KENYA DAIRY INDUSTRY: STATUS AND OUTLOOK

PRESENTED AT THE 15TH ESADA DAIRY CONFERENCE AND EXHIBITION
KENYATTA INTERNATIONAL CONFERENCE CENTRE, NAIROBI

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MANAGING DIRECTOR-KENYA DAIRY BOARD
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ABOUT KENYA

Population: 49.4 million
Capital city: Nairobi
Total area: 580,367 km²
Per capita: USD 3,250
Economy: Agriculture contributes one third of national GDP
HISTORY OF THE DAIRY

- Dairy industry in Kenya dates back to 1900s
- Colonial farmers established large scale dairy farms
- Marketing through common entity
- Restriction of Africans to participate in commercial dairying
- Kenya Dairy Board established in 1958, to organize and promote orderly marketing of dairy produce.
- Provide for improvement and control of the industry and its products.
- Market segregated into formal (scheduled) and informal (Non Scheduled)
- Liberalization of the industry in 1992 brought dramatic changes in the operation of the industry
REGULATORY FRAME

• Dairy industry like other food industry in Kenya well regulated
• Regulations governing the dairy industry:
  • Dairy Industry Act Cap 336 - Kenya Dairy Board
  • Public Health Act Cap 242 - Department of Public Health
  • Food Drugs and Chemical Substances Act-Cap 254-Department of Public Health
  • Standards Act Cap 396- Kenya Bureau of Standards
**TRENDS: SOCIO-ECONOMIC CONTRIBUTION**

- Contributes an estimated 4% of national GDP, 14% of agricultural GDP, and 44% of livestock GDP
- Provides livelihoods to 1.8M smallholder dairy farmers
- Provides an estimated 750,000 direct jobs and 500,000 indirect jobs
- Contributes to national food and nutritional security *(national per capita consumption of milk is around 110 liters)*
- Dairy industry will significantly contribute to the national Big Four Agendas of *food & nutritional security, manufacturing, universal health, and Housing.*
Milk production is largely undertaken by smallholder dairy farmers.

Production systems include open grazing, zero grazing, and semi zero-grazing.

Productivity per cow per day remains low (7-9 litres per day) mainly due to poor feeding, among other poor animal husbandry practices.

The dairy herd is estimated at 3.55 million (KNBS, 2009). This consists of Friesians, Ayrshires, Jerseys, Sahiwals, and their crosses.

Production is estimated at 5.2 billion litres per year (from cattle, camels, goats, and sheep).
**TRENDS: MILK COOLING**

- Raw milk cooling capacity has been expanded by Government with procurement and distribution of over 350 coolers.
- This will improve microbiological quality of raw milk and support processing of quality milk and milk products.
- Over **500** coolers, with a capacity of **3.4** litres per day, are currently operational.
Milk processing is undertaken at small, medium, and large scale.

KDB has licensed 29 milk processors, and 67 mini dairies.

The total milk processing capacity is approximately 3.75 million litres per day; approximately 46% of this capacity was utilized in 2018.

Raw milk intakes in 2018 by processors was 636 million litres.
DRIVERS OF DAIRY DEVELOPMENT IN KENYA.

Development of the dairy industry in Kenya (past and present) has been driven by the following factors among others:

- Promotion of smallholder farming (Government initiated land subdivision and settlement schemes after independence)
- School milk programme (especially Nyayo school milk programme, 1980 to 1998)
- Organization of dairy farmers into cooperatives and other forms of producer groups
- Subsidized agriculture up to 1987 with dairy farmers benefiting from subsidies in breeding, animal health, and extension and training services
- Favourable Government policies such as abolishment of milk quotas in 1965 and on going distribution of milk coolers to organized groups.
- Interest and investment in the dairy sector by development partners and private sector
WORLD MILK PRODUCTION OUTLOOK IN 2018

- The world milk production for the year 2018 was at 838 million tons with 81% of the total milk produced by cows, 15% produced by buffalos, 3.4% produced by goats, 1.6% sheep, and camel.

- The Largest producer of cow milk in the world is USA.

- Other countries key in world milk production is China, Brazil, Germany, Russia, France, New Zealand, Turkey, and United Kingdom.
WORLD MILK PRODUCTION OUTLOOK IN 2018

Milk producing species contribution to world milk production.
Dairy production projection

Milk production in Kenya is expected to grow from the current 5.2 billion liters to 12 billion litres in 2030.

Growth in milk intake to the formal sector will rise to 1 billion litres in 2022 from the current 630 million litres

The local Dairy products markets will continue to be dominated by liquid milk in the next decade

Consumption is also expected to grow with the rise in population and urbanization
# FARM GATE PRICES IN SELECTED COUNTRIES

<table>
<thead>
<tr>
<th>Country</th>
<th>USD</th>
<th>ksh</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>0.41</td>
<td>41</td>
</tr>
<tr>
<td>CHINA</td>
<td>0.47</td>
<td>47</td>
</tr>
<tr>
<td>NEW ZEALAND</td>
<td>0.33</td>
<td>33</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>0.36</td>
<td>36</td>
</tr>
<tr>
<td>UGANDA</td>
<td>0.22</td>
<td>22</td>
</tr>
<tr>
<td>KENYA</td>
<td>0.30</td>
<td>30</td>
</tr>
<tr>
<td>SOUTH AFRICA</td>
<td>0.31</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: FAOStart, 2018; CLAL it farm gate prices in US
# Major Milk producing Countries in the World

