



**EAST
COAST
ECONOMIC
REGION**

Investment and Business Opportunities In The Herbal and Biotechnology Cluster Development In East Coast Economic Region (ECER)



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Investment Prospectus

Introduction

The East Coast Economic Region Development Council (hereinafter called “ECERDC”) is a statutory body established pursuant to the East Coast Economic Region Development Council Act 2008 (Act 688) for the purposes of, amongst others, to plan and implement the East Coast Economic Region (ECER) Master Plan. Various catalytic and high impact projects to stimulate, encourage and accelerate the growth of the East Coast Economic Region (ECER) is undertaken and implemented to ensure commercial viability, equitable distribution and sustainable use of resources. ECERDC is positioning the region as a destination of choice for both domestic and international investors involved in the agricultural sector, specifically involving the herbal and biotechnology cluster.

ECERDC is now inviting potential Investors to submit their Expression Of Interest (EOI) to commercially develop, operate and manage the following Herbal and Biotechnology Cluster Development Project in ECER:-

EOI.A/2011/01:
Herbal & Biotechnology Cluster Development Project



The target crops promoted for development are herbs such as Tongkat Ali (*Eurycoma longifolia*), Hempedu Bumi (*Andrographis paniculata*), Kacip Fatimah (*Labisia pumila*), Mengkudu/Noni (*Morinda citrifolia*), Dukung Anak (*Phyllanthus niruri*), Misai Kucing (*Orthosiphon aristatus*), Halia (*Zingiber officinale*), Roselle (*Hibiscus rosa sabdariffa*), Lemon Myrtle (*Backhousia citriodora*) and Gaharu/Agarwood (*Aquilaria malaccensis*) but it shall not be limited to exploring other commercially viable herbs in demand.

As such, potential Investors presently involved in crop farming, primary and secondary processing of herbs, technology providers, product distributors and entrepreneurs interested in contract farming arrangements with out growers are invited to participate in the overall business opportunities stemming from these initiatives by ECERDC.

For further information on ECER and the Investment and Business Opportunities in the Herbal & Biotechnology Cluster Development, please visit our website at <http://www.ecerdc.com.my>

Investment & Business Opportunities in ECER



The ECER is a haven for investors and businesses that seek a new hub of growth which will position them to serve a total population of 2 billion people in the Asia Pacific market. While many global investment destinations have reached their maximum capacities, the ECER is a new beginning; one that offers unlimited potential growth as a strategic springboard for investors. With its present integrated infrastructure set up, skilled workforce, competitive cost of labor and a balanced work & play lifestyle has drawn many expatriates from all over the world to the region. ECER is presently in a position to further lure early entry investors with attractive investment incentive packages to entice investment appetite in the region.

ECERDC invites all investors to be a part of this vision in transforming the Region to be a major exporter of sustainable resource based and high value products, a vibrant trading centre, a technology center anchored on innovation and focused on knowledge development. Five clusters have been identified as key initiatives

in generating economic growth within the ECER, namely Tourism, Oil, Gas & Petrochemical, Manufacturing, Agriculture and Education. Supporting these clusters are the enabler projects comprising Infrastructure, Human Capital, Environment and Real Estate that represent a further stream of business opportunities for investors.

The agriculture sector has long been the mainstay of the ECER's economy. Investors are encouraged to explore the possibilities in large scale commercial farming, with wider application of modern technology and improving supply chain management, especially those geared towards supplying the export market with value added products.

To spearhead developments in the agricultural sector, potential investors may take the form of Anchor Company status and are invited to set up contract farming arrangements with local farmers, as well as to establish a one-stop collection, processing, packaging and distribution centres in the ECER, to be able to supply raw materials and processed products to manufacturers and retailers locally and abroad in a sustainable and reliable manner. By improving the management of the value chain, through implementing efficient pricing and off take structures, optimization of outputs through proven farming techniques, applying commercially viable technologies for product expansions, reducing post harvest losses due to better handling of produce and to ensure a high level of quality control for end consumers will enable the ECER herbal industry to be better positioned in the industry.



Consider ECER Your Unique Investment Destination

Malaysia's conducive business environment has made the country one of the world's top destinations for investors.

Malaysia has to date attracted more than 5,000 foreign companies from more than 40 countries. Investments into the country for the last 50 years have been made possible by a tolerant and supportive business infrastructure and active government encouragement.

The ECER offers investors an attractive business proposition that is hard to resist. Its pristine surroundings, competitive cost of living and reliable infrastructure provide investors some of the most complete lifestyles.

As education is given key focus in the ECER, investors can expect respectably high education services from kindergartens to primary and secondary schools, including international schools. There also several universities in the ECER that offer quality education.

