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IMPORT SUBSTITUTION IN WEST MALAYSIA

WITH REFERENCE TO SELECTED INDUSTRIES

I.

INTRODUCTION

by

Wong Ah Meng

326133

REFERENCE

NOT TO BE BORROWED.

III.

IMPORT SUBSTITUTION IN THE FOOD MANUFACTURING  
INDUSTRY IN WEST MALAYSIA

Introduction

Ice Cream and other Dairy Products

Biscuits

Animal Feeds

Rice

Conclusion

IV.

IMPORT SUBSTITUTION IN THE BEVERAGES AND  
TOBACCO MANUFACTURING INDUSTRY

A Graduation Exercise presented to  
the University of Malaya in  
part fulfilment towards the  
Degree of Bachelor of Economics  
with Honours





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West Malaysia is one. In chapter 3 an attempt is made to analyse within the limitations of available statistical data the progress of import substitution in West Malaysia in the food manufacturing industry, to be followed by the beverage and tobacco products manufacturing industry in chapter 4 and the chemical products manufacturing industry in chapter 5. The results of the analysis in these 3 chapters must be regarded as tentative, partly because of the lack of the necessary statistical data and partly because the time period involved is short, a difficulty common to all those who are making an empirical study on the economics of underdeveloped countries, particularly so when industrialization is the subject of study. In the concluding chapter a number of observations are made and based on these observations some policy suggestions are forwarded for further discussion and consideration.

Wong Ah Meng



## SYNOPSIS I

### INTRODUCTION

In chapter 2 a brief theoretical discussion will be undertaken regarding the pros and cons of import substitution in developing countries to be followed by a general survey of the recent general trends and development of the import substitution process in the developing ECAFE countries of which West Malaysia is one. In chapter 3 an attempt is made to analyse within the limitations of available statistical data, the progress of import substitution in West Malaysia in the food manufacturing industry, to be followed by the beverage and tobacco products manufacturing industry in chapter 4 and the chemical products manufacturing industry in chapter 5. The results of the analysis in these 3 chapters must be regarded as tentative, partly because of the lack of the necessary statistical data and partly because the time period involved is short, a difficulty common to all those who are making an empirical study on the economies of underdeveloped countries, particularly so when industrialization is the subject of study. In the concluding chapter a number of observations are made and based on these observations some policy suggestions are forwarded for further discussion and consideration. to be performed on the spot, such as handicrafts, processing of rice, coconut, palm oil etc.

We can say, therefore, that at the time of independence, there were practically as yet no import-substituting industries in West Malaysia in the true sense of the word. This is because import-substituting industries require protection against foreign competition which was not provided at that time. It was not until 1958 that the import substitution programme was given a serious start with the enactment of the Pioneer Industries (Relief from Income Tax) Ordinance in that year. Import substitution, therefore, is a relatively new feature of the West Malaysian economy and is still in its infancy today.

There are 3 categories of secondary industries in West Malaysia and these are (i) the primary processing of agricultural products such as rubber and coconut, off estates;<sup>1</sup> (ii) the manufactures of food products, beverages, tobacco, structural clay products; and (iii) more

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<sup>1</sup> Census of Population, 1957

<sup>2</sup> Wheelwright R.L. *Industrialization in Malaysia*, Melbourne, 1965 p.1.

<sup>3</sup> The only exception is Tobacco Manufacturing industry which was protected by an import duty on imported tobacco products.

<sup>4</sup> Processing off estates is, by definition, not included in the manufacturing sector.



capital-intensive operations such as machinery repair, tin smelt, machine parts etc. Most of the industrial firms fall under category (ii). In West Malaysia this category of industries accounts for about 63 per cent of the value added by manufacturing industries.<sup>1</sup>

## CHAPTER I

### INTRODUCTION

#### Nature and Extent of Industry at the Time of Independence

Even as late as 1957, the manufacturing industry in West Malaysia was undeveloped and unprotected from overseas competition, a classical characteristic of a colonial economy. The 1957 Census of Population shows that the proportion of the total working population in secondary industry in 1957 was only 9.6 per cent while in the manufacturing industry alone it was only 6.4 per cent.

The manufacturing industry in West Malaysia was exposed to foreign competition, particularly from the advanced western countries. As such, it is not surprising that import-replacement industries find it very difficult to survive in such an unprotected market. With few exceptions those secondary industries which survived are those with "natural" protection, that is, those associated directly or indirectly with primary production and trade, where the processing needs to be performed on the spot, such as handicrafts, processing of rice, coconut, palm oil etc.<sup>2</sup>

We can say, therefore, that at the time of independence, there were practically as yet no import-substituting industries in West Malaysia in the true sense of the word.<sup>3</sup> This is because import-substituting industries require protection against foreign competition which was not provided at that time. It was not until 1958 that the import substitution programme was given a serious start with the enactment of the Pioneer Industries (Relief from Income Tax) Ordinance in that year. Import substitution, therefore, is a relatively new feature of the West Malaysian economy and is still in its infancy today.

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<sup>1</sup>Census of Population, 1957

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<sup>3</sup>The only exception is Tobacco Manufacturing industry which was protected by an import duty on imported tobacco products.

<sup>4</sup>Processing off estates is, by definition, not included in the manufacturing sector.



capital-intensive operations such as machinery repair, tin cans, machine parts etc. Most of the industrial firms fall under category (ii). In West Malaysia this category of industries accounts for about 68 per cent of the value-added by manufacturing industries.<sup>5</sup>

### Scope for Import Substitution

As pointed out earlier, industrialization in general and import substitution in particular are relatively new in West Malaysia. Hence, there is tremendous scope for further expansion. The potentiality of import substitution in West Malaysia can be gauged by the amount of retained imports in the country. Table 1.1 shows that the amount of retained imports in 1963 was \$2,240 million and this increased to \$2,445 million in 1965. The most important items were food, manufactured consumer goods and machines and transport equipment as shown in Table 1.1 and Table 1.2. The existence of such a substantial market for consumer and producer goods would provide a viable basis for the establishment of many industries producing import-substituting products.

### Objective of Study

The main objective of this study is to show, within the availability of comparable statistical data, the progress and extent of import substitution of a few selected categories of manufacturing industries in West Malaysia. Such a study is not expected to give a complete picture of the process of import substitution in West Malaysia. Nevertheless, it is hoped that such a partial coverage will provide us with some indications of the progress and extent of import substitution since its inception in 1958.

### Scope and Limitations of Study

Import substitution is a wide-ranging subject covering many fields of economic activities such as manufacturing, agriculture and services. As such, it would be erroneous to associate import substitution with manufacturing alone although this is the most likely sector where import substitution is practised, particularly in underdeveloped countries which are usually primary producing countries. This study is concerned solely with the manufacturing sector in West Malaysia in which substantial import substitution has taken place during the last decade. However, it is not within the scope of this study to cover all the industries found in this sector. Only certain industries will be selected for our study and analysis. These are: (i) the food manufacturing industry; (ii) the tobacco and beverage manufacturing industry; (iii) chemical products industry.

This study covers the period between 1957 and 1966. No effort is made to go earlier than 1957 mainly because of the inadequacy and incompleteness of statistical data prior to this date. Import data, even if available, were at best fragmentary and inaccurate. On the other hand, data on local production were not available until 1959 when the first census of manufacturing industry in the States of Malaya was published

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<sup>5</sup>"A Guide to Investment in Malaysia", prepared by The Industrial Development Division, Ministry of Commerce and Industry, p.5.



TABLE 1.1

VALUE OF RETAINED IMPORTS, WEST MALAYSIA,  
YEARLY STATISTICS, 1963-1965 (\$ MILLION)

	Sections	1963				1964				1965			
		Imports	Re-Exports	Retained Imports	% of Total Retained Imports	Imports	Re-Exports	Retained Imports	% of Total Retained Imports	Imports	Re-Export	Retained Imports	% of Total Retained Imports
0	Food	656.9	12.8	644.1	28.7	695.2	7.1	688.1	29.0	613.9	5.1	608.8	24.9
1	Beverages and Tobacco	61.3	1.3	60.0	2.7	58.1	0.4	57.7	2.5	60.7	0.1	60.6	2.5
2	Crude Material (Inedible)	292.3	90.9	201.4	9.0	227.8	51.5	176.3	7.5	229.4	63.1	166.3	6.8
3	Mineral Fuels	152.7	10.0	142.7	6.4	167.3	10.1	157.2	6.6	174.2	5.4	168.8	6.9
4	Oils, Vegetable, Animal	11.7	0.4	11.3	0.5	12.4	0.4	12.0	0.5	14.8	0.6	14.2	0.6
5	Chemicals	168.1	5.6	162.5	7.2	177.0	4.7	172.3	7.3	208.3	3.8	204.5	8.3
6	Manufactured Goods by Material	469.3	97.1	372.2	16.6	464.7	19.3	445.4	18.9	510.2	16.0	494.2	20.2
7	Machines and Transport Equipment	500.1	47.4	452.7	20.2	515.9	49.3	466.6	19.7	580.2	60.0	520.2	21.3
8	Misc. Manufactured Articles	151.4	6.6	144.8	6.5	152.3	6.3	146.0	6.2	165.3	4.3	161.0	6.6
9	Others	53.1	4.7	48.4	2.2	50.7	3.4	47.3	2.8	51.3	4.8	46.5	1.9
	Total	2,516.9	276.8	2,240.1	100.0	2,521.4	152.5	2,368.9	100.0	2,608.3	163.2	2,445.1	100.0

Source: Issues of Annual Statistics of External Trade Federation of Malaya.



TABLE 1.2

VALUE OF RETAINED IMPORTS AS A PERCENTAGE OF  
GROSS DOMESTIC PRODUCT, 1963, 1964, 1965

(\$ Million)

Sections	1963			1964			1965		
	Retained Imports	Gross Domestic Product	Retained Imports as a % of GDP	Retained Imports	Gross Domestic Product	Retained Imports as a % of GDP	Retained Imports	Gross Domestic Product	Retained Imports as a % of GDP
0 Food	644.1	8,080	8.0	688.1	8,570	8.0	608.8	9,170	6.6
1 Beverages and Tobacco	60.0	8,080	0.8	57.7	8,570	0.7	60.6	9,170	0.7
2 Crude Material (Inedible)	201.4	8,080	2.5	176.3	8,570	2.0	166.3	9,170	1.8
3 Mineral Fuels	142.7	8,080	1.8	157.2	8,570	1.8	168.8	9,170	1.8
4 Oils, Vegetable, Animal	11.3	8,080	0.1	12.0	8,570	0.1	14.2	9,170	0.2
5 Manufactured Goods by Material	372.2	8,080	4.6	445.4	8,570	5.2	494.2	9,170	5.4
6 Chemicals	162.5	8,080	2.0	172.3	8,570	2.0	204.5	9,170	2.2
7 Machines and Transport Equipment	452.7	8,080	5.6	466.6	8,570	5.5	520.2	9,170	6.0
8 Misc. Manufactured Articles	144.8	8,080	1.8	146.0	8,570	0.7	161.0	9,170	1.7
9 Others	48.4	8,080	0.6	47.3	8,570	0.6	46.5	9,170	0.5

Source: Various issues of Annual Statistics of External Trade, Federation of Malaya, First Malaysia Plan 1966-1970, Table 2-3 p. 24.



by the Statistics Department.

In writing this exercise, the writer was confronted with 2 major difficulties. (1) The data and information that were available were inadequate as well as incomplete. (2) There was a lack of literature on industrialization in general and import substitution in particular in West Malaysia. Needless to say, these difficulties would necessarily limit the scope of analysis of this study.

## Methodology

Much of the information regarding import substitution is obtained from the Statistics Department, articles and publications, and to a smaller extent, from the data obtained from United Nations Publications. The writer also has interviews with personnel of the various government and quasi-government bodies directly or indirectly concerned with the industrialization programme, such as, the Federal Industrial Development Authority (F.I.D.A.), the Industrial Development Division, Ministry of Commerce and Industry and the Tariff Advisory Board (T.A.B.).

## The Concept of Import Substitution

The concept of import substitution is applicable not only to industrialization but also to other fields of economic activities such as agriculture and services. However, not for various reasons, the term is commonly associated more with industrial development than with agriculture or services. In the case of industrialization, import substitution is not so much a goal as a process whereby a country can be set on the road to industrialization.

The term import substitution, however, must not be taken in the literary sense. It should give rise to a false notion of its simple nature. In a narrow sense, import substitution is a process which consists of replacing imports with locally produced goods. Such a process, if carried out systematically will, in itself, result in the process of turning imports (M) to domestic production (D). But this process D - M does not stop there. It usually leads to a process of domestic growth which was started with a view to import substitution and is expected to become as efficient as to be able to compete successfully in the export market. This is possible, however, only if the process of import substitution takes place within the framework of changing conditions existing in the country. Therefore, the D - M process will in most cases lead to the sequence D - M - E, where E form the exports. Thus, the concept of import substitution should not be taken as a "backward-forward" procedure but rather as a spontaneous and dynamic process of industrial development.

## Definition

There is no clear-cut definition of the term, "import substitution". Different definitions have been used by different writers to serve their own purposes. Fundamentally, it means producing locally what used to be imported. E. Prebisch defines import substitution as an increase



## CHAPTER II

### IMPORT SUBSTITUTION WITH REFERENCE TO DEVELOPING COUNTRIES

#### Introduction

In this chapter an attempt will be made to discuss briefly the pros and cons of import substitution as a vehicle of industrialization and then in the light of such discussion to survey the general performance of developing countries in the ECAFE region with regard to import substitution. The main purpose of this chapter is to throw some light on the suitability and potentiality of import substitution as a means for accelerating the rate of industrial development in developing countries.

#### The Concept of Import Substitution

The concept of import substitution is applicable not only to industrialization but also to other fields of economic activities such as agriculture and services. However, and for various reasons, the term is commonly associated more with industrial development than with agriculture or services. In the case of industrialization, import substitution is not an end in itself but rather a means whereby a country can be set on the road to industrialization.

The term import substitution, however, must not be taken in the literary sense, for to do so would give rise to a false notion of its dynamic nature. In a dynamic economy, import substitution is a process which extends beyond the stage of replacing imports with locally produced goods. Certain commercial policies applied systematically will, in normal circumstances, help in the process of turning imports (M) to domestic production (D). But this process M - D does not stop there. Ultimately the production of consumer goods which was started with a view to import substitution may be expected to become so efficient as to be able to compete successfully in the export market. This is possible, however, only if the process of import substitution takes place within the framework of changing conditions existing in the country. Therefore, the M - D process will in most cases lead to the sequence M - D - X, where X form the exports. Thus, the concept of import substitution should not be taken as a "once-and-for-all" procedure but rather as a continuous and dynamic process of industrial development.

#### Definition

There is no clear-cut definition of the term, "import substitution". Different definitions have been used by different writers to serve their own purposes. Fundamentally, it means producing locally what used to be imported. R. Prebisch defines import substitution as an increase



in the proportion of goods that is supplied from domestic sources and not necessarily as a reduction in the ratio of imports to total income.<sup>1</sup> It should be noted, however, that import substitution can mean not only the substitution of home-produced goods for imported goods but also the substitution of capital goods for consumer goods imports. A.R. Khan says that in an import-competing industry an increase in domestic output represents import substitution since in its absence, imports would have been necessary to maintain the same availabilities.<sup>2</sup> But according to him, this proposition is incorrect. He explains that once production of a commodity that was formerly imported is undertaken at home, its domestic consumption often exceeds what would have been absorbed or demanded if the commodity had continued to be imported. If the commodity is a consumption good, the effect of this is to liberalize consumption, and the contribution to aggregate national saving and the development effort is consequently diminished. The United Nations Economic Survey of Asia and the Far East (1963) adopted a broad definition. According to this report, import substitution is said to exist in the case of a given commodity whenever its domestic production increases at a faster rate than its importation, so that imports of that commodity constitute a diminishing proportion of the total supply (domestic production plus imports).<sup>3</sup> This definition requires the computation of the share of production in total supply and the share of imports in total supply. The former is termed production coefficient and the latter, import coefficient. The method of computation is as follows:

$$\text{Production coefficient} = \frac{D}{D + M} \times 100 \quad \begin{array}{l} \text{where } D = \text{Domestic Production} \\ M = \text{Total Imports} \\ D + M = \text{Total Supply} \end{array}$$

$$\text{Import coefficient} = \frac{M}{D + M} \times 100 \quad \begin{array}{l} \text{where } M = \text{Total Imports} \\ D = \text{Domestic Production} \\ D + M = \text{Total Supply} \end{array}$$

For the purpose of this study we shall adopt the definition used in the United Nations Economic Survey of Asia and the Far East, (1963). This definition is adopted mainly because of the availability of production and imports data necessary for the computation of the production coefficient and import coefficient, both of which are indicators of import substitution.

### The Problem of Measurement

There are no fixed criteria against which import substitution

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<sup>1</sup>R. Prebisch "Commercial Policy in the Underdeveloped Countries", American Economic Review, May 1959, p.253.

<sup>2</sup>Khan, A.R. "Import Substitution, Export Expansion and Consumption Liberalization: A Preliminary Report". The Pakistan Development Review, Vol. III No. 2, 1963, p.208.

<sup>3</sup>United Nations Economic Survey of Asia and the Far East, 1963, p. 28.



can be measured. Its measurement is determined partly by the economic structures and conditions of a particular country and partly by the purpose or purposes for which the measurement is needed.<sup>4</sup> In a static economy where the population and pattern of demand remain constant, an increase in domestic production will lead to a decrease in imports. In such a case, the measurement of import substitution would be simple and straightforward. Such a situation certainly does not apply to developing countries where the population is increasing rapidly and governments are pursuing development programmes which change the distribution of income and the character of demand.

Import substitution may be measured by the increase in the share of domestic production or the decrease in the share of imports to total supply. As pointed out earlier, the ratio of domestic production to total supply is termed production coefficient and the ratio of imports to total supply is termed import coefficient. According to this measure, an increase in the production coefficient or a decrease in the import coefficient would indicate import substitution. This measure, however, may be misleading. For example, a decline in the import coefficient may be the result of import restrictions or austerity measures, the imposition of which has produced an artificial slackening in the demand for such imports. In such a case, a decline in the import coefficient can take place even in a situation where domestic production remains stagnant. On the other hand, an increase in the import coefficient does not necessarily indicate negative import substitution. In a dynamic economy, both import substitution and an increase in absolute imports can take place simultaneously.<sup>5</sup> Hence, to take the ratio of domestic production or imports to total supply for any commodity as measures of import substitution is to make only a first approximation. For a more refined measure of import substitution, an input-output analysis would be required. However, such an analysis is not possible in this study owing to the lack of comparable statistical data. For our purposes, we shall adopt the "production coefficient" and "import coefficient" as measures of import substitution, bearing in mind of course the limitations inherent in their uses.

