

Design and Implementation of HACCP Plan and Procedures at Mille Fleur Apiculture Processing Facility.

**TERMS OF REFERENCE
(TOR)**

**(SHORT-TERM)
TECHNICAL ASSISTANCE CONSULTANCY**

1. BACKGROUND

The Mille Fleurs Honey Producers' Cooperative Ltd is the premier umbrella association of beekeepers on the island. The Beekeeping Industry is regarded as one rife with opportunities for increasing investment and enterprise development in a way that can contribute to *addressing rural poverty, improve rural livelihoods, address existing shortfalls in demand, produce products that have prophylactic and curative properties, and contribute to foreign exchange earnings via export development opportunities etc.*

These opportunities can stem from:

- Low industry entry costs and the production of healthy and pure products positioned to capitalize on consumer preferences for this type of product, combine to offer opportunities for new entrants to the industry.
- There are opportunities for value-added products including products related to the health care sector. Products such as lotions present a market opportunity and there are potential niche markets with specialized honey products combined with popular fruits.
- Other selected product opportunities were identified, including the development of gift packages using honey coupled with other products. Honey is a popular food product that may combine well with tea and lemon to create a healthy and nutritious drink. Honey and rum is also a popular drink that may be promoted within select markets. Honey cookbooks are popular and more recipes using honey could be developed and marketed.
- There is a growing movement globally that is seeking to expand the wealth of traditional knowledge that constitutes apitherapy - the healing properties of bee products. In recent years, there has been a worldwide revival of interest. Honey, beeswax, propolis and bee venom, used in bee-sting therapy, are the main bee products used in apitherapy.
- Honey has strong antibiotic properties: it is a sterile solution with a high sugar concentration that prevents the growth of micro-organisms. It is highly acid. It contains enzymes which produce hydrogen peroxide that kills bacteria. Honey is good for healing wounds and for skin treatment: its hygroscopic property is good for drying out wounds, and its permeability allows oxygen to pass through it.
- Propolis also has medicinal properties: the gums and resins that bees gather from plants for propolis are the very substances exuded by plants for their own protection and healing.

Apiculture in St Lucia appears to have tremendous income generating potential. In 2003 it was estimated that US\$ 6.5 to 17.5 million worth of honey could be produced annually. The estimated current value of the industry is between US\$ 112,000 to \$300,000 annually- which is reflective of a significant unrealized/untapped potential. Realization of this potential is dependent on several factors key among them being market development and expansion.

Mille fleur has embarked on an industry development and expansion initiative that simultaneously seeks to address the various facets of the industry. With the assistance of the GEF a concerted effort is being made to expand the number of beekeepers, provide Capacity building in product development, marketing business management and productivity improvements for beekeepers, conduct market research and establish a market information system. Logo development, Branding and labeling to facilitate joint marketing, the appropriate packaging of honey and by-products to ensure quality, biodiversity conservation and food safety, subscription to and participation in networking activities such as the Caribbean Beekeeping congress in collaboration with the Ministry of Agriculture, a complementary biodiversity conservation programme, etc.

Moreover, in attempt to increase the efficiency of production and market share, the producers will process their honey and by-products jointly in a facility to be located in La Caye Dennery. Tapping into international honey markets requires that the facility is compliant with internationally recognized standards such as HACCP compliancy.

The purpose of this assignment is to (i) Prepare a comprehensive HACCP Plan for a designated apiculture processing facility that is earmarked to be located within the IRDC facility at La Caye Dennery (ii) Produce detailed concept drawings that will be used as the basis to undertake the requisite refurbishment and retro-fitting of a part of the IRDC facility (iii) Capacity building activities for the operators, administrators, principal stakeholder who will be involved in the working of the facility once it is fully operationalized (iv) recommend machinery, equipment and supplies germane to the apiculture processing operation and (v) to ensure that - on completion of the assignment - the facility is in a position to be HACCP certified.

