PART B: The “VILLAGE LAITIER” and Other Production Systems/Models

The case for a restructuration of the dairy supply chain, particularly at primary production level (fresh milk production), has been made in Part A.

One specific project idea proposed by Government for the agro-industrial livestock sector is that of a “Village Laitier”. This second part will attempt at conceptualising this project, covering some of the strategic and tactical issues at project design level.

Presumed Objectives of the Project:

These may be summarized as follows:

(i) To increase fresh milk production and ensure its effective integration with the manufacturing / processing sector
(ii) To enhance employment opportunities through an increasingly diversified agro-industrial sector
(iii) To serve as a pilot project demonstrative of production facilities transitioning towards more sustainable (profitable and environmentally-friendly) systems that may be replicated depending on its outcome

CHOICE OF MODEL/SCALE OF OPERATIONS

The “Village Laitier” as a pilot-investigational dairy farm must be a showcase of planned milk production that should incorporate organized marketing facilities as well.

The transitioning towards more sustainable systems connotes a change to the modern system, by the concurrent acceptance, adoption and adaptation of new technologies and good management/agri-business practices.

The challenge of the management plan for the project would be how to balance the resources of land, labour and capital over the key functional areas of the dairy farm: milking; housing; feeds and manure storage.

Land constraint would dictate choice of intensive zero-grazing, confinement systems as opposed to extensive grazing system, but some combination of these may be envisaged depending on the land extent available, the site and its suitability assessment.

Increase in size generally results in increased feed and labour efficiencies because of herd composition; better genetics; more intensive feed management; and more modern facilities.
However, size and scale of operations will again depend on land availability which will also impact on input/feed procurement strategies: in-situ production or purchases or combination of both.

**SITING**

The following siting possibilities exist:

(i) **Palmar Livestock Breeding Station (approximately 310 arpents)**

We made a site visit there, and it appears that some 225 arpents of reserve lands are available. However, its suitability needs to be better defined, because of its apparent rockiness, and vicinity to tourism zone, although the positive point could be a design that may offer agri-tourism opportunities.

(ii) **Others**

- 30 Arpents at Nouvelle Decouverte
- Salazie (acreage?)
- La Flora (SIT Lands) – part of 100 Arpents earmarked for agro-industry projects.
- Rose Belle Sugar Estate (Part of the 300 Arpents earmarked for agro-industry projects, as announced by DPM and Ministry of Finance)

**CHOICE OF DAIRY BREED (RACE LAITIERE)**

The most appropriate breed appears to be the Friesian or an appropriate Friesian-cross. The local ‘breed’ of Creole cows is almost non-existent and therefore reliance would be on the Friesian and its importation.

The potential sources of supply are South Africa and Australia. The South African source may be cheaper.

An appropriate strategy of stock procurement through importation should be worked out, e.g. import could be effected in a strategic alliance with slaughter cattle importers, and taking account of the past attempts and experiences of heifer importations.

**NUTRIENT MANAGEMENT PLAN**

This is the most critical component of the overall management plan, having the most significant impact on production cost and profitability. Findings of nutrition research (AREU), should be applied to determine the appropriate fodder species; the appropriate concentrate/compounded feeds and ration formulation and feed technologies to match the
nutritional needs of the various categories of livestock: milking and dry cows; heifers; calves; and possibly some male (breeding) bulls that may be around.

**HOUSING AND DAIRY FACILITIES**

The best options should be considered, with the objective of planning to build the basic structure; additional facilities may be added later when the finance is available.

Appropriate designs for the various housing requirements (milking parlour; calf pens; storage, etc) exist; and should be adapted to the requirements of the chosen site and use of locally available materials and resources.

**SERVICES INPUT**

Institutional support of the Veterinary Services and APD (Agricultural Services) and Research and Extension (AREU) should be coordinated and organized, sustainable and effective, pertaining to the area of animal health and reproduction (provision of AI services); and technical and management advice.

**MARKETING/PROCESSING**

The starting option could be integration with existing outlet facilities (AMB or private sector), which would be much easier to organize given the size and volume of product involved.

The setting up of a processing unit may be envisaged in a second phase of the development plan.

**MANURE/LIVESTOCK WASTE MANAGEMENT**

Again this is a sensitive area, and existing techniques and technologies of handling and storage, composting, disposal, etc, could be tapped. It can even become a useful source of additional income because of the high demand of manure by the agricultural/horticultural sector. Production of biogas could also be appraised.

**INVESTMENT/ORGANISATION AND OWNERSHIP ISSUES**

Various models of organization/ownership and participation may be considered. One proposal is the BOT system, and expression of interest for such option maybe sought. Submissions already made from the private sector may also be considered, while taking account of the declared policy of the Government on economic democratization.
The concept of “Village Laitier” may also connote a self-contained and comprehensive entity that, at the every extreme, also includes an in-situ residential community of breeders, each managing a holding of critical size to sustain the family unit.

The experiences of the Maison des Eleveurs at Henrietta, and the Cow Breeders Cooperative Society Limited at Nouvelle Decouverte, should be probed and analysed when options of a collective organization are considered.

POLICY ENVIRONMENT

The role of the State in the launching of such projects should be well defined and understood from the very start.

The project should benefit from the incentives package already tailored to encourage the transitioning of the traditional sector towards more ‘modern’ systems.

Project-specific support schemes could be envisaged on a case-to-case basis, based on the feasibility studies/business plans of projects that come from the private sector.

RECOMMENDATION

*The charting out of a detailed blueprint for the “Village Laitier” project to be commissioned by the Ministry.*

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