodder, and the lack of year-round availability of quality forages. Milk processors suffer from milk fluctuations between dry and rainy seasons, resulting in capacity utilization of only 40-60% across the board. These high fluctuations arise because most farmers depend on rain-fed agriculture and rarely make provisions for preserving fodder for the dry-season. KMDP's fodder intervention aims to increase year-round access to good quality fodder from individual farms or purchased from Commercial Fodder Producers. This includes improving farm-management skills in production, mechanisation and preservation, introducing new fodder seed varieties and piloting innovative technologies and business concepts for marketing of preserved fodders.



- *Dairy Consultants and Total Farm Management:* Proper training & extension services for practical skills development are required, for farmers to apply good animal husbandry practices as regards to feeding, housing, fertility management, calf rearing and record keeping. This is essential to raise productivity and to reduce cost of production for higher profitability. However, there is a huge knowledge gap in Kenya in all aspects of dairy management and the institutional environment to provide training & extension is weak. KMDP helps to cushion this through various interventions (see also the VOSD Agenda below). One of these is to capacitate private local dairy consultancy firms and link them, on one hand, to the market (e.g. medium/large scale Dairy Farmer Forums), and, on the other hand, to international expertise and dairy consultancy firms in a franchise model.



- *Quality Based Milk Payment systems (QBMP)*: Milk delivered to processors is often adulterated with water and other additives and does not meet microbial standards set by the Kenya Dairy Board and the Kenya Bureau of Standards. Quality Based Milk Payment systems provide an incentive to farmers and farmer-owned dairy societies to maintain milk quality. This KMDP intervention aims to facilitate processors to pilot QBMP-systems, by providing technical advice and other support. This is done in collaboration with the Kenya Dairy Board.



- *Practical Training and Vocational Skills Development (VOSD)*: Transfer of knowledge, including vocational skills is the foundation of a competitive dairy sector. Agriculture training and extension (T&E) has traditionally been provided by government, but got dismantled with the implementation of Structural Adjustment Programmes in the 1990-ies. Although private agents and institutions and NGOs have emerged to fill this gap, this privatisation process has not been completed. The skills and knowledge gap of farmers and other actors along the dairy value chain are significant. KMDP focuses on linking dairy value chain operators (farmers, dairy societies and processors) to training institutions, and to support these institutions to engage in more market-oriented approaches to curricula development and T&E delivery models (outreach, demo farms, etc.). In this VOSD Agenda KMDP is involved in the following projects or interventions:

- ✓ *Dairy Training Institute (DTI) Naivasha*: Support to the transitioning of DTI towards a SAGA or a Polytechnic under TVET to attain autonomy from government, and preparation of a comprehensive investment or business plan for a more commercially-oriented private sector-driven national Dairy Training Institute.
- ✓ *Practical Dairy Training Centres*: Support to a number of decentralized private operated Practical Dairy Training Centres or Dairy Training Farms close to the farmer.



- *Policy*: Industry policies affect the business enabling environment. Some policies are counter-productive to the growth and commercialization of the dairy sector, e.g. a VAT on liquid processed milk. KMDP engages with policy and opinion makers to identify or address policies constraining the growth and competitiveness of the sector. Examples of this are fiscal policies regarding tax exemptions for dairy equipment and liquid processed milk, regulation of the raw milk market, the introduction of dairy industry standards, the development of standards for milk fortification, piloting of new energy and protein rich fodder seeds, the regulations regarding the importation of heifers, and the institutional environment for practical dairy training.
- *Innovation Fund*: To facilitate and fast-track innovations in the sector, KMDP operates an Innovation Fund that facilitates piloting private sector initiated proof-of-concepts. The Fund assists in making available co-funding for technical assistance and hardware. The Innovation Fund has a charter that spells out which projects are eligible for funding and the criteria for co-financing and own-contribution of the applicant. It also has a format for proposal writing.

### 3. International Business Linkages and Public-Private Partnerships

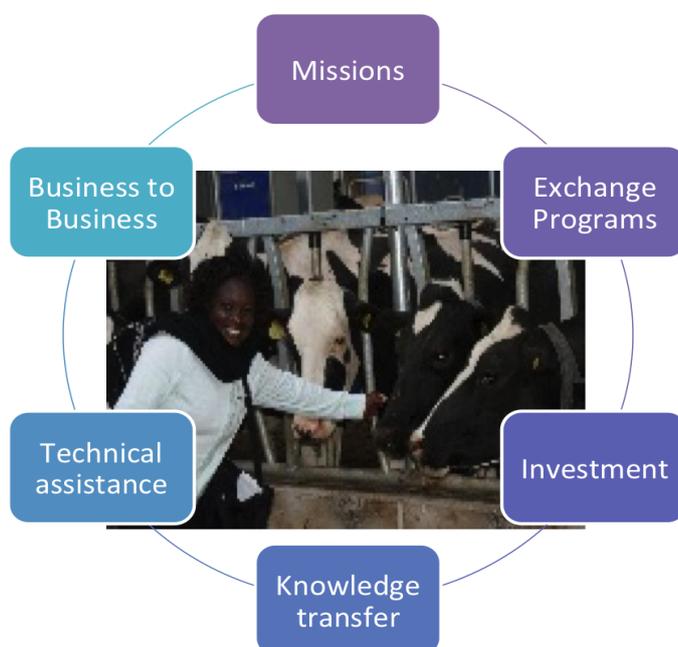
KMDP actively promotes and facilitates business linkages between the Kenyan and the Dutch dairy sector and other international players. Increasingly, emphasis in international thinking about development is shifting from Aid to Trade, and this is acknowledged by KMDP as well as a more sustainable path to growth.