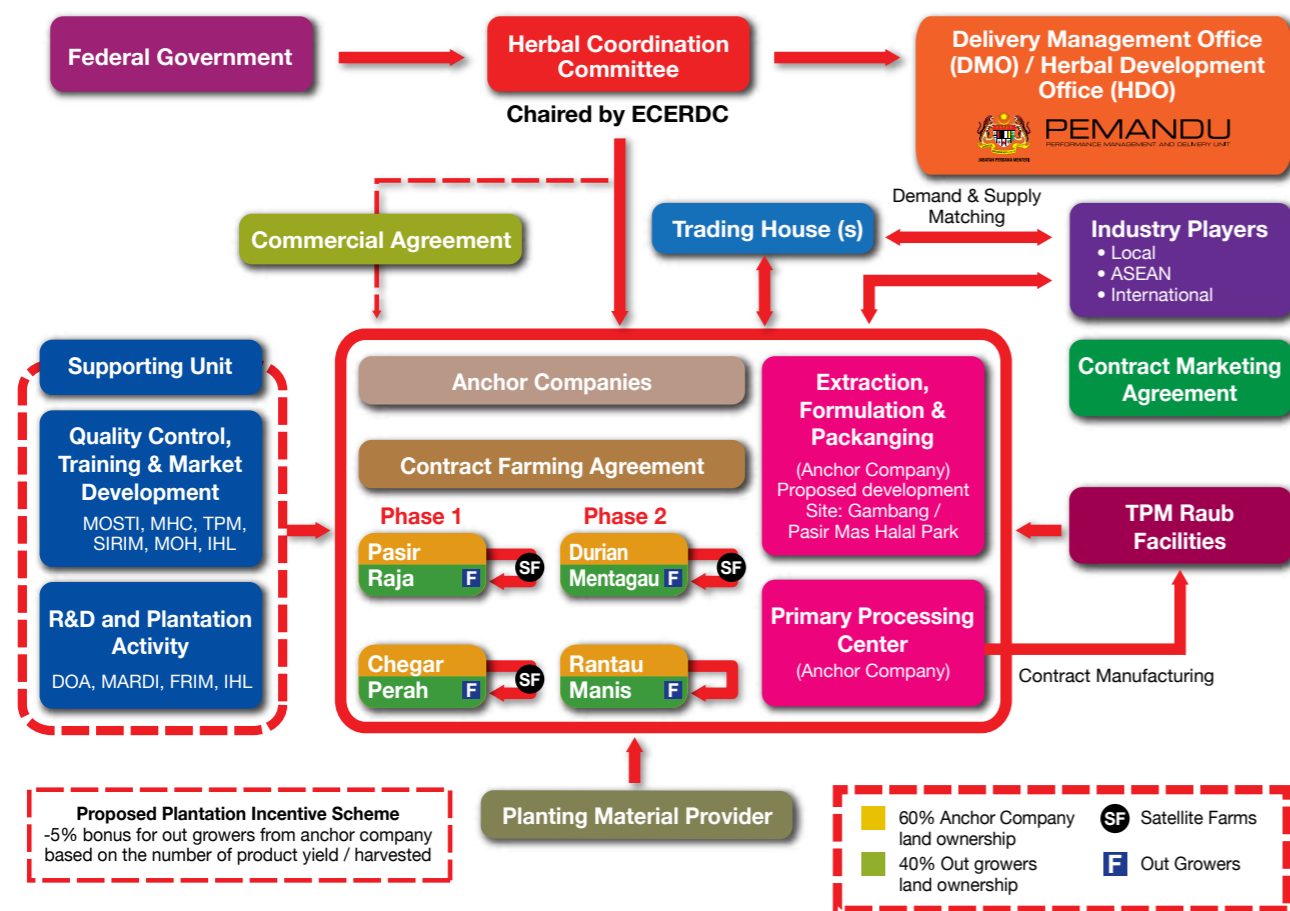
The ECER has very efficient and well-equipped healthcare services where world-class medical facilities are provide at nominal cost. Property prices in the ECER are comparatively lower than many parts of Asia, making living in the region affordable.

The region is also well connected with modern road, rail, air and sea transportation systems. Public transportation is comfortable, efficient and cost-competitive.

Investors are also assured of reliable public utilities, state-of-the-art ICT services and easily accessible amenities in the ECER.

ECER Malaysia, renowned for its hospitable people in distinctive culture and heritage, welcomes you to the region.

