#### **CHAPTER 3**

#### ANALYSIS OF SMALL AND MEDIUM ENTERPRISES

#### 3.1 Introduction

In the economy, SMEs have been the backbone of economic growth in driving development. Economic growth in developed countries such as Japan, Korea, Taiwan and many others, has been significantly generated by the activities of SMEs. The percentage contribution of SMEs to GDP/total value added range from 50% in Korea, 55.3% in Japan, 57% in Germany, 60% in China to 47.3% attained by Malaysia (Mohd Aris, 2006). S<Es are important traders and service providers to primary industries (Sarah et al. 2009). SMEs also offer employment opportunities, initiate improvement, accelerate competition and support big companies (Hashim and Wafa, 2000). The globalization process has brought opportunities and challenges for SMEs in Malaysia. The Malaysian government has given priority to SMEs and put in place a policy and institutional framework that addresses their developmental needs. Strategies during the Ninth Malaysian Plan (2006-2011) emphasized the development of SMEs in the manufacturing sector and, in particular, the development of a competitive Bumiputra Commercial and Industrial Community (BCIC).

Funding to address critical issues in promoting and developing SMEs has been made available through various agencies — Malaysia External Trade Development Corporation (MATRADE), Malaysia Technology Development (MTDC), Small and Medium Industries Development Corporation (SMIDEC) and Standards and Industrial Research Institute of Malaysia (SIRIM) Berhad. The development of a competitive and resilient small and medium enterprise sector is a key component of the Government's

economic growth strategy. As the SME sector comprises 99.2% of total establishments and employs more than 5.6 million workers, promoting entrepreneurship and SMEs is an important thrust to support the Government's aim of achieving balanced economic development and a higher standard of living for all levels of society (SME Annual Report, 2006). The government policies, especially on tariffs, give SMEs the opportunity to enter into new markets for their new products and greater access to technology, capital, labour and intermediate inputs (SME Annual Report, 2006).

### 3.2 Definition of Small and Medium Enterprises in Malaysia

SMEs in Malaysia account for 99.2% or 548,267 of total establishments in Malaysia (SME Annual Report, 2008). The findings also reveal that 87% of SMEs were in the service sector, followed by 7.2% in the manufacturing sector and 6.2% in the agriculture sector. Collectively, three-quarters of these three sectors compared to the gross domestic product (GDP) was estimated to be more than three-quarters of the total GDP in 2003 (Aris, 2006). Malaysian SMEs can be grouped into three categories: Micro, Small or Medium (SME Annual Report, 2006). These groupings are decided based on either:

- **↓** The number of people a business employs or
- ♣ On the total sales or revenue generated by a business in a year.

Table 3.1(a) and Table 3.1(b) show the definition of SMEs in Malaysia.

Table 3.1(a) Definition of SME based on Annual Sales Turnover

Size	Manufacturing (including agro- based) and Manufacturing-related services	Primary Agriculture	Services Sector (including ICT)
Micro	Less than RM250,000	Less than RM200,000	Less than RM200,000
Small	Between RM250,000 and less than RM10 million	Between RM200,000 and less than RM1 million	Between RM200,000 and less than RM1 million
Medium	Between RM10 million and RM25 million	Between RM1 million and RM5 million	Between RM1 million and RM5 million

Source: SME Annual Report 2006

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Table 3.1(b) Definition of SME based on Number of Full-Time Employees

Size	Manufacturing (including agro- based) and Manufacturing-related services	Primary Agriculture	Services Sector (including ICT)		
Micro	Less than 5 employees	Less than 5 employees	Less than 5 employees		
Small	Between 5 to 50 employees.	Between 5 and 19 employees.	Between 5 and 19 employees.		
Medium	Between 51 to 150 employees.	Between 20 and 50 employees.	Between 20 and 50 employees.		

