



RUMUSAN

SEMINAR DALAM RANGKA PEKAN BIOFARMAKA NASIONAL

Koordinasi yang efektif antara pihak swasta (GP Jamu & GP Farmasi), Asosiasi Petani, Pemerintah (Departemen Teknis yang mempunyai kebijakan utama terhadap sumberdaya alam, Departemen Kesehatan dan BPOM) dan perguruan tinggi perlu diikat dalam suatu organisasi dengan visi, misi, tujuan dan program dengan capaian yang jelas. Organisasi seperti Malaysian Herbal Cooperation (MHC) dapat menjadi target untuk koordinasi program di tingkat nasional. Pengembangan produk biofarmaka dalam bentuk jamu, ekstrak terstandar, fitofarmaka dan *nutraceuticals* perlu didukung. Semua stakeholder harus bersatu secara sinergis dalam kebersamaan dan jejaring kerja yang saling menunjang dan menguatkan. Adapun target dari program tersebut adalah terutama untuk meningkatkan kesejahteraan petani dan pengusaha kecil.

Kebun koleksi plasma nutfah biofarmaka nasional dapat dikembangkan dengan memperkaya kebun yang sudah ada dalam lingkup Departemen Pertanian (a.l. Balittro dan balai plasma nutfah), Perguruan Tinggi dan LIPI dan ditata dalam suatu hubungan kesejajaran yang efektif. Perlu adanya kekhasan yang dikembangkan pada kebun-kebun tersebut, yang dikaitkan dengan pemanfaatan dan status sumberdaya alam.

Perlu disusun suatu dokumen yang merupakan cetak biru dari pengembangan produk dan industri biofarmaka Indonesia yang unggul dan mampu bersaing di kancah global. Dokumen ini menjadi acuan pengembangan biofarmaka yang akan mengatur dan diacu oleh seluruh pihak yang terlibat didalam produksi, pengembangan dan pemasaran di Indonesia dari hulu sampai ke hilir.

Perlu disusun database biofarmaka Indonesia yang komprehensif, juga berbagai standar yang terkait dengan biofarmaka, antara lain Standard Operational Procedures (SOP) budidaya, Good

Agricultural Practices (GAP), Good Agricultural and Collection Practices (GACP), Good Manufacturing Practices (GMP), SNI produk bahan alami untuk biofarmaka, perbaikan Materia Medika Indonesia (MMI) dan peraturan kelembagaan dan pemasaran yang seimbang dan saling menguntungkan, yang didukung oleh SDM yang tangguh.

Berbagai SOP dan GAP yang sudah dihasilkan perlu dikaji, disosialisasikan dan divalidasi untuk masing-masing areal sentra pengembangan yang spesifik agar diperoleh bahan standar yang bermutu dan aman. Serta menghasilkan acuan baik bersifat lokal, regional maupun nasional. Pemenuhan kualitas ekspor perlu juga dicapai pada penerapan SOP ini. Perlu identifikasi dan penguatan sentra produksi yang dikaitkan dengan standar mutu dan pemasaran baik dalam negeri maupun ekspor. Pengembangan sentra di Luar Jawa untuk ekspor perlu segera direalisasikan.

Pemasaran biofarmaka harus dilakukan dengan merebut simpati dan kepercayaan konsumen, oleh karena itu dibutuhkan identitas produk yang jelas. Kriteria dari BPOM dapat digunakan dan diperkenalkan ke konsumen.

Agar produk biofarmaka dapat dipercaya dan menjadi andalan dalam pemeliharaan kesehatan dan kecantikan konsumen maka yang dijual dengan brand tertentu adalah manfaat dan image yang melekat pada produk sehingga mampu memikat "pikiran dan perasaan" calon konsumen sehingga mereka menjadi pemakai produk biofarmaka yang loyal.

Data teknis yang sangat diperlukan yaitu a) Keperluan atau permintaan setiap jenis bahan mentah yang terstandar dan tertentu mutu bakunya untuk keperluan industri dalam negeri dan untuk ekspor; b) Penentuan luasan dan sentra produksi; berapa luas harus ditanam dan dimana; serta perkiraan harga pembeliannya dari petani; c) Status pemanfaatan dalam hubungannya dengan pelestarian serta; d) Pemasaran yang jelas. Perlu dibicarakan secara terbuka dan didukung oleh suatu program informasi teknologi yang regular seperti pada

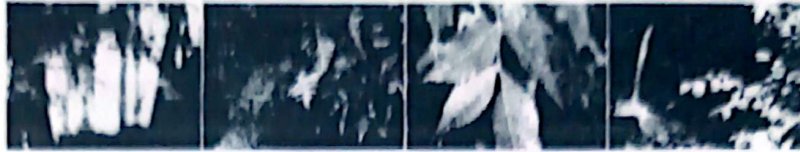
komoditas lain. Adanya bursa tanaman obat perlu dipikirkan. Data dan informasi ini diharapkan dapat dicapai pada tahun ini, dengan fasilitator dari Departemen Pertanian dan Departemen terkait serta pelaksana dari GP Jamu dan Asosiasi Petani.