#### Arguments for and against Import Substitution as a Vehicle of Industrialization

Most developing countries in the world have adopted import substitution as a direct road to industrialization. However, this does not necessarily mean that this strategy of industrial development is the best means to achieve rapid industrial growth. Nevertheless, it does reflect on the suitability of this pattern of industrialization in the light of existing economic structures and conditions prevailing in these countries. Whether this pattern of industrial development is a right approach or not is debatable and only the past performance of import substituting industries can provide us with the answer. Even then, one can hardly make generalisations about the merits and demerits of import

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<sup>4</sup> ibid., p. 28.

<sup>5</sup> In fact the volume of imports tend to increase during the early stages of industrialization.



substitution from the experiences of a few countries which have experimented with industrialization via import substitution. For the success or failure of a policy of import substitution depends on a number of factors such as the size of the domestic market, the existence of a healthy investment climate, the availability of capital, raw materials and technical know-how, the existence and availability of which varies between countries.

In this section, an attempt is made to discuss briefly, on a theoretical basis, some of the major arguments for and against import substitution as a vehicle of industrialization, with particular reference to developing countries. The basic assumption underlying this discussion is that a policy of import substitution is usually accompanied and supported by tariff and taxation policies or by direct methods such as import-restriction and government investment in import-substituting industries.

Import substitution may be adopted as a strategy of industrialization partly because of the relative scarcity of basic industrial raw materials, capital, technical know-how and trained manpower and partly because of the small size of the domestic market, all of which are typical characteristics of developing countries. In the light of these limitations, import substitution seems to be the easiest way to get industrialization started, especially if it is directed at the production of light consumer goods. In the first place, light industries require relatively less capital and lesser number of highly skilled or highly trained manpower, and secondly, they are assured of a ready domestic market. Furthermore, the development of these industries may in turn induce the development of ancillary industries to serve the original industries. Much of the recent economic history of some rapidly developing countries can be written in terms of industrialization working its way backward from the "final touches" stage to domestic production of intermediate, and finally to that of basic industrial materials.

But a policy of import substitution may involve the government in a loss of revenue for a number of years or more. This loss of revenue arises because of the necessity to provide tax incentives to manufacturers, both foreign and local, to induce them to invest in manufacturing industries. Revenue is lost through exemption or reduction in import duties for certain items of raw material imports, income tax exemption and loss of import duties on items of imports in order to give protection to domestic manufactured products. If the country concerned depends to a great extent on taxation (direct and indirect) for a large part of its revenue, then this would result in a substantial loss of revenue and consequently this would impair the ability of the government to finance the development and improvement of the infrastructural and other basic services necessary for successful industrialization. On the other hand, it can be argued that the losses or gains in government revenue from higher import duties depend very much on the price elasticity of demand for imported commodities. If the elasticity of demand for imports is high, then higher import duties would result in a reduction in revenue. On the other hand, if the price

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<sup>6</sup>O.A. Hirschman, The Strategy of Economic Development, New Haven, Yale University Press, 1958, p.112.



✓  
elasticity of demand for imports is low, government revenue may even increase instead of fall.

Another argument in support of import substitution as a vehicle of industrialization is that it would enable the country to save foreign exchange which would otherwise be spent on imports of consumer goods. The foreign exchange resources thus saved could then be used to import capital goods and spare parts which often cannot be produced in the home country at the initial stages of development but which are essential for accelerating the rate of industrial growth. But, it must also be realized that a policy of import substitution in turn generates a demand for imports of fuel and raw materials by the import substituting industries. If the amount of foreign exchange saved by import substituting industries falls short of the amount required by them for the import of fuel and raw materials, a policy of import substitution may add to balance of payments difficulties which in turn may adversely affect the industrialization process in the country.

In some countries, import substituting industries especially those of the labour-intensive type are encouraged because they provide additional employment opportunities for the rapidly increasing population. As more and more people are employed, the market for industrial products would expand and this in turn would stimulate further production and expansion. In short, the economy would benefit from the "multiplier effect" of these industries. On the other hand, a policy of protection of import substituting industries would cause society to bear not only the losses that would be incurred by these industries during their infancy, but also the cost to consumption in the form of higher-price import substitutes during this period. This may cause a fall in the real income of the people especially if the higher-price import substitutes are basic necessities.

The artificial fostering of import substituting industries may discourage the development of "export industries" which, for many developing countries, offer the means to generate faster industrial growth. As protection is a device which affects only local market industries, it tends to make this kind of industry more profitable than export industries. Thus, by confining industrial development to the narrow domestic markets, the pace of industrialization would be gradually slowed down as these market limits are reached, unless, of course, export markets can be found for the surpluses that would inevitably develop if the pace of industrialization is maintained.

Finally, an important effect of import substitution policy frequently overlooked or underestimated in economic development planning and policy is the influence of protection of the domestic market on the market structure and competitive practices of the protected import-competing industry. Such protection provides a foundation for the development of oligopolistic market structures, characterised by non-price competition among a small group. The tendency is reinforced when, as is frequently the case, protective policies encourage the establishment in the country of branch plants and subsidiaries of the giant corporations of the advanced countries, since these corporations characteristically



transplant with them both the technology of production and the marketing practice of their home countries, neither of which is well adapted to the factor availabilities and market size and standard of living of the developing countries. The consequences is likely to be both that the developing country will suffer the "wastes of imperfect competition" and that the protected industries will not become a dynamic source of technical progress and improving productivity, but instead will play a parasitical role in relation to the economy at large.

Although it is difficult to say whether, on balance, import substitution has more advantages than disadvantages or vice versa, it is, nevertheless, necessary for developing countries to weight the likely costs and benefits of a policy of import substitution before acting on it. For their real resources are too limited to allow them to act on policies which might prove disastrous and irreversible as a result of miscalculations and misjudgements.

### Recent Trends in Developing ECAFE Countries

In the previous section, it was pointed out that import substitution as a policy of industrialization has been adopted by most developing countries throughout the world. We have also discussed the major advantages and disadvantages of import substitution as a strategy of industrialization with particular reference to developing countries. In this section, an attempt will be made to examine the extent and progress of import substitution in the developing ECAFE countries in order to add realities to our theoretical discussion on import substitution in the previous section.

### Composition of Imports

Although the change in the composition of imports of a particular country does not measure the extent of import substitution as such, it does help to reveal some of the trends of development leading to import substitution.

A decrease in the ratio of final consumption goods to private consumption expenditure would indicate, ceteris paribus, the growth of consumption goods industries. Table 2.1 shows the ratio of imports of final consumption goods to total private consumption expenditure in some of the developing ECAFE countries for the period 1953-54 to 1960-61. It can be seen from the table that all the countries, except the Republic of Korea, achieved import substitution of consumption goods during the period covered. Burma and the Philippines showed the greatest per cent change in the ratio. For the 7 developing ECAFE countries as a whole, the per cent change in the ratio was -21 per cent. Import control could of course distort the ratio as is the case of Burma. It must also be noted that the conditions prevailing in the base year 1953-54 should also be taken into consideration in coming to any definite conclusion.

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<sup>7</sup>United Nations Economic Survey of Asia and the Far East 1963,



TABLE 2.1

## IMPORT SUBSTITUTION OF CONSUMPTION GOODS

Country	Ratio of Import of Final Consumption Goods to Private Consumption Expenditure			
	1953-54 (1)	1960-61 (2)	(2)-(1) (3)	Per Cent Change (4)
Burma	16.0	11.0	-5.0	31
Ceylon	28.0	23.0	-5.0	18
China (Taiwan)	4.9	4.5	-0.4	8
South Korea	2.7	3.7	+1.0	37
India	2.7	2.2	-0.5	19
Philippines	6.6	3.2	-3.4	52
Thailand	10.3	9.8	-0.5	4
Average of 7 developing ECAFE countries	4.8	3.8	-1.0	21

Sources: United Nations Economic Survey of Asia and the Far East 1963, p.31

It has been stated earlier that a change in the composition of imports may show trends leading to import substitution. Table 2.2 shows how import of material for consumption goods has been substituted for import of final consumption goods. With the exception of Cambodia, Laos, Sabah and Sarawak, all the countries showed positive percentage changes in the ratio of import of material for consumption goods to import of consumption goods during the period 1953-54 to 1961-62. This could be due to 3 possibilities. First, it could be that import of material for consumption goods increases while the import of consumption goods remains constant; second, it could mean that the import of material for consumption goods increases while the import of consumption goods declines and, third, it could be that both import of material for consumption goods and the import of consumption goods increase, with the former increasing at a faster rate than the latter. With the exception of Burma, India, the Philippines and South Vietnam, all the countries showed increases in both the import of material for consumption goods as well as the import of consumption goods. For these countries, the third possibility is true. In the case of Burma, India, the Philippines and South Vietnam, the second possibility is true as is indicated in column (4) and (5).



In general, an increase in the ratio of import of material for consumption goods to import of consumption goods indicates, especially in countries where the substitution of import of material for consumption goods is inadequate, a negative ratio for consumption goods, and, therefore, is

**TABLE 2.2**  
**SUBSTITUTION OF IMPORT OF MATERIAL FOR CONSUMPTION GOODS**  
**FOR IMPORT OF CONSUMPTION GOODS (EXCLUDING FOOD)**

Country	Ratio of Import of Material for Consumption Goods to Import of Consumption Goods			Annual Compound Rate of Change at Constant Prices		
	1953-54 (1)	1961-62 (2)	Per Cent Change (3)	Import of Material for Consumption Goods (4)	Import of Consumption Goods (5)	(4)-(5) (6)
Burma	43	60	+ 40	+ 0.9	- 3.1	+ 4.0
Cambodia	20 <sup>a</sup>	17	- 15	+ 2.8	+ 6.0	- 3.2
Ceylon	41	65	+ 50	+ 8.5	+ 2.4	+ 6.1
China (Taiwan)	374	660	+ 76	+20.7	+12.5	+ 8.2
India	179	426	+138	+ 6.3	- 4.6	+10.9
Indonesia	63	95 <sup>b</sup>	+ 51	+ 8.1	+ 2.3	+ 5.8
Korea, South	211	685	+225	+17.3	+ 1.2	+16.1
Laos	31 <sup>a</sup>	26	- 16	+14.7	+17.7	- 3.0
Malaya and Singapore	64	100	+ 56	+ 8.5	+ 2.6	+ 5.9
Sabah	38	31	- 18	+13.8	+16.6	- 2.8
Sarawak	624	395	- 37	- 3.0	+ 2.7	- 5.7
Pakistan	119	193	+ 62	+12.3	+ 5.6	+ 6.7
Philippines	56	253	+352	+ 6.2	-12.1	+18.3
Thailand	25	45	+ 80	+11.6	+ 3.7	+ 7.9
South Vietnam	27 <sup>a</sup>	101	+274	+ 7.1	-12.8	+19.9
Average of ECAFE countries <sup>c</sup>	96	152	+ 58	+ 7.5	+ 1.4	+ 6.1

Source: As per Table 2.1.

<sup>a</sup>1955

<sup>b</sup>1961

<sup>c</sup>Excluding Cambodia, Laos and South Vietnam, for which statistics for 1953-54 are not available.



In general, an increase in the ratio of import of material for consumption goods to import of consumption goods indicate, especially in countries where domestic production of material for consumption goods is inadequate, a more developed consumption goods manufacturing industry.<sup>8</sup> The negative ratio for Cambodia, Laos, Sabah and Sarawak, therefore, is a reflection of the narrow base of manufacturing industry in these countries. For the developing ECAFE countries as a whole, the ratio of import of material for consumption goods to import of consumption goods increased by 58 per cent over the period 1953/54-1961/62, (See Table 2.2). This is due to the fact that import of material for consumption goods increased at a faster rate than import of consumption goods. The annual compound rate of change at constant prices of import of material for consumption goods was +7.5 while that of import of consumption goods was +1.4. Needless to say, the economic conditions prevailing in the base period 1953-54 must be taken into consideration in coming to any definite conclusion. This is because if the base year is an abnormal year, as in the case of certain countries (e.g. Malaya and Singapore), the per cent change would be inflated or deflated as the case may be.

For most developing countries in the ECAFE region, import substitution has been directed mainly at the manufacture of light consumer goods, while capital goods which cannot be produced at home or which can be produced only at higher cost are imported. Since these countries depend mainly on imports for the supply of capital goods, additional evidence of import substitution may be deduced from the substitution of imports of capital goods for the imports of consumption goods. As indicated in Table 2.3, all countries except Laos showed such substitution, indicating the progress of industrial development. The annual compound rate of change at constant prices in the import of capital goods increases for all developing ECAFE countries, while that of import of consumption goods also increases except for Burma, India, the Philippines and South Vietnam. The increase in the ratio of capital goods to import of consumption goods for all developing ECAFE countries, except Burma, the Philippines, India and South Vietnam during the period 1953-54 to 1961-62, therefore, means that the import of capital goods increased at a faster rate than import of consumption goods over the period covered, as is indicated in column (4) and (5) in Table 2.3. Countries with a high rate of substitution and high ratios of capital goods imports to consumption good imports include India, the Philippines and South Vietnam. For Malaya and Singapore, the ratio of import of capital goods to import of consumption goods increased by 78 per cent over the same period. This increase, however, can be inflated due to the conditions prevailing in the 1953-54 period.<sup>9</sup>

Another indication of industrial development in the developing ECAFE countries is the substitution of the import of material for capital goods for imported capital goods. Table 2.4 shows the substitution of import of material for capital goods for import of capital goods in the

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<sup>8</sup> United Nations Economic Survey for Asia and the Far East, 1963, p.32.

<sup>9</sup> This is a depression period for West Malaysia.



TABLE 2.3

SUBSTITUTION OF IMPORT OF CAPITAL GOODS FOR IMPORT  
OF CONSUMPTION GOODS (EXCLUDING FOOD)

Country	Ratio of Import of Capital Goods to Import of Consumption Goods			Annual Compound Rate of Change at Constant Prices		
	1953-54 Average (1)	1961-62 Average (2)	Per Cent Change (3)	Import of Capital Goods (4)	Import of Consumption Goods (5)	(4)-(5) (6)
Burma	63	139	+121	+ 6.7	- 3.1	+ 9.8
Cambodia	33 <sup>a</sup>	83	+152	+22.2	+ 6.0	+16.2
Ceylon	70	103	+ 47	+ 7.4	+ 2.4	+ 5.0
China (Taiwan)	221	507	+129	+24.8	+12.5	+12.3
India	181	766	+323	+14.3	- 4.6	+18.9
Indonesia	94	116 <sup>b</sup>	+ 23	+ 5.2	+ 2.3	+ 2.9
South Korea	78	289	+271	+19.2	+ 1.2	+18.0
Laos	71 <sup>a</sup>	39	- 45	+ 7.6	+17.7	-10.1
Malaya and Singapore	45	80	+ 78	+10.1	+ 2.6	+ 7.5
Sabah	60	72	+ 20	+19.2	+16.6	+ 2.6
Sarawak	65	82	+ 26	+ 5.8	+ 2.7	+ 3.1
Pakistan	212	505	+138	+17.8	+ 5.6	+12.2
Philippines	71	446	+528	+10.5	-12.1	+22.6
Thailand	89	126	+ 42	+ 8.4	+ 3.7	+ 4.7
South Vietnam	28 <sup>a</sup>	166	+493	+14.8	-12.8	+27.6
Average of ECAFE countries <sup>c</sup>	89	193	+117	+11.8	+ 1.4	+10.4

Source: As per Table 2.1.

<sup>a</sup>1955

<sup>b</sup>1961

<sup>c</sup>Excluding Cambodia, Laos and South Vietnam, for which statistics for 1953-54 are not available.



TABLE 2.4

SUBSTITUTION OF IMPORT OF MATERIAL FOR CAPITAL GOODS  
FOR IMPORT OF CAPITAL GOODS

Country	Ratio of Import of Material for Capital Goods to Import of Capital Goods			Annual Compound Rate of Change at Constant Prices		
	1954-54 Average (1)	1961-62 Average (2)	Per Cent Change (3)	Import of Material for Capital Goods (4)	Import of Capital Goods (5)	(4)-(5) (6)
Burma	28	39	+39	+11.4	+6.7	+4.7
Cambodia	56 <sup>a</sup>	58	+4	+22.5	+22.2	+0.3
Ceylon	70	48	-31	+2.4	+7.4	-5.0
China (Taiwan)	24	22	-8	+23.2	+24.8	-1.6
India	33	18	-45	+6.3	+14.3	-8.0
Indonesia	22	14 <sup>b</sup>	-36	-0.8	+5.2	-6.0
South Korea	61	51	-16	+16.5	+19.2	-2.7
Laos	46 <sup>a</sup>	87	+89	+18.6	+7.6	-11.0
Malaya and Singapore	109	143	+31	+4.2	+10.1	-5.9
Sabah	32	27	-16	+16.8	+19.2	-2.4
Sarawak	24	28	+17	+7.7	+5.8	+1.9
Pakistan	39	30	-23	+13.9	+17.8	-3.9
Philippines	51	11	-78	+8.5	+10.5	-19.9
Thailand	25	27	+8	+9.5	+8.4	+1.1
South Vietnam	49 <sup>a</sup>	35	-29	+8.8	+14.8	-6.0
Average of ECAFE countries	43	28	-35	+5.9	+11.8	-5.9

Source: As per Table 2.1.

<sup>a</sup>1955

<sup>b</sup>1961

<sup>c</sup>Excluding Cambodia, Laos and South Vietnam, for which statistics for 1953-54 are not available.



developing ECAFE countries. The ratios given in the table must, however, be examined in the light of the nature of the requirements for capital goods and the development of the capital goods industries. Thus, while the high rate of increase in the import of capital goods and material for capital goods [columns (4) and (5)] in China (Taiwan), India, South Korea and Pakistan was for industrial development purposes, the greater rate of increase in import of material for capital goods over that of import of capital goods [see column (4) and (5)] in Burma, Cambodia, Laos, Sarawak and Thailand was due to the nature of investments in these countries and not the result of the development of capital goods industries. As can be seen from the table, almost all the developing ECAFE countries showed a relatively high rate of increase in the import of capital goods. This is an indication that the capital goods industries in these countries are still in their infancy. Even though the import of materials for capital goods increases at a high rate, it can hardly be expected that this will provide complete substitution for the import of capital goods for many more years to come.

Table 2.5 summarizes the progress of import substitution in some of the ECAFE countries with reference to selected commodities. It can be seen that import substitution is concentrated mainly in consumer goods with the exception of cement which is produced by every country. Among the countries listed, the Philippines and South Korea show relatively rapid progress as well as a wider base in their import substitution programmes. Both countries show positive increases in the percentage of production to total supply for all the commodities listed. By 1962, the Philippines could supply 60 per cent of the total supply of 11 of the 13 commodities listed, and, for South Korea 7 of the 9 commodities listed. However, only South Korea and Thailand have reached the stage where import substitutes could be exported. For South Korea, 15 per cent of the cotton fabrics and 23 per cent of steel plated and sheets (uncoated) and for Thailand, 19 per cent of the cement and 7 per cent of the sugar produced were exported in 1962.