Source: SME Annual Report 2006

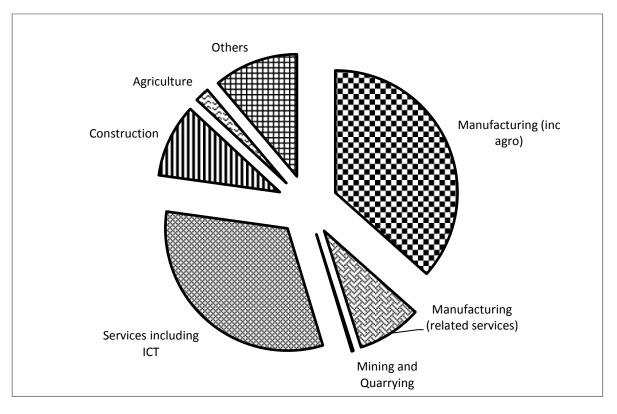
Ndubisi and Salleh (2006) summarize the definition of Malaysian SMEs into two broad categories – manufacturing and services – as shown in Table 3.2.

**Table 3.2 Definition of SME based on category** 

Category	Micro Enterprise	Small Enterprise	Medium Enterprise
Manufacturing, Manufacturing-related services and agro-based industries	Sales turnover of less than RM250,000 or full time employees less than 5	Sales turnover between RM250,000 and RM10 million or full time employees between 5 to 50.	Sales turnover between RM10 million and RM25 million or full time employees between 51 and 150.
Services, Primary Agriculture and Information and Communication Technology (ICT)	Sales turnover of less than RM200,000 or full time employees fewer than 5	Sales turnover between RM200,000 and RM1 million or full time employees between 5 and 19.	Sales turnover between RM1 million and 5 million or full time employees between 20 and 50.

Source: (Ndubisi, 2006)

The business sector of Malaysian SME comprises manufacturing (including agrobased), manufacturing related services, mining and quarrying, services (including ICT), construction, agriculture and others with 16,184 establishments throughout Malaysia. The proportion of this sector is shown in Chart 3.1



Source: UNDP (2004)

Chart 3.1 SMEs Proportion

# 3.3 Small and Medium Enterprises Output to GDP

The SMEs of manufacturing, services and agriculture sectors as well as ICT has contributed to the economy in terms of output, value-added, employment and exports (Third Industrial Master Plan, 2006). The Malaysian economy registered a growth of 4.6% in 2008, amidst the international financial turmoil and deterioration in the global economic environment. The significant role of Malaysia's SMEs is demonstrated by their contribution to output and value added, RM 405 billion and RM154 billion respectively in 2003. Services sector contributed 57 percent and 55 percent value added of the services sector. Table 3.3 show the output and value added by sector.

Table 3.3 Ouput and Value Added of SMEs by Sector

		Output		Value added				
		(RM billion)	)	(RM billion)				
Sector	Total	SMEs	%	Total	SMEs	%		
Manufacturing	549.1	191.6	34.9	128.1	47.5	37.1		
Services	361.7	204.9	56.7	187.6	102.7	54.7		
Agriculture	20.6	8.7	42.1	9.1	3.6	39.7		
Total	931.4	405.2	43.5	324.7	153.7	47.3		

Source: Department of Statistic, Census of Establishment and Enterprises 2005

SMEs not only stimulate entrepreneurship but also provide a broad economic base. In 2005, SMEs contributed 32 percent to the GDP, 56.4 percent to employment and 19 percent to exports. Chart 3.2 shows the SMEs contribution to the economy of Malaysia.

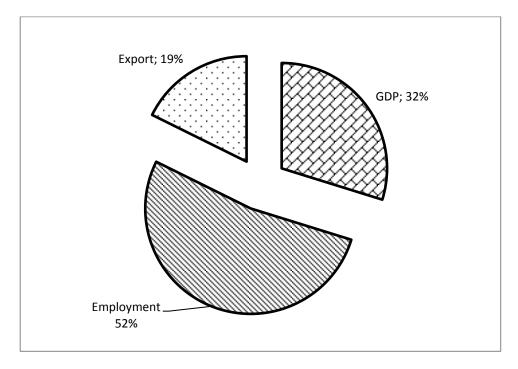


Chart 3.2 Contribution of SMEs to the Economy

In the year 2003, Small and Medium Enterprises (SMEs) contributed RM405 million output and RM154 million value-added to the GDP. Table 3.4 shows the breakdown of the contribution by sector. SMEs accounted for 43.5 percent of total output and 47.3 percent of value added. The service sector contributed the largest share of 56.7 percent and 54.7, respectively, while manufacturing 34.9 percent on output and 37.1 on value added.