Teknologi dan kemampuan meneliti sudah dimiliki oleh banyak instansi. Koordinasi dan target yang disepakati perlu dilakukan, untuk sementara target tanaman rimpang dan unggulan BPOM dapat menjadi rujukan. Sosialisasi hasil kemajuan dan rencana kegiatan perlu dilakukan melalui pertemuan lintas sektoral difasilitasi oleh RISTEK/Departemen Teknis/Perguruan Tinggi.

- Perlu dilakukan sosialisasi strategi pengembangan berdasarkan (a) Pendekatan teknologi (benih, GAP, panen, pasca panen, bahan aktif, khasiat dan keamanan preklinik dan klinik, serta GMP untuk produk obat); (b) Pendekatan ekonomi (permodalan yang dapat dijangkau UKM, membangun trading house dan penguatan kemitraan yang menguntungkan UKM); (c) Pendekatan sosial budaya (promosi, membangun etos kerja, semangat wira usaha dan membangun loyalitas konsumen).
 - Prioritas seyogyanya segera diberikan kepada adanya suatu kebijakan terpadu dalam bidang kesehatan, industri, investasi, perdagangan, pertanian/kehutanan/kelautan, dan riset dengan teknologi yang berkaitan dengan pengembangan biofarmaka dari mulai penyediaan dan pemanfaatan sumberdaya alam sampai kepada dapat diterimanya produk biofarmaka/herbal etikal dan digunakan dalam pelayanan formal.
- Faktor ungkit yang perlu dilakukan untuk pengembangan agro industri - agrobisnis biofarmaka :
- Penerapan SOP/GAP yang tertata dimulai dari sentra produksi yang ada dan dilanjutkan kedaerah sentra produksi luar jawa (target ekspor) dengan konsep LEISA dan organik sesuai keperluan pasar.

- Peningkatan status produk melalui penelitian yang terpilih dan disepakati oleh semua stakeholder dari hulu sampai hilir dengan koordinasi pengguna (user), penelaah (PT & Litbang) serta fasilitator.
- Kebijakan ekonomi menyangkut permodalan untuk petani dan UKM serta lembaga penyeimbang harga (bursa, trading house) dan keterbukaan pasar (dalam maupun luar negeri).
- Membangun citra dan loyalitas terhadap produk biofarmaka yang didasari oleh kualitas khasiat dan keamanan produk dan diterimanya produk dalam layanan formal.

PUBLIC-PRIVATE SECTOR PARTNERSHIP IN DEVELOPING HERBAL INDUSTRY IN MALAYSIA



INDONESIAN BIOPHARMACA EXHIBITION CONGRESS 2004

BY
NASHIRUDDIN MOHD TAHIR
SENIOR EXECUTIVE
MALAYSIAN HERBAL CORPORATION (MHC)
nash@might.org.my

15 JULY 2004

A wholly-owned subsidiary of

MIGHT

1

MALAYSIAN HERBAL CORPORATION (MHC)

- Wholly-owned subsidiary of MIGHT
- MIGHT is a partnership between the industry and the public sector in Malaysia working in synergy to prospect for business and investment opportunities through the harnessing of high technology

MIGHT

Malaysian Industry-
Government
Group For High
Technology

"MIGHT is a good example of the Malaysian Incorporated concept, where both government and the private sector work together towards a common goal"

YABhg Tun Dr. Mahathir Mohamad
Former Prime Minister of Malaysia & Former Patron of MIGHT

A wholly-owned subsidiary of

MIGHT

2

MIGHT INITIATIVE IN HERBAL PRODUCTS



- In 1998, MIGHT established MIGHT Interest Group (MIG) in Herbal Products as a spin-off from the MIG Pharmaceuticals and recognition of the rich biological resources of Malaysia.
- Through its members, comprising key representatives from ministries, universities, research institutions and key players has successfully drew up the Malaysian Herbal Industry Outlook.

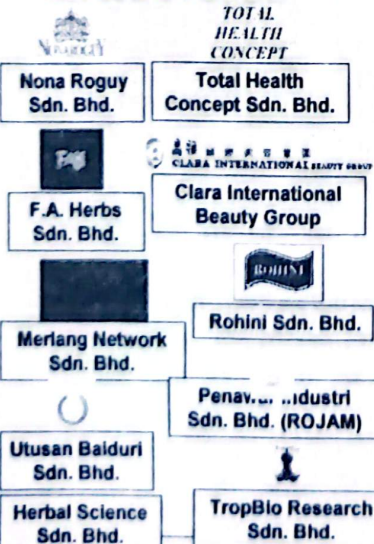
3

A wholly-owned subsidiary of

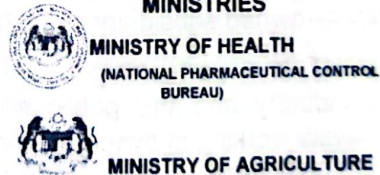
MIGHT

MIGHT INTEREST GROUP (MIG) IN HERBAL PRODUCTS (1998)

PRIVATE SECTOR KEY LOCAL PLAYERS



PUBLIC SECTOR MINISTRIES



RESEARCH INSTITUTIONS



UNIVERSITIES



4

A wholly-owned subsidiary of

MIGHT

OUTPUT OF MIG- IN HERBAL PRODUCTS



000
0000
00000
0000
00000
0000
0000
0 0

- ☐ Malaysian Herbal Industry Outlook.
- ☐ Malaysian Herbal Corporation (MHC).