In conclusion we may say that the progress and extent of import substitution in the developing ECAFE countries over the period 1953-54 to 1961-62 had not been very significant. While considerable progress was made in the substitution of consumption goods, the import of final consumption goods still continued. For some countries such as China (Taiwan), Sabah and Sarawak, the rate of increase of consumer goods was over 12 per cent per annum. This means that local production has not increased fast enough to meet the increase in demand as a result of increases in population and per capita income. In addition to this, the import of material for consumption goods industries for most of the developing ECAFE countries also increased at a relatively rapid rate during the period covered. This could be the result of a lack of local industries producing such materials and therefore imports have to be relied upon. It is likely, therefore, that, as the consumption goods manufacturing industries in these countries become more and more developed, dependence on imports of material for consumption goods industries is expected to increase. As for capital goods, import substitution has been negligible for most ECAFE countries and is likely to remain so in view of the lack of technical know-how, shortage of capital and trained manpower and the relatively small size of the domestic market.



TABLE 2.5

IMPORT DUTY, IMPORT SUBSTITUTION AND EXPORT OF SELECTED  
MANUFACTURED COMMODITIES 1955 AND 1962

Country and Commodity	Import <sup>a)</sup> duty (Percentage)	Production as Percent of Total Supply			Percent of Increase from 1955 to 1962			Export as Percent of Production	
		1955	1962	1955-1962 <sup>b)</sup>	Production	Import	Total Supply	1955	1962
<b>Burma<sup>c)</sup></b>									
Sugar	29	45	72	27	238	9	113	-	-
Cotton Yarn	10	20	27	7	173	77	96	-	-
Gunny Bags	25	9	23	14	227	9	29	-	-
Cement	10	45	28	- 17	- 33	37	5	-	-
<b>Indonesia<sup>c)</sup></b>									
Gasoline <sup>c)</sup>	50	96	84	- 12	- 12	249	0	76	58
Cement	50	30	80	50	248	- 64	29	-	-
<b>South Korea</b>									
Fertilizers (urea)	10	-	50	50	-	1,354	3,555	-	-
Rubber tyres	60	55	100	45	278	950	46,950	-	-
Newsprint	30	18	94	76	443	- 92	6	-	-
Printing paper	30-50	52	90	38	503	- 30	247	-	-
Kraft paper	50	8	90	82	7,972	- 24	624	-	-
Cotton yarn and thread	40	97	100	3	98	- 99	86	-	-
Cotton fabrics	70	100	100	(+)	71	-100	48	-	15
Cement	15	40	81	41	1,304	118	597	-	-
Steel plates & sheets (uncoated)	80	-	16	16	9,353	- 51	- 41	-	23
<b>West Malaysia</b>									
Cement	10	44	62	18	200	42	111	2	1
<b>Philippines<sup>c)</sup></b>									
Gasoline	10.25	43	82	39	132	- 62	21	-	-
Distilled Fuel Oil <sup>d)</sup>	10.25	23	76	53	193	- 72	- 12	-	-
Caustic Soda <sup>e)</sup>	50	15	20	5	43	2	8	-	-
Fertilisers <sup>e)</sup>	5	31	38	7	136	74	94	-	-
Automobile Tyres <sup>f)</sup>	60	67	98	31	183	- 86	94	-	-
Paper, Writing	50	92	99	7	2	- 87	- 5	-	-
Kraft	25-40	-	60	68	-	- 74	- 36	-	-
Cotton Yarn	35	15	97	82	3,111	- 83	391	-	-
Cotton Fabrics	10-25	47	67	20	1,246	473	835	-	-
Cement	88	88	99	11	128	- 89	103	-	-
Tin Cans	10	85	100	15	85	- 97	98	-	-
Air Conditioners	70	72	97	25	283	- 65	185	-	-
Refrigerators	40-120	58	97	39	419	- 79	208	-	-
<b>Thailand<sup>g)</sup></b>									
Sugar	72	81	100	10	177	-100	125	2	7
Paper	10	8	9	1	114	82	84	1	1
Gunny Bags	27.5	18	26	8	204	87	108	7	1
Cement	31	94	97	3	143	35	137	3	19

Source: United Nations, *Economic Survey of Asia and the Far East*, 1963, pp.41-43.

- a) Rates for import duties: Burma 1960; Indonesia 1961; West Malaysia 1962; Philippines 1957; Thailand 1961.  
b) (+) and (-) indicate increase or decrease less than 0.5  
c) Statistics refer to 1955 and 1961.  
d) Figures refer to 1955 and 1961.  
e) Figures refer to 1958 and 1961.  
f) Figures refer to 1957 and 1961.  
g) Figures refer to 1956 and 1962.



On the whole, we can say that import substitution in most of the developing ECAFE countries has not achieved very significant progress during the period 1953-54 to 1961-62. Whatever progress had been achieved, it was at best limited to the consumer goods industries. If industrialization for these countries is to have any meaning at all, they must be able to substitute not only for consumer goods but also intermediate and capital goods as well. They must also look beyond the stage of producing merely for the domestic market to a stage of production for export. A great virtue of export manufacturing is that the world offers a market of vast size for almost any kind of production that is competitive in price and quality.<sup>10</sup>

It is high time that policy-makers of developing ECAFE countries ponder the economic feasibility of import substitution on the basis of narrow national markets. For empirical evidence has shown that only in countries with relatively large domestic markets can the process of import substitution in aggregate terms be carried out to an appreciable extent.<sup>11</sup> (See Table 2.6)

1,000 - 3,000	Thailand	13.2	16.3
	China (Taiwan)	15.8	17.3
	Burma	18.5	19.3
	Ceylon	32.5	33.2

Sources: United Nations, Asian Economic Statistics (Economic Survey of Asia and the Far East) and Yearbook of National Accounts Statistics.

<sup>10</sup>The value of imports as percentage of gross domestic products.

<sup>11</sup>Measured by gross domestic product at market prices in 1959.

<sup>12</sup>Export coefficients are calculated in relation to net domestic product at factor cost in the case of India, and at market prices in the case of Indonesia.

<sup>10</sup>M.D. Bryce, Policies and Methods for Industrial Development, New York, 1965, p.70.

<sup>11</sup>See United Nations Economic Bulletin for Asia and the Far East Vol. XII, No. 3, December 1961 p.59.



TABLE 2.6

SELECTED ECAFE COUNTRIES:  
IMPORT COEFFICIENT<sup>a</sup> 1951 AND 1959

## CHAPTER III

Size of Market <sup>b</sup> (in US\$ Million)	Country	1951 Total Import Coefficient	1959 Total Import Coefficient
Over 15,000	India <sup>c</sup>	8.5	6.9
	Indonesia <sup>c</sup>	5.2	2.6
3,000 - 6,000	Philippines	13.2	9.1
	South Korea	9.4 <sup>d</sup>	10.6
1,000 - 3,000	Thailand	13.2	18.3
	China (Taiwan)	15.6	17.3
	Burma	18.5	19.3
	Ceylon	32.5	33.2

Sources: United Nations, Asian Economic Statistics (Economic Survey of Asia and the Far East) and Yearbook of National Accounts Statistics.

<sup>a</sup>The value of imports as percentage of gross domestic product.

<sup>b</sup>Measured by gross domestic product at market prices in 1959.

<sup>c</sup>Import coefficients are calculated in relation to net domestic product at factor cost in the case of India, and at market prices in the case of Indonesia.

<sup>d</sup>1953

Because of all these statistical limitations, no attempt has been made at refined analysis. Consequently, the conclusions drawn from the analysis of the various commodities would be nothing more than a rough indication of the general trend of import substitution in West Malaysia.

It must also be noted that because the statistics given by the Statistics Department does not distinguish between "gross" exports and "net" exports, we shall assume that the export figures given include re-exports.



CHAPTER III

The extent of import substitution in this industry is shown in Table 3.1. Figures on production and imports show that in absolute terms, both domestic production and imports of ice cream and dairy products have increased during the period. Imports increased from 53.9 million in 1959 to 544.7 million in 1966. Although imports have increased in absolute terms, this does not indicate negative import substitution. If the import coefficient is examined, we find that the

Introduction of imports in total supply has in fact decreased from 94.2 per cent in 1959 to 57.3 per cent in 1966. This is a good example

In this chapter, an examination is made of the progress and extent of import substitution in selected manufactured products classified under the broad category, the food manufacturing industry in West Malaysia. These products include ice cream and other dairy products, biscuits, animal feeds and rice.

The scope of analysis of this chapter and the following two chapters is limited by the following factors:

- (i) there is a dearth of information about the "import content" of the manufactured commodities; this excludes the possibility of showing the extent of substitution of local raw materials for imported materials;
- (ii) a dearth of information regarding the proportion of production that is being exported;
- (iii) lack of information about ex-factory prices for purposes of comparison with import prices;
- (iv) for most of the commodities under study, the import and export figures are given in terms of value with the result that price influences cannot be eliminated. We have therefore to assume constant prices;
- (v) since the surveys by which the data are collected do not cover all the manufacturing units in West Malaysia, the output figures are underestimated.

Because of all these statistical limitations, no attempt has been made at refined analysis. Consequently, the conclusions drawn from the analysis of the various commodities would be nothing more than a rough indication of the general trend of import substitution in West Malaysia.

It must also be noted that because the statistics given by the Statistics Department does not distinguish between "gross" exports and "net" exports, we shall assume that the export figures given include re-exports.



## Ice Cream and Other Dairy Products

### Import Substitution 1959-66

The extent of import substitution in this industry is shown in Table 3.1. Figures on production and imports show that in absolute terms, both domestic production and imports of ice cream and dairy products have increased during the period 1959-66. Domestic production increased from \$3.9 million in 1959 to \$62.5 million in 1966, while imports increased from \$64.7 million in 1959 to \$83.8 million in 1966. Although imports have increased in absolute terms, this does not indicate negative import substitution. If the import coefficient is examined, we find that the relative share of imports in total supply has in fact decreased from 94.2 per cent in 1959 to 57.3 per cent in 1966. This is a good example of a case where both import substitution and increased imports have occurred simultaneously.

The share of production in total supply on the other hand increased from a mere 5.8 per cent in 1959 to 42.7 per cent in 1966. This rapid increase was made possible by the establishment of 3 new plants producing sweetened condensed milk during the period 1961-64.<sup>1</sup> If these plants were to expand their product lines to include unsweetened or evaporated milk, milk powder and butter, it could be expected that the volume of imports of dairy products would be reduced considerably in the foreseeable future.

### Establishment and Employment

In 1959 there were 33 establishment in the industry employing a total of 360 employees, an average of 12 employees per establishment. As the dairy products factories were not established until 1961, all of these establishments were ice cream factories. The small number of employees per establishment indicates not the capital-intensive nature of these establishments but rather their small-scale operation. As a matter of fact the method of production is labour-intensive.

By 1966 the number of establishments have increased to 69 employing 1,014 employees while the average number of employees per establishment increased slightly to 15. However this does not mean that all the establishments are small size establishments. As pointed out earlier, three new modern sweetened condensed milk plants were set up by foreign manufacturers since 1961. These are relatively large scale plants using the most modern machinery and equipment and employing on the average over 100 employees each. Incidentally these 3 plants are responsible for the greater part of the increase in production in value terms in the industry for the period 1961-66.

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<sup>1</sup>These 3 plants are: (1) Premier Milk (M) Ltd.  
(2) Food Specialties (M) Ltd.  
(3) Pacific Milk Industries (M) Ltd.



TABLE 3.1

## ICE CREAM AND OTHER DAIRY PRODUCTS

## IMPORT SUBSTITUTION (1959-1966)

Year	Production \$1,000	Imports \$1,000	Total Supply \$1,000	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Value - Added by Production \$1,000	Exports \$1,000	Domestic Consumption \$1,000
1959	3,998	64,772	68,770 $\frac{1 \times 16}{57.254}$	5.8	94.2	2,003	1,516	67,254
1960	3,833	80,240	84,073	4.5	95.5	1,717	881	83,192
1961	7,585	75,333	75,918	10.2	89.8	2,387	1,690	74,228
1962	13,476	72,501	85,977	15.6	84.4	5,086	1,903	84,287
1963	22,558	81,050	103,608	21.8	78.2	6,882	2,471	101,705
1964	27,497	84,298	111,795	24.6	75.4	8,534	4,870	108,172
1965	36,431	86,520	122,951	29.6	70.4	12,962	13,495	116,747
1966	62,502	83,846	146,348	42.7	57.3	21,808	14,488	131,860

Source: Compiled from "Survey of Manufacturing Industries" and "External Trade Statistics of West Malaysia".



TABLE 3.2

## ICE CREAM AND OTHER DAIRY PRODUCTS

ESTABLISHMENT AND EMPLOYMENT, 1959, 1966

Year	Number of Establishments	Number of Employees	Average Number of Employees Per Establishment
1959	33	360	12
1966	69	1,014	15

Source: Survey of Manufacturing Industries, West Malaysia, 1959, 1966, (Table 1).

Raw Materials

The major raw materials used by the ice cream and other dairy products industry are milk powder, anhydrous fat, sugar and liquid milk, in that order of importance. Unfortunately the industry has to depend on import for the bulk of these materials. The possibility of local substitution of these materials (except sugar) is very remote because of the absence of a developed dairy cattle industry in the country. The only item which can be substituted is sugar. Although the quality of locally refined sugar still leaves much to be desired, it can be expected that more and more local sugar would be used by the industry in the foreseeable future as their quality improves and as the government imposes greater quota restrictions on imported sugar to protect the local sugar industry. According to a Tariff Advisory Board Publication, about \$5 million to \$6 million of foreign exchange would be saved a year if all the sugar requirements of the ice cream and dairy products industry were obtained from domestic sources.<sup>2</sup> This sum would increase if further expansion of the industry takes place in the future.

Marketing

All the ice cream and the bulk of the sweetened condensed milk are sold on the domestic market. As shown in Table 3.1, domestic consumption has almost doubled over the period 1959-66. Although the milk industry produces mainly for the domestic market it has also been actively seeking foreign market for its products. The effort at export expansion, however, was not very successful with the result that the export markets have been limited to Indonesia, East Malaysia and Thailand. Exports to

<sup>2</sup>See "Oral and Written Evidences on Milk" published by The Tariff Advisory Board.



Singapore was made impossible in 1965 when the Singapore government imposed a protective tariff on imported sweetened condensed milk. At present about 8 per cent of the total output of sweetened condensed milk are exported - mainly to East Malaysia.

One of the main problems facing the milk industry is foreign competition, a problem common to other industries in West Malaysia as well. This is because the domestic market is not particularly protected from foreign competition in view of the relatively low import duty on imported sweetened condensed milk of \$4 per 100 pounds.<sup>3</sup> Because of greater volume of production, foreign manufacturers have been able to sell their products at about the same price as similar local products despite the import duty. Besides this, the foreign manufacturer also has the added advantage of an established market reinforced by the high degree of brand consciousness among local consumers. In view of these unfavourable factors, greater protection would have to be given to local producers if excess capacity were to be avoided.

### Consumption Liberalization

Since the bulk of the products of the ice cream and dairy products industry are sold within the domestic market, it would be interesting to know whether there has been any liberalization of consumption of these commodities. According to A.R. Khan, if in the process of import substitution the output of a consumption commodity becomes so great that "normal" consumption is exceeded, we shall say that domestic consumption of this commodity has been liberalized.<sup>4</sup>

TABLE 3.3

#### ICE CREAM AND DAIRY PRODUCTS

#### CONSUMPTION LIBERALIZATION 1959-66

Consumption Per Capita (\$)								Average Annual Consumption Per Capita (\$)
1959	1960	1961	1962	1963	1964	1965	1966	1959-66
9.87	11.85	10.24	11.25	13.20	13.65	14.31	15.67	12.51

Source: Computed by author from data given in Table 3.1

<sup>3</sup> Trade Classification and Customs Tariff 1964, Federation of Malaya, Government Printers, Kuala Lumpur

<sup>4</sup> A.R. Khan, *Op cit*; p.208  
Consumption Per Capita is obtained as follows:  $\frac{D}{P}$  where D = Domestic Consumption and P = Total Population.



As shown in Table 3.3 the consumption per capita has shown an increasing trend, rising from \$9.87 in 1959 to \$15.67 in 1966. This is a very strong indication of consumption liberalization. That consumption liberalization has taken place can also be seen by comparing the average annual consumption per capita of \$12.51 with the consumption per capita in the base year 1959 of \$9.87.

### Biscuits

#### Import Substitution 1959-66

The biscuit manufacturing industry in West Malaysia is a relatively matured industry, as a glance at Table 3.4 will show. Even as early as 1959 domestic production accounted for 75 per cent of the total supply. The industry seems to have reached its maturity by 1962, though, in absolute terms production has continued to increase. In 1959 domestic production amounted to \$15.9 million and this increased to \$32.2 million in 1966, an increase of 108 per cent over the 8 year period (or an average increase of 12.5 per cent per annum). On the other hand, the total value of imports dropped only slightly from \$5.3 million in 1959 to \$4 million in 1966. For the period 1962-66, however, imports had remained at about the same level. This is an indication that the industry has reached its maturity although imports still constitute about 10 per cent of the total supply. Incidentally these imports consist mainly of high quality biscuits which are consumed only in small quantities and largely by the higher income group.

#### Establishments and Employment

As shown in Table 3.5 there were 80 establishments in West Malaysia in 1959 employing a total of 1,209 employees, an average number of 15 employees per establishment. By 1966 the number increased to 168 establishments and 2,287 employees, while the average number of employees per establishment decreased to 14. As most of the establishments are small-scale factories it is not surprising that the number of people employed in each establishment is small. In the majority of cases, the method of production is labour intensive rather than capital intensive as the figures would have us believed. Because of each unit's small productive capacity in comparison with total demand, it has taken the biscuit industry much longer for full import substitution to be achieved than would be the case if the unit's capacity is large in relation to demand.

#### Raw Materials

The major raw materials used by the biscuit manufacturing industry includes flour, fats, sugar and flavouring chemicals, most of which are imported from abroad. However, with the establishment of local industries producing flour, sugar and flavouring chemicals, there has been a gradual substitution of these local materials. Unfortunately, the rate of substitution of local raw materials for imported materials has not been very rapid because of 3 main reasons. (1) The prices of these local materials are relatively higher than similar imported materials. (2) The quality of local materials is very much inferior to those imported from



TABLE 3.4  
BISCUIT MANUFACTURING INDUSTRY  
IMPORT SUBSTITUTION 1959-1966

Year	Production \$1,000	Imports \$1,000	Total Supply \$1,000	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Value - Added by Production \$1,000	Exports \$1,000	Domestic Consumption \$1,000
1959	15,996	5,320	21,316	75.1	24.9	4,717	-	-
1960	17,510	4,929	22,439	78.1	21.9	5,143	926	21,511
1961	18,941	4,484	23,425	80.9	19.1	5,726	1,358	22,067
1962	24,596	3,921	28,517	86.3	13.7	6,352	1,652	26,865
1963	28,807	3,814	34,621	83.2	16.8	6,779	2,068	32,555
1964	30,872	3,950	34,822	88.7	11.3	6,899	1,474	33,348
1965	28,862	3,990	32,851	87.9	12.1	6,920	1,584	31,267
1966	32,291	4,031	36,322	88.0	11.1	7,506	2,330	33,992

Source: Compiled from "Survey of Manufacturing Industries, West Malaysia" and "External Trade Statistics, West Malaysia".



