# **MAURITIUS RESEARCH AND INNOVATION COUNCIL (MRIC)**

## COLLABORATIVE RESEARCH AND INNOVATION GRANT SCHEME (CRIGS)

### **Project Summary**

#### **Title of Project:**

Unveiling the commercial potential of the Mauritian produced cocoa butter for local and international markets using a biotechnology based approach

Local Company: Kakao Ti Gerard LTD

Main Collaborating Institution: University of Mauritius

Project Leader: Mr Thierry Baisse, Kakao Ti Gerard LTD

Research Collaborator(s)	
Name	Organisation
Dr Joyce Govinden Soulange	University of Mauritius

#### **Technical Abstract**

The chocolate tree was introduced in Mauritius in the 16th century and is exploited by a few planters scattered around the island. Cocoa butter is renowned for its several uses in the pharmaceutical, cosmetic and in the food sectors. Since cocoa is cultivated on very small acreages in Mauritius (1-12acres), and is biologically grown, the yield of cocoa beans is not competitive with other world producers on the international market. However, locally produced cocoa butter has the potential to contend with available cocoa butter equivalents as it is directly extracted from biologically grown Mauritian chocolate tree.

Cocoa butter is obtained after removing the shell from the bean at an extraction rate of 25-55% fetching a price of up to 500 Euros for 1kg on the international market. The yield of cocoa butter is determined by various factors including post-harvest processes such as fermentation, drying and roasting. These processing treatment parameters vary with genotype and agro-climatic conditions and have not been defined for the Mauritian cocoa.

This project aims at producing high quality organic cocoa butter, which will supply the local chocolate and cosmetic industry and contribute to project Mauritius on the world market by optimizing the post-harvest treatments involved in cocoa butter production using a biotechnology based approach.

Key Words: Mauritius; cocoa; cocoa butter, organic; biotechnology