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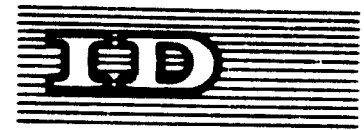
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07246



Distr.  
LIMITED

ID/WG.231/8  
10 November 1976

ENGLISH

**United Nations Industrial Development Organization**

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Expert Group Meeting on Evaluation of the Effectiveness  
of Industrial Estates in Developing Countries

Vienna, Austria, 12 - 16 December 1976

EVALUATION REPORT ON INDUSTRIAL ESTATES NO. 9  
MALAYSIA <sup>1/</sup>

by

A. Neilson \*

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\* Consultant

<sup>1/</sup> The views and opinions expressed in this paper are those of the consultant and do not necessarily reflect the views of the secretariat of UNIDO or of the Swedish International Development Authority (SIDA), under whose joint auspices the study was undertaken. This document has been reproduced without formal editing.

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SUMMARY OF OBSERVATIONS

1. The industrial estates programme has been, and is continuing to be, successful in raising the levels of employment. As a device to equalize regional development it has been less effective.
2. The programme and its associated incentives are designed to attract large and medium-scale enterprises. Very little attention has been given to the small-scale industrial sector.
  - b
3. The undoubted success of the programme cannot be attributed to any single factor. The liberal system of incentives, the provision, in the main, of prepared plots ready to receive factories, the implementation of the development policy by a series of autonomous corporations subject only to over-all control of a technical nature by the Federal Industrial Development Authority, and the economy in the design of the estates have all played an important part.
4. The Government does not regard the creation of industrial estates as an investment in real estate development, per se, from which a direct profit is to be derived.. The writer believes, however, that it does make such profit.
5. The time taken to have an estate ready to receive tenants usually is one year from the date of acquisition of the land. Once development has commenced, land can be available at three months notice.
6. Plots for factories are leased on terms varying from 60 to 69 years with option to renew for a further 39 or 30 years. On allocation of a plot the entrepreneur pays a premium based on the area, and thereafter an annual quit rent. The premium charged covers the development costs.
7. Apart from the basic infrastructure (roads, power, water telephones) no other service or amenity is provided, except that in free-trade zones perimeter fencing and lighting and security guards are supplied and maintained by the State Economic Development Corporation.

8. Except where an industrial estate is in proximity to a town an area is reserved for worker's housing.

9. Neither training nor recreational facilities are provided by the State Economic Development Corporations.

10. Voluntary trade unionism is current in Malaysia. Union membership is stronger in the old established enterprises, particularly in the rubber, sawmilling and metal trades, than among those and other establishments on industrial estates.

11. The working conditions are better, safer and healthier in factories on industrial estates than elsewhere.

12. Inter-trading on industrial estates is negligible, but reaches considerable proportions between firms in the textile and electronic fields in free-trade zones.

13. The client entrepreneurs admit that they could not obtain equivalent accommodation at the same cost outside an industrial estate. They appreciate the simplified and speedy procedures to obtain plots and the assistance given by the State Economic Development Corporations in expediting the approval of their building plans by the Town Boards concerned.

CHAPTER ONE.

THE NATIONAL BACKGROUND.

I. BASIC STATISTICS.

Area.		334,600 sq.kms.
Population (1970) <sup>1/</sup>		10,439,530
Racial groupings		
Malays (46.8%)		4,886,912
Chinese (34.1%)		3,555,379
Indians and Pakistanis (9.0%)		941,944
Land and Sea Dyaks (3.7%)		336,060
Kadazians (1.82%)		184,512
Other natives (3.2%)		337,395
Others (1.42%)		145,618
Gross Domestic Product (1971, 1970 prices) <sup>2/</sup>	MB	15,315,000,000
Gross National Product		17,146,000,000
Real gross national per capita income (1975 at 1970 prices)	MB	1,224
Average annual percentage growth of per capita income (1971 - 1975)		1.6%
Mean household incomes, per annum (1970)		
Chinese	MB	4,728
Indian		3,648
Malay		2,074
Others		9,756
Rural average		2,400
Urban average		5,136
Exports 1975 (US\$ 3,787,000,000)	MB	9,089,000,000
of which manufacturing (US\$ 797,000,000)		1,912,000,000
Imports of goods and non-factor services (1975)		9,835,000,000
Composition of imports 1974 <sup>1/</sup>		
Consumption goods (US\$ 641,000,000)	MB	1,538,000,000
Investment goods (US\$ 822,000,000)		1,973,000,000

<sup>1/</sup> "Malaysia your profit centre in Asia" Federal Industrial Development Authority, 1974. <sup>2/</sup> Third Malaysia Plan p.12

Intermediate goods	(US\$ 960,000,000)	MS	2,303,000,000
Non-retained exports	(US\$ 100,000,000)		240,000 000
<u>Labour force</u>	<sup>3/</sup>		
Total labour force (1975)			4, 225,000
Peninsular Malaysia			3,590,000
Annual average growth		3.4%	
Employment in manufacture(1970)			253,900
Employment in manufacture(1975)			362,800
Unemployment	1970	1975	
Malays	8%	6.9%	
Chinese	7.0%	7.2%	
Indians	11.0%	12.2%	
Others	3.1%	11.3%	

Rates of exchange	Through 1971	1 US dollar = 3.06 M. dollars
	1972 to 13/2/72	= 2.82 do.
	14/2/72 to 21/6/73	= 2.54 do.
	22/6/73 to date	= 2.40 do.

#### GENERAL INFORMATION

West Malaysia, generally referred to as Peninsular Malaysia, and East Malaysia are separated by the South China Sea; the shortest distance between them being approximately 620 kms. The former comprises that portion of the Malay Peninsula south of the Thai border. It corresponds to the former Federation of Malaya, but does not include the island of Singapore. It contains eleven states - the States of Johor, Negri Sembilan, Selangor, Perak, Kedah, Perlis, Pahang, Kelantan and Trengganu, and the erstwhile British Crown Colonies of Malacca (now Melaka) and Penang. The area is 131,580 sq.kms. East Malaysia has an area of 210,080 sq.kms., and occupies the entire northern coast of Borneo, with the exception of the small independent State of Brunei, which lies between them. It is made up of the State of Sarawak and Sabah (ex British North Borneo). Both Sarawak and Sabah have a common southern border with Indonesia (Kalimantan)

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3/ Third Malaysia Plan p 142



On both the eastern and western sides of the Peninsula the alluvial coastal plain gradually rises to the rain forest covered mountainous spine of the country. Most of the food crops ( rice,sago,tapioca,maize,ground-nuts,vegetables and fruit) and all the plantation crops ( rubber,oil palms, pineapples and coconuts) are grown on the plains;principally the western plain where the bulk of the tin ore is mined. The rain forests abundantly provide commercial timbers. The waters surrounding the Peninsula are rich in fish and other seafoods.

The coastal plain of East Malaysia produces rubber,palm-oil,sago, rice,pepper,hemp and cocoa beans. The forests,particularly the dry rain forests,yield large quantities of round timber and sawn logs,which in value account for one-third of the total exports of the area. Crude petroleum is extracted from off and on-shore wells at several coastal sites. There is evidence that relatively large gas fields exist beneath the Malaysian continental shelf.

#### Population

Racially the population is heterogeneous. The racial distribution is given under Basic Statistics (page 3). The urban - rural disposition is shown in Table I, below.

Table I

Race	Urban	Rural
Malays +	18.0%	32.0%
Chinese	50.7%	49.3%
Indians	37.7%	62.3%
Others	46.9%	53.1%
Total	32.0%	68.0%

+ "Malays" include Land and Sea Dyaks; collective called indigenes or the Bumiputra. Virtually all the land and Sea Dyaks and the Kadazans are confined to East Malaysia.

On the above showing, the Chinese outnumber the Malays and Indians in urban areas by about one-half million (490,350). The Malay group is numerically the greatest in the Peninsula, but only on its eastern side does

Table II

	Total h'holds (000)	Rural Poor h'holds (000)	Poverty % age	Total h'holds (000)	Urban Poor h'holds (000)	Poverty % age
Agriculture	816.2	560.2	68.3	76.7	22.2	60.5
Mining	27.0	9.3	34.4	5.4	1.8	33.3
Manufacture	66.2	28.2	42.5	84.0	19.7	23.4
Construction	15.5	6.9	44.5	19.5	5.9	30.2
Utilities	5.6	2.3	41.1	7.2	2.4	33.3
Commerce	74.1	30.8	41.6	88.2	18.4	20.9
Transport	26.1	11.7	44.8	35.2	10.7	30.4
Services	136.0	33.7	24.8	163.1	27.0	16.6
Total	1,166.7	683.7	58.6	439.3	108.1	24.6

	Total	Total	Total
Agriculture	859.2	528.4	68.3
Mining	32.4	11.1	34.3
Manufacture	105.2	48.5	32.3
Construction	75.0	12.8	36.6
Utilities	12.8	4.7	36.7
Commerce	162.3	49.2	30.3
Transport	61.3	22.4	36.5
Services	299.1	60.7	20.3
Total	1,606.0	791.8	49.3

Table IV

Gross Domestic Product at factor cost 1970 prices.

SECTOR	M\$ Millions					
	1967 @		1970 @		1975	
Agriculture, fishing, forestry	2,723	(32.5%)	3,432	(32.1%)	4,563	(29.8%)
Mining, quarrying	530	(6.3%)	613	(5.7%)	612	(4.0%)
Manufacturing	940	(11.2%)	1,307	(12.2%)	2,197	(14.4%)
Construction	343	(4.1%)	481	(4.5%)	711	(4.6%)
Utilities	204	(2.4%)	245	(2.3%)	401	(2.6%)
Wholesale and retail trade	1,233	(14.7%)	1,423	(13.3%)	2,086	(13.6%)
Banking, insurance and real estate	147	(8.7%)	836	(7.8%)	1,109	(7.2%)
Ownership of dwellings	543					
Public Adminst.	1,864	(21.7%)	794	(7.4%)	1,199	(7.8%)
Other services			874	(8.2%)	1,237	(8.1%)
Statistical discrepancy			97		102	
Gross Domestic Product	8,378		10,708		15,315	

Sources @ Dept., of Statistics quoted World Bank Report  
 @@ Third Malaysia Plan p.58

it significantly outnumber the Chinese. In Malaysia "urban" is defined as a gazetted administrative area having a population of 10,000 or more; all other areas are classified as rural.

The principal urban centres, towns with a population of more than 50,000, are listed here-in-under. 5/

<u>PENINSULA</u>		<u>EAST MALAYSIA</u>	
<u>Western side</u>		<u>Eastern side</u>	
Kuala Lumpur	491,828	Kota Bharu	55,052
George Town (Penang)	270,019	Kuala Trengganu	53,602
Ipoh	247,389		
Johor Bharu	135,036		
Kelang	113,260		
Petaling Jaya	92,633		
Seremban	79,015		
Melaka	84,000		
Alor Star	66,179		
Butterworth	61,252		
Luar	55,052		
Taiping	54,603		
Batu Pabat	53,087		

Kuala Lumpur is the Federal capital and the present State capital of Selangor. All other towns listed are State capitals except Petaling Jaya, Butterworth, Kelang, Luar, Taiping and Batu Pabat.

The urban population is expected to increase at the rate of 4.6% per annum, of which is likely to be attributable to rural - urban migration. 6/ It will be observed that the urban settlements are larger and more numerous on the west side of the Peninsula than either on the eastern side or in East Malaysia. This situation is a reflection of the relative levels of economic and social development. The skewed urban - rural and racial distributions pose difficult problems in the implementation of the declared policy of Government to secure more equitable regional development and distribution of wealth.

