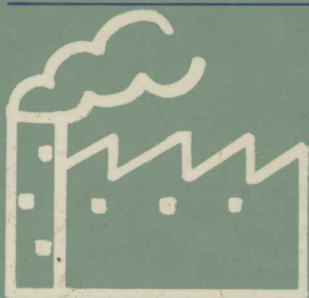


INDUSTRIAL DEVELOPMENT

An Introduction to the
Malaysian Industrial
Master Plan



CHEE PENG LIM

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Dedication

This book is dedicated to
Khoo Paik Moy
Lew Chin
Yen Lin
Yin Kheong
Yin Khean

About the Author

Dr. Chee Peng Lim joined the Faculty of Economics and Administration, University of Malaya in 1971 and was appointed an Associate Professor in 1979. In 1981 he went to the Graduate School of Business Administration, University of Washington as a Graduate Fulbright Visiting Associate Professor. He was appointed Chairman of the Division of Analytical Economics in 1982–1984. Presently, he is on secondment to the ESCAP/UNCTC Joint Unit on Transnational Corporations in the Economic and Social Commission for Asia and the Pacific (ESCAP) in Bangkok.

Dr. Chee has served as a committee member on several committees in the public and private sectors and has also been a consultant to various local and international organizations such as FOMFEIA, APDC, ESCAP, ILO and the World Bank. He has written extensively on industrial development in Malaysia in general and on small industry in particular.

Preface

The idea of writing this book occurred while the Malaysian Industrial Master Plan was still in the intermediate stages of completion. At that time, the objective was to explain the rationale for the Industrial Master Plan, the basic background and major issues related to the industrial development of Malaysia and also to anticipate some of the main findings and recommendations of the Plan. The manuscripts for the book were completed before I took up my secondment with the ESCAP/UNCIC Joint Unit on Transnational Corporations in January 1985. Unfortunately, due to unforeseen and unavoidable circumstances, publication of the book was delayed. In August 1985, 14 reports together with an *Executive Highlights* of the Industrial Master Plan were published. Fortunately, the publication of the Plan did not render the manuscript entirely irrelevant. So instead of abandoning the manuscript altogether, I decided to revise certain parts of the manuscript in order to present an *ex post* instead of an *ex ante* perspective of the Plan. Materials used in this book were largely drawn from data which I had collected over the years in my study of the manufacturing sector in Malaysia. References to the Industrial Master Plan may be traced directly to the 14 reports and the *Executive Highlights* on the Plan which were published by UNIDO.

It is a great pleasure to acknowledge the enormous intellectual debt which I owe to my colleagues, friends and family who contributed in various ways to the successful completion of this study. I am particularly grateful to my

colleagues in the Faculty of Economics & Administration, University of Malaya, who provided some useful comments and advice. My participation in various committees, such as the National Committee on UNIDO, Federation of Malaysian Manufacturers' Committee on Industrial, Fiscal and Monetary Policies and the National Committee on Comparative Technology Transfer gave me valuable insights into the practical problems faced by industrialists in Malaysia. Similar insights were also gained from my experiences as a consultant in various industrial projects, especially, the International Development Corporation of Japan's industrialization project in Southeast Asia, 1974, the World Bank's project on small industry in Malaysia in 1975, the Asian and Pacific Development Centre's rural industry project in 1982 and Sysplan's Terengganu's Master Plan project in 1982. I am grateful to all the chairmen in whose committees I served and the colleagues in the various projects, not forgetting the numerous government officials and industrialists for sharing their insights, experiences and problems on industrial development with me. Thanks are also due to Lew Chin and Yen Lin for typing the manuscript and to Yin Kheong and Yin Khean for preparing the various tables which appear in this study. Finally, I would like to thank my wife, Phaik Moy, for encouraging me to persevere and finish the study.

List of Abbreviations

AFC	— Asean Finance Corporation
AIC	— Asean Industrial Complementation
AIC	— Asean Investment Corporation
AICF	— Asean Investment Capital Fund
AIFC	— Asean Investment Finance Company
AIJV	— Asean Industrial Joint-Venture
Asean-CCI	— Asean Chambers of Commerce and Industry
Asean	— Association of Southeast Asian Nations
CCDSI	— Coordinating Council for Development of Small-scale Industries
CIC	— Capital Investment Committee
COIME	— Committee on Industry, Minerals and Energy
COTT	— Committee on Trade and Tourism
DOS	— Department of Statistics
EO1	— Export Orientation Stage One
EO2	— Export Orientation Stage Two
ERP	— Effective Rate of Protection
ESCAP	— Economic and Social Commission for Asia and the Pacific
GDP	— Gross Domestic Product
HICOM	— Heavy Industry Corporation of Malaysia
IBRD	— International Bank for Reconstruction and Development
ICA	— Industrial Coordination Act
IMP	— Industrial Master Plan
IS1	— Import Substitution Stage One
IS2	— Import Substitution Stage Two