5

A wholly-owned subsidiary of

MIGHT

MALAYSIAN HERBAL INDUSTRY OUTLOOK



000
0000
00000
0000
00000
0000
0000
0 0



- ☐ The Outlook provides an overview of the herbal industry in Malaysia and globally
- ☐ The Outlook provide inputs and recommendations to develop the local herbal industry in Malaysia.
- ☐ The Outlook is focusing on business opportunities, human resource development, policy & regulations as well as technology and R&D.

6

A wholly-owned subsidiary of

MIGHT

MAIN ISSUES IDENTIFIED

- ☐ Lack of co-ordination between various entities in the industry
- ☐ Herbal industry cuts across multi-sectors and should be properly managed
- ☐ A need to have greater collaborations between Research Institutions, Universities and Players

**Malaysian
Herbal
Corporation**

Major recommendation from the Malaysian Herbal Industry Outlook is the establishment of a **dedicated body that coordinates** the activities of all stakeholders and promotes the local herbal industry.

7

A wholly owned subsidiary of

MIGHT

ESTABLISHMENT OF MHC

MIGHT

Subsidiary



- ☐ Recognition of the vast commercial potential of the rich biological resources of Malaysia.
- ☐ Members comprising experts, scientists, researchers and personnel from **PUBLIC** and **PRIVATE** sectors.
- ☐ A dedicated body that coordinates the activities of all stakeholders and promotes the local herbal industry
- ☐ Strives to play a catalytic role in developing the Malaysian herbal industry into a prominent global player

8

A wholly owned subsidiary of

MIGHT

ROLE OF MHC



Co-ordinate

PUBLIC SECTOR

PRIVATE SECTOR

- A co-ordination body working in **PARTNERSHIP** with the public and private sectors for the development of herbal industry in Malaysia.
- Focused on addressing the critical issues of local herbal industry.

9

A wholly-owned subsidiary of

MIGHT

ROLE OF MHC

Programmes and activities by MHC will serve to address issues crucial to building the competitiveness of the industry

- ⌘ Raw Material Development Program
- ⌘ Human Resource Development
- ⌘ Standards and Quality Assurance Program
- ⌘ Awareness Program
- ⌘ International Outreach Program
- ⌘ Business Networking



10

A wholly-owned subsidiary of

MIGHT

INITIATIVES

INTERNATIONAL OUTREACH PROGRAMME

- ☐ Prospecting Mission to the USA and India (2001)
- ☐ Prospecting Mission to Europe and China (2002)
- ☐ Prospecting Mission to China (2003)
- ☐ Prospecting Mission to Hong Kong (2003)
(sponsored by MATRADE)
- ☐ Prospecting Mission to Indonesia (October, 2004) -
tentative



000
0000
00000
0000
00000
0000
0000
0 0

11

A wholly-owned subsidiary of

MIGHT

INITIATIVES

2nd ASIA PACIFIC NATURAL PRODUCT EXPO & CONFERENCE 2005 (NATPRO 2005)

Malaysia's Leading Herbal and Natural Products Expo

Date: 14 – 16 April 2005

Venue: Putra World Trade Centre, Kuala Lumpur

Highlights :

- * Theme: Capitalising on Asia's Natural Heritage
- * 30 business and economic papers presentation
- * 10,000 trade visitors
- * 4,000 sq meters
- * Participants from 16 Asia Pacific countries
- * More than 150 booths
- * <http://www.herbamalaysia.net/natpro2005>



000
0000
00000
0000
00000
0000
0000
0 0

12

A wholly-owned subsidiary of

MIGHT

INITIATIVES

MALAYSIAN HERBAL PORTAL – **www.herbamalaysia.net**

- ☐ First ever Malaysian herbal portal
- ☐ Supported by National Information Technology Council (NITC)
- ☐ A knowledge platform for the herbal industry community to acquire information, collaborate and exchange knowledge
- ☐ Aims to create increase greater awareness of the potential of the herbal industry and ultimately become a significant reference centre in Malaysia for the transfer of information, knowledge and expertise among stakeholders
- ☐ Featuring database on scientific research, market trade data, monographs on local herbs, articles, journals, updates, directory and links

000
0000
00000
0000
00000
0000
0000
0 0

13

A wholly-owned subsidiary of

MIGHT

INITIATIVES

RAW MATERIAL PRODUCTION AND PROCESSING

1. Encourage participation of Big Plantations companies
2. Promoting "One Herbs One Village Programme"
3. Promoting GAP, GCP and organic farming
4. Encourage setting up of High-end extraction plant
5. Setting up of a dedicated Herbs Trading House