Social factors

(a) Poverty. 7/

Of the 1.6 million households in Peninsular Malaysia 791,800, or 49.3%, have less than the essential income (exclusive of any assistance provided by the State) to obtain the minimal nutritional and non-food requirements. As will be seen from Table II all economic sectors are affected, but by far the worst is agriculture. As the Malays constitute 56% of the rural population and 67% of them are engaged in agriculture the majority of poor households must be those of the Malays. This taken with the low level of education in the agricultural sector (see following paragraph) increase the difficulty of raising substantial numbers of these families above the poverty line.

5/ Labour Statistical Handbook (1970 census)

6/ Third Malaysia Plan n.149

7/ Third Malaysia Plan II6I

(b) Education 7/

A sample survey to determine the effect of the education of heads of households on the incidence of poverty was conducted in 1970. The result is given in Table III.

Education	Poor households		Percentages
	Rural	Urban	
None	30.4	27.0	62.7
Some primary	60.9	22.5	57.7
Completed primary	54.6	26.3	47.7
Lower secondary	25.5	12.4	19.0
Some upper secondary	3.7	6.4	7.6
Completed school certificate or higher	4.1	2.8	7.7
All educational levels	50.6	24.6	42.3

It will be noticed that as the level of education rises the incidence of poverty in the sample diminishes. There is a marked change in the percentages once the upper secondary level has been reached.

(c) Payments in kind and provident fund contributions.

In addition to daily wages employers in the manufacturing industries, in 1972, made payments in kind to the value of **RM 13.8** millions. The greater part of this was free meals (**RM 10,569,000**). Free accommodation and clothing (usually protective) accounted for **RM 2,470,000** and **RM 809,000**, respectively. The employers, in the same year, contribute to the Government Provident Fund and Social Security Scheme, including other such schemes, the sum of **RM 22** millions. A similar breakdown for 1970 is not available, but payments in kind to employees amounted to **RM 9.915,000**.

**2. INDUSTRIAL BACKGROUND.**

Prior to the early sixties Malaysia was an exporter of primary and intermediate products. Since that time there has been a continuous and progressive change to the manufacture of import substitutes and goods for export. In Table IV are shown the gross domestic product (at factor cost 1970 prices) by contributing sectors for the years 1969, 1970 and 1975. Only manufacturing, utilities and public administration increased their percentage contributions to the G.D.P. over the period.

The gross sales, values added, values of exports, numbers of establishments and paid full-time employment are given in Table V for the manufacturing sector over the years 1966 to 1970. The statistical coverage of establishments was altered in 1970 to exclude units, employing less than five workers, in certain industries.

7/ Third Malaysia Plan pp 161/2

TABLE V

Manufacturing Sector	M.				
Year	1966	1967	1968	1969	1970
Gross sales (000,000)	2,166	2,302	2,737	3,210	3,030
Gross value added (000,000)	573	644	779	992	1,182
Employment (000)	79.2	87.1	101.0	116.1	143.8
Establishments (000)	2.83	2.96	3.10	3.19	3.19
Sales/Establishments (000)	765	778	882	1,028	1,283
Gross value added per worker (100)	7.23	7.39	7.79	8.54	7.97
Employment per establishment	28.0	29.4	32.3	36.4	46.5
Net export manufactured goods (000,000)	269.2	290.1	361.1	422.0	525.2
Gross exports as % of gross sales	12.4	12.6	13.2	13.2	17.3

Source: Manufacturing Census 1970

The figures for that year, therefore, are not strictly comparable. The table shows that there has been a continuous rise in the value of manufactures and in the value of exported manufactured goods. The ratio of one to the other has remained almost constant. The period covered was before the great thrust in total exports which occurred in 1973 and 1974, rising to 10,159 million Malaysian dollars.

In Table VI are given the principal statistics for the West Malaysian manufacturing industries.

#### Labour force

The population of Malaya in its younger age, and over the years 1970/1975 there was an increase in the percentage between the ages of 15 and 64 years, with a growth rate of 4.3% in the 15 to 29 years group compared with the over-all increment of 3.2%. More labour, therefore, is becoming available at the prime working age.

The composition of the labour force of necessity reflects the racial make-up of the population. However, the rural - urban distribution and the traditional attitudes of the various races impose a pattern whereby certain races are more likely to follow a particular group of trades than others. That is not to say that any particular trade is the monopoly of any one race. In Table VII the racial distribution between the various sectors of the economy is shown for the years 1970 and 1975. 8/ The most notable feature is the increased Malaysian or Bumiputra participation in the manufacturing and construction sectors. This, no doubt, has been brought about by the Bumiputra legislation of Government which requires a 30% Malay component in factory and other labour forces, and the employment now available to them in the assembly of electronic appliances.

On a broad basis it can be said that the majority of the Malays depend for their livelihood on the agricultural and services sectors while the Chinese, or at least the urban Chinese, depend on manufacturing and commerce.

#### Entrepreneurship.

The ownership of fixed assets in the non-corporate industrial sector (manufacturing, mining and construction) by racial communities may be a rough guide to their relative success as entrepreneurs. If that be so, in 1973, the Bumiputra and the Indians each owned 2.3%, while the Chinese accounted for 92.7%. 9/ The Bumiputra holding of share capital was 2.4% against 27.2% by the Chinese and 1.1% by the Indians. As far as the Industrial Estates Programme is concerned, there are very few establishments owned by individual Malays; on some estates none. There are, however, several joint ventures involving Malaysian organizations.

It is nonsense to explain these differences, as is sometimes

8/ Third Malaysia Plan p.142

9/ Third Malaysia Plan p.6

Table VI

## Principal Statistics of West Malaysian Manufacturing Industries

OPERATION	1968			1969			1970			1971				
	No. of units	Gross value added	No. of workers	Gross value added	No. of workers	Gross value added	No. of workers	Gross value added	No. of workers	Gross value added	No. of workers			
Off-estate processing	150	530.9	72.5	698.1	143	9,532	128.6	1,553	174	19.5	13.4	771.2	142.8	1,613
Food manufacture	490	500.2	90.9	10,705	491	10,705	104.7	11,505	540	843.4	190.4	1,587.7	221.35	2,215
Beverages	70	61.2	24.8	2,162	69	2,162	41.1	2,427	60	72.1	42.9	156.3	47.1	281.9
Tobacco	114	218.6	57.1	3,864	114	3,864	79.2	3,818	67	274.7	84.6	3,821	90.5	4,084
Textile manufacture	60	72.4	19.5	4,880	68	4,880	24.4	5,414	76	97.5	28.6	139.9	25.3	1,574
Footwear and clothing	501	253.3	87.1	18,270	517	18,270	112.0	21,781	102	48.1	13.3	511.7	177.1	7,807
Wood products	-	-	-	-	-	-	-	-	130	20.5	118.2	25,744	828	1,310
Furniture and fixtures	-	-	-	-	-	-	-	-	34	44.3	31.3	2,480	149	10.4
Paper and paper products	371	104.8	52.6	9,224	384	9,224	52.3	9,061	272	143.5	77.0	28.2	12.8	2106
Printing and publishing	-	-	-	-	-	-	-	-	14	7.3	2.2	11.7	3.0	690
Leather and leather products	45	98.1	46.8	7,673	48	7,673	46.0	8,351	51	119.5	51.3	154.1	72.2	9160
Rubber products	302	205.0	76.4	4,879	306	4,879	86.7	5,586	232	275.2	107.0	775.7	145.0	6,749
Chemical products	4	174.7	40.4	3,378	4	3,378	70.2	3,322	9	173.2	41.8	202.3	46.7	573
Petroleum and coal products	203	108.3	56.6	5,970	211	5,970	69.1	6,709	172	143.0	80.0	214.7	117.4	1,062.9
Non-metallic mineral products	78	59.4	21.9	7,148	87	7,148	33.4	3,889	52	104.9	32.4	157.6	60.3	1,048.1
Basic metals	329	97.4	33.9	6,631	331	6,631	40.2	7,200	203	140.5	41.7	211.5	55.3	1,040.9
Metal products	224	34.9	15.4	7,947	240	7,947	17.5	4,322	42	21.2	72.5	130.2	43.6	782.7
Non-electrical machinery	-	-	-	-	-	-	-	-	42	21.2	72.5	130.2	43.6	782.7
Electrical machinery	106	50.3	17.4	3,473	100	3,473	70.7	4,577	75	127.2	7.5	173.2	40.7	580.5
Transport equipment	62	185.1	52.2	6,589	74	6,589	70.4	2,549	117	17.3	26.0	110.6	41.5	853.6
Miscellaneous	3,109	2,736.4	76.1	3,279.9	3,187	3,279.9	991.6	7,195	7,195	3,227.1	1,180.4	5,119.7	1,524.9	19,727.9
Total														

Table VII

Racial participation in labour force by sector

Sector	Malays		Chinese		Indians		Other	
	(000)	%	(000)	%	(000)	%	(000)	%
<u>1970</u>								
Agriculture	951.1	67.6	300.9	21.4	142.0	10.1	12.0	0.9
Mining & quarrying	21.1	24.8	56.3	66.0	7.2	8.4	0.7	0.8
Manufacturing	76.3	28.9	172.6	65.4	14.0	5.3	1.0	0.4
Construction	12.6	21.6	55.9	72.0	4.7	6.1	0.2	0.3
Utilities	8.0	4.2	3.0	18.1	5.4	22.5	0.2	1.2
Transport & storage	50.2	42.6	47.3	32.6	20.4	17.1	0.8	0.7
Commerce	82.5	23.5	229.1	65.3	37.5	10.7	1.8	0.5
Services	229.9	48.5	169.2	35.7	66.4	14.0	3.5	1.8
<u>Total</u>	<u>1436.6</u>	<u>51.4</u>	<u>1034.3</u>	<u>37.0</u>	<u>227.0</u>		<u>25.9</u>	
<u>1975</u>								
Agriculture	1032.6	67.3	317.0	20.7	170.7	11.1	13.8	0.9
Mining and quarrying	27.7	32.1	47.6	56.0	8.0	9.5	0.7	0.5
Manufacturing	102.1	33.1	217.3	51.9	24.7	6.7	1.1	0.3
Construction	28.1	28.8	50.0	60.2	10.2	10.5	0.5	0.5
Utilities	13.1	51.2	7.0	14.0	5.1	23.8	0.2	1.0
Transport & storage	76.0	47.2	60.4	37.5	23.5	14.6	1.1	0.7
Commerce	145.2	31.6	281.8	61.3	72.3	7.0	0.5	0.1
Services	302.0	50.6	217.8	36.5	68.0	11.4	9.0	1.5
<u>Total</u>	<u>1744.8</u>	<u>52.6</u>	<u>1204.0</u>	<u>36.7</u>	<u>341.7</u>	<u>10.3</u>	<u>26.6</u>	<u>0.8</u>



done, by asserting that the Chinese works very much harder than either the Malays or the Indians. If the occasion demands it all work equally hard. Certainly none of these races has a monopoly of skills. The explanation is to be found in their backgrounds. The Chinese have had a longer commercial tradition than the Malays, and in the last two or three generations moved into the high income industrial fields (tin and rubber). As a group they consequently were able to command much more capital than the Malay agriculturists. With greater wealth more avenues of education were open to the Chinese. To some extent the paternalistic policy of the former British Colonial Administration was responsible for the attitude of last generation Malays to commercial and industrial ventures. The attainment of rank in the Civil Service was held out to be the most worthwhile addition. However, a new generation has grown up with a less sense of its own identity. The result of greater educational opportunities for the Malays already is evident. Their share in professional, technical, administrative and managerial posts increased from 14.6% in 1970 to 21.1% in 1975. IO/

Government is conscious of the racial disparity in entrepreneurship, and is taking steps to reduce it by education and by making finance available on favourable terms to prospective Bumiputra entrepreneurs. Courses on management aspects are held by the National Productivity Council. The Majlis Amanah Rakyat (MARA) offers training courses and advisory services as well as loans.

