

Ministry Paper /2014
Jamaica Dairy Development Board

1.0 Purpose

The matter for tabling is the report on the operations of the Jamaica Dairy Development Board for the year ended March 31, 2014.

2.0 Background

In 2012 the livestock sector contributed JMD10.346 billion to the economy or 1% to GDP. In the past, the cattle and dairy industries have supplied up to 80% of the beef consumed locally.

Local milk production peaked at 38.8 million litres in 1992 and has been consistently declining since, except for the period 1996-1999, to 12.2 million litres in 2010. Production has varied between 12 and 13 million litres since 2010, with production in 2013 at 12.34 million litres.

As an indicator of nutritional status, Jamaicans are not drinking enough milk for a normal healthy life. Per capita consumption of milk remains at 105 ml/day. This is one-third of the average for Latin America and the Caribbean; one-fifth of the average for developed countries; slightly less than the average of other developing countries; and half of The World Health Organisation minimum requirement.

The industry has seen declines in the dairy herd population by some 33 percent since 2004 to a current figure of 12,400 heads. The breeding herd remains at about 6,300 heads of which 85 percent are Jamaica Hope.

The dairy industry has many challenges, all of which are being systematically addressed through targeted interventions of the Jamaica Dairy Development Board (JDDDB). Main challenges comprise: market distorted by subsidies in countries of origin for imported dairy products despite GATT and WTO rulings; high energy costs; high incidence of cattle larceny; low levels of technological adaptation; and over-reliance on imported inputs that are becoming increasingly expensive.

Relying on imported milk powder is a risky food security and food safety strategy for Jamaica given that import of milk powder from one major producing country was banned in 2013 by several importing countries, including China, due to contamination. International milk powder prices are back to the high 2008 world food crisis levels of USD 5,350 per metric tonnes (MT) FOB. This is about J\$76 per litre fluid equivalent of Jamaican fresh milk, 13% higher than the current farm-gate price for fresh milk in Jamaica. The food safety risks and high costs associated with milk powder importation provide a clear justification for Jamaica to promote new investments in dairying.

Figures from FAO confirmed that aggregate prices for dairy products rose by over 50 percent in 2013, by far the largest price increase for commodities globally. Milk consumption in China is growing at over ten percent annually, a main factor driving the price for this commodity. FAO

forecasts that within the next five years, milk powder prices could rise to, and remain at, over USD 7,000 per mt CIF, more than JMD \$85 per litre fluid equivalent of fresh milk in Jamaica. This provides notification that Jamaica must continue to take seriously the issue of national food security.

The retail price of processed liquid milk in Jamaica is close to the highest in the world. Dairy farmers receive only about 25 percent of this retail price. Among the contributing factors are: (i) relatively high retail margins (35-40 percent); (ii) high milk processing costs (around 40 percent); and (iii) high farm-gate milk prices. Jamaican milk producers also get close to the highest price farm gate in the world for their milk (JMD\$62.50-70), but close to the lowest share of the retail price. Jamaica must therefore develop strategies to correct market anomalies and improve efficiencies.

2.0 The Jamaica Dairy Development Board

The Jamaica Dairy Development Board (JDDDB) was established under Act No.4 of 2009, for the purpose of promoting and fostering the development of the dairy sector with particular emphasis on promoting local milk production and achieving efficiencies in the production, processing, marketing and other trade in dairy products.

The revitalization of the dairy sector forms a major plank of the Government's policy of enhanced national food security. In this regard, the JDDDB is assigned the Mission of ensuring the achievement of the measurable targets established by the Minister of Agriculture through policy formulation, capacity building and the creation of a regulatory framework to drive the attainment of international competitiveness.

The Dairy Sector Revitalization Programme (DSRP) of the JDDDB, which commenced in fiscal year 2008 provides the platform for direct intervention by the Board in rebuilding of capacity within the local milk producing sector. The major components of this programme consist of a concessionary working capital loan facility available through the Development Bank of Jamaica/ National People's Co-operative Bank (DBJ/NPCB) at an interest rate of 5 percent per annum.