KMDP therefore facilitates international companies that wish to contribute in a professional and credible way to the Kenya dairy sector, through their products and services. Vice versa KMDP assists local dairy stakeholders who wish to link up with international input suppliers and service providers, or who want to organize a study tour overseas for exposure and learning.

In addition to that, KMDP also partners in public-private partnerships and related projects that are aimed to support the dairy industry in Kenya. In this way KMDP has succeeded to leverage additional funding for the Kenyan dairy sector, through participating in consortia and projects that receive funding from outside KMDP.

Currently KMDP is a partner in the following programmes funded by the Dutch Government to support the Kenyan dairy sector:

- *NABC/Dutch Dairy Development Partners* (<http://www.nabc.nl>): SNV is a member of this initiative hosted by the Netherlands African Business Council. NABC organises exhibitions and trade missions for stakeholders in the Kenyan/Ugandan and Dutch dairy sector. Under NABC also a Train-the-Trainer Project is financed for Practical Dairy Training Centres in North Rift, DTI and Bukura Agricultural College.
- *NUFFIC/NICHE KEN127*: SNV/KMDP is consortium partner in a project financed by the Dutch Government for capacity development at Egerton University and Dairy Training Institute Naivasha. The project consortium is led by Wageningen UR, Centre for Development Innovation (WUR CDI).
- *NUFFIC/NICHE KEN214*: SNV/KMDP is also a consortium partner in a NUFFIC sponsored project that targets capacity building of Baraka Agricultural College in Molo. The project is led by CINOP; other Dutch partners in this project are Dairy Training Centre and Aeres Group
- *FDOV GAIN/DSM*: SNV/KMDP is a partner in this project that assists two local processors in launching fortified dairy products into the market. The project targets young children in the lower income groups or Base of the Pyramid with milk or milk products that are enriched with micro-vitamin and minerals.
- *FDOV SOILCARES (PASIFIK)*: SNV/KMDP is a partner in this project that has launched in Kenya high-tech mobile soil sampling labs. In addition to that, the project will set up a NIR Infrared feed lab according to the latest technologies as regards to scope, speed and accurateness of testing of raw materials, manufactured feeds and forages.



## SNV/KMDP Collaboration

SNV realizes that changes usually involve policy issues, regulatory reforms and innovations in the value chain, and that this can often only be realized if different organisations and stakeholders work together to achieve a common goal. Therefore SNV strives to partner and collaborate with like-minded organizations to have impact at these levels. These partners and collaborators cut across international borders and include both public and private sector agents. Some of these are:

- Embassy of the Kingdom of the Netherlands in Nairobi
- Netherlands Ministry of Foreign Affairs/Minister for Development Cooperation and International Trade
- Netherlands Ministry of Economic Affairs
- RVO.NL
- Netherlands African Business Council (NABC)
- The Dutch Dairy Development Partners
- DSM Nutrition/GAIN
- SoilCares
- PUM Senior Expert Programme
- Agriterra
- Rabo Development
- Wageningen University and Research
- The Friesian Dairy Development Consultants
- Dairy Training Centre (DTC) - The Netherlands
- CINOP
- Aeres Group
- Cow Signals/Vetvice
- Roodbont Publishers
- Scope Insight
- IFDC
- ESADA
- Chase Bank
- Kenya Dairy Board (KDB)
- Kenya Dairy Processors Association (KDPA)
- Kenya Ministry of Agriculture, Livestock and Fisheries (MoALF)
- Dairy Training Institute (DTI), Naivasha
- Egerton University (EGU)
- University of Eldoret
- Baraka Agricultural College
- Technology Farm, Rift Valley Institute of Technology
- Lewa Practical Dairy Training Centre
- Mawingu Practical Dairy Training Centre
- Willens Practical Dairy Training Centre
- Kenya Seed Company
- Leldet Ltd
- Dairy Societies and Dairy Processors in Kenya

## About SNV

SNV is a not-for-profit international development organisation. Founded in the Netherlands nearly 50 years ago, we have built a long-term, local presence in 38 of the poorest countries in Asia, Africa and Latin America. Our global team of local and international advisors work with local partners to equip communities, businesses and organisations with the tools, knowledge and connections they need to increase their incomes and gain access to basic services - empowering them to break the cycle of poverty and guide their own development.

By sharing our expertise in Agriculture, Renewable Energy, and Water, Sanitation & Hygiene, we contribute to solving some of the leading problems facing the world today – enabling local solutions to global challenges and sowing the seeds of sustainable change.

SNV aims to make a lasting difference in the lives of 40 million people over the period 2011-2015.

## SNV in Kenya

SNV started work in Kenya in 1967. Our clients include government, local authorities, private sector, farmer groups and non-governmental organisations. Aligned with the Government of Kenya's Vision 2030 and the Millennium Development Goals, we work in the agriculture (dairy, extensive livestock and horticulture), water, sanitation and hygiene, and renewable energy sectors.

To increase the effectiveness of our programmes and our resources, we actively engage in partnerships with other development agencies, as well as private and public sector organisations.

## For more information

To learn more about SNV and our work in the dairy sector, visit our website.

[www.snvworld.org/dairy](http://www.snvworld.org/dairy)



*SNV is dedicated to a society where all people enjoy the freedom to pursue their own development. We contribute to this by strengthening the capacity of local organisations.*

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