Small-scale industry.

There is no accepted definition of small-scale industry as there does not appear to have been the need for one. There are no financial concessions exclusive to the small scale sector as a whole. MARA, an organization assisting only Bumiputra entrepreneurs, limits its advisory services to units of fixed capital of less than RM 100,000. Very few small-scale enterprises, in the sense that term is understood in many countries, say, twenty employees or less, are to be found on industrial estates. There are, of course a very large number scattered throughout the country. It is possible to make a reasonable estimate of their number and the employment they provide, but not of the value of their production nor the value added.

The Third Malaysia Plan gives the employment in the Manufacturing Industries of Peninsular Malaysia as 263,000 and 362,800, respectively, for the years 1970 and 1975. The "Survey of Manufacturing Industries" quotes for the years 1970 and 1972 (latest available issue) 157,602 and 206,200, respectively, for total employment. The difference between the 1970 employments is

TABLE VIII  
Principal statistics by fixed assets

Fixed assets size group	Number of establishments	Gross value of production (000)	Number of workers		Year	
			Unpaid	Paid part-time		
Under 10,000	406	150,262	1703	10,106	1970	
10,000 - 19,999	29	86,248	762	6,074		
20,000 - 49,999	129	127,818	1101	12,642		
50,000 - 99,999	302	217,304	573	11,867		
100,000 - 199,999	272	240,472	336	12,858		
200,000 - 499,999	144	453,537	178	21,200		
500,000 - 999,999	156	501,173	19	20,791		
1,000,000 - 4,999,999	24	210,620	7	75,209		
5,000,000 - 9,999,999	17	330,247	-	3,287		
10,000,000 plus	17	264,802	-	8,024		
Total	2,192	3,210,056	7,467	170,805		7,030
Under 10,000	878	154,116	1516	19,176		1972
10,000 - 19,999	745	95,550	824	6,778		
20,000 - 49,999	1662	202,852	1101	12,642		
50,000 - 99,999	460	257,256	690	12,858		
100,000 - 199,999	303	310,051	385	15,205		
200,000 - 499,999	372	536,426	232	20,791		
500,000 - 999,999	107	688,623	36	21,200		
1,000,000 - 4,999,999	25	1,478,623	9	20,791		
5,000,000 - 9,999,999	35	517,503	-	3,287		
10,000,000 plus	23	220,207	-	8,024		
Total	7,102	5,119,095	7,802	124,022	11,032	

TABLE IX  
Principal statistics by size group

Employment size group	Number of establishments	Gross value of production (000)	Average value	Number of workers during December		Year
				Unpaid	paid	
1-9	117	55,804	475	177	1,047	1970
10-19	501	13,504	269	708	2,377	
20-29	238	242,190	1,018	1,673	10,591	
30-49	437	176,253	40,520	702	8,707	
50-99	500	298,267	59,653	709	14,169	
100-199	303	593,447	1,958,482	372	25,270	
200-499	181	791,227	4,371,525	7	11,570	
500 and over	120	1,222,100	10,184,735	-	26,702	
1,000 plus	5	408,920	158,620	-	1,061	
Total	1,722	3,030,019	1,181,807	4,467	140,305	
1-4	167	12,501	75,010	222	272	1972
5-9	523	75,270	10,004	650	3,012	
10-19	236	242,150	1,590	1,073	10,830	
20-29	557	247,312	44,121	776	12,067	
30-49	562	470,760	83,120	302	20,072	
50-99	475	727,070	1,527,771	90	31,950	
100-199	256	1,057,507	4,064,473	-	77,433	
200-499	143	1,277,710	3,964,624	-	75,204	
500 and over	30	600,195	1,710,951	-	25,901	
1,000 plus	12	202,977	147,436	-	12,477	
Total	3,685	5,119,625	1,584,107	4,042	127,979	

is attributable to establishments with less than five workers in certain industries being omitted from the coverage. This means that some 106,200 were not included in 1970, and, at an average of 2.5 employees per establishment, an estimated 42,480 enterprises. There is little doubt that many of the "missing" workers are self-employed, and some, perhaps, employed only occasionally. In any case this sub-sector has little growth potential. A guess at the employment in 1975 would be 116,000 in 44,600 establishments.

In Tables VIII and IX are given the principal industrial statistics by size groups and value of fixed assets, for the years 1970 and 1972, for those enterprises included in the "Survey of Manufacturing Industries". It is interesting to note that the added value per worker in establishment size group I to I9 rose from HK 3,205 to HK 4,501 over the period under review while for the 20 and above groups, as a whole, it fell from HK 7,024 to HK 7,642.

An attempt has been made to show, in Table X, the distribution of establishments for the years 1970 and 1972. The missing enterprises and workers being considered in the "handicrafts" sub-sector.

Sub-sector	Table X			
	1970		1972	
	Units	Employment	Units	Employment
"Handicrafts"	42,480	106,200	47,770	108,300
S.S.I. (I-19 workers)	1,542	16,839	1,642	17,398
Large & medium Ind'ry	1,650	140,853	2,023	188,729
<b>Total</b>	<b>45,672</b>	<b>263,892</b>	<b>46,965</b>	<b>314,427</b>

The small-scale industrial establishments, at present, are accommodated mainly in shop-houses in urban areas, or in temporary buildings along the main roads leaving the towns. There are, of course, exceptions, but bad housekeeping, overcrowding and lack of sanitary facilities are commonplace in shop-house premises. The same, to a greater extent, is evident in the temporary buildings; some of them scarcely proof against wind and rain. In both cases much of the work is carried on outside the building; thereby creating a nuisance and obstruction to traffic in the towns, and degrading the environment in the rural and semi-rural areas.

In some towns the municipality has zoned specific areas for industrial use. The small-scale establishments that previously occupied premises in residential and commercial districts were compelled to move to the industrial zone. In a number of instances the new accommodation was provided by private developers who constructed terraced worksheds (c.20ft., x 20ft.) to lease.

The writer has been unable to trace any association of workers engaged in a particular trade, other than trade unions. There are numerous associations among the Chinese, but these are

and a few millions. There is a large number of employers' associations, only a few retailers, and a few manufacturers' organizations.

CHAPTER TWO

INDUSTRIAL ESTATE

Historical

In 1952, work was commenced at Petaling Jaya, some 15 miles from Kuala Lumpur, on the construction of a resettlement area for squatters then occupying state land in and around the capital. Almost as an afterthought, 300 acres were set aside for industry, which, it was hoped, would provide employment to those relocated. The settlement was administered by the District Officer. Few industrial establishments were attracted. By the end of 1955 barely six acres had been sold. In 1954, the administration was transferred to a new body - the Petaling Jaya Development Authority, later the Petaling Jaya Development Corporation - the main task of which was to promote industry in the area. In 1957 the Federal Government initiated its "Incentives to Industry" policy which had the desired effect of encouraging industrialists to build their premises at Petaling Jaya. The 300 acres reserved for industry proved to be inadequate, and an additional 400 acres were allocated. By the end of 1966, there were 264 factories (43 of which were pioneer industries) providing about 10,000 jobs. Apart from approximately 70 acres of worked out mining land that is now being reclaimed for factory sites and low-cost housing, there is no more land available.

The endeavours of the Corporation had been so successful that the Selangor Government decided to widen the Corporation's authority to cover the entire State. The Corporation was reconstituted as the Selangor Economic Development Corporation. This organization was the forerunner of Economic Development Corporations in other States. There are now twelve such bodies.

Petaling Jaya, although it has several weaknesses in design, largely on account of the original planning being piecemeal, served to some extent as a pattern for other industrial estates and free-trade zones. Three important principles emerged - the executive authority should be an autonomous organization responsible for construction, leasing and administration; in the main, only prepared plots with the basic infrastructure be made available; and that land be reserved for housing, and the units be built to accommodate the work force as it developed.

Government policy

The Federal Government for some time has considered the rapid expansion of the manufacturing industries to be essential for the reduction of disparity in regional development, and for the more equitable distribution of incomes. It, therefore, embarked on a policy of industrial decentralization and development using the industrial estate device and, later, that of free-trade

zones as its tools. It was appreciated that decentralization, per se, could increase significantly neither employment nor the output on which incomes depend. Indeed, in some countries where industrial decentralization has been effected without adequate safeguards the results have been disastrous. The Government, therefore, launched a massive campaign, backed by a liberal system of fiscal incentives, to attract new, particularly resource based, export oriented, labour intensive and precision industries. At the same time it instituted machinery to ensure that industrial estates were built only in locations where the labour and the essential services were available or could be provided. The Federal Industrial Development Authority (FIDA) was created for this purpose and to promote industrial development.

As measures of success would be increased employment and the development of new skills, it followed that the aim was to attract large numbers of labour in the technologically advanced fields - the medium and large-scale enterprises. Little or no attention was paid to the needs of small-scale industry.

The Federal Government made available loans on easy terms (three years period of grace) to the various State Economic Development Corporations (SEDCs) to construct industrial estates. FIDA, the Land Office and the SEDC of the State concerned were party to the planning. One or two of the wealthier states, however, proceeded on their own without recourse to other authority. Under a directive of the Ministry of Co-ordination of Public Corporations, in 1954, it became compulsory to channel all matters relating to industrial estates through FIDA. In the wealthy States of Malacca, Penang, Terengganu and Johor the respective SEDCs carry out the construction of industrial estates and free-trade zones with their own facilities; elsewhere contractors are employed.

The decision on what types of industry may be admitted to an industrial estate rests with FIDA. Apart from one or two estates in the eastern part of the Peninsula which are intended to accommodate undertakings to process locally available agricultural and forest resources, the writer obtained the impression that any enterprise that was not violently incompatible and did not make excessive demands on the services would be permitted.

The writer was informed by the Director General of FIDA that it was not the policy of Government to operate industrial estates and free-trade zones to produce a profit. It is difficult to prove whether a profit or loss is made. The SEDC that constructs the estate receives only the premium on the land. That is the amount the lessee pays to obtain the allocation of a plot. The annual quit rent is payable to the Land Office, and ultimately reaches the State Treasury. From the single premium the SEDC has to meet its development costs, the interest on the Federal loan and the maintenance of the estate. In the case of free-trade

zones the SEDC also has to bear the cost of perimeter lighting and fencing and security guards.

While this somewhat involved system of charges relieves the SEDC of collecting rents it places it in an adverse financial position. The indebtedness of SEDCs is increasing. To alleviate their condition most SEDCs engage in other ventures, using the credit facilities available to them by virtue of the periods of grace of their loans. Such operations as joint ventures in manufacturing, often with firms owning estate plots, participating in the wholesale trade, and the construction of dwellings for sale are undertaken. This method of financing can be successful as long as the funds can be kept revolving. One serious hitch and the whole credit structure will collapse. The ventures in house building while, no doubt, necessary, useful and profitable, is counter-productive as far as industrial estates are concerned as the houses are too expensive for factory workers, other than the administrative and upper clerical cadres.

#### Services on estates.

The general policy is to provide levelled plots serviced by roads, water (potable and industrial), electricity, telephones, sanitation and drainage. There is no other common user facility except a customs post in a free-trade zone. An industrial estate is near to a town, albeit sometimes a small town, or forms part of a developing new town. Such additional services/amenities as a bank, post office, hospital or clinic, recreation and entertainment are expected to be provided in the town. Firms on the estate are encouraged to provide canteen facilities for their staff, and virtually all do so.