TABLE 3.5

BISCUITS

ESTABLISHMENT AND EMPLOYMENT, 1959, 1966

Year	Number of Establishment	Number of Employees	Average Number of Employees per Establishment
1959	80	1,209	15
1966	168	2,287	14

Source: Survey of Manufacturing Industries, West Malaysia, 1959, 1966 (Table 1).

abroad. (3) The existence of a strong prejudice against the locally produced materials. Nonetheless, the rate of substitution of local raw materials particularly flour and sugar is expected to increase substantially in the foreseeable future in view of the fact that the government is going to impose greater quota restrictions on the import of these 2 commodities.

Marketing

The biscuit manufacturing industry is essentially a domestic-market-oriented industry. Domestic consumption of biscuits increased from \$21.5 million in 1959 to about \$34 million in 1966. However, for the period 1964-66 consumption has been stagnant. As pointed out earlier, the biscuit industry has already reached its maturity by 1962 and since then the industry has become export oriented, a natural development of the process of import substitution. The export performance of the industry during the period covered, however, has not been very encouraging either, as a glance at Table 3.6 will show. In 1960 the value of exports was a mere \$0.9 million. It increased only slightly to \$2.3 million in 1966. The drop in exports in 1964 and 1965 was the result of Indonesian confrontation against Malaysia which started in late 1963. Throughout the period 1959-66 less than 5 per cent of the total domestic production were exported, partly because of the lack of export promotional efforts on the part of local producers (the majority of whom were contented with supplying the home market only) and partly because of the fact that the manufacturing of biscuits is relatively simple, and as such, most countries have their own biscuit manufacturing industries which are usually protected. Unless an effort to improve the quality and price of local biscuits, to amalgamate the small units into bigger units so as to give them economies of scale and an aggressive policy of export promotion is made, the proportion of exports to total production would remain at a low level.



### Consumption Liberalization

For the period 1960-66 there has been a distinct increase in the per capita consumption of biscuits. Per capita consumption of biscuits increased from \$3.06 in 1960 to \$4.03 in 1966. The average annual consumption per capita for the period 1957-66 also show an increase over the base year 1960. We can therefore conclude that consumption of biscuits has been liberalized. In this case consumption liberalization is an indication of existence of market limits which we have noted earlier.

TABLE 3.6

#### BISCUITS

#### CONSUMPTION LIBERALIZATION 1960-66

Consumption Per Capita (\$)							Average Annual Consumption Per Capita (\$)
1960	1961	1962	1963	1964	1965	1966	1960-66
3.06	3.04	3.58	4.22	4.20	3.83	4.03	3.70

Source: Computed by author from data given in Table 3.4

### Animal Feeds

The growth of the animal feeds industry in West Malaysia is correlated to the growth of the livestock and poultry industry in the country. Under the agricultural diversification programme, the need to develop a sound livestock industry was emphasised in order to meet the growing dietary needs of the country's expanding population. As a result, a number of "pioneer" firms were established since 1959 in response to the growing demand for animal feeds by the expanding livestock and poultry industry.

### Plants and Production

There are at present about 26 feedmills in West Malaysia. With few exceptions the majority of them are small scale establishments. Six of these feedmills account for about 70 per cent of the total production. The quantities and values of total animal feeds production by these 6 large feedmills for the period 1961-65 are shown in Table 3.7 below.

As shown in Table 3.7 both the quantities and values of animal feeds production has increased for the period 1961-65. In 1961 the feedmills produced only 7,000 odd tons of feeds worth about \$2 million. This increased at a rapid rate to 79,557 tons in 1964 and by 1965, production has increased to 103,844 tons valued at about \$33.4 million. These figures represent only about 70 per cent of the total production



and are produced by the bigger feedmills but excluding the smaller feedmills which produced just a few thousand bags. Thus we can see that there has been a substantial growth in the animal feeds industry.

TABLE 3.7  
PRODUCTION OF ANIMAL FEEDS, 1961-65

Year	Quantity (Tons)	Value (\$1,000)
1961	7,266	2,089
1962	26,688	7,861
1963	68,947	19,841
1964	79,557	23,664
1965	103,844	33,375

Source: Veterinary Division, Ministry of Agriculture and Co-operative

#### Raw Materials

The availability of raw materials (feed components) is very important to the feedmilling industry. In West Malaysia the industry has to depend on imports for the supplies of most of its raw material requirements mainly because the country does not produce sufficient quantities of feed components. Consequently considerable amount of feed components of various kinds have to be imported annually from abroad. The quantities of feed components imported and their values are shown in Table 3.8. It shows that in 1958 West Malaysia imported about 106,000 tons of feed components. This figure gradually increased to 210,000 tons in 1962 and 235,000 tons in 1963. But since then, in 1965, it has been reduced to about 186,000 tons. There has, therefore, been a drop of about 55,000 tons between the period 1963-65. This drop in the imports of feed component was not due to a slack in demand or imposition of import duties but to substitution of local feed components. It was during this period that 2 flour mills were established in West Malaysia whose by-products, wheat bran and pollards were used to substitute similar imported feed components.<sup>5</sup> The other feed components available locally is rice bran, a by-product of local paddy mills.

Regrettably, the use of local feed components like wheat bran, pollards and rice bran has not been very substantial during the period covered. There are 2 main reasons for this. (1) The quality of local

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<sup>5</sup> These 2 local flour mills are: (1) The Malayan Flour Mills (M) Ltd. and (2) The Federal Flour Mills Ltd.



TABLE 3.8

IMPORTS OF FEED COMPONENTS FOR THE PERIOD 1958 TO 1964 INTO THE STATES OF MALAYA

Commodity	Unit of Quantity	1958		1959		1960		1961		1962		1963		1964		1965	
		Quantity	Value \$1,000.	Quantity	Value \$1,000.	Quantity	Value \$1,000	Quantity	Value \$1,000	Quantity	Value \$1,000	Quantity	Value \$1,000	Quantity	Value \$1,000	Quantity	Value \$1,000
Rice Bran	Ton	12,221	2,499.0	21,198	4,004.0	13,910	2,705.4	9,769	1,841.1	18,639	3,412.0	29,364	5,263.8	38,955	6,738.2	50,502	6,377.6
Other Bran	"	12,971	3,959.3	20,033	5,392.4	17,986	4,904.1	19,630	5,162.0	26,368	6,218.1	31,825	7,822.0	19,015	3,652.5	11,698	3,469.4
Maize	"	18,636	3,594.0	25,268	4,520.3	32,576	5,943.7	34,408	6,679.9	64,994	12,448.6	72,069	14,328.9	54,727	11,056.8	20,760	5,135.6
Coconut Cake	"	26,999	5,893.7	26,852	6,981.8	26,558	6,442.4	28,914	5,973.2	24,124	5,875.2	19,588	4,548.6	13,786	3,197.0	11,698	3,089.6
Other Oil Cakes	"	6,535	1,611.0	4,594	1,223.4	4,783	1,327.7	4,895	1,313.2	7,677	2,064.6	9,966	2,723.5	10,584	2,876.5	11,068	3,498.6
Prawn Dust	"	5,200	1,340.1	5,300	1,263.4	4,866	1,275.1	5,538	1,501.9	7,252	2,385.4	4,698	1,797.2	3,062	1,298.9	1,098	313.2
Fish Meal Except prawn dust	"	286	140.7	524	231.3	972	425.0	1,100	437.8	1,930	894.8	7,393	2,843.9	6,470	2,719.7	6,000	3,119.6
Tapioca Refuse	"	-	-	-	-	21,334	2,175.7	16,540	1,742.6	8,462	1,263.7	13,565	1,608.1	10,683	1,179.2	11,100	2,092.8
Skim Milk	"	-	-	-	-	647	486	995	741.9	1,662	1,396	2,665	1,661.6	2,752	1,872.6	26,000	1,508.6
Animal Feeding Stuff, NES	"	23,723	3,120.7	34,891	5,104.0	24,430	7,166.8	36,593	10,161.4	49,746	15,113.2	44,290	13,158.6	41,733	12,394.8	48,201	15,094.2
Total		106,571	22,153.5	138,660	28,720.6	148,062	32,414.5	158,382	35,555.0	210,854	49,815.2	235,423	55,756.2	202,002	47,986.2	198,125	43,699.2

Source: Veterinary Division, Ministry of Agriculture and Co-operatives



feed components are much more inferior to that of imported feed components. For example, locally-produced rice bran contains a high percentage (13 per cent) of crude fat (oil) which is not extracted.<sup>6</sup> As such the bran if stored would become rancid. (2) The prices of local feed components are relatively higher than imported feed components although their qualities are relatively inferior than those of the latter. For example, while local wheat bran and pollard are sold at between \$12.90 to \$14.45 per picul, imported rice bran can be obtained at \$10 per picul.<sup>7</sup> Unless the quality and price of local feed components are made competitive, the proportion of local feed components used in relation to the total amount consumed would remain small.

## Marketing

All the domestically produced animal feeds were sold in the domestic market. There was no export of animal feeds outside the country simply because there was no surplus for export. In fact the varieties of feeds available are so limited in relation to domestic requirements that a large proportion has to be imported annually.

In view of the fact that production still falls short of domestic requirements there is much scope for expansion and growth of the animal feeds industry. As pointed out earlier, the feedmilling industry is closely related to the livestock and poultry industry. Its future therefore depends on the future expansion of the livestock and poultry industry. As it is, the livestock and poultry industry is an expanding industry. Table 3.9 shows the projections for the production of eggs, poultry meat, pork and beef for the period 1965-80. As can be seen from the table, there is a great need for the expansion of the livestock and poultry industry to meet the growing demand of the population. Therefore, it can be expected that the demand for animal feeds will increase in the foreseeable future.

## Rice

### Import Substitution 1959-66

Rice is a staple food in West Malaysia. It is the intention of the government to be self sufficient in this important commodity. Accordingly, various measures were taken by the government towards achieving this objective. But despite such measures as extension of cultivated acres, double cropping, improvement of irrigation and drainage schemes and planting of better seeds, production still lags behind consumption.

Table 3.10 shows the extent of import substitution of rice in

<sup>6</sup> Research by "The Pakistan Industrial Credit and Investment Corporation" (PICIC) has revealed that the fat equivalent can be extrated for cooking pruposes. All of this would go to waste if rice bran is fed raw to cattle and poultry. Furthermore it was found that raw rice bran is injurious to cattle health.

<sup>7</sup> See "Oral and Written Evidences on Animal Feeds", published by the Tariff Advisory Board.



TABLE 3.9

PROJECTIONS FOR PRODUCTION OF EGGS, POULTRY MEAT, PORK  
AND BEEF FOR THE PERIOD 1965-68, WEST MALAYSIA

Commodities	Units	1965	1970	1980
<b>Eggs</b>				
Local production	No. in millions	750.00	1,200.00	1,800.00
Annual consumption per capita	No.	100.00	130.00	160.00
<b>Poultry Meat</b>				
Local production	Million pounds	90.00	156.40	448.00
Annual consumption per capita	Pounds	12.00	17.00	40.00
<b>Pork</b>				
Local production	Million pounds	99.00	125.00	175.00
Annual consumption per capita	Pounds	33.00	38.00	50.00
<b>Beef</b>				
Local production	Million pounds	27.53	28.70	56.00
Annual consumption per capita	Pounds	7.00	7.00	8.00

Source: Veterinary Division, Ministry of Agriculture and Co-operation.

1970 - Population estimated to be 9,200,000\*

1980 - Population estimated to be 11,200,000\*

\*Based on 3 per cent increase per annum.



TABLE 3.10  
RICE  
IMPORT SUBSTITUTION 1959-66

Year	Production		Imports		Total Supply \$1,000	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Exports \$1,000	Domestic Consumption (Tons)
	Tons	\$1,000	Tons	\$1,000					
1959	373,470	87,399	361,706	189,751	277,150	31.2	68.2	2,110	733,066
1960	477,980	118,795	373,578	134,803	253,598	46.8	53.2	16,612	834,946
1961	523,120	116,927	355,855	129,499	246,426	47.4	52.6	20,146	838,829
1962	493,840	102,970	310,263	132,357	235,327	43.7	56.3	22,156	781,947
1963	535,920	110,670	398,805	164,751	275,421	40.2	59.8	9,542	925,183
1964	477,350	121,910	408,745	156,845	278,755	43.7	56.3	6,899	879,196
1965	571,020	143,387	293,279	112,638	256,025	56.0	44.0	35,928	828,371
1966	585,030	147,217	239,407	104,909	252,126	58.4	41.6	31,805	792,632

Source: Compiled from "Survey of Manufacturing Industries, West Malaysia",  
"External Trade Statistics, West Malaysia" and  
"Monthly Statistical Bulletin for the State of Malaya", July 1967.



West Malaysia during the period 1959-66. It shows that both in quantitative and value terms, production has increased while imports had decreased over the period covered. Production increased from 373,470 tons (\$87.4 million) to 585,030 tons (\$147.2 million) in 1966, while imports dropped from 361,706 tons (\$189.7 million) in 1959 to 239,407 tons (\$104.9 million) in 1966. The extent of substitution is shown by the import coefficient which decreased from 68.2 per cent in 1959 to 41.6 per cent in 1966. Consequently local production at present is able to meet about 3/5 of the total domestic requirements.

The growth in rice production in West Malaysia has been due primarily to increase in productivity per acre, and to a lesser extent, an extension in planted acreage.<sup>8</sup> With the increasing use of high-yielding plants (e.g. Malinja and Mashuri), and with the increasing practice of double cropping and the increase in new planted acreages, the trend in rice production can be expected to show an accelerated growth in the foreseeable future, thus cutting down further the rice import bill.

### Establishments and Employment

Table 3.11 shows that in 1959 there were 77 large rice mills in West Malaysia with a total work force of 1,813. By 1966 the number of rice mills has increased to 83 while the number of workers has increased to 2,259. This averaged out at about 27 workers per establishment. The percentage increase in the number of workers employed was 18.5 per cent over the 8 year period, or about 2.3 per cent per annum. There has therefore been a slow growth in the rate of employment in the rice milling industry. This could be due to the increase in the productivity of labour as a result of increased mechanization of rice cultivation. On the other hand, there does not seem to have been any increase in capital-intensiveness of the industry, as the average number of workers per establishment instead of decreasing has increased. Nevertheless, in terms of employment the rice milling industry is one of the largest industry in West Malaysia.

### Consumption Liberalization

Though in absolute terms, domestic consumption of rice has increased over the period 1959-66, the per capita consumption has shown a decline over the same period. A comparison between the average annual consumption per capita (9.50 oz. per day) and the per capita consumption in the 1959 (10.56 oz. per day) shows that consumption liberalization has been negative. (See Table 3.12). In view of the fact that rice is the main staple food of over 90 per cent of the population in West Malaysia, this negative value of consumption liberalization is quite surprising. Perhaps this is due to the substitution of better cereals or bread for rice, but since there is no empirical evidence to substantiate this, the above conjecture may not be true.

<sup>8</sup> Dr. Lim Chong Yah: "West Malaysian External Trade, 1947-65" p.37.



As for animal feeds and rice, TABLE 3.11 indicates that substitution has not been very significant but they possess great potential for further import substitution in the future.

#### RICE

#### ESTABLISHMENT AND EMPLOYMENT, 1959, 1966

Year	Number of Establishments	Number of Employees	Average Number of Employees per Establishment
1959	77	1,813	23.5
1966	83	2,259	27.00

Source: Survey of Manufacturing Industries, 1959, 1966, (Table 1)

TABLE 3.12

#### RICE

#### CONSUMPTION LIBERALIZATION, 1959-65

Consumption Per Capita (oz. per day)							Average Annual Consumption Per Capita (oz. per day)
1959	1960	1961	1962	1963	1964	1965	1959-65
10.56	11.68	11.36	10.26	11.79	10.90	10.10	9.50

Source: Computed by author from the data given in Table 3.10

#### Conclusion

Among the commodities examined in this chapter for the period 1959-66, the progress of import substitution was most significant for ice cream and dairy products. Production of this group of commodities increased by about 15 times over the period covered which resulted in a considerable drop in the share of imports in total supply. The main reasons for this rapid rate of import substitution are the coming into operation of newly established milk plants and the small base in the base year. Import substitution in the biscuit industry was also substantial with production more than doubled, but compared with the ice cream and dairy products industry the rate of substitution was very much slower, mainly because of its larger base. On the other hand the biscuit industry was able to substitute more local raw materials for imported materials than the ice cream and dairy products industry which, as noted earlier, has to import a large proportion of its raw material requirements from overseas.



As for animal feeds and rice, import substitution has not been very significant but they possess great potential for further import substitution in the future.

## CHAPTER IV

### IMPORT SUBSTITUTION IN THE BEVERAGE AND FOOD INDUSTRIES

#### The Beverage Industry

##### Import Substitution

It has been pointed out that although considerable substitution has taken place since 1955, the beverage trade has not been very successful. The production of beer from 1957.4 million in 1955 to 1965.4 million in 1965, an average rate of increase of 4.2 per cent. The production of soft drinks in 1965 was the result of the imposition of a 100 per cent tariff on the import of soft drink concentrates. The production of other beverages declined from 1955 to 1965, an average rate of decrease of 1.2 per cent. The share of imports in the total production of beverages declined from 46.5 per cent in 1955 to 35.5 per cent in 1965.

The production of beverages during the period 1955-65 was not very successful. This is due to the fact that the production of beverages is a highly competitive industry, while imports of soft drinks, alcoholic drinks, and other beverages have remained at the same level. The sudden drop in the production of beverages is primarily due to the establishment of new factories in the country.

##### Establishment of New Factories

Table 4.1 shows the number of establishments and the total work force in the beverage industry in the period 1955-65. It shows that the number of establishments in the beverage industry increased from 79 in 1955 to 79 in 1965, while the corresponding work force was 1,899 and 1,882 respectively. There has been only a slight increase in the number of employees employed in the industry over the period 1955-65. The average number of employees

<sup>1</sup> During the period 1955-65 2 breweries were established in West Malaysia. These are (1) The Malayan Breweries (M) Ltd. (2) Guinness (M) Ltd.