000
0000
00000
0000
00000
0000
0000
0 0

14

A wholly-owned subsidiary of

MIGHT

INITIATIVES

EDUCATION AND TRAINING

1. Encourage School of Pharmacy at local Universities to incorporate curriculum of herbal study
2. Graduate Re-skilling Programme
3. Public Lectures and Awareness Programmes
4. Proposed "Certificate for Sales Person"

000
0000
00000
0000
00000
0000
0000
0 0

15

A wholly-owned subsidiary of

MIGHT

INITIATIVES

STRATEGIC BRAINSTROMING SESSION ON HUMAN RESOURCES DEVELOPMENT (2002)

Attended by public and private sectors

Major recommendations:

1. Establish dedicated institute/colleges for herbal science
2. Produce qualified herbal practitioners
3. Develop comprehensive herbal courses and curricular for introduction in local universities
4. Identify and develop Centres of Excellence
5. Optimise current funding sources for HRD development
6. Form a task force to address HRD needs

000
0000
00000
0000
00000
0000
0000
0 0

16

A wholly-owned subsidiary of

MIGHT

INITIATIVES

TECHNICAL COMMITTEE ON HERBS (2004)

Main Task: To identify and develop Malaysian Standard (MS) related to herbs

Members consist both of public and private sectors

Working Groups :

1. Botanical, Pharmacognosy and Biotechnological aspects of herbs
2. Pharmacological, Toxicological and Clinical aspects of herbs
3. Pharmaceutical and Phyto-chemistry aspects of herbs



000
0000
00000
0000
00000
0000
0000
0 0

17

A wholly-owned subsidiary of

MIGHT

GOVERNMENT MAJOR INITIATIVES

GLOBAL INFORMATION HUB ON TRADITIONAL AND COMPLEMENTARY MEDICINE

www.globinmed.com

- ☐ A unique interactive e-database of reliable, accurate and comprehensive information on integrated medicine to be easily access
- ☐ A conclusion from the 12th Meeting of Commonwealth Health Ministers
- ☐ Policy, research, trade, education, safety, conservation and intellectual property rights.
- ☐ Lead by Institute of Medical Research, Ministry of Health
- ☐ MHC being the team member



000
0000
00000
0000
00000
0000
0000
0 0

18

A wholly-owned subsidiary of

MIGHT

GOVERNMENT MAJOR INITIATIVES



NATIONAL COMMITTEE FOR RESEARCH AND DEVELOPMENT IN HERBAL MEDICINE (NRDHM)

Objectives of NRDHM

- To provide direction, coordinate and monitor all the related activities pertaining to herbal medicine R&D.
- To ensure that such activities are conducted according to the national priorities
- To ensure that activities follow accepted standards
- To ensure that products are standardised, safe and efficacious.
- To maximise global market penetration.

Sub-committees :-

1. Research & Development
2. Training - University
3. Liaison & Publicity
4. Global Information Hub
5. Publication

000
0000
00000
0000
0000
0000
0 0

19

A wholly-owned subsidiary of

MIGHT

GOVERNMENT MAJOR INITIATIVES



AUDIT OF RESOURCES SUPPORTING THE MALAYSIAN HERBAL INDUSTRY

Objectives:

- To obtain comprehensive information on the status of the Malaysian herb genetic resources
- To obtain comprehensive information on the quantity and the quality Malaysian resources used in R&D, production, manufacturing and marketing of all herbs and herbal products
- Assess, analyses and quantify the strength and weakness of resources utilised in R&D, production, manufacturing and marketing of all herbs and herbal products
- Recommend the strategies and plan of action for the development of the herbal industry

000
0000
00000
0000
00000
0000
0000
0 0

20

A wholly-owned subsidiary of

MIGHT

GOVERNMENT MAJOR INITIATIVES



BIO-VALLEY MALAYSIA

- ☐ 200-hectare site neighbouring Putrajaya & Cyberjaya
- ☐ Adopts a cluster approach modeled from the United States and Canada
- ☐ Aims to accelerate the R&D and commercialization of the biotechnology industry in the country.
- ☐ Nucleus of the country's biotechnology industry
- ☐ A magnet for foreign investment, and will bring ideas, technologies, opportunity, and international trade to Malaysia
- ☐ Government is pouring in RM100 million (US\$26.3 million) initially to build the infrastructure and facilities by 2006 that will house 150-200 new biotech companies
- ☐ Research priorities: Genomics and proteomics, agriculture, and nutraceutical/pharmaceutical technologies



bioValley
Malaysia

21

A wholly-owned subsidiary of

MIGHT

MALAYSIAN HERBAL HERITAGE



- ☐ Malaysia's rainforest is among the **world's oldest** rainforest
- ☐ **4th most bio-diverse** nation in Asia after India, China and Indonesia
- ☐ The one of the only **12** countries in the world with mega diversity of plants, medicinal and aromatic plants
- ☐ Home to about **12%** of all the plant species on earth, which has not been fully exploited and cultivated
- ☐ One of the **primary centres of biodiversity** with an estimated 15,000 known plant species, 3,700 are known to be useful, 2,000 species with medicinal value and the balance remain largely unexploited.