On almost every estate there is an area set aside for workers' housing. As the demand for housing cannot accurately be predicted, as it depends not only on the number of plots leased, but also on the rate of occupation and the rate of expansion of the occupying firm, the provision of housing usually lags the construction of factories by between three and five years. The transportation of workers to and from their place of employment is a problem on some estates. On Penang Island private transport companies are able to supply the service. In Butterworth, on the mainland, but part of Penang State, the Government is not prepared to extend the franchise of existing transport companies unless 30% of the operation is in the hands of the Bumiputra. The result is that several of the large concerns on the estate each run their own fleet of busses. In Negri Sembilan the SEDC operates a bus service between Seremban and the Senawang Industrial Estate.

In the free-trade zones the absence of banking facilities is very inconvenient. Not for the customary cash transactions, but because in the export trade certifying documents relating to



foreign exchange control must be endorsed by a bank official.

#### Advance factories.

A few advance factories have been built, mainly on estates in Selangor and Penang, and rented to "small" and medium-scale industrialists. The units had a covered area of about 4,000 sq. ft. The Malaysian Industrial Estates Limited (MIEL), a wholly owned subsidiary of Malaysian Industrial Development Finance Limited (MIDFL) constructs both custom-built and standard advance factories on industrial estates. MIEL is run on a commercial basis with its shares quoted on the Kuala Lumpur Stock Exchange. In the twelve years it has been operating it has built 404 factories in 16 different locations throughout the country. The company leases one or more sub-divisions of an industrial estate and erects standard units on the developed land. A minimum project usually is 10 workshops. If the subscribers to dispose of these to potential entrepreneurs, standard long-term (99 years) are available.

In Malaysia MIEL is considered to be providing a service to small-scale industry. A valuable service certainly it provides, but not to the small-scale sector, or, at least not for. The standard buildings range in covered area from 1,000 to 10,000 sq. ft. Three types of factory are available; (1) Terraced 1,000 to 4,000 sq. ft.; (2) Duplex (semi-detached) 2,000 to 6,000 sq. ft.; (3) Single units 2,000 to 10,000 sq. ft. About 90% of the construction is the duplex unit. Some years ago MIEL built terraced workshops with living quarters above at Mak Le Slin Industrial Estate (Penang), but these were discontinued as objectionable to the Health Department. The units at Mak Le Slin were visited. They exhibited many of the disadvantages associated with the shon-hous type of workplace.

#### Advantages to tenants in Industrial Estates and Free-trade Zones.

The main attractions of an industrial estate or free-trade zone to a prospective operator are; (1) It is cheaper to build a factory on an industrial estate or free-trade zone than to do so on prepared land elsewhere. The unit cost of developed land in private hands is estimated at between M\$ 2.50 and M\$ 3.00 per square foot. (2) The premium charged on an industrial estate rarely exceeds M\$ 1.20 and often is under M\$ 1.00 per sq. ft. (3) It is difficult to obtain privately owned land zoned for industry, and any attempt to have land reclassified takes over one year, if it is possible at all. (4) The elapse of time between leasing of the land and obtaining permission to start building is reduced as the SEDC expedited the approval of plans through the local Town Board. Furthermore, in the case of a concern with a capital in excess of M\$ 250,000 there may be no option but to occupy ground in an industrial estate. The location of such a company is directed by the Ministry of Trade and Industry.

#### Credits for industry

II/ Source MIEL

Apart from 75 foreign and domestic banks and 9 merchant banks, there are several Government sponsored institutions offering credit. The principal agency is MIDPL which provides medium-term loans for (a) Machinery, covering 75% of CIF cost plus installation charges at 10% per annum, four years term; (b) Factories, 80% of cost of land and buildings, interest at 10% per annum, four years term; and (c) Projects, 50% of land, buildings and machinery, interest at 10% per annum, four years term. MIDPL makes loans to the purchasers of the factories it has built. To non-Indigenes - 70% of land and cost of building at current interest rate (presently 10%) with a term of 10 years; to the Bumiputra the rate of interest is 8% and the term 12 to 14 years.

For the development of small-scale industry (including businesses), which would be more accurately described as Bumiputra industry, MA A made during the period of the Second Malaysia Plan loans to the extent of M\$ 167 millions, and the Pakl Pembangunan (established 1977) M\$ 7.6 millions. 12/ Through the Credit Guarantee Corporation all banks are required to use some their lending to small-businesses to 10% of their total savings deposits. The Corporation was established in 1973, and by 1975 loans to the value of M\$ 302 millions had been guaranteed, 42% to the Malays.

The Government and the SEDCO are always prepared to consider joint ventures with foreign companies.

#### Government Industrial Estate Programme.

The Government, at the present time, operates 59 industrial estates (including free-trade zones). Six of the estates in Sarawak were constructed by, and presumably taken over from, the Borneo Development Corporation, and one small private estate in Sabah has been absorbed in a Government estate. A list and some details of the industrial estates are given in Appendix II.

The total area of factory plots (leasable area) is 9,240 acres of which 6,765 acres have been leased to date (Sept. 1976). In some instances factories have not yet been erected on the plots. The total employment provided by the estates and free-trade zones is not recorded. An average of the employment density taken over twelve large and twelve small plots gave the number of workers per acre as 19.7 and 54.3, respectively. A rough average of the density over the country is 31.6 workers per acre (calculated on the total employment and leased area for the estates in the State of Melaka). If this density is indeed applicable, then the totality of leased areas should provide employment for 177,700 workers, or 88% of the labour force in the Peninsular manufacturing industries in 1972. This estimate is only indicative of the order of employment in industrial estates and free-trade zones. It is sufficient, however, to show that a significant proportion of the manufacturing sector is accommodated on industrial estates, and suggests that the greater part of the new industries are so located. 12/ Third Malaysia Plan p.315

According to the Third Malaysia Plan the Government intends to increase the industrial estate acreage by 2,500 over the 11 year period (1971/80). In view of the 2,275 acres still to be allocated, and the slowing down of new investment during the last two years, it appears to be a ambitious programme.

Private industrial estates.

There are, at least, five industrial estates constructed by private enterprise - Padang Lalang (Pahang), Mukin Lenggat (Kelantan), Kenayan (Sabah), Piasau and Birtawa (both Sarawak). No information is available in Kuala Lumpur on Mukin Lenggat and Birtawa. The Padang Lalang estate was constructed by MTEL. It contains 28 units of terrace workshops varying from 1,000 sq.ft., to 2,000 sq.ft., covered area. Prices range from RM 15,275 to RM 24,625. Kenayan has a plot acreage of 20, all of which has been leased. Piasau has 14 acres, none of which is occupied.

The writer found a small industrial estate under construction about one mile from the Selangor EDC estate at Batu Caves the existence of which was not generally known in Government circles. This estate consists of about 30 terrace workshops, and obviously is intended for small-scale enterprises. Although no information could be obtained as to the owner, it is known to be a private venture. Indeed, the writer was informed that what loosely might be described as nursery blocks have been built by Chinese speculators in one or two towns to house small industrial enterprises displaced from urban centres. In Kuala Lumpur the new premises are an improvement on the old shop-houses the entrepreneurs formerly occupied. Some of the defects of the shop-house establishments are recurring - bad housekeeping, overcrowding, work spilling on to the road, interference with traffic etc. The industrial area is seriously overcrowded. Many of the premises are shacks, and the whole area is becoming an industrial slum.

Location of industrial estates.

Of the 59 Government industrial estates and free-trade zones 41 are situated on the western side of the Peninsula, 8 on the eastern side and 10 in East Malaysia. The Government proposes to allocate one-quarter of the 2,500 acres to be developed during the Third 11 year Period to the less industrially advanced States of Kelantan, Trengganu, Kedah, Sabah and Sarawak. Only Kedah is on the western side of the Peninsula. The twelve States with existing industrial estates can be divided into four groups:-

1,000 plus acres	500 to 1,000 acres	100 to 500 acres	Under 100
Selangor (2022)	Melaka (554)	Sabah (748)	Kelantan (20)
Penang (1603)	Pahang (576)	Merri S'bilan (290)	
Johor (1307)	Sarawak (843)	Kedah (445)	Trengganu (57)
Perak (1095)			

@ leasable areas in all cases.

The above groupings in terms of industrial estate acreage

reflect the relative levels of economic development. Had such a grouping been made before any industrial estate was built in Malaysia on the basis of relative development the result would have been the same. This illustrates the opinion expressed by several writers that an industrial estate is likely to be successful only if located where industry already exists.

Growth of industrial estates.

It was difficult to obtain the information to present an over-all picture of the growth of industrial estates. FIDA is still collecting data. In several of the States the development authority has changed more than once since the estates programme was inaugurated, and in Selangor the EDC has grown to such extent that the writer could not find anyone who was able or willing to discuss matters outside his immediate concern. The growth of industrial estates in Penang may illustrate the pattern in other States and that of the country as a whole.

Position of factories in operation on PDC estates

End of period	Factories			Occupied land			Employment		
	Total	Abs. change	% change	Total	Abs. change	% change	Total	Abs. change	% change
1971	30	-	-	125.5	-	-	4500	-	-
1972	50	20	66.7	204.0	89.3	5.9	2877	2877	79.1
1973	74	24	48.0	325.6	121.6	42.3	23750	13482	154.0
1974	91	17	23.0	520.0	194.4	59.8	27278	3528	16.0
1975 @	102	11	12.1	NA	NA	NA	30155	2877	10.5

Sources Penang Development Corporation Annual Report 1974  
 @ PDC informant.

Over the above period the investment in the manufacturing industries rose continuously in absolute terms, but after 1973 the annual increase fell steadily. This is reflected in the decreasing annual percentage increment in employment after that year.

Size of industrial estates

In Malaysia, industrial estates range in area from 1 acre (Pernaisuri, Sarawak) to 1,106 acres (Shah Alam, Selangor) and the planned development of 2,126 acres (Pasir Gudang, Johor). Thirty-five of the 59 estates are under 100 acres. The average size over the whole country is 157 acres. Obviously if an estate is planned to include an administration block and a wide range of common facilities and amenities there is a lower limit to the acreage below which the unit cost of developed land, or land and buildings as the case may be, becomes higher than that at which the equivalent land, or land and buildings, could be obtained outside the estate. In such circumstances, unless the development authority is prepared to subsidize the estate indefinitely, tenants will not be attracted. In the writer's opinion, the lower limit of size for an estate intended for small-scale industry, provided with

a modest range of common facilities (administration office, canteen, clinic and utility shed for use either as a warehouse or an exhibition hall) is about 10 acres, and the optimum size around 20 acres. Above 40 acres administration charges tend to rise rather steeply.

The situation in Malaysia is unique for a country that has only recently embarked on a policy of rapid industrialization. The aim has been to attract large scale enterprises, and the estates have been designed to cater for them. Non-factory premises are not built, and very few warehouses have been provided by the development authorities. Under these circumstances the upper limit to the size of an estate is determined by the availability of manpower and services, particularly water and electricity, and, of course, the foreseen demand for factory plots. The latter is not critical as the area of developed land can be increased at short notice (3 months in some cases). There is virtually no lower limit, although the unit cost increases as the size decreases it cannot exceed what an individual entrepreneur would have to pay if he developed a site for himself.

In Peninsular Malaysia the larger estates tend to have a higher occupancy rating than the smaller estates. However, too much should not be read into that as the time the estate has been operational and its location have a bearing on the rate at which the land is taken up.

#### Performance of enterprises.

The estates visited contained very few enterprises that had operated in some other part of Malaysia before moving to the estate in question. The few the writer was able to find reported increased employment. All admitted that their turnover had increased, but none was prepared to discuss it in absolute terms. The smallest increase in employment was 2 in a jobbing panel beating establishment now employing 13. The largest was in a sewing machine factory where the employment had trebled (present labour force 150)

visited

All the new establishments had increased their work force since joining the estate, but that was to be expected as many were only working up to full capacity. Not a few of the firms stated that they would increase their labour force if they could find persons with acceptable educational qualifications.