## CHAPTER IV

### IMPORT SUBSTITUTION IN THE BEVERAGES AND TOBACCO PRODUCTS INDUSTRY

#### The Beverages Manufacturing Industry

##### Import Substitution 1959-66

If Table 4.1 is examined, we find that although some import substitution has taken place during the period 1959-66, the progress made has not been very significant. Domestic production increased from \$17.4 million in 1959 to \$23.2 million in 1966, an average annual rate of increase of 4.2 per cent. The sharp drop in the value of production in 1965 was the result of the crown cork tax (5 cents per piece) the imposition of which forced a number of marginal aerated water factories to close down. With increasing domestic production, import of beverages declined from \$33.4 million in 1959 to \$20.1 million in 1966, an average rate of decrease of 4.9 per cent per annum. Hence imports declined at a slightly faster rate than the increase in production. Consequently the share of imports in total supply dropped from 65.8 per cent in 1959 to 46.5 per cent in 1966. There is thus strong evidence of import substitution of beverages during the period covered.

As pointed out earlier, import substitution of beverages during the period 1959-66 has not been very encouraging. Perhaps this is due to the fact that production has been confined to only a limited range of beverages particularly aerated water and other non-carbonated drinks, while imports consisted of not only these but also beer, stout and other alcoholic drinks. Note also that for the periods 1959-62 and 1963-65, the share of imports in total supply remained practically at the same level. The sudden drop in the import coefficient after 1962 was due primarily to the establishment of local beer and stout breweries in the country.

##### Establishments and Employment

Table 4.2 shows the number of establishments and the total work force in the beverages industry for the period 1959-66. It shows that the number of establishments had increased from 73 in 1959 to 79 in 1966 while the corresponding employment figures were 1,859 and 1,882 respectively. There has been only a slight increase in the number of employees employed in the industry over the period covered. The average number of employees

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<sup>1</sup>During the period 1963-66 2 breweries were established in West Malaysia. These are: (1) The Malayan Breweries (M) Ltd.  
(2) Guinness (M) Ltd.



TABLE 4.1

## BEVERAGE MANUFACTURING INDUSTRY

## IMPORT SUBSTITUTION (1959-1966)

Year	Production \$1,000	Imports \$1,000	Total Supply \$1,000	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Value - Added By Production \$1,000	Exports \$1,000	Domestic Consumption \$1,000
1959	17,380	33,405	50,785	34.2	65.8	9,658	526	50,259
1960	19,769	37,855	57,624	34.3	65.7	11,249	282	57,342
1961	20,399	39,438	59,837	34.1	65.9	11,145	384	59,453
1962	20,371	36,263	56,634	36.0	64.0	11,903	339	56,295
1963	24,313	27,233	51,546	47.2	52.8	12,557	417	51,129
1964	25,786	28,597	54,383	47.4	52.6	12,062	325	54,058
1965	20,611	27,244	47,855	47.3	52.7	9,644	1,690	46,165
1966	23,215	20,187	43,402	53.5	46.5	12,074	7,273	36,129

Source: Compiled from "Survey of Manufacturing Industry," West Malaysia and "External Trade Statistics," West Malaysia.



per establishment seems to indicate that the industry is capital-intensive. This is not so. The small number of employees per establishment is due to the small size of these establishments. On the contrary the industry is labour-intensive. Unless an empirical study is made to find out the causes for the decline in per capita consumption, it is not possible for us to give any valid reasons for such a decline in the per capita consumption of beverages in West Malaysia.

#### BEVERAGES

#### ESTABLISHMENT AND EMPLOYMENT, 1959, 1966

Year	Number of Establishments	Number of Employees	Average Number of Employees per Establishment
1959	73	1,859	25.5
1966	79	1,882	24.0

Source: Survey of Manufacturing Industries 1959, 1966. (Table 1)

#### Raw Materials

The major ingredients used by the beverage industry are malt, flavouring chemicals, bases, fruit juices, and sugar, a large proportion of which are imported from overseas. It was only in recent years has there been a gradual substitution of local raw materials particularly sugar, base and flavouring essences. Regrettably the rate of substitution has not been very rapid mainly because of the comparatively poorer quality and higher prices of local raw materials.

#### Marketing

The beverage industry is a domestic-market-oriented industry. Hence virtually all the production of the industry are consumed locally. This is particularly true for aerated water and other non-carbonated soft drinks. But unfortunately domestic consumption has declined over the period 1959-66. Due to lack of empirical evidences it is not possible to give any real reasons for this decline in consumption. All we can say here is that the elasticity of demand for beverages is low but this alone could not be the cause of the decline in consumption.

Since the beverages industry is oriented towards the domestic market, the value of exports was negligible. Only in the case of beer and stout was there a small percentage of exports to overseas market. Perhaps the main reason for the insignificance of exports of beverages is that almost all countries in the world have their own beverages industry.

Import substitution in tobacco products in West Malaysia during the period 1957-1966. Further substitution was evidenced during the period 1957-1966. Production increased from 10.1 million gallons in 1957 to 1966. The beverage industry is a domestic-market-oriented industry. Hence virtually all the production of the industry are consumed locally. This is particularly true for aerated water and other non-carbonated soft drinks. But unfortunately domestic consumption has declined over the period 1959-66. Due to lack of empirical evidences it is not possible to give any real reasons for this decline in consumption. All we can say here is that the elasticity of demand for beverages is low but this alone could not be the cause of the decline in consumption.

As shown in Table 4.3, there has been a distinct decline in the per capita consumption of beverages throughout the period 1959-66. In



absolute terms consumption per capita dropped from \$7.37 in 1959 to \$4.29 in 1966. The average annual per capita consumption of \$6.82 was, also lower than that of the base year value of \$7.37. In other words, consumption liberalization has been negative for the beverages industry. Unless an empirical study is made to find out the causes for the decline in per capita consumption, it is not possible for us to give any valid reasons for such a decline in the per capita consumption of beverages in West Malaysia.

TABLE 4.3

BEVERAGES

CONSUMPTION LIBERALIZATION, 1959-66

Consumption Per Capita (\$)								Average Annual Consumption Per Capita (\$)
1959	1960	1961	1962	1963	1964	1965	1966	1959-66
7.37	8.17	8.20	7.51	6.63	6.82	5.66	4.29	6.83

Source: Computed by author from data given in Table 4.1.

Aerated Water and Cordials

Import Substitution 1957-66

A glance at Table 4.4 will show that the aerated water and cordials industry is a relatively developed and matured industry even as late as 1957. Further import substitution was evidenced during the period 1957 - 1966. Production increased from 10.1 million gallons in 1957 to 13 million gallons in 1966. On the other hand imports dropped from 1.1 million gallons to 0.5 million gallons for the same period. The relative share of imports in total supply, already at a very low level, continued to drop further. We can therefore conclude that almost all the domestic requirements are met by local supplies. The main reason for the complete substitution of local aerated water and cordials is the localized nature of the industry. The bulkiness of the commodity in relation to its price necessitated that the factories be established near the place of consumption.

Tobacco Products

Import Substitution 1959-66

Import substitution in tobacco products in West Malaysia during the period 1959 - 1966 was very rapid despite of the fact that substantial substitution has already been achieved prior to this period. Table 4.5 shows that the gross value of output increased substantially from \$48.2 million in 1959 to \$198 million in 1966, an average annual rate of increase



TABLE 4.4

## AERATED WATER AND CORDIALS

## IMPORT SUBSTITUTION (1957-1966)

Year	Production 1,000 Gallons	Imports 1,000 Gallons	Total Supply 1,000 Gallons	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Exports 1,000 Gallons	Domestic Consumption 1,000 Gallons
1957	10,148	1,124	11,272	90.0	10.0	12	11,260
1958	10,608	1,030	11,638	91.1	9.9	11	11,627
1959	11,437	982	12,419	92.1	7.9	3	12,416
1960	12,830	901	13,731	93.4	6.6	5	13,726
1961	12,674	842	13,516	93.7	6.3	5	13,511
1962	12,518	844	13,362	93.7	6.3	3	13,359
1963	13,325	944	14,269	93.4	6.6	1	14,268
1964	13,733	1,069	14,802	92.8	7.2	35	14,769
1965	13,023	475	13,498	96.0	4.0	19	13,479
1966	13,023	531	13,554	96.1	3.9	51	13,503

Source: Monthly Statistical Bulletin for the States of Malaya, July 1967.



TABLE 4.5

## TOBACCO PRODUCTS MANUFACTURING INDUSTRY

## IMPORT SUBSTITUTION (1959-66)

Year	Production \$1,000	Imports \$1,000	Total Supply \$1,000	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Value - Added by Production \$1,000	Exports \$1,000	Domestic Consumption \$1,000
1959	48,252	46,826	95,078	50.7	49.3	10,624	285	94,793
1960	94,453	44,436	138,889	68.0	32.0	17,866	318	138,571
1961	115,905	48,828	164,733	70.4	29.6	22,220	314	164,419
1962	147,161	35,482	182,642	80.6	19.4	27,876	520	182,123
1963	167,604	33,500	200,104	83.8	16.2	28,146	876	199,228
1964	177,068	28,944	206,012	85.9	14.1	36,945	241	205,771
1965	185,562	32,898	218,460	84.9	15.1	40,057	67	218,393
1966	198,003	35,701	233,704	84.7	15.3	54,016	634	233,070

Source: Compiled from "Survey of Manufacturing Industries, West Malaysia" and "External Trade Statistics, West Malaysia".



of 38.8 per cent. This rapid increase in domestic production was matched by the fall in the value of imports from \$46.8 million in 1959 to \$35.9 million in 1966. Consequently the relative share of imports in total supply from 49.3 per cent in 1959 to only 15.7 per cent in 1966. It must be admitted, however, that this decline in the import coefficient is not due to a shift in taste or to an increase in import duties but to import substitution. Local production has been able to increase fast enough to meet the bulk of domestic requirements as well as the increase in demand so that imports were able to be reduced to a much smaller proportion of total supply than before.

#### Establishments and Employment

While the number of establishment dropped from 143 in 1959 to 126 in 1966, the corresponding figures for employment increased from 3,470 to 3,843 respectively. As indicated by the figures for the average number of employees per establishment in Table 4.6 the majority of the establishments are small scale and labour-intensive. A few relatively large firms employing more than 50 employees each and using modern plant and equipment account for the bulk of the total output.

TABLE 4.6

#### TOBACCO PRODUCTS

#### ESTABLISHMENT AND EMPLOYMENT, 1959, 1966

Year	Number of Establishments	Number of Employees	Average Number of Employees per Establishment
1959	143	3,470	24.0
1966	126	3,843	30.5

Source: Survey of Manufacturing Industries 1959, 1966 (Table 1).

#### Raw Materials

The major raw material used in the manufacture of tobacco products is tobacco. Until recently almost all the tobacco requirements were imported from overseas. Although tobacco is being grown in West Malaysia on a commercial scale, the proportion used of these locally-grown tobacco in relation to the total has not been very substantial mainly because of their relatively poorer quality. It must be admitted, however, that the climate and other physical conditions in West Malaysia are not suitable for the production of high quality tobacco. Consequently a large proportion of the tobacco requirements particularly of the larger plants have to come from outside sources. Most of the locally-grown tobacco are used for the manufacture of cheap cigarettes, cigars, cheroots and manufactured tobacco.



## Marketing

As the figures in Table 4.5 will show, the bulk of the local production of tobacco products in West Malaysia are consumed within the domestic market, indicating that the tobacco products manufacturing industry is essentially a domestic-market-oriented industry. Throughout the period covered less than 5 per cent of production was exported to overseas market. There are 3 main reasons that account for the insignificance of exports. (1) The manufacturers of foreign brands are foreign subsidiaries and hence cannot export to markets which are served by the same brands from other centres where these brands are being manufactured. (2) Most countries have their own tobacco manufacturing industry which are heavily protected from foreign competition. (3) Local manufacturers found it difficult to compete in international markets. At present exports are confined mainly to the East Malaysian market.

## Consumption Liberalization

If Table 4.7 is examined it is clear that the per capita consumption of tobacco products has shown a rising trend during the period 1959 - 1966. Consumption per capita increased from \$13.91 in 1959 to \$27.70 in 1966, a very large increase indeed. For the period as a whole the average annual per capita consumption was \$23.37 which is higher than the value for 1959. This is a strong indication of the liberalization of consumption. Domestic consumption has been liberalized mainly because of an increase in "induced" demand made possible by means of highly competitive advertisements through various mass media.

TABLE 4.7

### TOBACCO PRODUCTS

#### CONSUMPTION LIBERALIZATION, 1959-66

Consumption Per Capita (\$)								Average Annual Consumption Per Capita (\$)
1959	1960	1961	1962	1963	1964	1965	1966	1959-66
13.91	19.75	22.68	24.30	25.85	25.97	26.77	27.70	23.37

Source: Computed by author from data given in Table 4.5

## Cigarettes

### Import Substitution 1959-66

Cigarette constitute the most important commodity in the tobacco products manufacturing industry, both in terms of quantity and value. The extent of import substitution of cigarettes in West Malaysia during



TABLE 4.8  
CIGARETTES  
IMPORT SUBSTITUTION 1957-66

Year	Production 1,000 lbs.	Imports 1,000 lbs.	Total Supply 1,000 lbs.	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Exports 1,000 lbs.	Domestic Consumption 1,000 lbs.
1957	2,732	9,029	11,753	23.2	76.8	57	11,695
1958	2,804	8,495	11,379	25.3	74.7	23	11,356
1959	4,133	7,748	11,881	34.8	65.2	28	11,853
1960	7,879	5,219	13,098	60.1	39.9	31	13,067
1961	9,517	3,983	13,500	70.5	29.5	46	13,454
1962	11,021	2,530	13,551	81.3	18.7	60	13,491
1963	12,834	1,434	14,268	90.0	10.0	42	14,226
1964	13,537	1,370	14,907	90.8	9.1	9	14,898
1965	13,140	1,229	14,369	91.4	8.6	8	14,361
1966	12,870	1,241	14,111	91.2	8.8	10	14,101

Source: Monthly Statistical Bulletin for the States of Malaya, September 1967 p.85.



the period 1959-66 is shown in Table 4.8. It shows that domestic production has increased from 2.7 million pounds in 1957 to 12.9 million pounds in 1966 while the corresponding figures for imports show a drop from 9 million pounds to 1.2 million pounds. The rapid increase in the production coefficient was matched by an equally rapid fall in the import coefficient. We can therefore conclude that substantial import substitution has taken place in this commodity.

The cigarette manufacturing industry seems to have reached its maturity as early as 1964. This is indicated by the import coefficient as well as imports in absolute terms, both of which had remained almost at the same level for the period 1964 - 1966. The imported cigarettes consist mainly of expensive brands the consumption of which is too small to justify their production domestically.

#### Consumption Liberalization

While domestic consumption of cigarettes has increased over the period 1957 - 1966, that of per capita consumption has remained unchanged. Average annual consumption per capita has not changed since 1957 despite an increase in the per capita income. In other words consumption liberalization has not taken place in this commodity (See Table 4.9)

TABLE 4.9  
CIGARETTES  
CONSUMPTION LIBERALIZATION, 1957-66

Consumption Per Capita (lbs)										Average Annual Consumption Per Capita (lbs)
1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1957-66
1.8	1.7	1.7	1.9	1.8	1.8	1.8	1.9	1.8	1.7	1.8

Source: Computed by author from data given in Table 4.8

#### Manufactured Tobacco

##### Import Substitution 1957-66

Import substitution of manufactured tobacco has already reached its limits even as early as 1962 as shown in Table 4.10. Production has not increased much over the period 1957 - 1966 and for the period 1958 - 1966 it has remained at about the same level. Imports on the other hand had dropped by about half over the period 1957 - 1966 but for the period 1959 - 1966 it has remained relatively stable. The fall in imports is



TABLE 4.10  
MANUFACTURED TOBACCO  
IMPORT SUBSTITUTION 1957-1966

Year	Production 1,000 lbs.	Imports 1,000 lbs.	Total Supply 1,000 lbs.	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Exports 1,000 lbs.	Domestic Consumption 1,000 lbs.
1957	1,705	1,278	2,983	57.2	42.8	29	2,954
1958	2,237	1,119	4,356	51.1	48.9	39	4,317
1959	2,150	563	2,713	79.3	20.7	38	2,675
1960	2,185	985	3,170	68.9	31.1	7	3,163
1961	2,326	1,205	3,531	66.9	33.1	6	3,525
1962	2,250	756	3,006	74.9	25.1	4	3,002
1963	2,151	684	2,835	75.9	24.1	3	2,832
1964	2,160	587	2,747	78.6	21.4	-	2,747
1965	2,179	739	2,918	74.6	25.4	90	2,828
1966	2,284	686	2,970	76.0	24.0	-	2,970

Source: Monthly Statistical Bulletin for the States of Malaya, September 1967 p.86



due more to increase in import duty than to import substitution. There is in fact very little import substitution in this commodity. It could also be due to a shift in taste.

## Conclusion

### CHAPTER V

The analysis in this chapter reveals that the process of import substitution in beverages and tobacco products has been very rapid and substantial during the period 1957 - 1966. By the end of the period studied, West Malaysia has achieved a very high degree of self-sufficiency in both these commodities. Progress in import substitution was greatest in the case of aerated water, cordials and cigarettes. The analysis also shows that both the beverages and tobacco products manufacturing industry are essentially domestic-market-oriented industries. While consumption liberalization was negative for beverages as a whole, it was positive and substantial for tobacco products as a whole, although it has remained unchanged for cigarettes. For both category of industry, exports had not been significant mainly because most countries have their own beverages and tobacco products industries. high cost of investment required for their manufacture and partly to the small size of the domestic market. Nevertheless, the establishment of basic chemical industries is essential for broadening the base of industrialization in West Malaysia.

## Refined Coconut Oil

### Import Substitution 1959-66

That import substitution had reached a very advanced stage in this commodity is evidenced by the fact that by 1959 domestic production accounted for 90.4 per cent of the total supply of refined coconut oil in West Malaysia. Because of this large base, the extent of import substitution during the period 1959-66 has not been substantial although, in absolute terms, production has shown a large increase. Table 5.1 shows that production has increased from \$10.9 million in 1959 to \$22.2 million in 1966. But the value of imports increased only slightly from \$1.1 million in 1959 to \$1.2 million in 1966. Throughout the period covered, imports remained at about the same level though domestic consumption has since doubled. This means that the increase in consumption has been met almost entirely by local production. Consequently, the share of imports in total supply declined further from the already low level of 9.6 per cent in 1959 to 5.3 per cent in 1966. It is an indication that the time has come for the industry to reorientate its production to the export market as well if excess capacity were to be avoided in the future.

### Establishments and Employment

Table 5.2 shows that the number of coconut oil refineries doubled and the number of workers employed increased by 25 per cent over the period 1959 - 1966. On the average each refinery employs about 9 workers, an indication of the small size of the establishment rather than the capital-intensiveness of the method of production, although relatively modern plant and equipment are used in the production process.