22

A wholly-owned subsidiary of

MIGHT

000
0000
00000
0000
00000
0000
0000
0 0

- Malay
- Chinese
- Indian



A wholly-owned subsidiary of

MIGHT

000
0000
00000
0000
00000
0000
0000
0 0

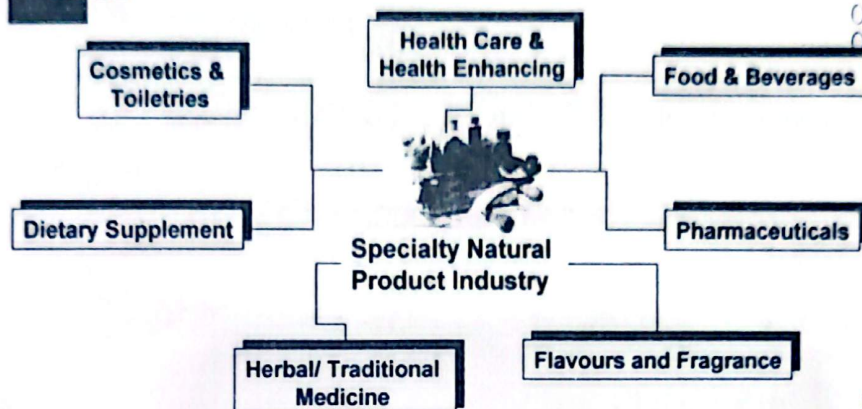
- ❑ Traditional medicine – significant role in primary healthcare
- ❑ National Policy on Traditional/Complimentary Medicine (T/CM) – emphasis on practice, education and training, raw materials and products, and research
- ❑ Paradigm shift – integrating T/CM into allopathic healthcare system
- ❑ Strategies –T/CM Standing Committee, National Committee for R&D on Herbal Medicines, Drug Control Authority

A wholly-owned subsidiary of

MIGHT

CLASSIFICATIONS

Component of Specialty Natural Product Industry (Third National Agricultural Policy (1998-2010))



25

A wholly-owned subsidiary of

MIGHT

MARKET SIZE

- ✳ Study by MIGHT Interest Group (MIG) in Pharmaceuticals in 1998 reported that the local pharmaceutical market in 1997 were made up of USD 0.32 billion for the western drug products and USD 0.53 billion for the traditional medicine.
- ✳ Total value of the domestic market for herbs and medicinal plants in 1998 was estimated as below and the market growth is estimated at 15% - 20% annually.

<i>Industrial Use</i>	<i>Value (USD)</i>
Herbal remedies	0.53 billion
Flavours & Fragrance	0.42 billion
Pharmaceuticals/Nutraceuticals	0.25billion
Total Value	USD 1.2 Billion

(Source : MARDI)

26

A wholly-owned subsidiary of

MIGHT

MARKET PROJECTION

Malaysian Herbal Industry Market Projection vs Target



Year	2000 →	2005 →	2010
Projected Market Value	USD 0.5 b	USD 0.8 b	USD 1.4 b
Targeted Local Content	USD 26.3 m	USD 131.2 m	USD 0.6 b
% Share	5%	15%	50%

000
0000
00000
0000
00000
0000
0000
0000
0 0

27

A wholly-owned subsidiary of

MIGHT

LOCAL MARKET TRENDS

- ☐ Increasing consumer sophistication and interest in all things natural
- ☐ Result of aging population, focus on specific products that moisturize; hair loss; uv protection.
- ☐ A trend for Aromatherapy
- ☐ On industrial level, this sector – for long period under SMI – is increasingly dominated by multinationals with many brands
- ☐ Trend towards environmentally friendly entrepreneurship

000
0000
00000
0000
00000
0000
0000
0 0

28

A wholly-owned subsidiary of

MIGHT

FACTORS CONTRIBUTE TO

DEVELOPMENT OF THE INDUSTRY

- ☐ Escalating expense of western pharmaceutical
- ☐ Emergence of global economy with ease of communication
- ☐ Increasing desire to return to natural lifestyle based on renewed interest in ethnic cultures
- ☐ Acquisition of Phytomedicine companies by pharmaceutical companies
- ☐ Achievement and breakthrough of biotechnology