Figure 3.0 : Proposed ECER Herbal and Biotechnology Business Model



An Anchor Company will spearhead the development of each of the herbal industry product cluster. The Anchor Company will invest in the various value chain of the herbal industry product cluster. The Anchor Company will secure local and international strategic investors or operating companies and implementation of the activities in the value chain. By doing so, the Anchor Company will significantly increase values in the entire value chain in the herbal industry and thus generate substantial liquidity and enhance returns.

Each anchor company is envisioned to provide primary processing before further processing by other industry players. At present there is a secondary processing facilities provided by Technology Park Malaysia (TPM) in Raub, Pahang. However some of the anchor companies may also able to provide their own secondary processing. The Trading House provides contract marketing agreement with anchor companies in matching the supply and demand with industry players for the supply of herbal products to the herbs grown by the contract farmers. The Trading House acts as an intermediary for market expansion and access for anchor companies as well as local herbal industry players in accessing the wider ASEAN or international markets.

The project will be supported by a number of government agencies including Department of Agriculture, MARDI, Drainage & Irrigation Department, Public Works Department and Land Office. The project will involve contract farming arrangements between the anchor company and contract outgrowers.

The Anchor Company will operate the Collection, Processing & Packaging Centre (CPPC) and marketing of the herbs. To ensure the quality of herbs produced, the anchor company shall establish a standard operating procedure (SOP) of cultivation practices to be adhered to by the contract outgrowers.

Among the specific roles of the Anchor Company include:

1. To spearhead the development of the herbs and biotechnology product clusters in Chegah Perah, Lipis and Pasir Raja, Dungun;
2. To collaborate with other related government agencies and stakeholders in enhancing project implementation and operation through R&D activities especially in varietal improvement, disease control, processing methods and enhancing productivity;
3. To lead and set the right eco-system for the herbal industry cluster right from plantation, cultivation and primary/secondary processing;
4. To provide technical guidance on the best practices in herbal cultivation operations through training programs and development of standard operation procedures to contract farmers;
5. To facilitate adequate supplies of quality inputs such as planting materials for the outgrowers and provide guaranteed buyback from outgrowers at a fixed price base on the agreed standard and quality;
6. To develop a contractual farming and marketing arrangement between anchor company and outgrowers and to ensure compliance of the agreed standards; and
7. To actively explore and develop new market opportunities through the support from trading house as well as relevant government agencies.

ECER Herbal and Biotechnology Cluster Development Project

Industry Overview

The global herbal market is valued at USD 70 billion for nutraceuticals and USD 20 billion for phytomedicines with an average growth rate between 15 to 20 percent annually. According to the World Bank, the global market for herbal medicine alone was USD 19.6 billion in 1996 and grew to USD 24.2 Billion in 2002. It has been projected to reach USD 5 trillion by 2050.

Malaysia is well positioned to be a key global player in the herbal industry due to its rich biodiversity heritage, cultural background and trade links. According to FAO, Malaysia is listed as the 12th most bio diverse nation in the world. Malaysia herbal industry estimated growth rate of 15% per annum and the industry is projected to have an estimated market value of RM7 billion, RM15 billion and RM 29 billion respectively in year 2010, 2015 and 2020. The numbers reflect the increasing popularity and usage of herbal and natural products.

Therefore, the Malaysian Government has acknowledged the herbal industry as one of the promising industry in the future. In addition, this industry is also very much interrelated with the development of agriculture, pharmaceuticals, life science, health care and food industry. Under the Third Agriculture Policy (NAP3) the herbal industry has been identified as a new source of wealth for Malaysia. Under the 9th Malaysia Plan (RMK9), the government is focused on developing the herbal product as a new segment targeted to spearhead the economic growth in the country. The objective is to capitalize on biodiversity to commercialize discoveries in health related and bio-generic drugs.

Table 1.0 shows that the total area and production for both spices and herbs has increased over the last five years, i.e. from 4,308 ha to 5,265 ha for planted area and from 35,230 MT to 42,095 MT in production. This increase in planted area as well as in production indicates the positive trend of the industry.



*Picture courtesy from En. Musa Yaacob, Principal Officer, MARDI

Table 1.0 : Planted Area and Production Volume of Major Species and Herbal Plants from 2005 - 2008 in Malaysia

Year	SPICES		HERBS		TOTAL	
	Planted Area (ha)	Production (MT)	Planted Area (ha)	Production (MT)	Planted Area (ha)	Production (MT)
2005	4,005	34,708	303	522	4,308	35,230
2006	4,429	36,958	338	864	4,767	37,822
2007	4,510	38,470	585	1,585	5,095	40,055
2008	4,615	40,270	650	1,825	5,265	42,095

Source: Statistical Handbook, 2008, MOA

The Government recently announced that the development of herbal product is one of the Entry Point Projects (EPP) under the Economic Transformation Programme (ETP).

