



UNIVERSITI TEKNOLOGI MARA

**SMALL SCALE INDUSTRY
IN THE PRODUCTION OF
TEA TREE AND CITRONELLA ESSENTIAL OIL**

Applied Business Project submitted in partial fulfillment of the
requirements
for the
Degree of Executive Masters in Business Administration

Universiti Teknologi MARA
Cawangan Sarawak

November 2002

SMALL SCALE INDUSTRY IN THE PRODUCTION OF TEA TREE AND CITRONELLA ESSENTIAL OIL

Table of Content		Page
Acknowledgement		
Executive Summary		
1.	CHAPTER 1 INTRODUCTION	
1.1	Introduction	1
1.2	Client	2
1.3	Objective	3
1.4	Scope	3
1.5	Strategy	7
1.6	Limitation	8
2.	CHAPTER 2 LITERATURE REVIEW	
2.1	Global and Malaysia Scenario on Herbal Industry	
2.1.1	Definition of Herbal Medicines	10
2.1.2	Current status and analysis of the Malaysian Herbal Medicines/ Products' industry	10
2.1.3	Strategic Analysis/Core Competencies	14
2.1.4	SWOT Analysis	15
2.1.5	Major Issues and Challenges	20
2.1.6	Development of the supporting Industry	21
2.1.7	Trade and Marketing of Non-Wood Forest Products (NWFP)	23
2.2	Essential Oil	
2.2.1	Background	33
2.2.2	Essential Oil in Malaysia	36
2.2.3	Extraction Technologies	37
2.3	Production and Uses of Tea Tree Oil	38
2.4	Production and Uses of Citronella Oil	48
2.5	Experiences from other countries	53
2.6	Environmental Analysis	
2.6.1	Challenges for the industry	58
2.6.2	Citronella oil challenges and breakthrough	60
2.6.3	Key issues for Tea Tree Industry in Malaysia	63
2.7	Incentive Schemes for Herbal Products	66
3.	CHAPTER 3 FINDINGS	
3.1	Technical Feasibility	
3.1.1	Sample Analysis	68
3.1.2	Land Availability	68

Executive Summary

Industry scenario:

Malaysia, a country blessed with a diverse range of flora and fauna and a potpourri of cultures, augers well for the development of herbal industry. In fact, study has shown that Malaysia is one of the only 12 countries in the world with a tremendous potential to be a global player in this industry. It is against this background that the Group has decided to choose this particular industry as its Applied Business Project.

Herbal industry involves a wide range of products. However, this project is confined only to the viability of producing and marketing of essential oils, specifically Citronella and Tea Tree oils, as a business venture. The project encompasses the planting, harvesting, extracting and the marketing of these oils.

Findings:

The paper highlights 3 aspects as follows:

a. Technical Feasibility

Technically, the project draws its technical expertise from the various relevant government departments and agencies in particular, MIGHT, MHC, FRIM, MARDI, and PMB. Expertise offered ranges from planting, harvesting and extracting technology, as well as, profiling of the extracted oil against the acceptable international standard. Their continued willingness to provide various forms of assistance will certainly put a strong footing for our client, Ms. Borneo Herbs Sdn Bhd, to embark into the business venture, confidently.

b. Investment Analysis

The choice of Tea as a perennial crop and Citronella grass as a cash crop would be a good strategy, as both plants are able to generate favourable yield under Malaysian soil and climatic condition on one hand, and using the same method of oil extraction, thereby using the same equipment, on the other. Hence, these favourable factors would ensure a sustainable and profitable return on investment as indicated by the investment analysis.

c. Market Study

Study has shown that the value of total import for Malaysia is increasing faster than that for export due to increased domestic demand for natural products which are herbal based. In this regard, the project is focused on exploiting the vast opportunity arising therefrom by becoming a supplier of essential oils for the domestic market.

1. CHAPTER 1 INTRODUCTION

1.1 Introduction

The usage of natural products, which are mainly herbal based products, has gained prominence of late, due to a number of factors such as escalating expense of western pharmaceuticals, a desire to return to natural lifestyle, renewed interest in ethnic cultures and drug companies entering herbal market. These products come in many varieties and are classified into four major product group: Flavours & Fragrance; Herbal Remedies / Pharmaceuticals; Health / Functional Food; and, Bio-pesticides.

The demand for these products has spurred the market into a trillion dollar industry worldwide. It is against this backdrop, that the group believes that this is a sunrise industry of the present and for the near future. Indeed it is so and the potential is indisputable. In Malaysia, the industry is at its infancy stage with only a small number of market players while most of the raw and/or semi processed materials are imported from China, India and Indonesia. With its rich flora and fauna, most of which are untapped, the government of Malaysia through its National Agricultural Policy (NAP 3) puts great emphasis on the development of the industry. In fact the National Herbal Products Blueprint was launched by Malaysian Industry Government Group For High Technology (MIGHT) which subsequently established Malaysian Herbal Corporation (MHC) to co-ordinate the herbal industry.

Apart from MIGHT and MHC, FRIM, MARDI, Malaysian Industrial Development Finance, Credit Guarantee Corporation Berhad, Bank Pembangunan and Bank Industri are amongst the few institutions which are prepared to provide technical and financial assistance to those who wish to participate in the industry. The

2. CHAPTER 2 LITERATURE REVIEW

2.1 Global and Malaysia Scenario on Herbal Industry

2.1.1 Definition of Herbal Medicine

The World Health Organization (WHO) defined Herbal Medicine as:

“Finished, labeled medicinal products that contain as active ingredients aerial or underground parts of plants, or other plant material, combinations thereof, whether in the crude state or as plant preparations. Plant material includes juices, gums, fatty oils, essential oils, and any other substances of this nature...may also contain natural organic or inorganic active ingredients, which are not plant origin. Herbal medicines may contain excipients in addition to the active ingredients...” (Source: MIGHT)

Under the Specialty Natural Products of the National Agriculture Policy (NAP 3) 1998-2010, herbal medicines/products has identified as one of the potential industry for Malaysia and referred as:

“...natural products based on botanicals (herbs, medicinal plants, spices and aromatic plants), and aquatic plants and animals. Botanical (including their extracts, exudates and essential oils) have found applications in a wide range of products including food & beverages, pharmaceuticals, herbal/traditional medicine, health care, health enhancing products, dietary supplement, flavours and fragrance, cosmetics and toiletries and various consumer goods.”

2.1.2 Current Status and Analysis of the Malaysian Herbal Medicines / Products Industry