The conduct of this assignment is a vital first step in the process of seeking to develop a feasible/viable apiculture sub-sector in Saint Lucia.

A Committee has been constituted to provide general oversight and direction in the conduct of this assignment.

Details of the specific task requirements and deliverables are provided below.

2. OBJECTIVE, PURPOSE & EXPECTED RESULTS

2.1 Overall Objective

To improve the competitiveness and viability of the Honey sub-sector by adhering to enhanced food safety requirements.

2.2 SPECIFIC OBJECTIVES

To Increase market access and business development opportunities for Beekeepers by providing improved production and processing facilities for honey and apiculture by-products

To facilitate joint processing and marketing of honey and honey products

To strengthen and develop the network required to ensure more systematic and sustainable exports of honey and by-products

To enhance the quality of the products produced and sold locally and overseas

To contribute to more sustainable rural enterprise development and livelihoods

To provide critical complementary support to the GEF approved project “Biodiversity Conservation through improving the production capacity of Beekeeping in Saint Lucia by increased market access and opportunities for honey and its by-products”

To develop and document Hazard Control Plans including standard operating procedures (SOPs) and Sanitary Standard Operating Procedures (SSOP’s) for implementation of HACCP principles to help the organisation achieve standard food safety and quality requirements.

3.. TASK SPECIFIC REQUIREMENTS

3.1 DELIVERABLES AND REPORTING REQUIREMENTS

The principal output (s) of this Assignment shall include, *inter alia* a comprehensive report based on the scope of works and specific activities outlined below. The report shall provide a basis for future decision making in respect of the project.

This report must conform to the following minimum requirements:

General

- Must be a comprehensive straightforward document that can be used in discussions with potential partners, the business community, government, clients, service providers and others to prove/provide evidence of the feasibility of and obtain support for the development of the sub-sector.
- It must/should contain a time-bound roadmap/blueprint for pursuing recommendations emanating from this assignment
- Data and information in the report must be presented in an analytical and comprehensive manner and address the issues highlighted below
- A draft copy of the final report must be prepared by the consultant and submitted to the OPSR/TEPA and the Veterinary and Livestock Services Division of the Ministry of Agriculture, food Production, fisheries and Rural Development for approval and agreement prior to finalization.

Specific

More specifically the expected deliverables shall include:

A. Plant Layout

- Proper work flow and placement of equipment
- Laboratory and Processing equipment specifications
- Sourcing of tools and equipment
- A concept drawing of the Operating/Production Area that is sufficiently detailed and clear to guide the refurbishment and retro-fitting work that would have to be undertaken as part of the process of rendering the facility HACCP compliant

B. A HACCP Manual

A comprehensive HACCP Plan that includes:

1. Work flow charts
2. Description of product
3. Documented SOPs and SSOPs
4. HACCP Work sheets and Hazard Analysis

C. Training

1. Identify training needs with management team
2. Design or adopt appropriate training modules
3. Provide Training to HACCP team and other staff members and honey producers

D. Implementation

1. Provide pertinent hands on training for no less than a period of 5 days
2. Prepare Draft HACCP Manual
3. Implement system
4. Monitor system
5. Verify system/implement corrective action
6. Accept system

E. Acceptance

1. Final discussion and editing
2. Deliver final HACCP documents

F. Other

All other HACCP pertinent functions/related duties to be defined in the work plan

G. Certification

Entity either Certified or able to issue a self-declaration about conforming to HACCP requirements.