000
0000
00000
0000
00000
0000
0000
0 0



29

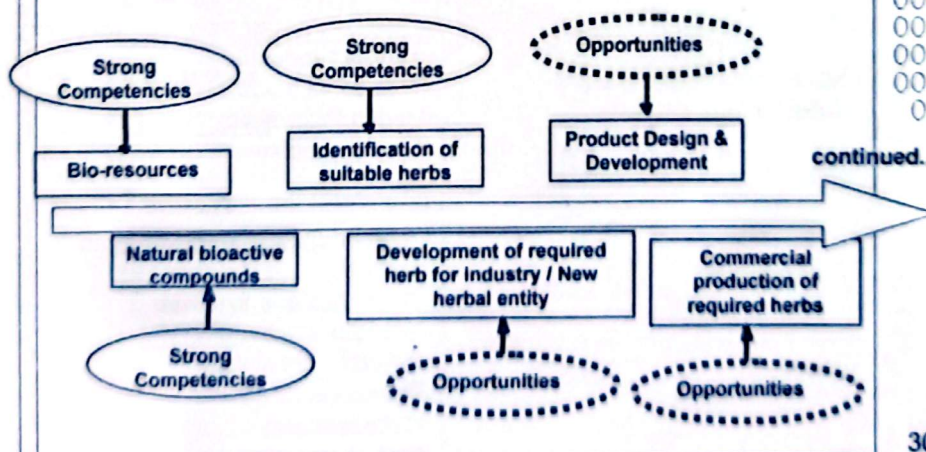
A wholly owned subsidiary of

MIGHT

COMMERCIAL OPPORTUNITIES

Strategic analysis

Core Competencies Along the Herbal Value Chain (Part 1)



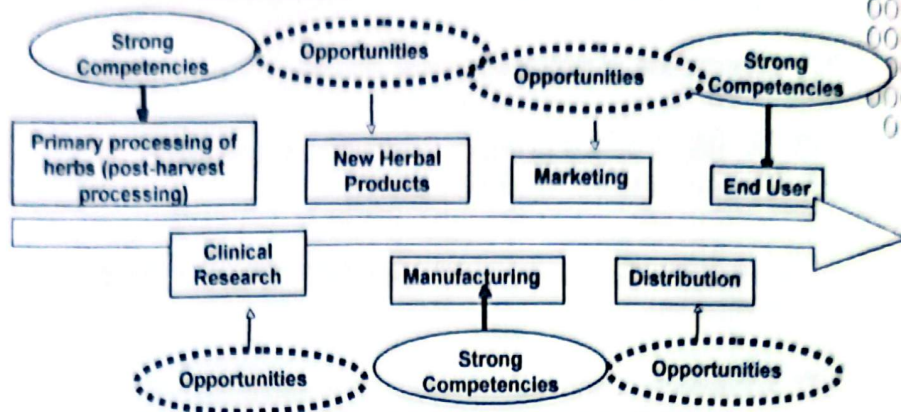
30

A wholly owned subsidiary of

MIGHT

COMMERCIAL OPPORTUNITIES

Strategic analysis Core Competencies Along the Herbal Value Chain (Part 2)



31

A wholly-owned subsidiary of

MIGHT

EMERGING SECTORS (NAP3)

Cluster map of current and future structure of specialty natural products industry

	Primary Products	Finished Products
CURRENT	• Harvested forest materials • Collected aquatic material	• Herbal Products • Traditional medicine • Health Products • Food Ingredients
FUTURE	• Plant extract • Active Ingredients • Raw materials from domesticated cultivators	• Food and health related herbal products • Cosmetics and toiletries • Aromatic products • Industrial chemicals • Pharmaceuticals • Nutraceuticals • Fine chemicals

A wholly-owned subsidiary of

MIGHT

SUPPLY AND DEMAND OF MEDICINAL PLANTS.....



Sources of supply:

- Wild (forest)
- Plantations and cultivated sources
- Imports – 50% (China, India and Indonesia)

Issues

- Insufficient supply of local raw materials to feed the demand
- Too dependent to imported herbs

Major Export Market

- Singapore
- Thailand

000
0000
00000
0000
00000
0000
0000
0 0

33

A wholly-owned subsidiary of

MIGHT

MAJOR IMPORTS OF TRADITIONAL AND COMPLEMENTARY MEDICINE - 2002



- China
- United States
- Australia
- Indonesia
- India
- Taiwan
- South Korea
- Hong Kong
- France



000
0000
00000
0000
00000
0000
0000
0 0

34

(Source : Ministry of Health)

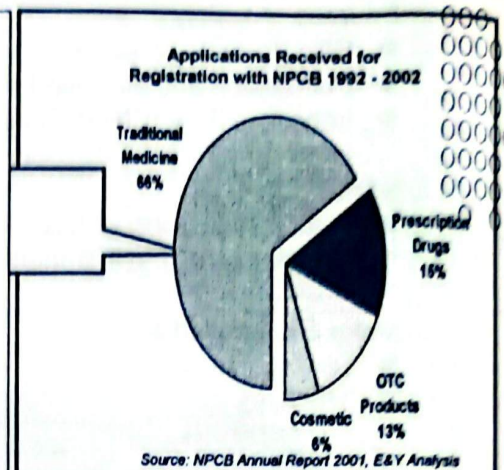
A wholly-owned subsidiary of

MIGHT

GROWTH OF TC/M

Traditional Medicine is anticipated to expand with a growth of 15-20% annually.

- According to WHO, up to 80% of the world's population still depend heavily on TCM for treatment. In Malaysia, WHO estimated that USD500 million is spent annually on this type of health care, compared to about USD300 million on allopathic medicine.
- The local interest in TCM is reflected in the large number of these products submitted for registration with NPCB.
- Traditional medicine in Malaysia is projected to expand with a growth of 15 - 20% annually driven by:
 - Accessibility and affordability.
 - GoM's support and plans to provide a global information hub on traditional medicine.