Perhaps the best indication of the effect of an industrial estate on performance, and what follows refers to the smaller class of undertakings, appeared in the statement made by the Chairman of MIEL at the 12th Annual General Meeting. "A random survey of 60 MIEL clients revealed an increase in sales turnover of 1.7% to RM 88,500,000. Total employment in all MIEL Kawasan (areas)

rose to more than 10,150 registering an increase of 8.7% over last year."I3/

#### Sub-contracting

Little evidence of inter-firm trading on industrial estates was observed. What little there was appeared to be of a sporadic nature prompted by some non-recurrent need. This is not surprising, in view of the absence of service industries on most estates, and the diversity of products manufactured. The writer was informed that those firms that do not possess maintenance workshops contract out their work to small engineering and electrical repair undertakings in nearby towns. The volume of such business is said to be considerable. Certainly this is confirmed by literally hundreds of small workshops in the industrial area of Kuala Lumpur.

In, and between, free-trade zones inter-firm trading reaches substantial proportions in the electronic and tile industries. One-third of the output of a firm, in the Batu Berendam (Melaka) Free-Trade Zone, engaged in the electro-deposition of precious metals, is taken by an assembler of electronic appliances in the same zone. Half the remainder is sold to assemblers in other zones, and the rest exported. Much the same applies at the Bayan Lepas (Penang) Free-Trade Zone; a firm makes diodes for the assemblers in the zone. In the textile field, an international firm producing thread makes about 1% of its sales in the estate. However, a manufacturer of polyester fibre, in the free-trade zone, sells most of its output to two producers of grey fabric who, in turn, send the material to be dyed and finished by a concern also located in the zone. The latter passes the finished fabric to a garment manufacturer in a free-trade zone. The made-up garments are exported. This is an exceptional case as all the firms are in the same commercial centre (Tanjung).

#### Side effects of industrial estates and free-trade zones.

With the exception of the long established Petaling Jaya Industrial Estate, there is little evidence of undertakings being induced to settle in the neighbourhood of an estate. Those that have done so, for the present at least, are stalls selling food, soft drinks and cigarettes to the labour force. This, perhaps, is inevitable in view of the multi-racial nature of that force, and the inability of a factory canteen to satisfy its varied needs.

In the case of Petaling Jaya, numerous firms, a few of international status (e.g. Guinness), have set up factories near the estate. The others mainly are service industries and the suppliers of engineering and building materials. The reasons may be the shortage of land in the estate and the highly developed infrastructure that has been created. The smaller firms, no doubt, are attracted by the proximity to customers.

In a few instances the presence of an industrial estate has given rise to better transport facilities. On account of the new town and industrial estate at Pasir Gudang (Johor) the road connecting it with the Capital and the main way joining the mainland to Singapore Island has been realigned to reduce the distance from 19 to 11 miles.

In the neighbourhood of some industrial estates new amenities such as children's playgrounds and golf courses have appeared. At Petaling Jaya, in addition to several cinemas, there is now a bowling alley, a skating rink and a five-star hotel. Beautiful in ovations in what was a squatter resettlement area. Such changes take time. Where an industrial estate is associated with a new town the planners provide for a city centre, a shopping complex, recreational facilities, schools etc. Then where a modest housing scheme is planned for an estate space is allocated for schools, shops and recreation.

There is, however, another side to the picture. Until quite recently most Malay women, certainly those in the larger (villages) led sheltered lives. Their world was the home, the smallholding and the market. Now they are still in factories, particularly in places using bluish electrical appliances, and working alongside men. The religious leaders are deplored the lowering of the standard of morality this has brought about. The writer has no means of checking this, but several letters have appeared in the local press expressing concern about the situation.

Trade Unions.

A voluntary system of trade unionism is practiced in Malaysia. Under the Trade Union Ordinance, 1959, all unions must be registered with Government, and their financial operations are monitored. Such management functions as promotion, transfers, hiring and firing are non-negotiable. The law until recently recognised unions organized by industry, occupation and trade. In the latter category are "House" unions (a House union is one formed by the employees of a particular firm). House unions in existence are still permitted to function, but no new one may be formed.

In 1974, there were 264 registered trade unions with a total membership of 373,572. 14/ Within the manufacturing sector there were 39 unions having a total strength of 52,560 members, and covering the following operations.

Nos.	Manufacture of	Nos.	Manufacture of
3 (1 house)	Food products	2	Beverages
3 (1 house)	Tobacco products	5 (1 house)	Textiles
1 (1 house)	Footwear	1	Wood products
1	Paper and paper products	6 (1 house)	Printing and publishing
1	Leather products	3 (1 house)	Rubber products
2	Chemical products	2	Non-metallic mineral products
2 (1 house)	Basic Metals	2 (1 house)	Electrical machinery
1	Machinery		
1	Metal products		
3 (2 house)	Miscellaneous		

The largest is the "Kesatuan Pekerja-pekerja Perkilang Perusahaan Makanan" (Union of workers in factories producing food-stuffs) with 4,968 members, closely followed by the "Metal Industry Employees Union" and the "Kesatuan Kebangsaan Pekerja-pekerja dalam Kerjairutan, Semenanjung Malaysia" (Union of workers in the manufacture of machinery) with, respectively, 4,872 and 4,231 members. The smallest union is in the Printing, publishing and allied trades category. It has only 29 members.

One hundred and twenty unions are affiliated to the Malaysian Trade Union Congress (MTUC) which claims to represent 85% of the organized workers. Such workers in the manufacturing industries appear to constitute about one-quarter of the labour force of the sector. Workers are more highly organized in the old established industries - metal working, sawmilling and rubber processing - in the large urban centres. There is less union activity among the workers in new industries located on industrial estates than elsewhere; although these workers gradually are becoming organized.

Where a union has members working in a factory it must obtain the recognition of Government as the representative union. Although no percentage of union members is stipulated under the Ordinance; administratively it is taken as 50%. A collective bargaining agreement is negotiated between the union and the firm. There is an advisory (not legally binding) "Code of Conduct for Harmony" by which negotiations are conducted and interpreted. In the event of a dispute the Conciliation Unit of the Department of Labour and Manpower must be notified. The Unit endeavours to assist the parties to reach a settlement. If unsuccessful the Unit has power to enforce arbitration by the Industrial Relations Court.

There is not a "Shop Steward" system. The union generally is represented by a district committee member working in the factory. Managements questioned on their relationship with the unions reported that they were amicable. The Secretary of The MTUC confirmed this in respect of the majority of foreign firms, but had reservations concerning certain large Malaysian concerns.

In 1974, there were 85 disputes, of which 31 were in the manufacturing sector. The total time lost was 103,884 man-days (67,166 in manufacturing). The causes of the strikes and the methods by which they were resolved are given in Appendix III. The total manhours lost in 1975 fell to 45,749.

The MTUC has in train discussions with Government to amend the current labour legislation. There appears to be six

I4/ (overleaf) Handbook of Labour Statistics, 1974



main issues among a number of minor ones:- (1) The MTUC considers the present legislation to be biased in favour of the employer. (2) There is no means of enforcing a decision of the Industrial Relations Court, if one party refuses to comply, without reference to the High Court - a long and expensive procedure. (3) There is alleged defiance by employers, with impunity, of Industrial Relations Court rulings and the terms of collective agreements. (4) The MTUC wishes to make present non-negotiable matters negotiable. (5) The MTUC requests specific legislation on the amounts payable as redundancy and retirement compensations. (6) The MTUC requires the law to be amended in respect of Pioneer Companies to permit the negotiation of wage conditions.

Safety, health and welfare

The "Factories and Machinery Act", 1970, is an enabling instrument under which, among others, have been made the "Fencing of Machinery and Safety" and the "Safety, Health and Welfare" Regulations, both of 1970. These and other Regulations are enforced by an Inspectorate with offices in most states.

A gauge of the success in the application of safety measures may be assessed by the accident rate per thousand workers in the manufacturing trades.

Year	Total accidents	Fatal accidents	Accident/1000 workers
1968	1,860	55	10.5
1970	2,785	52	18.8
1972	3,721	75	16.8
1974	2,100	46	16.0

Source. Handbook of Labour Statistics, 1974. Rate for 1974 calculated on estimated number of workers.

The most frequent cause of accidents (1974) was "stepping on, striking against or being struck by objects, including falling objects" (78%). Machine tools caused 10% of the accidents. This comparatively low percentage confirms the writer's observations of reasonably good guarding of moving parts.

Safety clothing is available in the larger concerns. The use of goggles is wide spread.

The "Safety, Health and Welfare" Regulations require the provision of medical facilities on a sliding scale, depending on the number of employees. At the lower end a first-aid cabinet, containing specified dressings, is all that is demanded. The requirements rising to a clinic with a trained full-time attendant and visiting or resident doctor at the other end of the scale. Some of the large factories, in addition to the facilities on the premises, maintain clinics where the workers reside. The services are available to members of the workers' families.

Separate toilets for the men are provided in all the factories built on industrial estates, and also rest rooms for women in the larger units. It is impossible to list all these facilities in small units in the towns and throughout the country etc.

### Training

There is no training scheme associated with any industrial estate, although the Industrial Training Institute occupies premises on the Prai (Ibama) estate. A National Apprenticeship Training scheme is operated by the Department of Labour and Manpower. Within the concept of apprenticeship it offers "Preparatory Trade Training" and "Apprenticeship in Training". The former is intended to enhance the employment prospects of school leavers and the unemployed. National fees are charged for the courses which last from 22 to 24 weeks. Free hostel accommodation is provided for outstation trainees. The subjects covered are (a) Mechanical engineering (machining, turning, motor vehicle repair, welding and sheet-metal work); (b) Electrical engineering (wiring, radio T.V. servicing, refrigeration/air conditioning); (c) Building trades (wood machining, carpentry/joinery, bricklaying, plumbing); and (d) Printing trades (hand composition, machine composing, letterpress printing, bookbinding)

To qualify for "Apprenticeship Training" the applicant must be between the ages of 15 and 26 years; hold, at least, the Lower Certificate of Education; be registered under the National Apprenticeship Scheme; and be sponsored by his employer. The course lasts for four years (1st. year 22 weeks, each subsequent year 11 weeks). The same subjects as in the "Preparatory Trade Training" courses are covered. The training is given in one of the Industrial Training Institutes (Kuala Lumpur or Prai) and by the employer in his own workshop. There is no course fee. Free hostel accommodation is available. The system roughly corresponds to the "sandwich system" in Europe. Under the National Apprenticeship Scheme the apprentice must be legally indentured to his employer; and the latter is required to give "on-the-job training and to record such training in the apprentice's log-book.

On the conclusion of either course the trainee is eligible to take the examination of the National Industrial Training Trade Certification Board (NITTTCB). Basic grade certificates are awarded to school leavers, and Certificates of Proficiency to apprentices.

Courses to up-grade skills are available. The trainee must be sponsored by his employer. A suitable syllabus is arranged by the NITTTCB in consultation with the employer. For persons who will be required to provide trade instruction and in-plant training special courses are arranged.

The annual intake of the Apprentices Training course is about 600. Government, the National Electricity Board and the mining industry account for about three-quarters of the trainees. The remainder is almost equally divided between large and small-scale establishments. Most of the former are located on industrial estates. In small undertakings it is usually the son or a relative of the proprietor who is nominated to take the course. The Department of Labour and Manpower is endeavouring to widen the field of selection in the latter category of establishments.