### 3.4 Geographical Location of SMEs

SMEs are mainly concentrated in the Central Region (Kuala Lumpur and Selangor) accounting for 37.1 percent, 10.4 percent SMEs are in Johor and Perak with 7.3%. The other states accounted for less than 44.1 percent. A vast number of manufacturing SMEs are located in West Coast of Malaysia where is the industrialized location which equipped with ports services (Saleh and Ndubisi, 2006). Manufacturing of textiles and apparel and wood based industries with 17.5 percent are based in Johor followed by Selangor (16.7 percent), Perak (9.4 percent) and Pulau Pinang (8.7 percent). Johor led of the country due to the accessibility of cheap labour and logging activities (Siti Sarah et al, 2009). While general businesses or services of SMEs are scattered all over Malaysia, agriculture is mainly concentrated in Kedah (north region of Malaysia) of 27.4 percent concentration and followed by east coast states with 2.6 percent (Mohd Aris, 2006). Figure 3.1 show the map of Malaysia.



Map of Malaysia

#### 3.5 Small and Medium Sectors

Small and medium sectors are divided into few sectors based on its concerntration of niche market of. According to Khairuddin (2000), SMEs in Malaysia can be caterogized into three main components; manufacturing, general business or services and agriculture. The general business or services sector includes construction, wholesale and retailing, transport and storage, business services and activities and prodiving services such as hotel and restaurant. The main activities of manufacturing sector consist of processing and production

of raw materials. Meanwhile, agriculture sector includes rubber, oil palm, paddy, coconuts, fruits and vegetables. From the components, the manufacturing sector is the most important components of SMEs in Malaysia as it is the main pillar of Malaysian economy.

#### 3.5.1 Manufacturing industry

As the Malaysian economy has been adapting to create new enabling environments for continuous economic growth and equitable development, the manufacturing sector has continued to move up the value chain, shifting to higher value-added skills and knowledge intensive manufacturing (SME Annual Report 2006). Table 3.4 shows the total output by SMEs in the manufacturing sector. Based on the SME Annual Report 2006, SMEs in the manufacturing sector continued to perform well in 2006 with a growth rate of 7.4% in value added to RM17.8 billion. SMEs in the manufacturing sector accounted for 96.6% (37,866) of the total establishments. SMEs contributed 34.9 percent of the output in manufacturing. SMEs accounted for 96.5% (39,436) of all enterprises in the manufacturing sector.

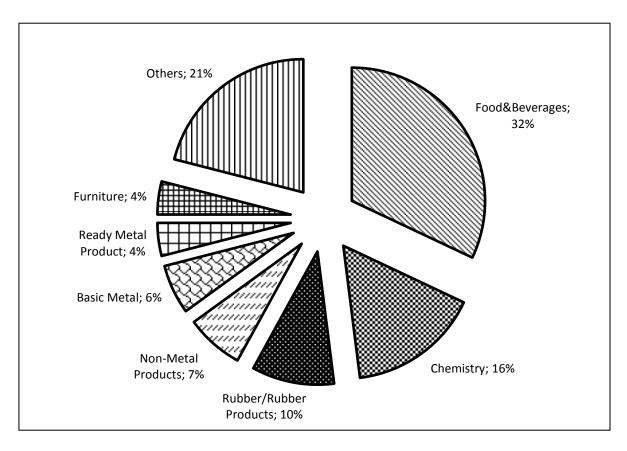
**Table 3.4 Total output by SMEs (Manufacturing)** 

	Value Level*		manufactu	ge share of ring sector %)	Growth (%)	
	2007	2008	2007	2008	2008	
Total output	94,356	100,299	30.74	30.9	6.30	
Value Added	19,251	20,507	26.33	26.5	6.52	
Employment	413,397	420,917	31.62	31.8	1.82	