H. Equipment and Consumables

A comprehensive listing (with detailed specifications and appropriate justification) of the equipment, machinery, supplies to be used in the processing work area and elsewhere together with potential sources of supplies and indicative cost

4. SPECIFIC ACTIVITIES/SCOPE OF SERVICES TO BE RENDERED UNDER THE ASSIGNMENT

The indicative activities to be undertaken to realize the expected objectives and output of this assignment shall include but are not limited to:

PRELIMINARY:

- Comment on the Terms of Reference suggesting potential refinements where necessary.
- Submit a detailed work-plan including a time schedule, budget, the names, professional status and biographic data of all professional staff to be deployed on this assignment, along with a description of the duties/tasks to be performed by each expert, the methodology to be employed in conducting the assignment, etc
- Review all relevant documentation pertinent to the conduct of this assignment.
- Conduct wide ranging consultations with key stakeholder and other interested parties, and review relevant background information in order to gain an insight/understanding of the requirements of the assignment

The task to be undertaken shall include but is not limited to the following:

- i. Comprehensive evaluation of processes and systems associated with the processing facilities to involve a systematic review of risk with regards to food safety in the design, operations and regulations of the designated facilities.
- ii. Facilitate training in principles, practices, norms, conventions and operations of a HACCP compliant systems
- iii. Development of a Hazard Control Plan, SOPs and SSOPs for the operations of the facility
- iv. The developed operational plan shall encompass procedures for the processing of honey and related products and by-products such as pollen and propolis, etc.
- v. Guide the entity through to the process of HACCP Certification.

5. QUALIFICATIONS AND KEY EXPERTISE

It is envisaged that the skills set and qualifications needed to undertake this assignment shall include but is not limited to:

- (i) Extensive knowledge, qualifications and experience in the establishment of Food Quality, Safety and HACCP verification systems.
- (ii) Proven expertise and experience in :
 - Food Safety and hygiene;
 - Quality management and quality control;
 - Expertise in documenting SOPs and SSOPs;
 - Knowledgeable in HACCP plan development, implementation and certification.

6. REPORTS/Reporting requirements

The consultant(s) is required to submit the following reports {both paper copies and electronic versions of the report must be submitted – at least three of each} as stipulated below.

- (i) **An Inception Report** should be submitted two weeks after the start of the consultancy. This report must include a detailed schedule of the work to be executed. The report should inter alia indicate any differences in the work plan, which may have resulted owing to differences between actual conditions and what had been anticipated, and any recommended modifications to the Terms of Reference to improve the quality and utility of the assignment and work output.
- (ii) **Interim Progress Reports** (based on a schedule to be agreed at the start of the assignment) should be submitted outlining progress in the attainment of the objectives and the scope of works milestones, as well as reporting on any difficulties encountered that may negatively affect the intended aims and objectives of the Assignment.
- (iii) **Draft Final Report** containing a complete account of the work performed justifying all conclusions and recommendations and containing the various work outputs identified above. There should also be a technical summary, giving the complete list of contents of the full report; The Terms of Reference should be bound in with the technical summary.
- (iv) **Final Report** to be submitted within two weeks of the receipt of comments on the content of the draft Final report. Should include a complete training module for the workshop.

7. DURATION AND TIMING

The specific duration and date for completion of the assignment will be stipulated in the contract. The duration of the assignment is not expected to exceed six months.

8. MANAGEMENT OF THE ASSIGNMENT

The Consultant shall work under and report to the authorised representative(s) of the OPSR/TEPA and the Veterinary and Livestock Services Division of the Ministry of Agriculture, Food Production, Fisheries and Rural Development concerning all aspects of the services to be rendered in accordance with the TORs.

Changes in the TORs can be made subject to and only after written mutual agreement between the Consultant, the OPSR/TEPA and the Veterinary and Livestock Services Division.

9. CONFIDENTIALITY

Throughout the duration of the assignment and following its completion, the Consultant shall maintain the strictest confidentiality vis-à-vis third parties in respect of all information gained in the course of conduct of the assignment. Reports, including draft reports, shall become the property of the company, and shall be reproduced or distributed only by said company, or with the permission of the Company.

10. SUPPORT FOR THE ASSIGNMENT

All support facilities required for the execution of the study are the responsibility of the Consultant. The cost thereof must be included in fees and expenses for rendering the agreed services. The Contracting Authority commits to cooperate with the Consultant and facilitate him/her in the completion of this assignment in the most effective manner possible.

11. REFERENCES