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### CHAPTER III

#### Some Economic Considerations

##### Cost of industrial estates.

Some of the SEDCs contacted were reluctant to provide information on the total development costs of their industrial estates and free-trade zones. They are feared to be afraid that it would be made public. Most were prepared to give the unit cost of development. Some of these are given below.

<u>Estate</u>	<u>Leasable area (acres)</u>	<u>Development cost/sq.ft.</u>	<u>Land premium</u>	<u>Total cost if known</u>
Merong	127.4	RM 1.15	RM 1.50	
Batu Arang	212.3	0.68	0.80 - 1.00	
Tihau Batu	70.7	0.76	0.60 - 1.20	
Batu Berendam C	48.1	0.46	0.85	RM 271,000
Tanjong Kling C	18.4	1.08	0.85	273,000
Bayan Lepas C	14.4	1.15	1.40	

A breakdown of the costs involved in developing a typical free-trade zone is given below.

<u>Item</u>	<u>Cost in cents per square foot</u>
Land	17.9
Filling and roads	36.6
Clearance	10.0
Drainage	1.6
Electricity	7.6
Sewers	18.0
Fencing and lighting	3.0
Servicing of loan	20.0
Overheads	4.5

115.2 Malaysian cents.

The unit cost of development tends to be higher the smaller the estate, but not invariably so. One of the major items is the

of free-trade zones

cost of the "fill" required to level the ground. In Selangor the average unit cost of development is stated to be around M\$ 1.00 per square foot, but at Bangi estate, now under construction, the unit cost is expected to be, at least M\$ 2.00 as the filling material has to be transported some twenty-five miles or so.

In the writer's opinion comparison of development costs is of little value; so many factors that vary from place to place must be taken into account. For example, in countries without a well developed electrical grid the cost of bringing power to a site may be prohibitive, and some compromise must be made. In any case the cost of development increases year by year as all the land allocated to the project is not developed until there is a reasonable prospect of it being required.

#### Factory costs

The construction cost of a single storey factory building is between M\$ 20 and M\$ 25 per square foot (1974 prices). For multi-storey buildings between M\$ 27 and M\$ 35 per square foot. The cost of air-conditioning works out at about M\$ 7 per square foot for a 12 foot ceiling height. Factories built by MIEL are leased at around M\$ 30 per square foot (1975 prices, including the land). 15/

#### Duration of construction.

Most of the SEDCs consider that they can have an estate ready for an industrialist to commence building his premises within one year of acquiring the land. This does not mean that the scheduled phase area is completely developed. The system is sufficiently flexible to permit building to start, even occupation, before the first phase is completed. The rate at which land can be turned over to industrialists tends to increase as development progresses.

#### Terms of lease.

The duration of the lease has already been mentioned. A plot may be leased on a down payment of 20% of the land premium, with the balance payable over one or two years. If a lessee decides not to proceed with the building of a factory, or otherwise wishes to forfeit his lease before building has commenced, he forfeits half of the original deposit. This has happened in only a very few instances.

#### Cost/benefits

The writer does not have all the necessary data to make a full cost-benefit analysis. It would have taken much longer than the time he had at his disposal, even supposing the information were obtainable. There are valid economic objections to what appears below. Indeed, it cannot be described as a cost-benefit study at all. However, it may serve to give an indication of the

15/ Building costs. Penang Development Corporation Annual Report '74

benefit the economy as a whole derives from the industrial estate programme. The assumptions made are that an industrial estate creates new jobs, and that the wages paid to the workers is money injected into the economy which would not have happened had the estate not been developed. To take the case of Penang, the PEDC spent M\$ 6.06 millions in 1974 to develop 185 acres of industrial estate. At an employment density of 31.6 per acre the employment potential is 5,846 jobs. Taking the average wage as M\$ 3.56 per day, 288 working days per year, the total potential earnings would amount to M\$ 5.99 millions per year. Even supposing that only one-third of the jobs were filled by hitherto unemployed persons, the inflow of cash to the economy would be about M\$ 2.0 millions per year. In the writer's view, that is a very handsome return on an investment of approximately seven million dollars.

Cost per job

The cost per job created depends on the total investment in an industrial estate, that is the investment by the development authority plus the fixed assets of the client industrialists. This information was not readily available. An approximation of the cost per unit of employment is given below for two industrial estates and one free-trade zone.

Case I Industrial estate.

		M\$
Developed area	139.46 acres at M\$ 1.05 per sq.ft.	6,379,000
Paid up capital of factories in operation (fixed assets not available)		70,730,000
Total investment in estate		77,109,000
Actual employment	5,600	
Cost per job	(US\$ 5,600)	13,770
Potential employment	18,950	
Potential cost per job	(US\$ 4,625)	11,100

Case II Free-trade zone

Developed area	119.2 acres at M\$ 1.22 per sq.ft.	5,947,500
Paid up capital of factories in operation		52,710,000
Total investment in Free-trade Zone		58,657,500
Actual employment	14,252	
Cost per job	(US\$ 1,712)	4,116
Potential employment	27,300	
Potential cost per job	(US\$ 900)	2,153

Case III Industrial estate

Developed area	121.06 acres at M\$ 1.06 per sq.ft.	5,577,000
Paid up capital of factories in operation		66,670,000
Total investment in estate		72,207,000
Actual employment	2,664	
Cost per job	(US\$ 11,210)	26,900
Potential employment	5,180	
Potential cost per job	(US\$ 5,813)	13,950

These costs per job are relatively low for modern industry.

The low unit cost in the free-trade zone estate is attributable to the fact that a high percentage of the activity is the assembly of imported components; the investment in equipment consequently is low.

#### Efficiency of estate development

The rate at which an authority develops an estate has an important bearing on the economy of the operation. The reservation of land to receive factories too far in advance of foreign demand, or the over-estimation of the demand, involves needless and unprofitable investment. A measure of the efficiency of the investment is the ratio of the investment by the development authority to that of the client enterprises. A low percentage, decreasing each year, is to be desired. For the three cases considered above (ain was available only for a single year (1974)). However, the percentages, respectively, 7%, 18% and 2.2% are satisfactorily low. In some countries, particularly in estates with a proportion of workshops built by the development authority, ratios of over 70% are not unknown, indicating over-investment.

#### Incentives

The Government's policy of incentives to industry has contributed in no small measure to the success of the industrial estate programme. The following incentives are designed to provide tax relief.

- (1) Pioneer Status depending on the fixed capital of the company allows total exemption from income tax for a period of 2 to 5 years.
- (2) Labour Utilization Relief provides for tax relief in the same way as for pioneer companies, except that it is based on the number of full-time employees. It is not available to pioneer companies.
- (3) Investment Tax Credit is granted to approved companies not holding pioneer status. It allows the company to deduct from its taxable income a sum at least equal to 25% of the amount spent on fixed assets of the project. The credit may be increased by an additional 5% for each of the following; if the factory is in a development area; if it produces a priority product; or if the Malaysian content of the product exceeds 50%.
- (4) Export Incentive. These consist of four specially designed incentives for companies manufacturing mainly for the export market.
- (5) Increased Capital Allowance. To encourage the modernization of factories or production techniques the allowance is granted to companies that do not qualify for relief under Pioneer Status, Labour Utilization Relief or Investment Tax Credit.

The foregoing incentives apply to all qualifying concerns whether on an industrial estate or not. However the proportion of factories, enjoying one or other of these benefits, on industrial estates and free-trade zones is high.

CHAPTER IV

Growth of the Industrial Estate Programme  
and  
Some general characteristics of estates

As will be seen from the Table below, the industrial estate programme really took shape in 1965. The main drive commenced in 1971 and continued until 1974. Thereafter the momentum declined; no doubt on account of the recession in world trade. The dates given in the Table are for the start of work, not for initiation of procedures to acquire the site. They are only approximate, being based on the memory of informants. As far as could be ascertained a record of starting dates is not maintained in FIDA, and the State Economic Development Corporations were not in existence until the seventies.

	YEAR	No. of Estates		YEAR	No. of Estates
	1952	1			
	1965	1		1971	-
First Malaysia Plan	1966	2	Second Malaysian Plan	1972	6
	1967	-		1973	6
	1968	1		1974	6
	1969	3		1975	6
	1970	-		1976	6
	No information	13			

A possible explanation of the spur of growth may be the allocation of funds to the development authorities during the First and Second Malaysian Plans.

Some characteristics of estates

One of the most notable characteristics of the industrial estate in Malaysia is its strictly utilitarian nature. An estate is built to accommodate factories and nothing else. With one or two exceptions, such as the Vocational Training Institute at Prai and some Government Departments at Merong, that policy has been carried out. In spite of no concession to landscaping or other amenities the estate presents a clean well cared for appearance.

Other features are the high ratio of leasable land to the gross area of the estate, which for the large estates averages about 85% and in one case is as high as 91%. For the smaller estates the ratio is about 74%. These ratios indicate a most economical use of land. Another is the high percentage of land already leased by industrialists. Twelve of the estates have no more available land. Forty-six of the 51 estates are more than 50% occupied, and half of these have occupancy ratios between 90 and 100%.

In the more recently constructed estates there are fairly high proportions of vacant plots; vacant in the sense that they do

not have a factory. As much as three years may elapse between the signing of a lease and the commencement of building. There have, however been very few cases of a leasehold being repossessed. The writer heard of only two instances.

A few of the estates have been planned to process locally arising resources. For example, Kuala Kedah Estate is intended to deal with fish and other seafoods. One fishmeal, one feed mill (using some fish offals) and one prawn processing plants are in operation. Six other fishmeal, one feed mill, six fish freezing, one prawn paste and two fish ball factories have been approved in principle for the site, together with a boat repair yard and a marine workshop. Tanah Merah Estate, not yet occupied, is intended for the forestry and agro-industries, and the Pulau Jerejak Estate off Penang Island for shipbuilding. Apart from these functional estates there is none that can be said to be dominated by any one industry. That is not the case, however, for the free-trade zones where the textile and/or the electronic industries are in the majority.

Range of manufactured products

The variety of manufactures is immense, and quite impossible to list in full. One of the older and medium size estates may illustrate the diversity of production.

Cosmetics	Tin containers	Animal feeds	Wire netting
Joss sticks	Towels	Batik printing	Plastic rope
Mosquito coils	Rubber milline	Electrical appliances	Drinking straws
Vegetable oils	Jute bays & twine	Cables	Bicycle parts
Wheat flour, bran	Food canning	Oxygen	Food processing
Confectionary	Laminated plastics	Exercise books	Footwear
Polythene sheets and bags	Playing cards	Chocolate mdts.	Feather sorting
Twisted coconut fibres	Jaggery and block sugar	Aluminium household utensils	Pewter ware and solder
Textiles			

Among the above the plants processing vegetable oils, coconut fibres, jaggery, feathers and rubber use locally arising materials as does, of course the factory making oxygen. The food canning and processing units have a high local input. All of the above products have an export as well as domestic market, the latter, however, is the greater.

In contrast the products of a free-trade zone are listed below.

Radios	Tape recorders	Printed circuits	Diodes
Cameras	Automobile electrical components	Core memories	Screws
Condensers	Toys	Semi-conductors	Surgical instruments
Teleprinter equipment	Polyester, cotton dyed fabrics	Synthetic fibres	T.V. sets
		Grey yarn	
		T.V. components	

The material used is 100% imported, usually in an inter-



-mediate form, and the entire output is exported.

## CHAPTER V

### Conclusions

The industrial estate programme had, and still has, two main objectives - to increase employment and to secure more equitable regional development by the dispersal of industry. There can be no doubt that it is achieving the first of these, but it appears to be less successful in attaining the second. The States that were rich before the policy of industrialization gained momentum have become wealthier, while there has been proportionally less improvement in the backward areas.