<sup>\*</sup>Value levels for Total Output And Value Added are in RM million

Source: SME Annual Report 2008

Based on the size in terms of output distribution, the food and beverages sub-sector contributed the largest contribution among subsetor, accounting for 32%, followed by chemistry and chemistry products 16%, rubber and rubber products 10%, non-metal products 7%, ready made metal products 6%, and basic metal 4%, furniture 4%, and others 21% (SME Annual Report, 2007). The distribution of SMEs' output in the manufacturing sector is shown in Chart 3.3



.Source: SME Annual Report 2007

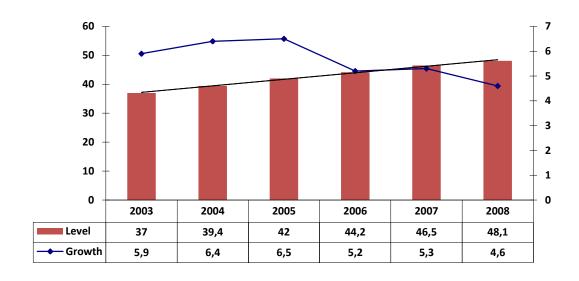
Chart 3.3

Distribution of SMEs Output (Manufacturing)

Interestingly, in 2003, most of the SMEs were in the textile and apparel and resource-based industries, which accounted for 23.2% (Third Industrial Master Plan (IMP3), 2006).

The productivity of SMEs in the manufacturing sector was increased by 4.6% because of the increased value-added employee. The growth was driven by export-oriented industries (8.5%), petroleum products (5.6%), electronics and electrical (EandE), products (5.4%), wood and wood products (4.8%) and food and beverages (4.7%). These sub-sectors recorded productivity growth of the above average SME productivity in the manufacturing sector (SME Annual Report, 2008). Chart 3.4 shows the productivity of SMEs in the manufacturing sector.

Chart 3.4
Productivity of SMEs in the Manufacturing Sector



Source: SME Annual Report 2008

#### 3.5.2 Services industry

SMEs account for 99.4% (449,004) of the total establishments in the services sector. More than half of the SMEs (55.3%) were concentrated in the wholesale and retail subsector, 14.5 percent in restaurants and hotels, and 6.2 percent in transport and communications. The other sub-sectors of professionals, health, education, real estate activities, business/management consultancy made up the remaining 24.0 percent (SME Annual Report, 2008). Table 3.5 shows the distribution of SMEs in services by sub-sector in 2003.

Table 3.5 Distribution of SMEs in services by sub-sector

Sub-sector	Total Number of	SME		
	Establishments	Number	Share (%)	
Total	451,516	449,004	100.0	
Wholesale and retail	249,178	248221	55.3	
Restaurants	63067	63013	14.0	
Transport and Communication	28231	27980	6.2	
Financial Intermediaries	19291	19108	4.3	
Professional Services	11245	11120	2.5	
Real estate activities	8847	8779	2.0	
Business and management consultancy services	8404	8352	1.9	
Health	7838	7759	1.7	
Education	7738	7618	1.7	
Hotel	2494	2275	0.5	
Computer services	1182	1095	0.2	
Telecommunications	88	58	neg.3	
Selected services	43913	43626	9.7	

ource: Industrial Master Plan Three (IMP), Consensus of Establishment and Enterprises, 2005 (preliminary data), Department of Statistic

The total output generated by SMEs is 56.7% of total output in the services sector. As the manufacturing sector is moving up the value chain, the services sector also gained increasing prominence with its share of GDP, rising from 47% in 1990 to almost 52% in 2006. Table 3.6 shows the productivity trend in the services sector. The productivity in the services sector is estimated to have expanded by 3.3%. The productivity trends will have an impact on SMEs as the majority of SMEs are in the services sector (87%). The services sector achieved a Total Factor Productivity (TFP) growth of 1-2% through the utilization of capital and labour and contributed 20.6% to output growth.