## CHAPTER V

### IMPORT SUBSTITUTION IN THE CHEMICAL PRODUCTS MANUFACTURING INDUSTRY

#### Introduction

The chemical products manufacturing industry is a relatively new industry in West Malaysia. The present stage of manufacturing is confined to the compounding of various chemical elements to produce a variety of chemical products. There are as yet no establishment which manufactures basic chemicals such as soda ash and sulphuric acid in West Malaysia. This is due partly to the initial high cost of investment required for their manufacture and partly to the small size of the domestic market. Nevertheless, the establishment of basic chemical industries is essential for broadening the base of industrialization in West Malaysia.

#### Refined Coconut Oil

##### Import Substitution 1959-66

That import substitution has reached a very advanced stage in this commodity is evidenced by the fact that by 1959 domestic production accounted for 90.4 per cent of the total supply of refined coconut oil in West Malaysia. Because of this large base, the extent of import substitution during the period 1959-66 has not been substantial although, in absolute terms, production has shown a large increase. Table 5.1 shows that production has increased from \$10.9 million in 1959 to \$22.2 million in 1966. But the value of imports increased only slightly from \$1.1 million in 1959 to \$1.2 million in 1966. Throughout the period covered, imports remained at about the same level though domestic consumption has almost doubled. This means that the increase in consumption has been met almost entirely by local production. Consequently, the share of imports in total supply declined further from the already low level of 9.6 per cent in 1959 to 5.3 per cent in 1966. It is an indication that the time has come for the industry to reorientate its production to the export market as well if excess capacity were to be avoided in the future.

##### Establishments and Employment

Table 5.2 shows that the number of coconut oil refineries doubled and the number of workers employed increased by 25 per cent over the period 1959 - 1966. On the average each refinery employs about 9 workers, an indication of the small size of the establishment rather than the capital-intensiveness of the method of production, although relatively modern plant and equipment are used in the production process.



TABLE 5.1  
REFINED COCONUT OIL  
IMPORT SUBSTITUTION 1959-1966

Year	Production \$1,000	Imports \$1,000	Total Supply \$1,000	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Value - Added by Production \$1,000	Exports \$1,000	Domestic Consumption \$1,000
1959	10,878	1,158	12,037	90.4	9.6	572	231	11,806
1960	11,547	729	12,276	94.0	6.0	749	45	12,231
1961	12,296	1,115	13,411	91.7	8.3	1,077	320	13,091
1962	14,046	1,352	15,398	91.2	8.8	878	104	14,294
1963	20,185	1,305	21,490	93.9	6.1	1,513	76	21,414
1964	23,778	1,395	25,173	94.4	5.6	1,151	679	24,150
1965	24,604	1,398	25,992	94.7	5.3	1,363	122	25,870
1966	22,163	1,238	23,401	94.7	5.3	1,090	410	22,991

Source: Compiled from "Survey of Manufacturing Industries, West Malaysia" and "External Trade Statistics, West Malaysia".



TABLE 5.2

## REFINED COCONUT OIL

ESTABLISHMENT AND EMPLOYMENT, 1959, 1966

Year	Number of Establishments					Number of Employees					Average Number of Employees per Establishment				
1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
10					142						14				
20					178						9				

Source: Survey of Manufacturing Industries, 1959, 1966 (Table 1).

Raw Materials

The major raw materials used by coconut oil refineries are coconut oil, groundnut oil, palm oil, edible tallow and cottonseed oil. Except for edible tallow and cottonseed oil, all the other raw materials are produced in significant quantities in the country. This means not only foreign exchange savings but also more value-added can be retained in the country.

Marketing

This is indicated by the fall in the relative share of imports in total supply from a relatively high level of 85.9 per cent in 1959 to a low level. If Table 5.1 is examined again it can be seen that almost all the production of refined coconut oil in West Malaysia are sold and consumed domestically. Although there has been some exports to overseas market, the amount exported was negligible. As a percentage of production exports barely exceed 3 per cent throughout the 1959 - 1966 period. This is because increased production has been met by increased domestic consumption so that very little was left for exports. Note also that the uncertainties in the exports market has resulted in the fluctuations in the value of exports.

Consumption Liberalization

We noted in the preceding section that domestic consumption has absorbed almost the entire output of refined coconut oil. This is due mainly to increase in the per capita consumption of the commodity. Table 5.3 shows that the per capita consumption has increased from \$1.7 in 1959 to \$2.7 in 1966. The average annual per capita consumption for the period as a whole was \$2.4 compared with \$1.7 in 1959, thus indicating that consumption has been liberalized.



TABLE 5.3

REFINED COCONUT OIL  
CONSUMPTION LIBERALIZATION 1959-66

Consumption Per Capita (\$)								Average Annual Consumption Per Capita (\$)
1959	1960	1961	1962	1963	1964	1965	1966	1959-66
1.7	1.7	1.8	1.9	2.8	3.0	3.2	2.7	2.4

Source: Computed by author from the data given in Table 5.1.

Paints, Varnishes and Lacquers

Import Substitution 1959-66

Table 5.4 shows that in aggregate value terms production of paints, varnishes and lacquers has doubled while imports declined by about 18 per cent during the period 1959-66. The gross value of output increased from \$1.5 million in 1959 to \$19.7 million in 1966. Imports on the other hand show a decline from \$9.2 million in 1959 to \$7.5 million in 1966. Though imports had not declined as rapidly as production has increased, substantial import substitution has taken place in this commodity. This is indicated by the fall in the relative share of imports in total supply from a relatively high level of 85.9 per cent in 1959 to a low level of 27.6 per cent in 1966.

The main reason for the rapid increase in production is the increase in the demand for paints and varnishes as a result of increasing housing and construction activities in West Malaysia. The small base in the earlier period also contribute to the rapid rate of substitution as modern plants were not established in the country until after 1959. The decline in the value of imports was due mainly to replacement by local products, and to a lesser extent an increase in the rate of import duties. However, in view of the fact that local manufacturers do not produce the whole range of the commodities consumed in the country, West Malaysia has to depend on imports for the supplies of those range of products which she does not produce at home mainly because the quantities consumed of these products are too small to warrant their production domestically.

Raw Materials

The industry depends on import for the supplies of all of its raw materials such as resins, pigments, solvents, turpentine and white cement. There are no import duties on these materials except spirits of turpentine and dipentine and white spirit. There are as yet no local production of these raw materials. This is because the materials required



TABLE 5.4

## PAINTS, VARNISHES AND LACQUERS

IMPORT SUBSTITUTION 1959-1966

Year	Production \$1,000	Imports \$1,000	Total Supply \$1,000	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Value - Added by Production \$1,000	Exports \$1,000	Domestic Consumption \$1,000
1959	1,511	9,239	10,750	14.1	85.9	1,151	841	9,909
1960	4,038	9,692	13,730	29.4	70.6	1,696	1,616	12,114
1961	7,125	9,411	16,536	43.1	56.9	2,453	2,076	14,460
1962	9,884	7,923	17,807	55.5	44.5	3,991	2,096	15,711
1963	12,589	7,698	20,287	62.1	37.9	4,647	3,894	16,403
1964	13,880	7,376	21,256	65.3	34.7	5,329	4,053	17,203
1965	15,595	7,645	23,240	67.1	32.9	5,957	4,828	18,412
1966	19,763	7,557	27,320	72.3	27.7	7,471	8,014	19,306

Source: Compiled from "Survey of Manufacturing Industries, West Malaysia" and "External Trade Statistics, West Malaysia".



for their manufacture are lacking or absent and, secondly, the demand for them is too small to warrant their production on an economical and profitable scale. shown that aggregate domestic consumption of paints, varnishes and lacquers has increased over the period 1959 - 1966.

**Marketing** the consumption per capita has also shown increases over the same period. If we compare the average annual per capita consumption with that A large proportion of the total production of paints, varnishes and lacquers are consumed domestically. Note that domestic consumption of these commodities has more than doubled over the period 1959-1966 mainly as a result of the housing and construction boom.

**Imports** Competition from foreign manufacturers is one of the major problems confronting local manufacturers. A large quantity of "bazaar" paints (cheap quality paints) are being imported annually into West Malaysia from neighbouring countries particularly Singapore, Hong Kong and India.<sup>1</sup> Because of greater volume of production and government subsidies, manufacturers in these countries are able to export their products at relatively low prices into West Malaysia and hence weaken the competitive position of local producers. Unless greater protection is given to local products, excess capacity may result since the combined capacity of the 6 paint factories in the country are sufficiently equipped to meet the entire domestic requirements.

Increased production has also enabled local manufacturers to export to overseas market. It must be admitted, however, that the export figures given in Table 5.4 cannot be taken as true indicators of export performance since they include re-exports. Nevertheless, exports in recent years had shown an increasing trend particularly to Singapore, East Malaysia and Thailand.

TABLE 5.5

PAINTS, VARNISHES AND LACQUERS

CONSUMPTION LIBERALIZATION, 1959-66

Raw Material Consumption Per Capita (\$)								Average Annual Consumption Per Capita (\$)
1959	1960	1961	1962	1963	1964	1965	1966	1959-66
1.4	1.7	1.9	2.1	2.1	2.2	2.3	2.3	2.0

Source: Computed by author from the data given in Table 5.4

<sup>1</sup>For further information regarding this matter, see the "Oral and Written Evidences on Paints" published by the Tariff Advisory Board.



## Consumption Liberalization

It was shown that aggregate domestic consumption of paints, varnishes and lacquers has increased over the period 1959 - 1966. Similarly the consumption per capita has also shown increases over the same period. If we compare the average annual per capita consumption with that in 1959, it will be seen that consumption has been liberalized, made possible by the lowering of quality as well as prices (See Table 5.5)

## Soaps, Washing and Cleaning Compounds

### Import Substitution 1962-66

Import substitution in this group of products has already reached an advanced stage by 1962 and continued progress was made during the period 1962-1966. Gross value of production increased rapidly from \$24.6 million 1962 to \$44.9 million 1966. The value of imports over the same period declined from \$7.3 million in 1962 to \$5.4 million in 1966. This has resulted in the import coefficient from 23.1 per cent to 10.8 /a fall in per cent respectively. There is therefore clear evidence of import substitution but the rate of substitution was slow owing to the large base. This substitution is due more to increased local production than to decreases in imports in view of the fact that the former increased by 84 per cent over the period covered whereas the latter decreased by only 26 per cent. (See Table 5.6)

## Establishments and Employment

Table 5.7 shows that both the number of establishments and the number of person employed has shown a decline over the period covered. The number of establishments dropped from 60 in 1962 to 45 in 1966, while the total work force decreased from 1,055 to 1,049. The average number of employees per establishment indicates that the majority of them are small firms, employing on the average 23 employees each. It is not surprising, therefore, that the turnover of establishments during the period was fairly large considering the ease with which they can be established or liquidated.

## Raw Materials

The major raw materials used by the industry include coconut oil, tallow and chemicals. Coconut oil are obtained from domestic sources while tallow and chemicals have to be imported from overseas. The trend is towards substituting local raw materials like palm oil for imported tallow as well as certain chemicals which are now being manufactured locally.

## Marketing

Like many of the commodities analysed earlier the soap, washing and cleaning compounds industry is oriented towards the home market. But recent export figures show that a substantial proportion of total production has been exported though we must take precaution in interpreting



TABLE 5.6

## SOAPS, WASHING AND CLEANING COMPOUNDS

## IMPORT SUBSTITUTION 1962-1966

Year	Production \$1,000	Imports \$1,000	Total Supply \$1,000	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Value - Added by Production \$1,000	Exports \$1,000	Domestic Consumption \$1,000
1962	24,462	7,352	31,814	76.9	23.1	10,668	5,441	26,373
1963	31,220	4,605	35,825	87.2	12.8	13,432	11,693	24,132
1964	45,205	4,055	49,260	91.7	8.3	20,509	19,245	30,015
1965	41,624	4,845	46,469	89.5	10.5	16,966	17,803	28,664
1966	44,965	5,435	50,400	89.2	10.8	20,011	18,743	37,657

Source: Compiled from "Survey of Manufacturing Industries, West Malaysia" and "External Trade Statistics, West Malaysia".



these figures as they include re-exports. Nevertheless exports is on the upward trend mainly as a result of export promotion. Regrettably the exports market is limited to only a few countries particularly East Malaysia.

TABLE 5.7

SOAPS, WASHING AND CLEANING COMPOUNDS  
ESTABLISHMENT AND EMPLOYMENT 1962, 1966

Year	Number of Establishments	Number of Employees	Average Number of Employees per Establishment
1962	60	1,055	17.5
1966	45	1,049	23.0

Source: Survey of Manufacturing Industries, 1962, 1966  
(Table 1).

Consumption Liberalization

Table 5.8 shows that the average annual per capita consumption of soaps, washing and cleaning compounds has remained unchanged over that in 1962, thus indicating that consumption liberalization has not taken place. The main reason for this is the rapid rate of expansion of exports towards the end of the period.

TABLE 5.8

SOAPS, WASHING AND CLEANING COMPOUNDS  
CONSUMPTION LIBERALIZATION 1962-66

Consumption Per Capita (\$)					Average Annual Consumption Per Capita (\$)
1962	1963	1964	1965	1966	1962-66
3.5	3.1	3.8	3.5	3.8	3.5

Source: Computed by author from data given in Table 5.6.



TABLE 5.9

## PERFUMES, COSMETICS AND TOILET PREPARATIONS

## IMPORT SUBSTITUTION 1959-1966

Year	Production \$1,000	Imports \$1,000	Total Supply \$1,000	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Value - Added by Production \$1,000	Exports \$1,000	Domestic Consumption \$1,000
1959	2,499	19,066	21,565	11.6	88.4	762	5,132	16,433
1960	3,394	20,549	23,943	14.2	85.8	1,864	4,932	19,011
1961	8,462	20,668	29,140	29.0	71.0	4,819	5,743	21,397
1962	9,533	7,197	16,730	57.0	43.0	6,023	3,105	13,565
1963	14,624	8,497	23,121	63.2	36.8	7,755	5,080	18,041
1964	17,080	7,567	24,647	69.3	30.7	10,960	5,125	19,522
1965	18,859	8,061	26,920	70.1	29.9	11,235	6,555	20,365
1966	15,853	8,853	24,706	64.2	35.8	8,701	3,954	20,752

Source: Compiled from "Survey of Manufacturing Industries, West Malaysia" and "External Trade Statistics, West Malaysia".



## Perfumes, Cosmetics and Toilet Preparations

### Import Substitution 1959-66

The progress of import substitution in this group of industry during the period is shown in Table 5.9. While the gross value of production has increased from \$2.5 million in 1959 to \$15.8 million 1966, that of imports decreased from \$19 million to \$8.8 million respectively. The combined effect of an increase in domestic production on the one hand and the decrease in imports on the other hand has resulted in a decrease in the relative share of imports in total supply from 88.4 per cent in 1959 to 35.8 per cent in 1966. This is a clear evidence of import substitution, made possible by a relatively high rate of increase of local production and, to a lesser extent, by the relatively high rate of import duties particularly on imported perfumes and cosmetics.

### Establishments and Employment

Table 5.10 shows that there was a large increase in the number of establishments from 13 in 1959 to 39 in 1966. Total employment also increased from 126 to 447 for the respective periods. With few exceptions these establishments are small size firms employing on the average about 10 to 11 employees each. At present there is only one "pioneer" firm<sup>2</sup> in this industry while the rest are non-pioneer firms and in most cases wholly locally owned and operated.

TABLE 5.10

#### PERFUMES, COSMETICS AND TOILET PREPARATIONS

#### ESTABLISHMENT AND EMPLOYMENT 1959, 1966

Year	Number of Establishments	Number of Employees	Average Number of Employees per Establishment
1959	13	126	9.5
1966	39	447	11.5

Source: Survey of Manufacturing Industries 1959, 1966, (Table 1).

### Raw Materials

The major items of raw materials used by this industry are talcum powder, vaseline, essence, perfume oil, white oil and glycerine, most of which are imported from abroad. With the exception of perfumery

<sup>2</sup>This firm is Naarden (M) Ltd.



oil and essences there are as yet no local substitutes for these imported raw materials.

### Marketing

The bulk of domestic production of perfumes, cosmetics and toilet preparations are sold on the home market. Though production has been able to meet domestic demand, the range of products is however limited so that the impact of import substitution on the aggregate imports is limited to this extent. Because of the relatively high import duties on imported perfumes and cosmetics foreign competition does not constitute a serious problem to local manufacturers though brand consciousness is still a thorny problem to be reckoned with.

The industry has also been seeking export markets for its products. Although the export figures shown in Table 5.9 cannot be taken as true indicators since they include re-exports, these export values nevertheless does indicate some general trends. The estimated percentage of exports to total production during the period covered was less than 10 per cent. The level of exports also remained almost at the same level throughout the period. The main reasons that account for the relatively low level of exports are inferior quality of local products and the high cost of production. Furthermore very little efforts were made to step up the promotional campaigns beyond the national boundary.

### Consumption Liberalization

As shown in Table 5.11 the average annual per capita consumption of perfumes, cosmetics and toilet preparations was slightly higher than the per capita consumption in 1959, indicating that consumption has been liberalized to a very small extent. This may be due to the fact that domestic production still falls short of domestic requirements and that there is still scope for further import substitution in the foreseeable future.

TABLE 5.11

#### PERFUMES, COSMETICS AND TOILET PREPARATIONS

#### CONSUMPTION LIBERALIZATION, 1959-66

Consumption Per Capita (\$)								Average Annual Consumption Per Capita (\$)
1959	1960	1961	1962	1963	1964	1965	1966	1959-66
1.4	1.7	1.9	2.1	2.1	2.2	2.3	2.3	2.0

Source: Computed by author from data given in Table 5.9



TABLE 5.12

## MEDICINAL AND PHARMACEUTICAL PREPARATIONS

IMPORT SUBSTITUTION 1959-1966

Year	Production \$1,000	Imports \$1,000	Total Supply \$1,000	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Value - Added by Production \$1,000	Exports \$1,000	Domestic Consumption \$1,000
1959	1,728	18,633	20,361	8.5	91.5	540	1,739	18,622
1960	3,357	22,449	25,806	13.0	87.0	1,687	3,449	22,357
1961	4,278	24,346	28,624	14.9	85.1	2,197	3,818	24,806
1962	4,637	24,345	28,982	16.0	84.0	3,339	3,987	24,995
1963	7,159	25,337	32,496	22.0	78.0	3,897	5,418	27,078
1964	8,805	26,813	35,718	22.2	77.8	4,207	6,088	29,630
1965	10,188	32,794	42,984	23.7	76.3	5,649	7,684	35,300
1966	10,020	38,987	49,007	20.5	79.5	5,134	6,006	43,001

Source: Compiled from "Survey of Manufacturing Industries, West Malaysia" and "External Trade Statistics, West Malaysia".