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JETRO	— Japan External Trade Organization
LDC	— Less Developed Countries
MARDEC	— Malaysian Rubber Development Corporation
MIDA	— Malaysian Industrial Development Authority
MIDF	— Malaysian Industrial Development Finance Bhd.
MIDFIC	— MIDF Industrial Consultants
MIEL	— Malaysian Industrial Estates Ltd.
MISC	— Malaysian International Shipping Corporation
MTI	— Ministry of Trade and Industry
NEP	— New Economic Policy
NICs	— Newly Industrialized Countries
NPC	— National Productivity Centre
NRP	— Nominal Rate of Protection
PETRONAS	— National Petroleum Corporation
PICA	— Private Investment Company of Asia
PTA	— Preferential Trading Arrangements
R & D	— research and development
RICs	— Regional Industrial Clubs
SACT	— Special Advisory Committee on Tariff
SESSs	— Small-scale Enterprises
SEDCs	— State Economic Development Corporations
SIRIM	— Standards and Industrial Research Institute of Malaysia
UDA	— Urban Development Authority
UNDP	— United Nations Development Programme
UNIDO	— United Nations Industrial Development Organization

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Chapter 1

Mapping Malaysia's Industrial Development

In 1983 Malaysia embarked on the preparation of a \$3.7 million¹ Medium- and Long-Term Industrial Master Plan for the country in cooperation with the United Nations Development Programme (UNDP) and the United Nations Industrial Development Organization (UNIDO). The Industrial Master Plan was completed in 1985 and maps out the path for the country's industrial development up to the year 2000. It proposes the type of industrial policies which Malaysia should adopt and the strategies to achieve the objectives set out. In short, the Plan is a very important document, perhaps the most important document on Malaysia's industrialization programme since the International Bank for Reconstruction and Development (now known as the World Bank) came out with its Report on the Economic Development of Malaya in 1957.

The Malaysian Industrial Master Plan comprises 22 reports in three volumes. Volume I gives an overview of the Plan. It integrates and summarizes the results of the various reports prepared for the Plan within the context of a macro-industrial development policy. Volume II describes the development plans for each of the 12 industries selected for the Plan studies (see p. 3 & 4). Volume III contains a collection of the special studies which are relevant in promoting and implementing the sectoral plans described in Volume II. These support policies include the New Economic Policy and indus-

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trial development, industrial infrastructure, heavy industry policies, incentive system, manpower and training, R & D and technology policies, linkage effects and an evaluation of resource policies. At present, only 14 reports together with an *Executive Highlight* of the Industrial Master Plan have been published (UNIDO, 1985).

The Malaysian Government decided to undertake the Industrial Master Plan for various reasons. Firstly, the country never had a systematic industrial plan since its independence. Consequently, in the past, planning for industrial development was often done on an *ad hoc* basis and in the context of a short-term perspective. No firm policies were developed to organize, and, where appropriate, to dictate mechanisms for promoting specific industrial sectors which could lay the foundation for a strong industrial base. Decisions were taken on the basis of vague ideas of general progress and often, somewhat haphazardly. Fortunately, in spite of the absence of an Industrial Master Plan, industrial development proceeded smoothly in the 1960s and early seventies. Supporters of the free enterprise system may use this argument to question the need for an industrial plan. However, while it is true that industrial development and adjustment are achieved primarily through the market mechanism, there are several reasons to complement the functions of the market by means of an industrial plan. One, the market is not the perfect mechanism which economic theories propound. Two, the existence of external economies and diseconomies must be considered. Three, from the viewpoint of long-term, dynamic industrial development, the market does not and cannot provide overall accurate information. Four, coordination between countries in the area of trade and investment cannot be left entirely to market forces. In short, the market mechanism has some deficiencies, especially from the viewpoint of long-term, dynamic industrial development. For this reason, the Malaysian Government was in need for more systematic industrial planning with a longer time horizon.

Secondly, an Industrial Master Plan was urgently needed in view of the 11 per cent annual industrial growth rate envisaged in the Fourth Malaysia Plan (Malaysia 1981, p. 297). Given

the projected rate of growth, manufacturing is expected to overtake agriculture as the second largest sector (after services) in the economy before the end of this decade.

Thirdly, many economists felt that the Malaysian manufacturing sector had reached a crossroad in its development (Lim and Chee, 1984). There were several alternative turnings ahead so it was time to draw up a map to chart the future directions for Malaysia's industrial growth.

Finally, it was felt that the Industrial Master Plan would assist the government in assigning priorities in industrial development to achieve the following development objectives:

- (i) to further stimulate private domestic and foreign investment in the development of small, medium scale and heavy industries,
- (ii) to encourage the growth and development of resource-based industries,
- (iii) to encourage the growth and development of export-oriented industries.