Table 3.6 Total Factor Productivity and Contribution (1999-2008) by SMEs (Services)

Services Sub-sector	TFP Growth (%)	Contributi	Contribution to Output Grov		
		TFP (%)	(%)		
Services	1.33	20.56	40.81	38.63	
Trade	2.12	33.79	32.32	33.89	
Finance	1.87	23.30	40.16	36.54	
Utilities	1.63	33.86	35.74	30.41	
Transport	1.36	20.70	44.62	34.68	

Source: SME Annual Report 2008

Overall productivity in the services sector is estimated to have expanded by 3.3%. The growth was lead by productivity gains in the transport, trade and finance subsectors. Productivity in the transport and trade subsectors was supported by upgrading and

maintenance of infrastructure, increased investment as well as higher domestic demand and tourism activities. Table 3.7 show details of services productivity.

**Table 3.7 Services Productivity** 

		2008
Output	Share of GDP	Growth in value added
•	(%)	(%)
Services	46.3	6.6
Transport	7.4	6.7
Finance	15.7	5.6
Utilities	2.9	2.2
Trade	14.8	9.4
Other Services	5.5	4.9
Productivity	Level (RM)	Growth (%)
Services	56,139	3.3
Transport	70,607	4.5
Finance	124,262	4.2
Utilities	162,606	4.0
Trade	40,027	4.3
Other Services	26,895	1.9
<b>Total Factor Productivity Growth</b>		1999-2008
Services		1.3
Transport		1.4
Finance		1.9
Utilities		1.6
Trade		2.1
Other Services		1.0

Source: Malaysian Productivity Corporation (MPC)

#### 3.5.3 Agriculture

The agriculture sector constitutes 6.2 percent of the total business establishments and provides 12.1 percent of the total employment in the country. In 2008, agriculture exports expanded strongly by 30 percent to RM68.1 billion (SME Annual Report, 2008). Malaysia's agriculture sector is predominantly made up of the palm oil and rubber subsectors, which cater for the export market. SMEs in the agriculture sector comprise smallholders in these plantation crops as well as farmers who are mainly in food-related

activities such as vegetable farming, livestock breeding, fisheries and aquaculture. Table 3.8 show the sub-sector of SMEs in agriculture.

Table 3.8 Distribution of SMEs in agriculture by sub-sector

Sub-sector	Total Number of	S	SME
	Establishments	Number	Share (%)
Total	32,397	32,126	100.0
Planting, market plantation and horticulture	21,333	21,146	65.8
Fisheries	6,701	6,669	20.9
Poultry farming	2,249	2,208	6.9
Agricultural and animal husbandry	1,571	1,558	4.8
Forestry, logging and other related services	283	258	0.8
Mixed-agriculture- agricultural and animal husbandry	230	227	0.7
Hunting, trapping and game propagation including related services	30	30	0.1

Source: Industrial Master Plan Three (IMP), Consensus of Establishment and Enterprises, 2005 (preliminary data), Department of Statistic

The Ministry of Agriculture and Agro-Based Industry (MOA), through its agency the Muda Agricultural Development Authority (MADA), has intensified its efforts to make the agriculture sector more vibrant. From their efforts through advisory services and guidance, modernization of infrastructure and equipment, product development and diversification and branding, promotion and marketing for the domestic and overseas market, MADA had produced 73 new entrepreneurs in four main sub-sectors, namely,

agriculture crops, livestock, fishery and agricraft. Table 3.9 shows the production value of these initiatives by MADA to promote agriculture sector.

Table 3.9 Production value resulting from initiatives by MADA

	Produ	uction value		
Sub Sector	2006	2007	2008	Total
Crops	823,781	4,069,334	5,519,395	10,402,510
Livestock	64,191	204,450	421,578	690,219
Fishery	128,381	659,642	855,224	1,643,247
Agricraft	53,492	50,742	44,600	148,834
Total	1,069,845	4,974,168	6,810,797	12,884,810

Source: Ministry of Agriculture and Agro-Based Industry (MOA), SME Annual Report 2008

Appendix 4 presents details of SMEs categorization.