2.1 Dairy Industry Cess

As a strategy for financing the interventions of the Board, Cabinet, in May 2010, approved the implementation of a Dairy Industry Cess to yield revenues dedicated to funding various capacity building initiatives agreed by stakeholders. A Cess regime was adopted based upon the average farm gate price of fresh milk during the preceding calendar year as reference price and assessing a rate of one (1) percent of this reference price per litre fluid equivalent of either imported solids or locally produced milk. Cess collections commenced in January 01, 2011 with farmers and processors making their contributions monthly.

The Board projects to raise J\$67.9million during fiscal year 2014/2015 by way of cess collections, toward the funding of capacity building initiatives identified in its Strategic Plan.

3.0 Achievements of the Jamaica Dairy Development Board 2013/2014

3.1 Capacity Building Projects

3.11 Low Interest Loans

A total of 53 dairy and beef farmers have benefited from a low interest (4-5 percent) loan disbursement of J\$69.4 million by the DBJ/NPC Bank to date. Some 250 dairy cattle were acquired with loan financing. Milk production generated by loan recipients' accounts for approximately 30% of national production.

3.12 Embryo Transplant Programme

The Jamaica Dairy Development Board, in recognition of the need for greater number of dairy animals with improved genetic merit for milk production, imported 50 Jersey embryos through its Dairy Sector Revitalization Programme.

To date, 11 purebred Jersey offsprings have been produced. Subsequently, females will be used to generate crossbred (Jamaica Hope x Jersey) embryos. The purebred Jersey bulls are being grown out at WINDALCo's stud farm for the collection of semen for artificial insemination.

3.13 Technical Assistance

Activities include:

i) **Conserved Fodder Assistance**

Twenty-three (23) dairy farmers are being assisted with the establishment of fodder banks designed to provide highly nutritive fodder for their animals, especially in periods of drought. Additionally four (4) farmers were assisted with the acquisition of forage choppers/harvesters to enhance their ability to efficiently utilize harvested fodder. Eleven (11) hectares of fodder was established.

ii) **Dairy Herd Milk Recording**

This activity allows for the generation of reports that will provide information for management to make critical decisions about their herd and effect genetic analyses of individual animals. In collaboration with the North Carolina State University (NCSU) and the Dairy Records Management Systems (DRMS) of the Dairy Herd Improvement Association (DHIA) of the USA, resumption of a National Milk Recording Programme is continuing – an activity critical to the genetic improvement of our dairy cattle population.

Currently, there are 7 participating herds in the programme of milk recording, with a combined population of 2,500 animals or approximately 37% of the mature dairy cattle of Jamaica. Some 30,111 measurements of milk production on individual cows have been recorded. The next step is Certification of the Milk Recording Field Service operations, a prerequisite to the initiation of the process of genetic evaluation.

iii) **Milk Laboratory**

Equipment for determining somatic cell count and analysing milk components such as protein and fat have been acquired for the purpose of establishing a Reference milk laboratory at the Bodles Research Station. The laboratory is functional, but must be promoted to clients to increase its utilisation.

iv) **Cryogenic Equipment**

An embryo freezer with requisite supplies was acquired for use in the dairy cattle embryo transplant programme and in the building of local competence. This initiative involved the four Cattle Breed Societies and WINDALCO.

v) **Forage Laboratory**

The Board has assisted in the purchasing of equipment for the upgrading of the forage laboratory at the Bodles Research Station. This move will allow for the analysis of forages to aid farmers in formulating nutritionally balanced rations from endogenous materials.

vi) **Training Programmes**

Cattle farmers and RADA livestock officers have benefited from on-going training programmes in various aspects of dairy farm management conducted by the JDDDB. To date Seventy Four (74) extension officers, livestock extension officers and farmers have undergone training under the auspices of the DSRP to improve their proficiency levels with respect to dairy cattle husbandry.

vii) **Technical cooperation:**

Colombian Corporation for Agricultural Research (CORPOICA)/ Agencia Presidencial de Cooperación Internacional de Colombia APC-Colombia

A Jamaican delegation of public and private sector representatives attended training in Colombia entitled “**Forage production systems to meet appropriate nutritional standards for different groups of livestock**” August 26 – 31, 2013. A reciprocal visit by Colombians was conducted Dec 8-13, 2013. A training workshop was conducted by Colombian experts for RADA extension officers, cattle and sheep/goat farmers at Bodles 12/12/2013.