(Source : Ministry of Health)

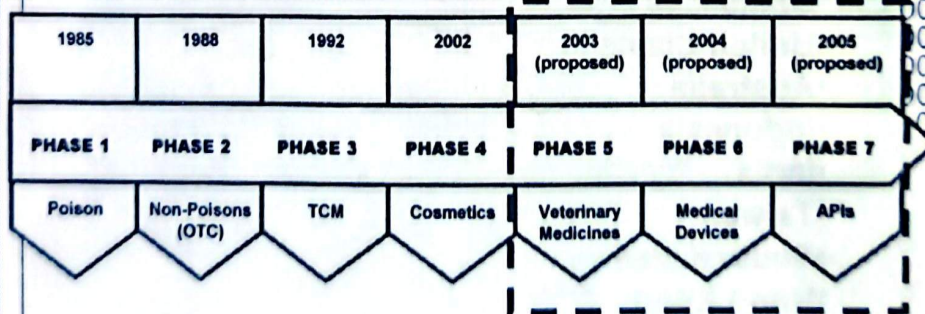
A wholly-owned subsidiary of

MIGHT

REGULATORY PHASES

Currently regulates 4 types of products.

Expected to expand to meet national and international expectations.



New activities

OTC - Over the Counter Drug

API - Active Pharmaceutical Ingredients

Sources: NPCB, E&Y Analysis

(Source : Ministry of Health)

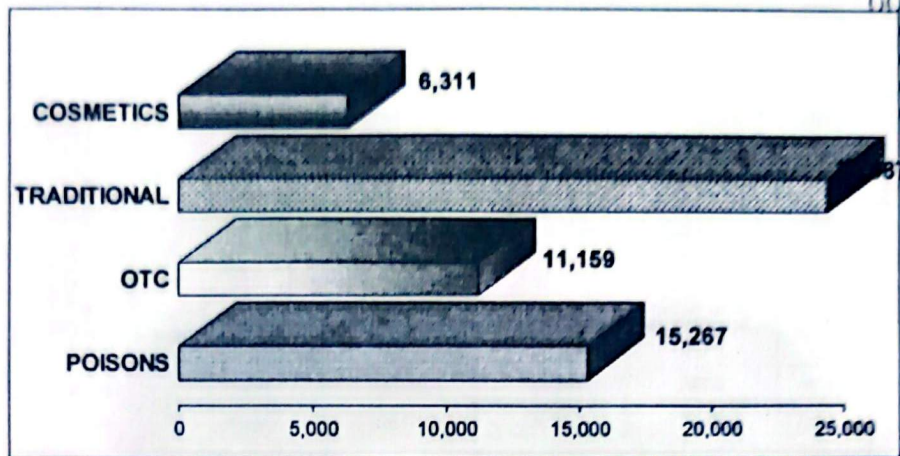
A wholly-owned subsidiary of

MIGHT

PRODUCTS REGISTRATION

Applications received for products registration – August 2003

Total = 57,124



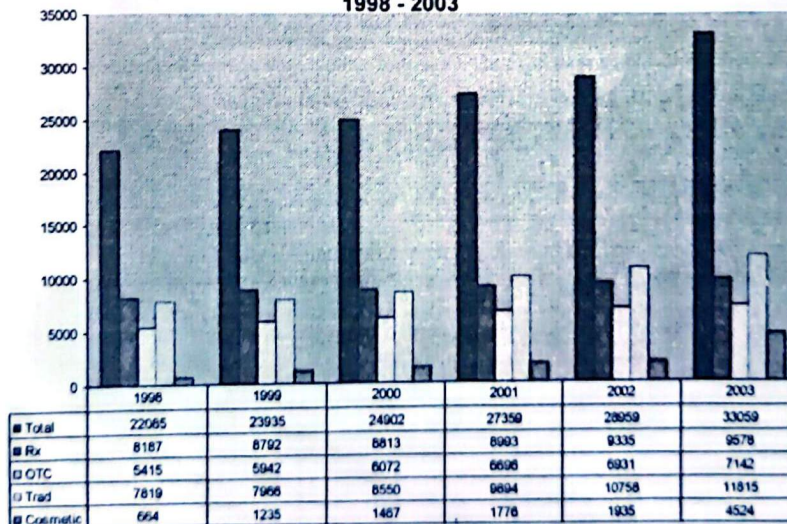
(Source : Ministry of Health)