## Medicinal and Pharmaceutical Preparations

### Import Substitution 1959-66

In absolute terms both domestic production and imports of medicinal and pharmaceutical preparations have shown increases over the period 1959 - 1966, with the former increasing at a faster rate than the latter. Table 5.12 shows that gross value of output increased rapidly from \$1.7 million in 1959 to \$10 million in 1966 while imports increased from \$18.6 million to \$38.9 million over the same period. While the increase in production was brought about by the establishment of pioneer firms after 1959, the increase in aggregate imports merely reflects the increasing spread and use of modern western medicine and health services both in the urban and rural areas in West Malaysia.

The increase in imports does not indicate negative import substitution. On the contrary the relative share of imports in total supply declined from 91.5 per cent in 1959 to 79.5 per cent in 1966, thus indicating import substitution during this period. Though import substitution has taken place in this group of commodities production can only meet 1/5 of the total domestic requirements, which means that there is still a wide margin for further substitution in this commodity.

### Establishments and Employment

As shown in Table 5.13 there was a large increase in the number of establishment in the medicinal and pharmaceutical preparations industry from 16 in 1959 to 61 in 1966. The corresponding figures for employment increased from 249 to 572. Note that despite the large increase in the number of establishments the number of persons employed had not increased very much. This is because most of these establishments are small firms employing on the average 9 - 15 person each.

TABLE 5.13

#### MEDICINAL AND PHARMACEUTICAL PREPARATIONS

#### ESTABLISHMENT AND EMPLOYMENT, 1959, 1966

Year	Number of Establishments	Number of Employees	Average Number of Employees per Establishment
1959	16	249	15
1966	61	272	9

Source: Survey of Manufacturing Industries 1959, 1966,

(Table 1). Over the period, imports declined from \$2.6 million in 1959 to \$0.4 million in 1966. Consequently, the share of imports in total supply



## Marketing

As indicated in Table 5.12 over 90 per cent of the total domestic production are consumed within the domestic market. Despite rapid increase in output production can only meet about 20 per cent of total domestic needs partly because output has been confined to a very limited range of medicinal and pharmaceutical preparations and partly because domestic consumption increases at a faster rate than production. Exports on the other hand had not been very significant throughout the period covered, amounting to about 5 per cent of production. Nevertheless, the export figures (including re-exports) shown in Table 5.12 indicate that export is on the upward trend and may well continue to be so in the foreseeable future in view of the export incentives provisions recently introduced by the government.

## Consumption Liberalization

It was noted earlier that domestic consumption increases at a very rapid rate over the period 1959-66. The per capita consumption too shows an increase over the base period. It increased from \$2.7 in 1959 to \$5.1 in 1966. For the period as a whole the average annual consumption per capita was \$3.7. Hence we can conclude that consumption liberalization has taken place during the period covered. This is due mainly to the rising standard of living particularly in the urban areas and the increasing spread and use of modern western medicine particularly in the rural areas.

TABLE 5.14

### MEDICINAL AND PHARMACEUTICAL PREPARATIONS

#### CONSUMPTION LIBERALIZATION, 1959-66

Consumption Per Capita (\$)								Average Annual Consumption Per Capita (\$)
1959	1960	1961	1962	1963	1964	1965	1966	1959-66
2.7	3.2	3.4	3.3	3.5	3.7	4.3	5.1	3.7

Source: Computed by author from data given in Table 5.12.

## Matches

### Import Substitution 1959-66

The extent of import substitution in matches during the period 1959-66 is shown in Table 5.15. It shows that while production has increased from \$2.7 million in 1959 to \$4 million in 1966, an increase of 47 per cent over the period, imports declined from \$2.6 million in 1959 to \$0.4 million in 1966. Consequently, the share of imports in total supply



TABLE 5.15

## MATCHES

## IMPORT SUBSTITUTION 1959-1966

Year	Production \$1,000	Imports \$1,000	Total Supply \$1,000	Production Coefficient (Percentage)	Import Coefficient (Percentage)	Value - Added by Production \$1,000	Exports \$1,000	Domestic Consumption \$1,000
1959	2,752	2,646	5,398	51.0	49.0	1,729	-	-
1960	2,704	1,223	3,927	68.9	31.1	1,661	12	3,927
1961	2,818	853	3,671	76.7	23.3	1,636	19	3,662
1962	3,015	713	3,728	80.9	19.1	1,811	54	3,674
1963	2,934	542	3,476	87.3	12.7	1,736	30	3,446
1964	3,801	410	4,211	90.3	9.7	2,149	27	4,184
1965	4,136	487	4,623	89.5	10.5	2,318	29	4,594
1966	4,044	431	4,475	90.4	9.6	2,467	27	4,448

Source: Compiled from "Survey of Manufacturing Industries, West Malaysia" and "External Trade Statistics, West Malaysia" p. 1-3.



dropped from 49 per cent in 1959 to only 9.6 per cent in 1966. This is a strong indication of import substitution. Note that for the latter period 1964 - 1966 there was little change in the value of imports although production has increased. This could be an indication that import substitution has reached its limit despite the fact that aggregate imports still account for 9.6 per cent of the total supply.

#### Establishments and Employment

As shown in Table 5.16 there has been no change in the number of establishments in the match industry since 1959 while employment has decreased from 543 in 1959 to 534 in 1966. This is an indication that the 3 existing firms are sufficiently equipped to meet the entire domestic requirements for matches. The average number of workers per establishment seems to suggest that the industry is labour-intensive. This is not so because the plants are relatively large plants and thus able to employ a relatively large number of workers. In actual fact the industry is not particularly labour-intensive in view of the fact that the match factories are fully automated and only the final packing process is done by hand. This fact accounts partly for the decline in the average number of workers per establishment from 181 in 1959 to 178 in 1966 although the number of establishments remained unchanged.

TABLE 5.16

#### MATCHES

#### ESTABLISHMENT AND EMPLOYMENT, 1959, 1966

Year	Number of Establishments	Number of Employees	Average Number of Employees per Establishment
1959	3	543	181
1966	3	534	178

Source: Survey of Manufacturing Industries, West Malaysia 1959, 1966 (Table 1).

#### Raw Materials

Most of the raw materials such as timber, chemicals, match sticks, match splints, paper are imported from abroad. Although timber are available in West Malaysia, the extent of substitution of local timber has been negligible mainly because of their unsuitability for the manufacture of match splints for which the industry continued to import from overseas. It is also interesting to note that even the labels for



the match boxes have to be imported.<sup>3</sup>

### Marketing

Like all the other commodities analysed earlier, almost all the total production of matches are sold and consumed within the home market. One of the firms predicted that the demand for matches in West Malaysia may drop as the social services such as electricity become available in the rural areas. Figures in Table 5.15 seems to indicate that the match industry has reached its maturity as early as 1964. The natural development would be for the industry to re-orientate its production for exports as well. Unfortunately efforts made to export matches to overseas market met with little success. This is because the manufacture of matches is comparatively simple, and as a result, most countries in the world have their own match industry which are usually protected from foreign competition. At present the export market of local manufacturers are confined mainly to East Malaysia. But even here West Malaysian manufacturers faced stiff competition from foreign manufacturers particularly Sweden, Hong Kong and the Republic of China.<sup>4</sup> This is because the import duties in East Malaysia has not been brought up to the tariff level of West Malaysia. As it is import duties on matches in East Malaysia are lower than those prevailing in West Malaysia.

### Consumption Liberalization

Though in absolute terms aggregate domestic consumption of matches in West Malaysia has increased over the period 1959 - 1966, consumption per capita has shown a decline over the same period (see Table 5.17). The average annual consumption per capita of \$0.5 is slightly smaller than the 1960 value of \$0.6, thus indicating negative consumption liberalization. There are 3 main reasons for this. (1) The income elasticity of demand for matches is low. (2) The spread of social services particularly in rural areas. (3) The substitution of gas lighters for matches.

### Conclusion

In conclusion we can say that with the exception of refined coconut oil, all the chemical commodities analysed in this chapter reveal a distinct decline in the share of imports in total supply over the period 1959 - 1966, thus indicating import substitution. By 1966 5 out of the 6 industries studied are able to supply more than 60 per cent of the total supply of their respective products. The 3 most successful industries are refined coconut oil industry, soaps, washing and cleaning compound industry and the match industry. For each of these industries, total output accounted for about 90 per cent of total supply in 1966. However exports were disappointingly low for most of these industries.

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<sup>3</sup>For detail see "Oral and Written Evidences on Matches" published by the Tariff Advisory Board.

<sup>4</sup>Ibid



Instead we have consumption liberalization particularly in paint, refined coconut oil and medicinal and pharmaceutical products.

TABLE 5.17

MATCHES

CONSUMPTION LIBERALIZATION, 1960-66

Consumption Per Capita (\$)							Average Annual Consumption Per Capita (\$)
1960	1961	1962	1963	1964	1965	1966	1960-66
0.6	0.5	0.5	0.4	0.5	0.6	0.5	0.5

Source: Computed by author from data given in Table 5.15



local manufacturers to export to overseas market since they can supply the protected home market at reasonable profits.<sup>2</sup>

#### CHAPTER VI

#### CONCLUSION

From what has been analysed in chapters 3, 4 and 5 regarding the progress of import substitution in West Malaysia, the following observations may be made.

(1) Import substitution in West Malaysia is still in its infant stage. As in many other developing countries in the Ecafe region, it is centred chiefly on light and intermediate industries engaged primarily in the production of foodstuffs, soft drinks, vegetable oils, footwear, textiles, and catering mainly for the domestic market. This pattern of development is attributable to 2 main factors; firstly, consumer goods industry is less complicated and less capital-intensive and secondly, there is a ready market which can be reserved for domestic consumer goods industry by various protective measures.

(2) The manufacturing sector in West Malaysia is characterized by the presence of a large number of small scale establishments. Taking the manufacturing sector as a whole, average full-time employment per establishment is about 10 workers. Establishment employing under 10 full-time workers each account for about 82 per cent of the total manufacturing establishments, but contribute only 14 per cent of total net output in manufacturing. On the other hand, the larger establishments which employ more than 50 full-time workers each account for only about 4 per cent of the total number of manufacturing establishments, but contribute 60 per cent of the total net output in manufacturing.

(3) The majority of the manufacturing industries in West Malaysia are heavily oriented towards the domestic market. For these industries, exports rarely exceed 10 per cent of total production. The reason for this is 2 fold. Firstly, local manufacturers are unable to compete with their foreign counterparts in overseas markets, and secondly, there is little incentive for

<sup>1</sup>First Malaysia Plan 1966-70, p.124.



local manufacturers to export to overseas market since they can supply the protected home market at reasonable profits.<sup>2</sup>

(4) A relatively large number of the local industries in West Malaysia depends to a large extent on imports for the supplies of industrial raw materials. Perhaps the main reason for this heavy dependence is the relatively weak "linkage" effect operating in the manufacturing sector.<sup>3</sup> For one thing, the establishment of an industry does not usually result in the establishment of related industries to cater for the original industry. In other words, there is a relative absence of the inter-industry growth effects in the manufacturing sector, where one industrial activity gives rise to others in fields closely related to it.<sup>4</sup> The absence of inter-industry growth effects in the manufacturing sector in West Malaysia is in turn the result of indiscriminate establishment of isolated and unrelated industries in the country.

(5) For many of the industries analysed, import substitution has almost reached its limits so that production can increase only in accordance with further increases in population and per capita income. This is an indication that the time has come for local manufacturers to re-orientate their production away from the domestic market to the export market, that is, they should produce for export as well. So far, there has been very little effort, both on the part of local producers and the government to promote the export of locally made products.

(6) For a number of commodities analysed, the rapid expansion of output has resulted in the liberalization of consumption. This is attributable to 3 main factors:

- (i) The high degree of protection induces an excessive concentration of investment in the protected industries. Once the capacity is created (export possibilities being non-existent or unexplored) the tendency is to utilize the capacity by inducing domestic consumption in excess of "normal" absorption through intensive sales promotion. Paints and cigarettes are 2

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<sup>2</sup>The more protected the market, the greater the profits will accrue to local manufacturers.

<sup>3</sup>For more detailed discussion on the "linkage" effect, see O.A. Hirschman, The Strategy of Economic Development, New Haven, 1958, p.109-16.

<sup>4</sup>O.A. Hirschman, ibid; p.104.



good examples.

(ii) The absence of internal restrictions on the consumption of the import-substituting products with the result that the consumption of these products grow at a faster rate than for other products.

(iii) The imports of imported goods are restricted by quantitative and other restrictive measures. The result is that imported goods become relatively more expensive and consequently their consumption are reduced. In the protected import-substituting industries, however, output expands much more rapidly and as a result, prices decline relatively, thus, inducing greater consumption.

(7) There has been little control over the use of foreign brands in West Malaysia. Many of the foreign-owned subsidiaries still continue to use the same brands as when their products were imported. This has the undesirable effect of perpetuating the "prejudice" against the locally-made products in favour of the foreign brand products.<sup>5</sup> This is enhanced by the intensive advertising of these foreign brands. Furthermore, products of foreign brands (made in Malaysia) cannot, in most cases, be exported because other markets are being served by subsidiaries of the same brands in different export markets. Motor vehicles, cigarettes, tooth pastes, medicinal and pharmaceutical products are good examples.

The observations set forth above are tentative. They are consistent with the available quantitative and qualitative evidences, but these evidences are admittedly sketchy. Until better evidences are available, these observations may be accepted as guidelines only.

It seems clear from the results of the analysis that the progress of import substitution in West Malaysia is being confronted with a number of problems, particularly the small size of the domestic market, foreign competition both at home and abroad, high cost of production, brand-consciousness, shortage of industrial capital, lack of entrepreneurial and managerial know-how, shortage of trained and skilled labour. These problems had been and will continue to be the main stumbling blocks to the successful implementation of the industrialization programme in West Malaysia. The crucial question is, can these problems be overcome, and if so, to what extent? What are the likely costs involved in overcoming these problems? The answers to these questions will undoubtedly have a direct bearing on the future course of industrial development in West Malaysia.

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<sup>5</sup>It may be noted that some local manufacturers deliberately avoid putting the "Made-in-Malaysia" mark on their products for fear of consumers' prejudice against their products.



In the light of the observations made earlier, a number of suggestions may be forwarded.

### Regional Co-operation

It is generally recognised that national import substitution based on narrow domestic market cannot be sustained over/long period /a of time. This is because a relatively large market is an important prerequisite for efficient and viable industrial development. For empirical evidences have shown that the size of the market has a positive correlation with productivity.<sup>6</sup> The larger the market, the higher is the productivity. This is particularly so in intermediate and capital goods industries where higher productivity cannot be achieved unless the production units are large enough to enable them to reap the economies of scale.<sup>7</sup>

The West Malaysian market is relatively small both in terms of population and purchasing power. Efforts to enlarge the market through exports has been frustrated by the commercial policies of both developed and developing countries.<sup>8</sup> Under such conditions, it is advisable for West Malaysia to co-operate with neighbouring countries to solve her market problem. Given that the establishment of intermediate and capital goods industries in West Malaysia is necessary,<sup>9</sup> regional co-operation would enable her to set up these industries which would otherwise not be possible in view of the small domestic market. It should be noted, of course, that the market size is only one of the problems relating to the establishment of intermediate and capital goods industries. The other factors like basic raw materials, technical skills and technological know-how have to be taken into consideration as well.

### Export Promotion

Our analysis of selected industries has shown that an insignificant amount of local manufactures are being exported to overseas markets. In the final analysis, it is the export-oriented industries which provide the "growth-inducing" effect in the economy. The government should therefore take measures to encourage and promote the export of local products abroad, particularly those products for which West

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<sup>6</sup> Balassa, The Theory of Economic Integration, chapters 5 and 6.

<sup>7</sup> M.B. Chenery, "Patterns of Industrial Growth", American Economic Review, September 196, pp.624-54.

<sup>8</sup> Paul Chan, Regional Co-operation in Southeast Asia, University of Malaya, 1968, p.255.

<sup>9</sup> The value of imports of machinery and transport equipment amounted to \$500 million in 1963, \$515.9 million in 1964 and \$580.2 million in 1965. (See Table 1.1) p.3.



Malaysian producers have a comparative advantage, such as rubber footwear, textiles, wood products and foodstuffs. Export promotion can be carried out by 3 methods, namely, by providing export incentives (e.g. subsidies, exemption from income tax expenditures on promotional activities), by sending trade commissioners overseas, and by participation in international trade fairs. With respect to the first method, the government has recently passed the Investment Incentive Act which includes a range of export incentives.<sup>10</sup> But export incentives alone are not enough to enable local manufacturers to sell in the highly competitive international markets. It has to be supplemented by sending trade commissioners overseas to explore the market potentials as well as to seek out potential buyers. In this highly competitive world, one has to go out and sell instead of waiting at home for orders to flow in. It is also equally important that local manufacturers be encouraged to participate in international trade fairs so as to enable foreign buyers to see for themselves the range of products available in West Malaysia. For export promotion to be successful, local manufactured products must be competitive, both in terms of quality and price with those of foreign manufacturers. Otherwise, much of the promotional effort would be wasted. Finally, to guide the promotional efforts of exporters, a National Promotional Centre should be established.

### Joint Ventures

Joint ventures in industrial undertakings in developing countries have been an important phenomenon of the post-war period.<sup>11</sup> Empirical evidences have shown that co-operation with industrially advanced countries for the use of the country's capital, resources, skill and experience is a much more economical and ultimately a quicker way of achieving industrialization than "to go it alone". This has been the experience of countries like Mexico, Israel and Puerto Rico. West Malaysia has no special circumstances which justify it as an exception.

As far as West Malaysia is concerned, joint venture serves 3 essential purposes. In the first place, it stimulates the engagement of responsible local capital in productive enterprises; secondly, it helps to develop a nucleus of experienced managerial personnel in both the private and public sector; and thirdly, it helps to advance training of local labour and technicians. Furthermore, joint venture also helps to reduce the amount of capital outflow in the form of profit remittances which otherwise would not be possible if the industry is wholly foreign-owned. Taking these factors into consideration, the government should therefore place greater emphasis on joint ventures in future industrial undertakings, particularly between established foreign manufacturers and local businessmen. In cases where local capital are not forthcoming, the government should step in to take the place of local investors

<sup>10</sup> For details, see Appendix II

<sup>11</sup> G.M. Meier, Leading Issues in Development Economics, New York, Oxford University Press, 1964, p.159.



as it has done so in the case of the iron and steel plant at Prai, though with a market the size of West Malaysia and in view of the lack of raw materials and skilled labour, the feasibility of establishing an iron and steel mill and other heavy industries may be questionable.