Colombia and Jamaica (R & D/JDDDB) are to collaborate on the design of silvopastoral forage trials for 2014/2015.

The Food and Agriculture Organisation of the United Nations (FAO) under a USD70,000 technical cooperation programme, completed a Rapid Assessment and formulation of Five-year Strategic Plan (2014-2018) for the Jamaica Dairy Industry. The objectives of the technical assistance were twofold: (i) to undertake a rapid assessment of the dairy industry and (ii) to develop a costed strategic action plan for immediate implementation.

The JDDDB commenced negotiations with The Inter-American Institute for Cooperation on Agriculture for “Technical Assistance with Costa Rica on improving

energy efficiencies in dairy operations”. The JDDB aims to benefit from Costa Rica’s successful adaptation of alternate energy systems in dairying operations including low cost plastic biodigesters and modified generators, solar and wind.

4.0 Industry Regulation

4.1 Regulations on the Trade in Dairy Products

Consistent with the requirements of the Jamaica Dairy Development Board Act, Draft Regulations were prepared and deliberated. Promulgation of the Regulations is pending a process that has commenced to review the “policy, institutional, and legislative support services of the JDDB“. This process does not preclude consideration to broaden the remit of the JDDB to that of a Livestock Board, with promulgation of the requisite Act along with subsidiary legislation.

4.2 Dairy Cess Implementation

The implementation of a cess on the trade in dairy products came into effect on the 1st of January, 2011. It is expected that revenues derived from this activity will continue to provide funding for capacity building projects of the Board.

5.0 Strategic Plan for the Dairy Sub-sector

The main tenets of the strategic direction for the dairy sub-sector comprise enhancements to production and marketing, and improvements the enabling environment. This is to be achieved by the following:

- **Herd Expansion, Enhanced Productivity, Market Interventions and Training**

The JDDB has approved a \$20 million for Phase 1 of a Heifer Rescue Programme to reduce the number of dairy heifers entering the meat trade as a corollary; increase the size of the national dairy herd and thereby increasing milk production; and revive and/or revitalise institutional herds.

The main aspects of the productivity enhancements include increased mechanization in feeding systems; improved herd nutrition; reduced feed costs; energy costs reduction, and breed improvement.

Marketing interventions will emphasise strategies to increase local milk consumption from the current low average of 105 ml/day, which is one-half of the WHO minimum requirement. The targeting of youth continues with support to the MoAF and MoE to include milk and milk products in the school feeding programme.

- **Enabling environment for improved investments in dairy sector enhanced**

Preliminary works were finalised for a national cattle census to be conducted in collaboration with MOAF’s Agricultural Marketing Information Division. The field work phase of the

census will commence in May 2014 and completed by November 2014. Surveillance & Detection Systems are to be promoted on cattle farms to reduce larceny of cattle. The MOAF and the JDDB will review the institutional/ policy/legal/regulatory framework of the JDDB.

Roger Clarke
Minister of Agriculture and Fisheries
16 April 2014

APPENDIX

Table 1: Forecast of cow numbers and fresh milk production to 2020

Year	2014	2015	2016	2017	2018	2019	2020
Cows	6,626	6,985	7,270	7,618	8,134	8,226	8,399
L/cow/day	5.81	6.10	6.41	6.73	7.07	7.42	7.79
Total in million litres (LM)	14.06	15.56	17.00	18.71	20.98	22.27	23.88

Table 2: Revised forecast of the demand and supply of milk and dairy products to 2020

	2015	2020
Population (million)	2.76	2.81
Consumption		
- Daily per capita(ml)	110	182
- Aggregate (L. M.)	130	194
Production		
- Fresh Milk Production (L. M)	15.56	23.88
- Self-sufficiency (%)	11.9	12.3