The writer, at least, has no doubt that the industrial estates and free-trade zones have proved a profitable investment for Government, and that the income from estates covers the running costs. Albeit the derived income does not find its way into the coffers of the developing authority. Accurate figures, in this connection, are difficult to obtain. The total annual quit rents must be a very considerable sum. In Johore, where there are only four estates, the rent roll is well over M\$ 200,000. This is clear profit as the development costs are covered by the land premium.

The success of the industrial estate programme cannot be attributed to any single factor. The liberal system of fiscal incentives has attracted enterprises that but for it might have settled elsewhere. Not a little credit must go to the estate designers who have maximised the leasable area in every estate, and have eliminated what might be described as "frills". The general policy of providing only prepared and serviced land instead of land and buildings has allowed a rate of development to be maintained in keeping with foreseen demand for industrial sites, thereby reducing unproductive investment, and so creating cheaper plots. The entrustment of the implementation of the industrial estate programme to a series of autonomous corporations, each with authority for its own State, and subject only to over-all approval by the Federal Industrial Development Authority has been a wise decision. It is perhaps unfortunate that in the past, the links between FIDA and the SEDCs were not stronger.

The facts that prepared land on industrial estates is cheaper than such land in private hands, and that it is available at short notice with a minimum of formalities has attracted industrialists. Free-trade Zones and abundant cheap labour, by the standards of the industrialized countries, are obvious inducements,

particularly to export oriented assembly industries.

The annual subventions to the SEDCs are insufficient to meet their recurrent estate maintenance charges, especially so for free-trade zones. (In point of fact some of the maintenance costs should be met by the Town Boards from the assessments they make on the property in the estates.) The present practice of SEDCs to engage in joint ventures and trading may ultimately redound to the detriment of the industrial estate programme if recessionary conditions continue.

The need for industrial estates and free-trade zones to have common user productive facilities and such amenities as libraries, exhibition halls, conference rooms and the like has not been felt. There would, however, appear to be a need for banking facilities on free-trade zones, sub-post offices, more low cost housing and better transport facilities for workers.

Not enough attention has been paid to the development of the small-scale industrial sector. The industrial zones in large towns, such as Kuala Lumpur, are likely to become engulfed in commercial or residential areas in the not too distant future.

In the writer's opinion consideration now should be given to providing suitable accommodation for small enterprises on new industrial estates, or on estates specially designed for them.

Generally the existence of an industrial estate does not appear to have induced the establishment of industrial ventures in its vicinity. The Petaling Jaya Estate is an exception. The increased earnings of estate workers has undoubtedly benefited the retail trade. There has been an increase in the number of children's play grounds and in the number of golf courses. Better public transport has resulted in some instances. The road system in Selangor has been greatly improved, but it is not possible to attribute the improvement solely to the industrial estates in the area; the new international airport is a contributory factor. In Johor road improvements are a direct result of the construction of an industrial estate.

An over-all assessment of the industrial estates programme in Malaysia is that it was well conceived and vigorously implemented.

Appendix I

Organizations visited and persons contacted.

Federal Industrial Development Authority, Kuala Lumpur.  
Mr. H. Madasivann Director General  
Mr. Chua Eng Seng Deputy Head Regional Division  
Mr. Lee Hoe Sang Engineer, Regional Division

Malaysian Industrial Estates Ltd., Kuala Lumpur.  
Inche Naniyan bin Jalaluddin Manager  
Mr. Chan Fook Sing Deputy Manager

Department of Labour and Manpower, Kuala Lumpur.  
Mr. Hor Chin Chong Head Manpower Training Division  
Mr. Koh Chian Seng Head Industrial Relations Division

Department of Factories and Machinery, Kuala Lumpur.  
Inche Abdul Jalil bin Fahrud Run Deputy Head

Department of Statistics, Kuala Lumpur.  
Miss Koh Soo Hai Industrial Statistician

Kalijah Amanah Rayhat, Kuala Lumpur.  
Tuan Syed Abdul Rahman bin Syed Idrus Director, Company and Industry Division.  
Tuan Haji Mohamed Rasli bin Mohar of Haji Haji Director Advisory Services Division

Selangor Economic Development Corporation, Petaling Jaya.  
Mr. A. S. Bhatt D.P.T., F.J.K. Deputy General Manager (Technical)  
Mr. K. Fernandez Assistant Publicity Officer  
Inche Alias bin Abu Bakar Research Officer

Penang Development Corporation, George Town  
Datuk Chet Singh K.M.M. General Manager  
Mr. N. Murugah Research Officer

Kedah Economic Development Corporation, Alor Star.  
Inche Saad bin Man Secretary

Federal Industrial Development Authority, Alor Star.  
Inche Yashub bin Anshad Regional Officer

Negeri Sembilan Economic Development Corporation, Seremban.  
Inche Tajul Khalid Chief Investment Officer  
Mr. Lin Eng Sun Corporation Engineer

Melaka Economic Development Corporation, Melaka.  
Inche Abdul Rahman bin Ahmad Assistant Project Manager

Malaysian Trade Union Congress, Petaling Jaya  
Mr. Patrick Rao Secretary

Appendix I cont.

United Nations Development Programme, Kuala Lumpur.

Mr. Fabrizio Oscella

Acting Regional Representative

Mr. F.M. Iqbal

Project Identification Unit.



Name	Development	Year	Gross area	Plot area	Leased area	Remaining area	Land Premium	Quit rent	Potential Employment	Actual Employment	Remarks
Pondar	Authority Caravak S. D.C.	1972	1192.0	750.0	18.0		0.50	240.00	22,000	NA	4 Pls. Kuching
Condrilan	"	1972	11.0	10.0			not decided		90	NA	7 Pls. Sibub
Manor Layan	"	1976	12.0	10.0			1.30	2.00	NA	NA	7 Pls. Sari
Piscan	"	1976	11.0	10.0			0.50	17.00	250	NA	7 Pls. Sibub
Curvel Ardu	"	1976	11.0	10.0			1.20	24.00	250	NA	7 Pls. Sari
P. M. Kuching	"	1976	11.0	10.0			1.50	30.00	150	NA	7 Pls. Kuching
P. M. Sari	"	1976	11.0	10.0			0.49	249.00	200	NA	7 Pls. Sari
P. M. Kuching	"	1976	11.0	10.0			1.00	207.00	200	NA	7 Pls. Kuching
P. M. Sari	"	1976	11.0	10.0			0.40	120.00	150	NA	7 Pls. Sari
P. M. Kuching	"	1976	11.0	10.0			0.50	120.00	150	NA	7 Pls. Kuching
P. M. Sari	"	1976	11.0	10.0			0.50	120.00	150	NA	7 Pls. Sari
P. M. Kuching	"	1976	11.0	10.0			0.70	120.00	150	NA	7 Pls. Kuching
P. M. Sari	"	1976	11.0	10.0			0.70	120.00	150	NA	7 Pls. Sari
P. M. Kuching	"	1976	11.0	10.0			0.50	120.00	150	NA	7 Pls. Kuching
P. M. Sari	"	1976	11.0	10.0			0.50	120.00	150	NA	7 Pls. Sari
P. M. Kuching	"	1976	11.0	10.0			0.50	120.00	150	NA	7 Pls. Kuching
P. M. Sari	"	1976	11.0	10.0			0.50	120.00	150	NA	7 Pls. Sari
P. M. Kuching	"	1976	11.0	10.0			0.50	120.00	150	NA	7 Pls. Kuching
P. M. Sari	"	1976	11.0	10.0			0.50	120.00	150	NA	7 Pls. Sari

Where both potential and actual employment are given, the potential refers to actual employment plus the estimated employment to be provided by factories under construction and those approved for the site.

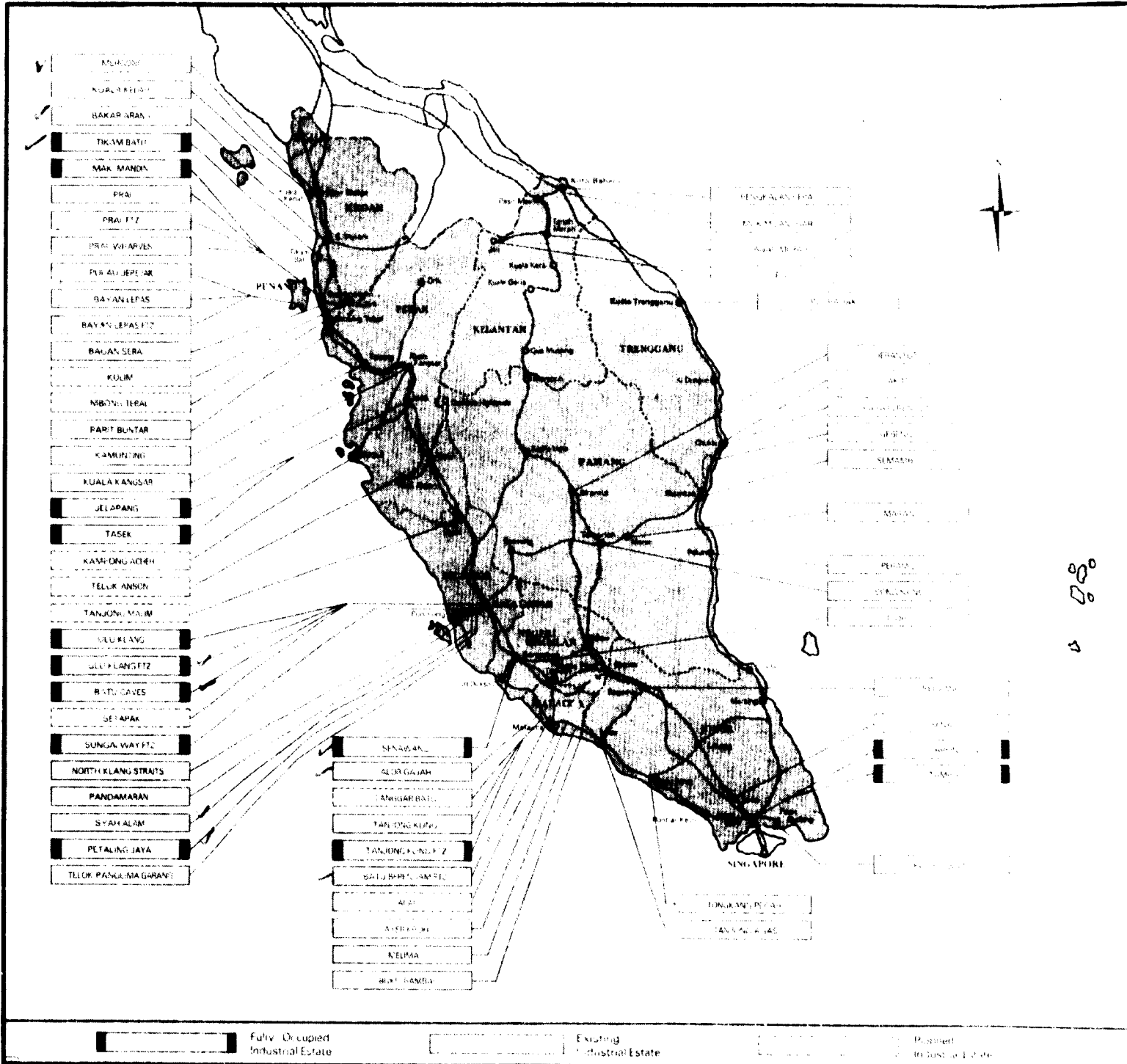
Where only potential employment is quoted the amount is based on the area of plots in the estate.

Note I is 45.00 per acre plus 1.70 per sq.ft. of building.

Land premiums are in £1 per sq.ft.  
Quit rents are in £1 per acre per annum.