### Industrial Planning

The present policy of West Malaysia with regard to industrialization is to leave a large share of investment outlay for industrial development to the initiative of the private sector, particularly private foreign enterprises. Such a policy has its advantages and disadvantages. One of the serious drawbacks is that private investors tend to place their own interest above the national interest with the result that some industries are set up which could hardly be called essential for industrial development. If present passive, unselective policy is continued, it will inevitably result in indiscriminate development and wasteful competition in a number of industries. For example, there are already in West Malaysia 6 paint firms, 3 match firms, 3 toothpaste firms, 3 sweetened condensed milk firms and 5 pharmaceutical firms, one competing with another as well as with importers for a share of the small internal market. In almost every case 1 firm can produce sufficient for the entire internal market, working on a 3-shift basis, so maximizing the productivity of expensive equipment and minimizing unit cost. Instead of this, the result is too often that each firm has considerable excess capacity, produces at a higher unit cost and dissipates much of its energy and resources in wasteful advertising.<sup>12</sup> Another drawback is the establishment of unrelated industries and the consequent absence of "linkage" effect in the economy. These defects, however, could be reduced or eliminated by means of proper planning. A plan should be drawn up, based on inter-industry relationships, so that the output of one industry becomes the input of the other industry.<sup>13</sup> In this way, a mutually-interrelated industrial complex will be established. In order that the right kind of industries are established, the plan should include a list of priority criteria for the selection of industries and products which need to be developed. This list should include the following:

- (i) industries having a large foreign exchange benefit coefficient,

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<sup>12</sup> Such a state of affairs may be attributable partly to the government's policy of providing additional employment opportunities to the rapidly growing labour force and partly to the lack of co-ordination among the various government bodies concerned with the industrialization programme. It is questionable here whether the employment problem justifies the indiscriminate development of industries without regard to the repercussions on the economy at large as a result of misallocation of scarce resources.

<sup>13</sup> Dr. Syed Waseem Ahmad, "How can we promote a more rapid industrial growth in Malaysia?" in Ekonomi, Vol. 8 December 1967 p.521.



prices. (ii) producer goods industries having the effect of reducing the import component of future development expenditure, that series could be made by them to be competitive within a specified time period. If and when necessary, this time period can be extended. (iii) industries using indigenous raw materials, such as extension. However, if the high price of local products are due to high cost of raw materials, government control would be useless. (iv) consumer goods industries meeting essential and high cost needs,

Purchase (v) industries making the largest contribution to national income per unit of investment,

Finally, it is suggested that if possible, the government or private (vi) industries which would provide basic inputs for the development, modernization and mechanization of the agricultural sector.

### Control of Capital Outflow

In West Malaysia, there is a large concentration of foreign capital in the private sector. As a result, capital outflow in the form of remittance of profits was substantial and would continue if no control is imposed on the repatriation of profits. According to E.L. Wheelwright, the net capital outflow for the period 1957-61 amounted to \$3,018 million.<sup>14</sup> He points out that there has so far been little need to import foreign capital, that the government would be better occupied in devising measures to reduce the outflow and to channel what it can tap into internal investment, some of which would be devoted to industrialisation.<sup>15</sup> While this fact is true, one wonders whether Wheelwright is aware of the adverse effect of restricting the repatriation of profits on the future capital inflow and the fact that West Malaysia needs foreign capital much more than foreign capital needs West Malaysia. What the government should endeavour to do is to encourage and induce the ploughing back of profits into productive industries by foreign investors. For example, exemption from income tax can be provided for earnings used for reinvestment purposes.

### Quality and Price Control

In view of the uncompetitiveness of local manufactured products both in terms of quality and price, it is suggested that the government should impose stricter control over the quality and price of such products when granting local producers additional protection from foreign competition. Otherwise, excessive protection would result in greater profits accruing to local producers without at the same time guaranteeing that they would improve the quality of their products or reduce their

<sup>14</sup> E.L. Wheelwright, Industrialization in Malaysia, Melbourne, 1965, p.106.

<sup>15</sup> E.L. Wheelwright, ibid., p.106.



prices. A time period should be given to local manufacturers to improve their quality and reduce their price to the level of foreign products so that serious effort would be made by them to be competitive within a specified time period. If and when necessary, this time period can be extended for those industries which can justify their applications for such an extension. However, if the high price of local products are due to high cost of production (as a result of lower output and high cost of raw materials), government control would be useless.

#### Purchase of Foreign Brands and Patents

Finally, it is suggested that if possible, the government or private business should explore the possibility of buying up rights of foreign brands or patents so that local products could be produced under national brands. Japan has done so for many of her manufactured products, and has become one of the world's largest manufacturers. Similarly the government could, after a period of time, substitute national brands for foreign brands once local citizens have mastered the techniques of production of a certain commodity. This would help reduce brand-consciousness among local consumers while at the same time enable local products to be sold in foreign markets which would otherwise not be possible if the products concerned were to be sold under established foreign brands.

#### The Future

We have seen that import substitution, though achieving considerable progress in certain commodities, has not, on the whole, attain significant results in West Malaysia. Furthermore, it has been limited to the domestic market (which is relatively small in terms of population and purchasing power) as well as to the production of consumer goods. The fact that import substitution is chosen as a means to get industrialization started does not necessarily mean that it is the best means. Although it is not possible to say, at present, whether import substitution as a vehicle for industrialization is feasible or not in West Malaysia (in view of the short period covered in the analysis), its continuation in the future is certainly questionable in view of the results achieved thus far and the numerous problems faced by the manufacturing industry. Even though industrialization may be initiated through import substitution, there still remains the problem of sustaining the industrialization momentum beyond the point of import replacement. The results of our analysis do not seem to indicate progress towards this direction. As far as the future development of industrialization in West Malaysia is concerned, it is important for the government to review and reconsider its policy of industrialization via import substitution. In this respect, the government should also consider the possibilities of inducing a gradual process of industrialization through agricultural development and the potential of industrialization through the export of manufactured products, particularly of new products. This is because industrialization via import substitution cannot be relied upon indefinitely for sustaining the rate of industrial growth in the future.



A.R. Khan:

"Import Substitution, Export Expansion and Consumption Liberalization", in The Pakistan Development Review, (Institute of Development Economics) Karachi, Vol. III No. 2, Summer 1963.

W.A. Lewis:

"The Industrialization of the British West Indies", Caribbean Economic Review, Vol. II No. 1, May 1950.

Lim Fay Noh:

"Malaysia and the Intra-Regional Trade of South-east Asia" in The Malaysian Economy in Transition, Ronald Ho and Yoo Poh Beng (Ed.) 1965.

## Books

H. Bruton:

"On the Role of Import Substitution in Development Planning", Philippine Economic Journal, 1965

Macario, Santiago:

M.D. Bryce:

Policies and Methods for Industrial Development, New York, McGraw-Hill, 1965.

J.J. Powers:

Industrial Development, New York, McGraw-Hill, 1960.

P.T. Bauer and

The Economics of Underdeveloped Countries, Cambridge University Press, London, 1959.

B.S. Yamey:

A.O. Hirschman:

The Strategy of Economic Development, New Haven, 1958.

Lim Chong Yah:

"West Malaysian External Trade, 1947-1965." Research Paper for AID/Wisconsin Conference on "Economic Inter-dependence in South-East Asia", Bangkok, January 1967.

G.M. Meier:

Leading Issues in Development Economics, New York, Oxford University Press, 1964.

H. Myint:

The Economics of Underdeveloped Countries, Hutchinson University Library, London 1965.

T.H. Silcock (ed):

Readings in Malayan Economics, Donal Moore, Singapore, 1961.

E.L. Wheelwright:

Industrialization in Malaysia, Melbourne University Press, 1965.

## Articles

H.B. Chenery:

"The Role of Industrialization in Development Programs", American Economic Review, May 1955.

## Publications

Federation of Malaya  
(Government)

"Patterns of Industrial Growth", American Economic Review, September 1960 Vol. 50, pp.624-54.

V. Kanapathy:

"Industrialization in Malaysia", U.N.B.C. Economic Review, Vol. 1, No. 2, 1965.



- A.R. Khan: "Import Substitution, Export Expansion and Consumption Liberalization", in The Pakistan Development Review, (Institute of Development Economics) Karachi, Vol. III No. 2, Summer 1963.
- W.A. Lewis: "The Industrialization of the British West Indies", Caribbean Economic Review, Vol. II No. 1, May 1950.
- Lim Tay Boh: "Malaysia and the Intra-Regional Trade of South-east Asia" in The Malaysian Economy in Transition, Ronald Ma and You Poh Seng (Ed.) 1965.
- Macario, Santiago: "Protectionism and Industrialization in Latin America", Economic Bulletin for Latin America Vol. IX No. 1, 1964.
- J.J. Power: "Import Substitution as an Industrialization Strategy, mimeographed."  
"Industrialization in Pakistan - A case of frustrated take-off", in The Pakistan Development Review, Vol. III No. 2, Summer, 1963.
- R. Prebisch: "Commercial Policy in Underdeveloped Countries", American Economic Review, May 1959.
- P.N. Rosenstein-Rodan: "Problems of Industrialization of Eastern and South-Eastern Europe" reprinted in A.N. Agarwala and S.P. Singh (ed) The Economics of Under-development, pp.245-55.
- R. Seligo and J.J. Stern: "Tariff Protection, Import Substitution and Investment Efficiency in The Pakistan Development Review Vol. 5 No. 2, 1965.
- H.W. Singer: "Problems of Industrialization of Underdeveloped Countries" in Dupriez (ed.) Economic Progress, Louvain, 1955.
- E.L. Wheelwright: "Industrialization in Malaya" in Silcock and Fisk (ed.) The Political Economy of Independent Malaya, pp.210-41.
- Syed Waseem Ahmad: "How can we promote a more rapid industrial growth in Malaysia?" in Ekonomi, Vol. 8, December 1967, p.521.

#### Publications

- Federation of Malaya: First Malaysia Plan 1966-1970, Kuala Lumpur, (Government Publications) 1960.
- Publications: "Industrialization and Economic Growth" (World Economic Survey, 1961, Part I).  
"Import Substitution and Export Diversification in MAFR Countries" (Economic Survey for Asia and the Far East, 1961).



States of Malaya Annual Statistics of External Trade, Department of Statistics, West Malaysia.

States of Malaya Statistical Bulletin (Monthly), Department of Statistics, West Malaysia.

Census of Manufacturing Industries - States of Malaya, 1959

Survey of Manufacturing Industries, States of Malaya, 1960.

Survey of Manufacturing Industries, States of Malaya, 1961.

Survey of Manufacturing Industries, States of Malaya, 1962.

Census of Manufacturing Industries, States of Malaya, 1963.

Survey of Manufacturing Industries, West Malaysia, 1964.

Survey of Manufacturing Industries, West Malaysia, 1965.

Survey of Manufacturing Industries, West Malaysia, 1966.

National Accounts of the States of Malaya, 1963-1965.

Report on the Economic Aspects of Malaysia by The International Bank for Reconstruction and Development, July 1963.

Central Bank Annual Report.

United Nations:

"Processes and Problems of Industrialization in Underdeveloped Countries", Department of Economic and Social Affairs, New York, 1955.

"Industrialization", Economic Bulletin for Asia and the Far East, Vol. IX, No. 3, December 1958.

"Industrialization and Economic Growth" (World Economic Survey, 1961, Part I).

"Import Substitution and Export Diversification in ECAFE Countries" (Economic Survey for Asia and the Far East, 1963).



APPENDIX I

LIST OF PIONEER COMPANIES IN WEST MALAYSIA  
AS AT 31st OCTOBER, 1961

Manufacture of Dairy Products

1. Premier Milk (M) Ltd.
2. Feed Specialities (M) Ltd.
3. Pacific Milk Industries (M) Ltd.

Manufacture of Prepared Animal Feeds

1. Asia Chemical Corporation Ltd.
2. Malayan Pharmaceutical Factory Ltd.
3. Sin Heng Chuan (M) Ltd.
4. Zephyr Chemical Feedstuffs Ltd.
5. Sealling Feedmills (M) Ltd.

Brewing and Malting

1. Guinness Malaysia Ltd.
2. Malayan Breweries (M) Ltd.

Manufacture of Paints, Varnishes and Lacquers

1. Colarosa (M) Ltd.
2. Federal Paints Factory Ltd.
3. I.C.I. Paints (M) Ltd.
4. P.A.R. Malayan Paintworks (P) Ltd.
5. Sison's Paints (East) Ltd.
6. The National Lacquer and Paint Products Co. (M) Ltd.

Manufacture of Soaps, Washing and Cleaning Compounds

1. Colgate Palmolive (Asia) Synthetic Detergents Co. Ltd.
2. Malayan N.S.D. Ltd.
3. Lam Soon Corporation Ltd.
4. A.B. Watson Company (Chemical) Ltd.
5. Dux Limited
6. Franco-Malayan Mfg. Co. Ltd.
7. Glaxo Allenburys (M) Ltd.
8. Malayan Pharmaceutical Factory Ltd.

Manufacture of Perfumes, Cosmetics and Toilet Preparations

1. Beecham Ltd.



2. Colgate Palmolive (P.M.) Ltd.
3. Johnson & Johnson (M) Ltd.
4. Lion Dentifrice (M) Ltd.
5. Malayan Consumer Industries (Fed.) Ltd.
6. "Kaoorden" (M) (Pty) Ltd.

#### APPENDIX I

#### Manufacture of Matches

##### LIST OF PIONEER COMPANIES IN WEST MALAYSIA

1. Kelantan Match Factory Ltd. 31st OCTOBER, 1967
2. Perak Match Factory Ltd.
3. Singapore Match & Tobacco Factory Ltd.

#### Manufacture of Dairy Products

Source: Industrial Development Division, Ministry of Commerce and

1. Premier Milk (M) Ltd.
2. Food Specialities (M) Ltd.
3. Pacific Milk Industries (M) Ltd.

#### Manufacture of Prepared Animal Feeds

1. Asia Chemical Corporation Ltd.
2. Malayan Pharmacaetical Factory Ltd.
3. Sin Heng Chan (M) Ltd.
4. Zephyr Chemical Feedstuffs Ltd.
5. Zuellig Feedmills (M) Ltd.

#### Brewing and Malting

1. Guinness Malaysia Ltd.
2. Malayan Breweries (M) Ltd.

#### Manufacture of Paints, Varnishes and Lacquers

1. Colorcem (M) Ltd.
2. Federal Paints Factory Ltd.
3. I.C.I. Paints (M) Ltd.
4. P.A.R. Malayan Paintworks (F) Ltd.
5. Sissons Paints (East) Ltd.
6. The National Lacquer and Paint Products Co. (M) Ltd.

#### Manufacture of Soaps, Washing and Cleaning Compounds

1. Colgate Palmolive (Asia) Synthetic Detergents Co. Ltd.
2. Malayan N.S.D. Ltd.
3. Lem Soon Corporation Ltd.
4. A.S. Watson Company (Chemical) Ltd.
5. Dumex Limited
6. Franco-Malayan Mfg. Co. Ltd.
7. Glaxo Allenburys (M) Ltd.
8. Malayan Pharmacaetical Factory Ltd.

#### Manufacture of Perfumes, Cosmetics and Toilet Preparations

1. Beecham Ltd.



2. Colgate Palmolive (F.E.) Ltd.
3. Johnson & Johnson (M) Ltd.
4. Lion Dentifrice (M) Ltd.
5. Malayan Consumer Industries (Fed.) Ltd.
6. "Naorden" (M) (Pty) Ltd.

#### Manufacture of Matches

1. Kelantan Match Factory Ltd.
2. Perak Match Factory Ltd.
3. Sincere Match & Tobacco Factory Ltd.

Source: Industrial Development Division, Ministry of Commerce and Industry, Malaysia.

The Investment Incentives Act, passed in March 1966 also provided a range of export incentives. The first related to deductions for certain outgoings and expenses for the promotion of exports.

Any expenses incurred by the approved company for export promotion would be allowed as a deduction.

Such expenses would include overseas advertising expenses paid to persons not resident in Malaysia, expenses attributable to free samples for customers outside Malaysia expenses incurred in conducting export market research and other related expenses.

Pioneer companies would have a special privilege as all deductions allowed and which were incurred during their tax relief period could be carried forward and the aggregate of this would be allowed as deductions in the post-tax relief period.

Another new export incentive took the form of an accelerated depreciation allowance for capital expenditure incurred in acquiring plant or equipment to modernise production techniques in existing or newly set up factories.

Only approved resident companies would be entitled to get this depreciation and to qualify for it these firms must export more than 20 per cent by value of its total production.

Exporters of primary commodities and firms enjoying pioneer status or investment tax credit would, however, not qualify.

The rate of accelerated depreciation given was 50 per cent a year and this would mean that more than 50 per cent of the initial outlay would be written off in five years.

A further incentive was the export allowance. A non-resident did not qualify and exports of primary commodities were excluded.

The allowance was related to the increase in exports, the extent of wages paid for employees whose basic wage did not exceed \$500 a month and to the amount of local materials brought for use in the manufacture of products for export.



## APPENDIX II

### INVESTMENT INCENTIVES ACT 1968 EXPORT INCENTIVES

The Investment Incentives Act, passed in March 1968 also provided a range of export incentives. The first related to deductions for certain outgoings and expenses for the promotion of exports.

Any expenses incurred by the approved company for export promotion would be allowed as a deduction.

Such expenses would include overseas advertising expenses paid to persons not resident in Malaysia, expenses attributable to free samples for customers outside Malaysia expenses incurred in conducting export market research and other related expenses.

Pioneer companies would have a special privilege as all deductions allowed and which were incurred during their tax relief period could be carried forward and the aggregate of this would be allowed as deductions in the post-tax relief period.

Another new export incentive took the form of an accelerated depreciation allowance for capital expenditure incurred in acquiring plant or equipment to modernise production techniques in existing or newly set up factories.

Only approved resident companies would be entitled to get this depreciation and to qualify for it these firms must export more than 20 per cent by value of its total production.

Exporters of primary commodities and firms enjoying pioneer status or investment tax credit would, however, not qualify.

The rate of accelerated depreciation given was 40 per cent a year and this would mean that more than 90 per cent of the initial outlay would be written off in five years.

A further incentive was the export allowance. A non-resident did not qualify and exports of primary commodities were excluded.

The allowance was related to the increase in exports, the extent of wages paid for employees whose basic wage did not exceed \$500 a month and to the amount of local materials brought for use in the manufacture of products for export.



### APPENDIX III

#### FACILITIES FOR INDUSTRIAL DEVELOPMENT

If you invest in industry in the Federation, you can take advantage of the many facilities provided by the government:-

- (1) Relief from income tax for 2 - 5 years to industries hitherto not carried on in the Federation.
- (2) Free transfer of capital and earnings within the Sterling Area and, with minimum of control, to and from countries outside the Sterling Area.
- (3) Protection of foreign investments against expropriation.
- (4) Tariff protection to deserving local industries.
- (5) Import duty exemption for machinery and in some cases of raw material to be used for manufacturing purposes.
- (6) Protection against dumping by foreign exporters.
- (7) Industrial estates providing cheap and readily available serviced sites.
- (8) Development of basic services to industry such as roads, ports, power and communication facilities.
- (9) Loan facilities for industry through the Malayan Industrial Development Finance Limited.
- (10) Productivity training for management and supervisory personnel in local industry.
- (11) Industrial research facilities through the proposed National Institute of Scientific and Industrial Research.

Source: Federal Industrial Development Authority.