



# Dairy Sub-Sector Revitalization Programme

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## **Strategic Role of the Jamaica Hope**

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Ponderosa Farm  
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# Key Strategic Objectives

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Realignment of value-chain to ensure greater equity to all industry players;

Increasing international competitiveness;

Attracting youth and women

# Origins and Rationale

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- Has genesis in 2005 Cattle Sector Study ([www.jlald.com](http://www.jlald.com)) & subsequent Stakeholder Conference/Workshop;
- Study revealed uncertain future of cattle sector;
- Conference/workshop identified strategies for sector revitalization;
- Five-year programme for cattle sector revitalization drafted 2006.

# Overarching Methodology

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- Stakeholder-led participatory approach through the agency of independent umbrella NGO
- Close cooperation between:
  - Public Sector – Catalyst & Enabler
  - Private Stakeholder – Grants and Equity injection

# Revitalizing the Dairy Sector

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- Current international situation accords greater immediacy to redevelopment of **dairy** sector;
- Estimated five-year cost of dairy sub-sector revitalization programme – US\$14.7M (excluding rationalized school feeding programme)

## Programme Goal

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To increase local milk production to 31 million litres by 2012 and further to 55 million litres by 2017 from current output of 14 million litres

# GOJ Input 2008/2009

- Budgetary support – J\$140M
- Leverage for access to grant funding from MFI's (DBJ equity participation fund - \$25M)
- Loan facility for pasture & herd improvement - \$52.5M (DBJ/PC Bank network)
- Grants for Ja. Hope development (\$13M) & farmer training (\$9M)
- Cattle purchases (imports) - \$20M
- Institutional support to NGO's - \$4M
- Establish 'Virtual Clearing House' - \$2M
- Programme coordination - JDDDB

# Strategic Importance of Jamaica Hope

- Results of JDDDB 2004 survey :
  - Total No. breeding females – 11,000
  - Animals of Jamaica Hope derivation – 85% of population
  - Based upon attrition since 2004, current JH breeding herd is estimated at 7650 of a total dairy breeding herd of 9000 COWS.



# Indicative Current Herd Productivity

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- Total Milk Yield (2007) – 14 million litres
- Mature cows (est.) - 7650
- % Cows in milk (est.) – 72%
- No. cows milking – 5510
- Annual yield - 2540 L
- Average daily yield per cow in milk – 6.95
- Average yield per cow (all cows) – 1830 L

# Comparative Productivity of Jamaica Hope

- Current yield national herd – 2540 L
- Farmers herds 1968 (Wellington) – 3218 L
- ALCAN Herd 1994 (Holness *et al.*):
  - Heifer Lactations: 3062 L (297d.)
  - Cow lactations: 3588 L (301d.)
- Current productivity levels 21-27% below established herd potential
- Is this genetic or environmental?

# Interventions to Improve Yield and Productivity

- Pasture Improvement – Improved pastures increased from 5400 ha to 6400 ha in 5 yrs
- Positive impact on nutrition & fertility
- Herd Expansion – from 9,000 cows to:
  - 17850 cows by 2012
  - 29000 cows by 2017
- Augmented by Jersey imports - 3000 females over next three years.
- Jamaica Hope genetic improvement

# Justification for Imports

YEAR	Milk Production (L)	
	Without Imports	With imports
2008	15.5	15.5
2009	17.5	17.5
2010	18.4	21.7
2011	20.4	24.5
2012	23.6	30.9

# Genetic Improvement of Jamaica Hope

- Re-establishment of National Progeny Testing Programme
- Re-establishment of National Milk Recording programme
- Consortium initiated in 2007 including MoA, WINDALCO and SIFL to jump-start progeny testing programme;
- Needed – Broad coalition of ALL committed Jamaica Hope Breeders.

# What's in it for the Jamaica Hope Breeder?

- Projected herd expansion will generate demand for >1400 heifers annually to 2012
- Potential income - \$9.1 million/yr.
- Export of semen - 12000 straws/yr @ US\$20 = J\$17.16 M
- Export of embryos – 5500@ US\$200 = J\$79 M

# Imperatives of Export Market

- Proof of Genetic Value of Animal Using Standardized Tools for Genetic Evaluation
- Reorganized AI system (DIY approach)
- Proficiency in MOET (trained Vets)
- National Herd Recording Scheme
- Broad based National Progeny Testing Programme for Sire Evaluation (Contemporary comparison)
- Disease-Free Status

# Requirements of Breeders

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- Individual animal recording
- Pre-select and make available for inspection/selection by panel, bull-dams for select mating to produce young bulls;
- Contract to rear out young bulls for further evaluation/selection for semen collection and storage;
- Make available a predetermined number of cows for mating to young sires on test.



# Summary

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- The Jamaica Hope remains the tropical dairy breed of choice for Jamaica and other developing countries;
- It provides the platform for the revitalization of the dairy sector;
- Pure breeders stand to earn as much as \$100 million per year from sale of cattle genetics;
- A demonstrable commitment is required of breeders if this potential is to be realized;
- The GOJ has kick-started the process;
- Breeders need to take ownership for sustainability.