Industrial Disputes  
(Manufacturing Sector)

Cause of dispute		Method of settlement	
<u>A. Related to collective bargaining:</u>			
(1) Concerning trade unionism or refusal to conclude collective agreement.	2	A. <u>Disputes settled by negotiations between the two parties.</u>	5
(2) Wages	10	B. <u>Disputes settled by action of third party.</u>	
(3) Management or dismissal of workers	7	(1) Through voluntary conciliation accepted by parties to dispute.	14
(4) Other causes	10	(2) Through compulsory conciliation imposed by law.	1
<u>B. Not related to collective bargaining:</u>			
(1) Sympathetic strikes	-	(3) Through voluntary arbitration.	1
(2) Political strikes	-	(4) Through compulsory arbitration.	1
(3) Other causes	2	(5) Strikes terminated without successful negotiations.	9
<u>Total</u>	<u>31</u>		<u>31</u>



# SECTION 1



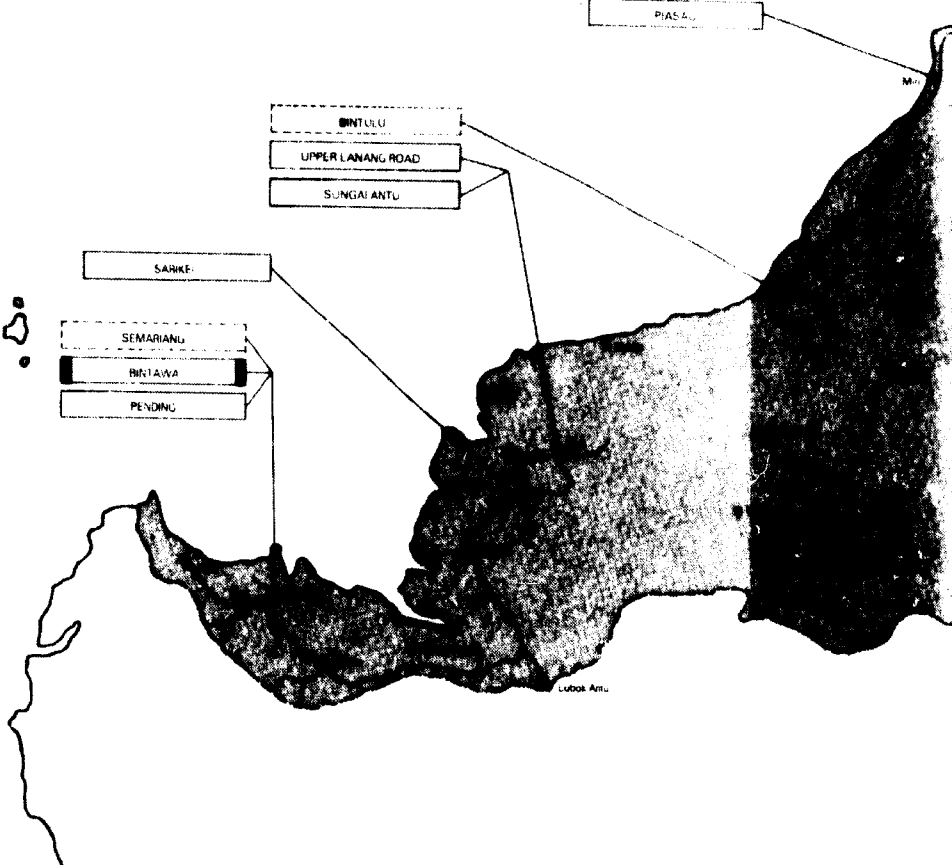
# MALAYSIA—industrial estates



SOUTH CHINA SEA

- PERAK
- PERANGKAP
- AMPAJ
- PERAK BUKIT
- GEBU
- SEMANG
- MAHAK
- PERAK
- SUNGAI LANG
- DUN
- SEJANG
- SENA
- LARKIN
- TAMPO
- PERANGKAP

- PERANGKAP
- SEJANG

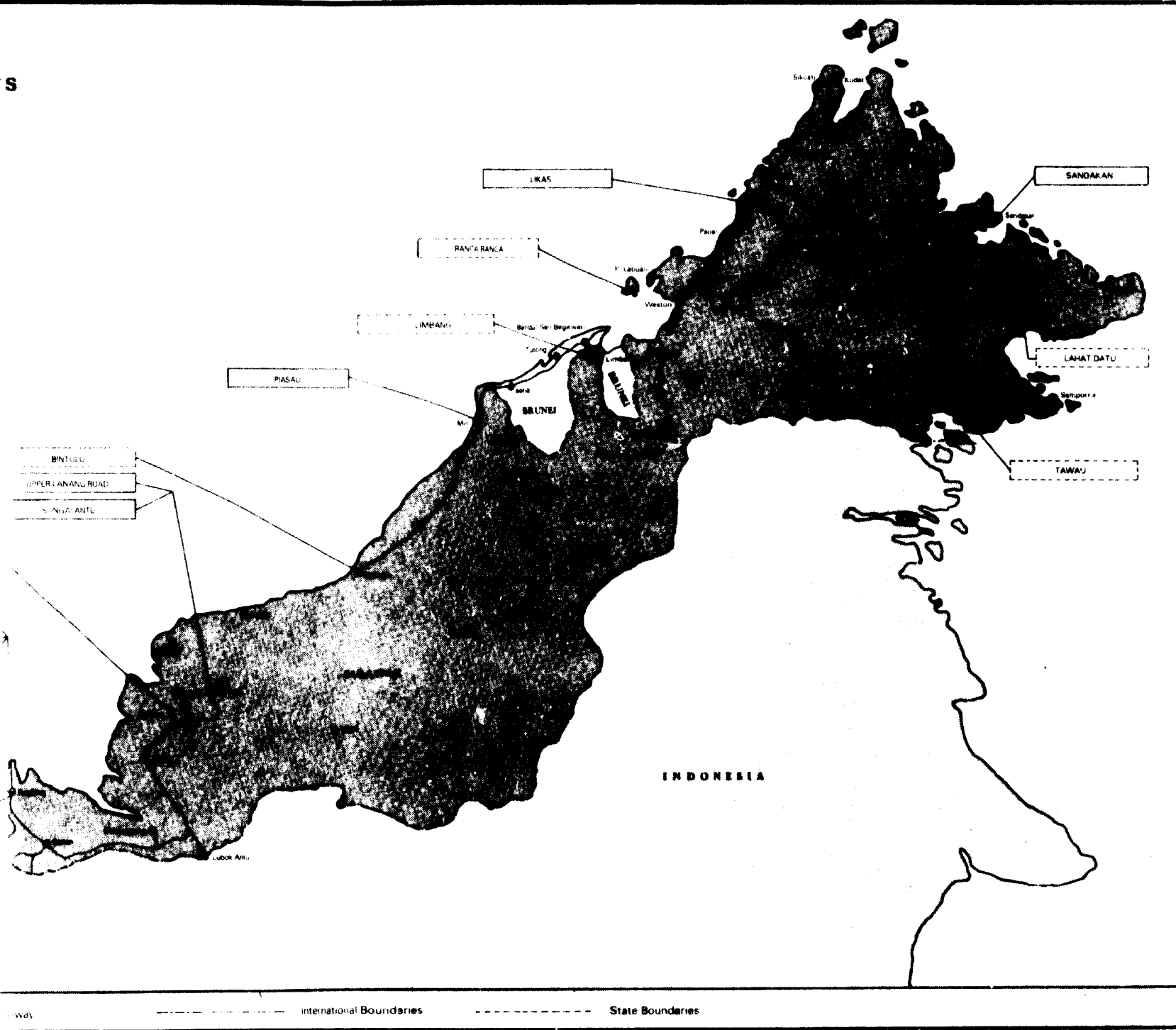


Legend for symbols:

- Planned Industrial Estate (dashed box)
- Main Trunk Road and Principal Road Connecting Industrial Estates (solid line)
- Railway (line with cross-ticks)
- International Boundaries (dashed line)

## SECTION 2

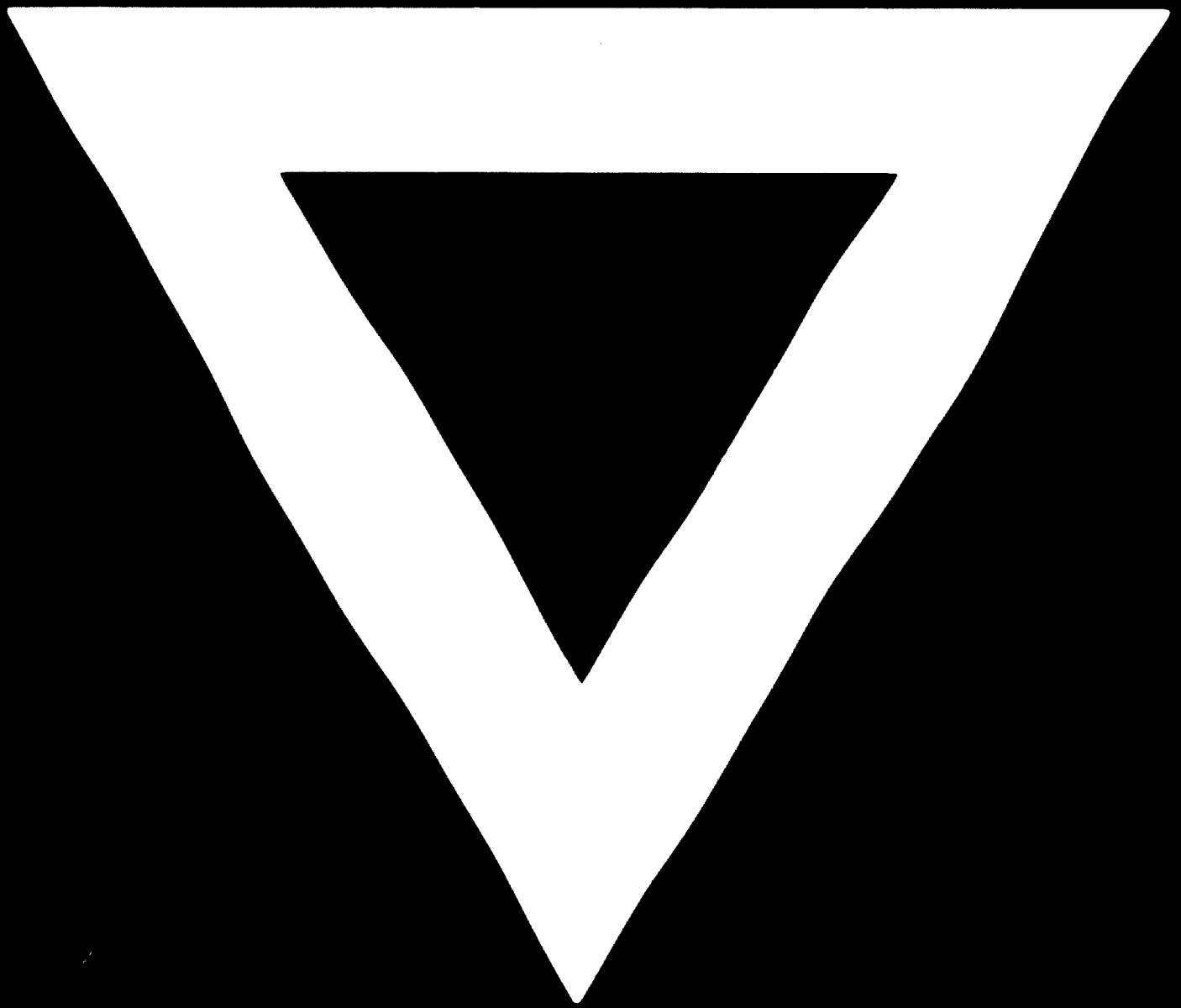
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### SECTION 3



**C-266**



**77.06.27**