### 3.6 Challenges of SMEs

Gaining international business opportunities and access to the global market are by far the most critical barriers identified. Limitation of time, competency and financial resources available are often the reasons for SMEs to identify and pursue new market opportunities. According to the SMIDP's 2001-2005, SMEs in Malaysia are facing many new challenges, domestically as well as globally. These challenges include (Salleh and Ndubisi, 2006):

- 1. Intensified global competition.
- 2. Competition from other producers (for example China and India).
- 3. Limited capability to meet the challenges of market liberation and globalization.
- 4. Limited capacity for technology management and knowledge acquisition.
- 5. Low productivity and quality output.

- 6. A shortage of skills for the new business environment.
- Limited access to finance and capital, and the infancy of venture funds in initial or mezzanine financing.
- 8. The high cost of infrastructure.
- 9. A general lack of knowledge and information.

Lack of knowledge on the best way to enter or to make the greatest use of commercial engagements in the market is another known barrier. SMEs may decide not to take up certain opportunities, or they may take an approach, which ends up being unsuccessful. The ability to reach out to the right customer is a problem for any business seeking to enter an unfamiliar market. Reaching out to produce the right product or service to the right customer at the right time can be a challenging issue to SMEs, especially to the new players in the market. This situation occurs because of the nature of the market. Competition is increased when SMEs are competing against the major players in the market. Failing to reinvest the profit gained today, poor management in people and time, retaining the old methods culture, little adaptation of latest technology, lack of long term foresight or lack of innovation in the product and services provided are the key barriers to the success of SMEs. These should be overcome to create a competitive and secure environment for the SMEs to conduct their business transactions more actively.

In developing SMEs in the knowledge-based (K-based) industries, the Government had implemented 25 programmes in 2008, amounting to RM913.2 million to reach 184,808 SMEs mainly in skills upgrading in the areas including biotechnology, nanothechonlogy, photonics, ICT, renewable energy, aerospace, and advanced materials (SME Annual report

2008). In 2009, the government had embarked numerous programmes to overcome short-term challenges for SMEs as a result of the global economics and financial crisis as well as for long-term challenges. Figure 3.2 shows development programmes for SMEs in 2009.

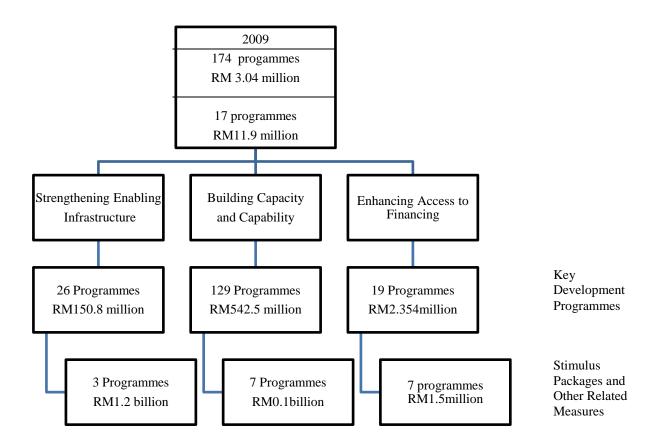


Figure 3.2 Development programmes for SMEs in 2009

Source: SME Annual Report 2008

In promoting higher productivity, the Malaysian government set a plan called the Third Industrial Master Plan 2006-2020 (IMP3), which set a target for the manufacturing sector to grow at 5.6 percent annually and contribute 28.5 percent to the Gross Domestic Product (GDP) in year 2020 with a total investment of RM412.2 billion (RM27.5 billion annually).

The IMP3 has set five strategic thrusts to ensure that SMEs in the manufacturing and services sectors contribute significantly to the economy. The thrusts are:

- 1. Enhancing the competitiveness of SMEs;
- 2. Capitalizing on outward investment opportunities;
- 3. Driving the growth of SMEs through technology, knowledge and innovation;
- 4. Instituting a more cohesive policy and supportive regulatory and institutional framework; and
- 5. Enhancing the growth and contribution of SMEs in the services sector.