A wholly-owned subsidiary of

MIGHT

PRODUCTS REGISTRATION

Products Registered
1998 - 2003



Sumber: Biro Pengawasan Farmasetikal Kebangsaan

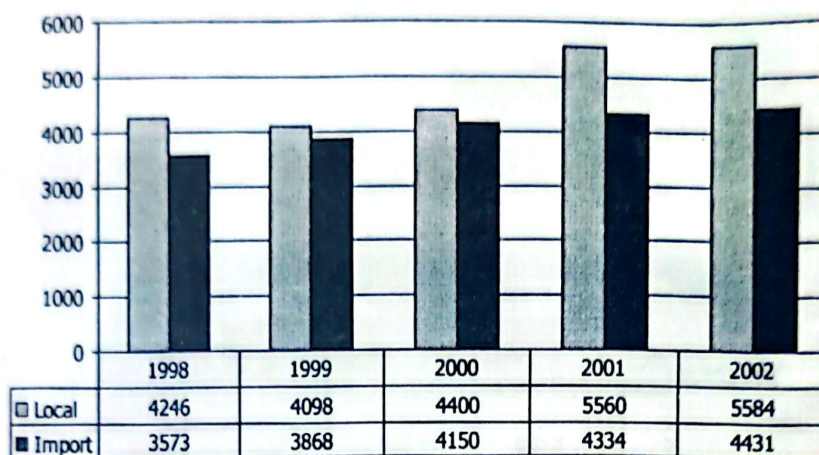
(Source : Ministry of Health)

A wholly-owned subsidiary of

MIGHT

PRODUCTS REGISTRATION

**Traditional Medicines
Local vs Import
1998- 2002**



(Source : Ministry of Health)

A wholly-owned subsidiary of

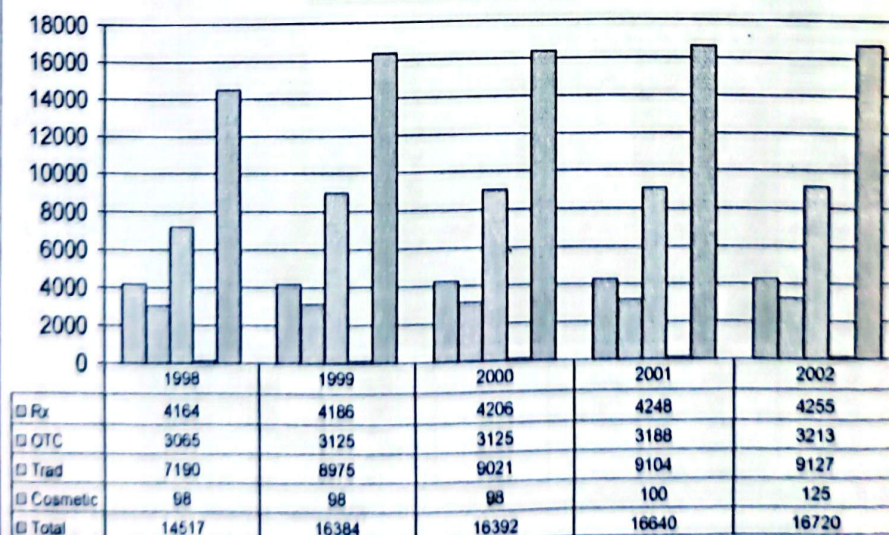
MIGHT

39

PRODUCTS REGISTRATION

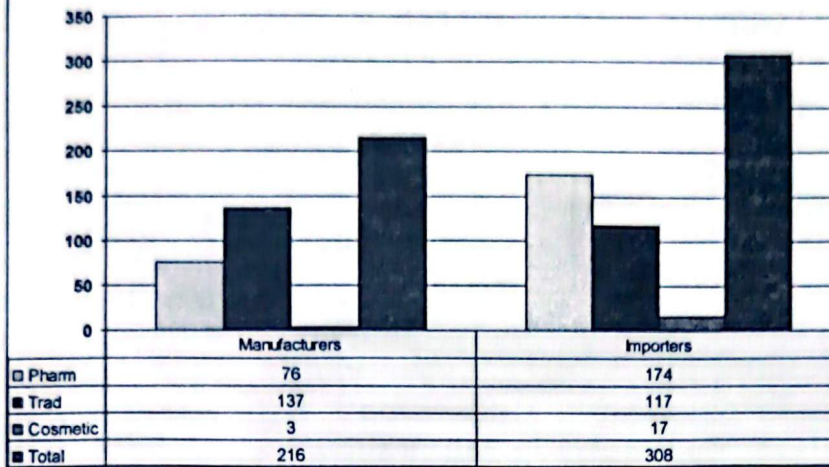
**Applications Rejected
1998 - 2002**

(Source : Ministry of Health)



PRODUCTS REGISTRATION

Licensed Manufacturers and Importers
(June 2003)



Sumber: Biro Pengawasan Farmaseutikal Kebangsaan

(Source : Ministry of Health)

A wholly-owned subsidiary of

MIGHT

41

CONCLUSION

1. The potential of the herbal industry in Malaysia is bright. Malaysia offers an attractive opportunity for international participation.
2. The **co-ordination** role of Malaysian Herbal (MHC) Corporation provides an effective mechanism to co-ordinate the business and collaboration opportunities especially in Malaysia.
3. MHC is looking forward to cooperate with public and private sectors including from **INDONESIA** for the development of the herbal industry.



THANK YOU

A wholly-owned subsidiary of

MIGHT

42