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PRODUCTION IN BILLION LITRES</th>
<th>MAJOR SOURCE OF MILK</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>91.3</td>
<td>Cows</td>
</tr>
<tr>
<td>INDIA</td>
<td>66</td>
<td>Buffalos</td>
</tr>
<tr>
<td>CHINA</td>
<td>35.7</td>
<td>Cows</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>34.3</td>
<td>Cows</td>
</tr>
<tr>
<td>GERMANY</td>
<td>31.1</td>
<td>Cows</td>
</tr>
<tr>
<td>RUSSIA</td>
<td>30.3</td>
<td>Cows</td>
</tr>
<tr>
<td>FRANCE</td>
<td>23.7</td>
<td>Cows</td>
</tr>
<tr>
<td>NEW ZEALAND</td>
<td>18.9</td>
<td>Cows</td>
</tr>
<tr>
<td>TURKEY</td>
<td>16.7</td>
<td>Cows</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>13.9</td>
<td>Cows</td>
</tr>
<tr>
<td>SOUTH AFRICA</td>
<td>2.8</td>
<td>Cows</td>
</tr>
<tr>
<td>KENYA</td>
<td>5.2</td>
<td>Cows</td>
</tr>
<tr>
<td>UGANDA</td>
<td>2.2</td>
<td>Cows</td>
</tr>
<tr>
<td>TANZANIA</td>
<td>2.5</td>
<td>Cows</td>
</tr>
<tr>
<td>SUDAN</td>
<td>4.6</td>
<td>Cows</td>
</tr>
</tbody>
</table>
TRENDS: GLOBAL MILK CONSUMPTION

Asia, 43.2%
Europe, 25.1%
North America, 12.0%
South America, 8.7%
Africa, 6.9%
Central America, 2.8%
Oceania, 1.3%
WORLD MILK CONSUMPTION

Per capita consumption of milk and milk products vary from Country to Country

Demand for dairy products in developing Countries growing due to the rising incomes, population growth and urbanization. Growth is higher in East Africa and South East Asia

<table>
<thead>
<tr>
<th>Rating</th>
<th>Per Capita Consumption in kg/capita/year</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>&gt; 150</td>
<td>Australia, North America, Pakistan, Argentina and Israel</td>
</tr>
<tr>
<td>Medium</td>
<td>&gt;30-150</td>
<td>India, Iran, Japan, Mexico, New Zealand, North &amp; Kenya</td>
</tr>
<tr>
<td>Low</td>
<td>&lt; 30</td>
<td>Senegal, Central Africa, East and South Asia</td>
</tr>
</tbody>
</table>
TRENDS: MILK CONSUMPTION

- Demand for milk and dairy products in Africa has been growing at an average rate of 4.0% per annum.

- The countries with the highest per-capita consumption in Sub-Saharan Africa are Sudan, Mauritania, Botswana and Kenya.

- Kenya's milk demand is growing at a rate of 7 percent.

- Annual per capital consumption of milk and dairy products in Kenya, currently 110 litres of liquid milk equivalent, is projected to double to 220 litres by 2030.
TRENDS: MILK TRADE

Approximately 8% of the world milk was reported to be traded internationally in 2018. This small fraction of milk traded is as a result of the perishability nature on milk.

Market share for whole milk powder and skim milk powder remained the highest at 40%.

The dominant export destination for dairy products in the year was in North Africa and Middle East.

China was the major dairy importer of skim milk powder from Europe.
TRENDS: MILK TRADE

Skim milk powder gained the highest export expansion (+8.6%) followed by butter (+7.5%).

International dairy prices declined by 4.6% in 2018 as compared to 2017.

Countries which experienced positive balance of trade in milk and milk products in 2018 included France, Spain, Netherlands, United Kingdom, Australia, Iraq and Denmark, China, Singapore, United Kingdom, Greese, Germany, Italy, Croatia, Russia and Ireland

Kenya exports Gee, butter
THREATS TO THE KENYAN DAIRY INDUSTRY

These include:

- Climate changes
- Land sub-division
- Competing enterprises such as real estate in prime agricultural land
- High cost of milk production
- Low participation of youth in the dairy value chain
- Increasing competition from other beverages
- Poor animal husbandry practices
- Low budgetary allocations to agriculture (less than 10% recommended in Maputo declaration)
OUTLOOK & OPPORTUNITIES

Demand for milk and milk products is projected to grow in Kenya as a result of:

- Increasing demand for quality and safe milk products by consumers
- Regional integration and cross-border trade
- Rising incomes and growth of the middle class
- Increasing diversification of consumption, for example there is increasing demand for yoghurt and more cheese is required for hotels and fast food industry
- School milk programme
- Growth in industrial consumers – baking, confectionery, fast foods etc.
Opportunities in the Kenyan dairy industry include:

- Increasing milk production, processing, distribution, and supply to meet the increasing national and regional demand for milk and milk products.
- Equipment supply and maintenance
- Commercialization of camel and goat milk value chains
- Fodder and feed production and distribution
- Large scale dairy production (e.g. communal dairy Farms)
- Training, extension and consultancy services
- Devolution of governance and resources
- School milk program
OPPORTUNITIES DAIRY DEVELOPMENT IN KENYA

- Increasing consumer awareness and demand for quality and safe milk and milk products
- Rising incomes and growth of middle class
- Tourism especially for high value added dairy products
- Regional integration, for example, the East African Community (EAC)
- Technology, for example, Extended Shelf Life (ESL) processing and milk dispensing
- Diversification of milk packaging, with affordable alternatives
Gender inclusion in the dairy sector

Gender inclusiveness is key in enhancing competitiveness and sustainability of Kenyan Dairy industry.

KDB has identified 3 key pillars to address

Pillar 1- Mainstreaming gender inclusion in internal structures

Pillar 2- Mainstreaming gender inclusion in the dairy industry through services offered by the Board

Pillar 3- sector wide issues that have linkages with gender inclusion
END OF PRESENTATION: THANK YOU