The key success factors for the herbal industry in ECER are the availability of sustainable and reliable raw material supply and integration between the processing/ manufacturing, marketing, technology application, packaging, branding and distribution of products which can only be achieved through supporting industry players. This is an important component of the development in ensuring competitiveness through product innovation and sustainable market demand through effective marketing and branding.

The current scenario based on studies conducted, indicates that the Malaysian herbal industry has the potential to compete against imported herbal products, however, these products are now produced cheaper in other countries as compared to Malaysia.

In addition, the consumer perception of Malaysian products is still low, as the consumer's mind set for Malaysian product generally relates it to lower quality and less attractive nutritional attributes compared to imported goods. This is a fallacy as the shortcoming in general is that imported products are being packaged and marketed more effectively through a robust distribution system.

After a detailed review of the industry, ECERDC has formulated a Business Model by mitigating past failures and adopting winning strategies which would appeal to the Investors as well as various stakeholders in the Herbal Industry in ECER. To roll out and implement its immediate plan for the Herbal & Biotechnology Cluster Development Model, ECER has identified two locations in the districts of Lipis in Pahang and Dungun in Terengganu. The areas have been proposed based on initial findings in terms of viable location attributes such as soil, water and weather information as well as having secured endorsements by the State Government of Pahang and Terengganu Department of Agriculture as promoted projects.

Objective

The primary objective of the ECER Herbal and Bio-technology Cluster Development is to promote the production of local herbs in a sustainable, competitive and reliable manner to be able to better positioned itself in both the local and export market. Other objectives are as follows:-

- To provide an attractive value proposition and a viable platform for domestic and foreign investment to participate in herbal and biotechnology related industries. In return this would help to create a sustainable local economy, expand employment and alleviate the economic well being in of the general public in the East Coast Region;
- To provide a balanced development throughout the value chain in order to ensure uninterrupted supply and demand. This will support the supply of raw material in reducing the reliance of imported raw material by focusing in producing quality herbal products;
- To provide awareness on the quality and biodiversity of the region via an alliance network of a trading house in marketing the herbal produce to major industry players around the world through demand and supply matching;
- To strategically position ECER as the producer of quality herbs in addressing the sustainability of the industry. Hence to align with main objective of the ECER Master Plan is to accelerate the growth of the ECER in a viable, equitable and sustainable manner.
- To promote synergy and integration with other promoted projects within ECER in relation to halal food produce, pharmaceutical and nutraceutical related products.



