

## .0 Introduction

### .1 Background

Economic development is an essential component to each nation. Therefore, each nation strives to achieve rapid economic growth. In Malaysia deepening the industrial structure and the strengthening of interindustry relations have been the major objectives for economic development. In the early 1970's Malaysia's economy had been subjected to rapid structural changes. The structure of the economic sector shifted toward manufacturing. Output increase in the manufacturing sector was observed while a decline was noted for the agriculture, fisheries and forestry sectors. Therefore, the manufacture sector is playing a more dynamic role compared to the primary sector.

The changing structure of the Malaysian economy is reflected in the changing composition of the country's GDP which showed that the share of the agriculture declined from 30.8 per cent in 1970 to 19.4 per cent in 1990 and 4.6 per cent in 1999 (Table 1). The manufacturing sector grew rapidly from 14.5 per cent to 26.6 per cent in 1990. However, in 1999 it only registered an 8.9 per cent increase owing to the 1997 financial crisis which was still higher than agriculture sector. (Table 1)

Table 1: Gross Domestic Product (GDP) By Sector (%)

Contribution to the growth (%)	1970	1980	1990	1999
Agriculture forestry and fishing	30.8	23.0	19.4	4.6
Manufacturing	14.5	21.0	26.6	8.9

Source: Economic Reports

All of this is an outcome of the industrialization strategies that were adopted since independence. There are a number of different plans that Malaysia had implemented in pursuing economic development such as the import-substitution industrialization strategy (1957-1969), export-oriented industrialization strategy (1970-1980), heavy industrial strategy (1981-1985) and economic liberalization strategy (1986- to the present). Import-substitution industrialization strategy is aimed to encourage foreign investors to set up production, assembly and packaging plants in our nation to supply finished goods which were previously imported from abroad.

When import-substitution strategy lost significantly in terms of output and employment generation, export-oriented strategy was launched. During the export-oriented phase, Malaysians introduced various new measures to facilitate and encourage manufacturing for export; mainly using imported equipment and materials.

Latter on, heavy industrialization was launched in the early 1980s. The heavy industrialization was expected to increase domestically produced content and to facilitate economic growth. Economy liberalization strategy was adopted owing to the increase of economic liberalization globally.

All of these undoubtedly involved higher levels of output. It also reflects the increase of economic intermediate input intensity and compositional shift in intermediate demand from primary to manufactured products. This suggested sectoral interdependency increased with economic development. International experience reveals that as an economy develops and differentiation of production activities increase, interindustry linkages become more pronounced. Therefore, interdependency among sectors is the essential characteristic of modern production.

Table 2: Employment and Labour in Various Sectors (Thousands)

Sectors	1970	1980	1990	1999
Agriculture, livestock, forestry and fishing	1776.0	1800.5	1738.0	1399.2
Mining and quarrying	87.3	62.2	37.0	41.9
Manufacturing	301.0	748.8	1333.0	2368.3
Construction	91	269.9	424.0	803.8
Finance Insurance, business services and Real Estate	411.	140.7	258.0	420.3
Transport, storage and communications	133.0	189.5	302.0	441.9
Government services	398	644.3	850.0	876.5
Other services	143	979.3	1744.0	8740.7

Source: Economic Reports

Economic development was also accompanied by a shift of employment from agriculture to manufacturing (Table 2). This pattern reflects many simultaneous effects. In manufacturing, development is accompanied by changes in the output composition of various industries. This has effects on the use of labour in the sense of reducing the employment associated with a given increased in output.

There is a general trend for industrial activities to become capital-intensive and labour saving while the economy develops, thus, reducing the supply of jobs at a time when demand for employment is increasing. This is because of increase in the labour force growth due to the high rates of population growth, which was two to three per cent annually. Therefore, it is important to study the ability of each sector to generate employment and to identify the sector which will generate the most employment and absorb the largest pool of surplus labour.

The pattern and measurement of interdependency indicates a given sector's capacity to stimulate other sectors. The degrees of interdependence among sectors with others sector can be examined through the relationship of intermediate

input to total transaction. A sector will receive output from other sectors as its input comprises output from other sectors. Thereby, the expansion of a sector will undoubtedly induce larger demand for products from its input-supplying sectors and will also provide larger input supplies to other sectors using its output. The former type of inducement is called backward linkages and the latter is called forward linkages.

Therefore, through the study of linkages, key sectors can be identified. Key sectors are the sectors that have the highest linkage among others. Identification of key sectors will be a useful foundation for the sectoral priorities commensurate with the objectives of a nation's economic development. A development strategy which based on key sectors is likely to promote overall economic development. Hence it is important to study sectoral interdependence and identified those sectors which are more highly linked other sectors. The purpose is to select the most efficient sequence, which enables it to accelerate the process of industrialization and the consider adequacy of the linkage criterion for determining the optimal allocation of scarce resources.

The study of employment generation will enable the policy maker to identify higher absorption sectors. Hence, it will stimulate the employment rate and reduce the unemployment rate in the region which facilitates economic growth.

A proper way of analysing structural interdependence is through the use of input-output analysis. This analysis provides an insight into the pattern of sectoral interdependency and permits the qualification measures of interindustry linkage. The input-output analysis is also ideally suited to capture the differences in

employment generation attributed to the differing composition of output produced by each sector. This is because output produced by each sector is different; therefore, the impact of increased output by each sector on employment generation is also likely to differ

In order to realize Vision 2020, the importance of telecommunication in economic development can not be denied. Thus, this study will carry out the impact of investment in telecommunication on other sectors. The analysis is to evaluate the extent of the telecommunication sector's interaction with other sectors in stimulating output and to help in the "information revolution".

The development of the economy encompasses infrastructure and transport growth. The investment on the SPRINT highway generates an economic multiplier. Therefore, this study intends to examine the impact of investment in construction by SPRINT highway as well.

## **1.2 Objective of Study**

- a. To identify "key sectors" which have high degree of interdependence with other industries in the economy.
- b. To determine linkages among sectors using Rasmussen's linkages formulation
- c. To examine output and employment linkages
- d. To study the employment generation capacities of the various sectors of the economy.
- e. To analysis the impact of intersectoral interdependence with particular reference to the telecommunications and construction sectors.

### **1.3 Framework of Study**

The study is organized in six chapters. Chapter one will presents the introduction and background of the study, justification of the study and scope of the study as well. Chapter two will discuss the significance of the literature review. The theoretical perspective and methodology will be discussed in Chapter three and four. Chapter five will portray the results of analysis. Finally, Chapter six will draw the conclusions of the study.

### **1.4 Limitations of the Study**

The input-output model is not the board model to answer all questions concerning with the application of economic systems. This is owing to the consequences of its assumption that underlying in the model. The limitations arise when one or more of the assumptions are not satisfied then the model must be modified.

The assumption of constancy in technical coefficient assumption has been proven to be unrealistic whether in short run or long run. In the beginning stage of economic development the coefficients are not stable. As the process of development matures, then the assumption may become more acceptable. Therefore, implying that the coefficients must be updated frequently or the model can only provide a reliable long-term impact assessment if the economic development merger to more mature stage.

It is well known that the development of telecommunication and construction sectors induce the impact not only on the economy of regional but also

on its social and cultural structural as well as on its environment. However, the input-output analysis just ignores these impact. Hence, this kind of method can not be used to represent the economic sector's impacts.

Therefore, the input-output analysis only measured the parts of total value of telecommunication impact and ignored others. Hence, even an application of the analysis is considered valid in a given situation it does not necessary provide a complete account of total impact of telecommunication and construction to the economy.