Based on the Organization Economic Co-Operation Development survey in 2008, Malaysia ranked 33<sup>rd</sup> in expected innovation performance compared to 134 countries. It ranked in 30<sup>th</sup> position in terms of expected innovation performance, 45<sup>th</sup> of expexted direct input and 31<sup>st</sup> for expected aggregate input. This showed that Malaysia has a great potential to be more innovative and competitive and follow suits of other Asian countries such as Taiwan, Korea and Singapore. Table 3.10 shows the rankings of the selected countries.

Table 3.10 Innovation Performance and Innovation Enableers Rankings: Malaysia vs.

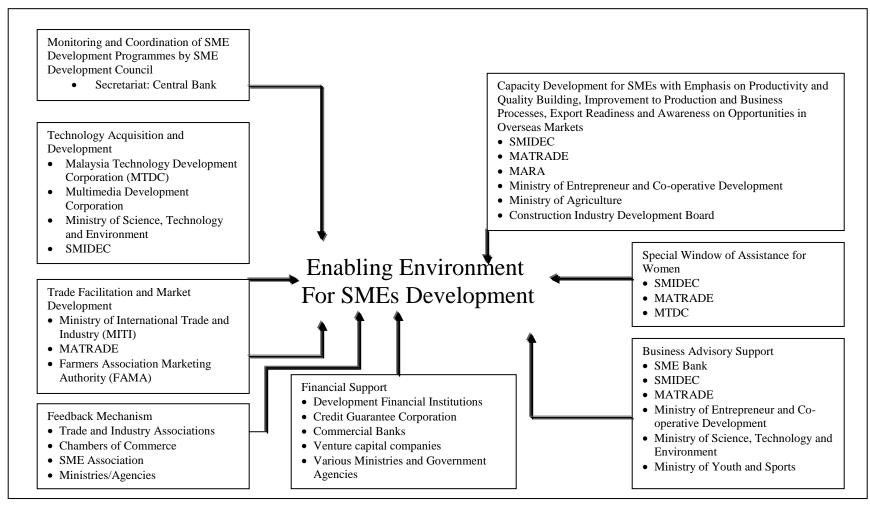
Selected Countries, 2007-2011

Country	IP	IE	DI	AI	Country (continued)	IP	IE	DI	AI
Japan	1	12	25	14	Ireland	20	19	1	19
Switzerland	2	1	4	2	Italy	19	27	37	29
United States	3	1	5	3	Australian	21	7	7	7
Sweden	4	1	9	4	Hong Kong	23	21	6	21
Finland	7	1	10	5	MALAYSIA	33	30	45	31
Germany	5	7	13	9	Thailand	59	65	57	64
Denmark	9	1	3	1	India	56	49	52	50
Taiwan	6	13	21	16	China	54	37	53	37
Republic of Korea	17	17	35	17	Phillipines	62	58	50	58
Norway	18	19	19	20	Indonesia	73	77	64	74
Singapore	14	13	2	11	Pakistan	78	73	75	77
United Kingdom	16	13	8	13	Vietnam	79	73	54	70

Source: OECD, Patent Database (2008)

Note: IP: Expected Innovation Performance; IE: Expected Innovation Environment; DI: Expected Direct Input; AI: Expected Aggregate Innovation

The government of Malaysia is committed to promote and develop SMEs. A master plan has been developed and several ministries, departments and units have been appointed to help and create development environment for SMEs. Figure 3.3 shows the plan.



Source: United Nation Development Programme 2004

Figure 3.3 Creating Enabling Environment for SME Development in Malaysia

## 3.7 Summary

This chapter discusses SMEs in Malaysia in detail. The definition of SMEs was elaborated upon as different countries have different definitions to suit their respective environments. There are three sectors of SMEs in Malaysia. The discussion of every sector was discussed. Challenges faced by SMEs were also highlighted. The government is taking its role seriously in assisting SMEs to cope with globalization. Technology and innovation are the drivers of the growth and competitiveness of SMEs in the knowledge era. Full support from the government will help SMEs in Malaysia to be competitive and resilient in achieving sustainable economic growth and be competitive in the global market.

The next chapter will discuss the methodology, research design and sampling used in this study.