Figure 2.0 : Structure of Herbal and Biotechnology Products Value Chain

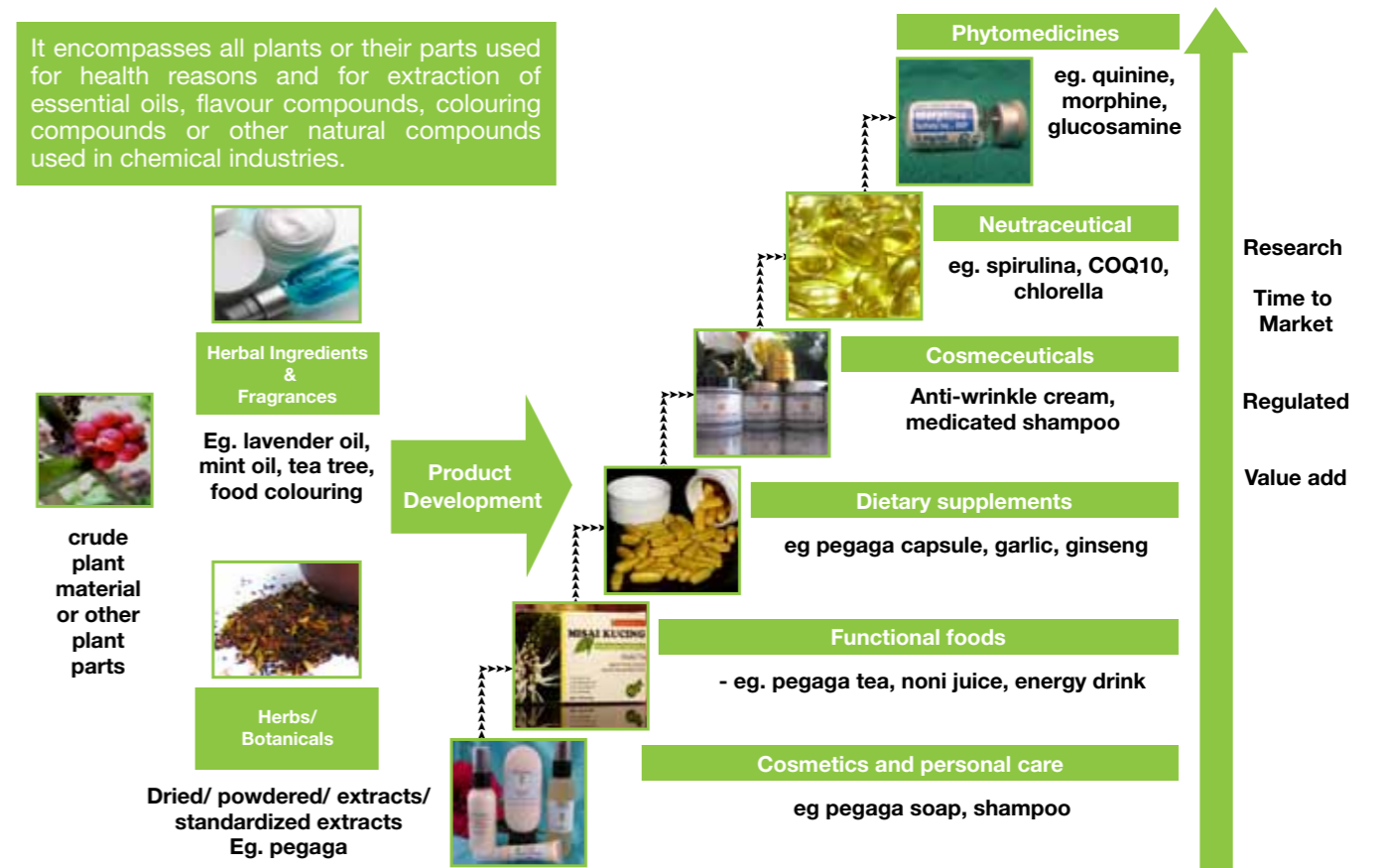


Figure 1.0 : Herbal and Biotechnology Industry Value Chain and Linkages



Depicted above in Figure 1.0 is the representation of the herbal industry value chain. It involves steps and relationships between private companies and government entities in providing support to the cluster development. The above value chain could also be presented as in Figure 2.0.

Upstream activities consist mainly of production of planting materials, nursery management and commercial cultivation of the proposed herbs as well as associated post-harvest activities.

Midstream activities involves primary processing such as washing, drying, chipping, grinding, essential oil distillation and production of standardized extracts. The output will be the production of raw materials/ ingredients for further processing into higher-value end products.

Downstream activities involves secondary processing for the production of high-end products such as cosmetics & personal care (eg herbal soap & shampoo), functional foods (eg pegaga tea, noni juice, energy drink), dietary supplements (eg Pegaga, Dukung Anak and Tongkat Ali capsules), cosmeceuticals (eg Anti-wrinkle cream, medicated shampoo), nutraceuticals (eg spirulina, ginko biloba) and Phytomedicines (eg quinine, morphine, glucosamine).

Business Model

The project will be developed based on a business model involving anchor company and out-growers. The anchor company will spearhead the development of the herbal products and source raw materials/ inputs from both its own farm as well as contract growers. The anchor company will also involve in primary processing before further processing or direct to industry players. A monthly staggered planting system has been proposed for a continuous and consistent supply of herbs.

The project will also involve the establishment of Trading House whereby through contract marketing agreement with anchor company, the trading house will provide the supply and demand matching initiatives in order to match the herbs grown by farmers or anchor company with potential buyers. Hence this will provide secured and wider market coverage for the industry players in the ECER.

The proposed business model as depicted in the **Figure 3.0** will benefit the famers by ensuring the market with a guaranteed buy back from the anchor company. A plantation scheme of 60:40 land segregation of Anchor Company and out-growers for annual and perennial crops are proposed. Supporting government agency and institution such as Biotech Corp, HDC, SIRIM, FRIM, Department of Agriculture (DOA) and MARDI will also play a key supporting role in order to allow for crop improvement, technology adoption, branding as well as continued focused R&D activities would improve the yield of the plantation.

ECERDC invites potential business entities and investors to explore the opportunities in its proposed the development of 406 hectares of state land in Pasir Raja, Dungun, Terengganu and 327 hectares of the state land in Chegar Perah, Lipis, Pahang as the initial herbal plantation project which will be carried out in a few phases of development. The proposed areas will be zoned as a Herbal Production Hub and leased to the anchor companies and outgrowers. The project will be supported with physical infrastructure consisting of farm roads, access roads, drainage system as well as the required utilities such as electricity and water. The project will also involve on-site processing and other facilities. Attractive investment incentives customized for the investors will also be granted on the basis of merit.