Considering its comprehensive objectives, the studies that were undertaken in conjunction with the Plan included:

- (i) natural resource assessment
- (ii) infrastructure assessment
- (iii) industry sectoral development studies
- (iv) special studies related to industry development.

The major emphasis however was placed on the industry sectoral development studies as these studies would provide the basis for the Industrial Master Plan. These studies were conducted for the following industries:

(a) Resource-based Industries

- (i) food processing industry
- (ii) palm oil products industry
- (iii) rubber products industry
- (iv) wood-based industry
- (v) chemical industry
- (vi) non-ferrous metal industry
- (vii) non-metallic mineral products industry (building materials, etc.)

(b) Non-resource-based Industries

- (i) transportation equipment industry
- (ii) machinery and engineering industry
- (iii) electrical and electronics industry
- (iv) ferrous metal industry
- (v) textiles/apparel industry

The Industrial Master Plan studies were undertaken by a team of experts from the United Nations Industrial Development Organisation (UNIDO) headed by Dr. Seongjae Yu in cooperation with the Malaysian Industrial Development Authority (MIDA) and relevant government departments and agencies. Further assistance was obtained from foreign sectoral specialists and short-term foreign and local consultants. In addition, the private sector (through the various industry associations)² was also invited to submit a memorandum on the respective industry sectors in accordance with the Terms of Reference prepared by MIDA.

The detailed Terms of Reference covered six major areas covering the following questions and issues:

- (i) Why the sector's development is important?
- (ii) The operational objectives to be achieved up to 1995;
- (iii) An in-depth analysis of the industry's current status and derivation of basis for future strategy and direction;
- (iv) Demand analysis and projection for export and domestic market;
- (v) What development strategy should be planned for the industry sector and how to develop the strategy?
- (vi) Formulation of policies and programmes supportive and inducive to the development strategy and investment plans.

The Special Studies Related to Industrial Development, among other things, examined industrial policy options; identified industries for export promotion; determined the country's engineering and marketing capability; examined the role of research and development and studied fiscal incentives and tariff protection.

In short, the Industrial Master Plan is a very comprehensive and detailed study of Malaysia's manufacturing sector

and provides useful indications for its future growth up to the year 1995. Considering its significance, the Plan deserves to be carefully studied by all Malaysians who are interested in the development of their country. This book has been prepared to facilitate such a study by providing a brief background of Malaysia's manufacturing sector and its development over the last 30 years. The subsequent chapters focus on selected issues in our country's industrial development which may help readers see the Plan in its proper perspective. These issues will touch on industrial policies and support measures, the role of small industry and the prospects for the development of heavy industry, trade in manufactured goods, selected resource and non-resource-based industries, foreign investments, problems facing industrialists, regional industrial cooperation and an anticipation of developments in the manufacturing sector in Malaysia following the recommendations of the Industrial Master Plan. In short, this book should appeal not only to those who are interested in the industrial development of Malaysia but also to those who are actively involved in its operations and planning.

Unfortunately, given the time, data³ and resource constraints, this book cannot hope to provide a comprehensive background on Malaysia's manufacturing sector. Neither can it hope to discuss all the significant issues relating to industrial development in this country. Instead, this book has to be restricted to a selective treatment of the subject, relying largely on the author's and other studies in this area. However, readers who have the time and the inclination may wish to consult the following publications for further information: P.W. Bell 1977, L. Hoffman & Tan 1980, M. Lindenberg 1973, S.Y. Lo 1972, W.D. McTaggart 1972, K.P. Teh 1977 and E.L. Wheelwright 1965.

¹ Unless otherwise stated the dollar sign (\$) denotes the Malaysian *ringgit* which is approximately equal to US\$0.40 or US\$1.00 equals \$2.40.

² For a list of the industry associations, see Appendix A.

³ For some idea of the data constraint, see Appendix B.

Chapter 2

Malaysia's Industrial Policy and Development

2.1 INDUSTRIAL POLICY

Before independence in 1957, an active programme of industrial development in Malaysia was non-existent. Industries were either mainly confined to the elementary processing of local raw materials or those with decisive advantage of "natural protection" from foreign competition by virtue of high transport costs and advantage of location. The industrial sector was made up of numerous small and a few large enterprises. The small enterprises were generally owned by Chinese while the large enterprises which dominated the sector were owned by foreigners, mostly British (E.L. Wheelwright 1956, p. 6). The colonial policy on industrialization was geared towards the exploitation of natural competitive advantages in primary production and the preservation of the domestic market for British export. Consequently, there was minimal industrial development in Malaysia before independence.

After independence, the Malaysian Government changed the colonial policy to one which would encourage industrial development in order to bring about a greater diversification and growth in national income. (For a detailed analysis of the factors calling for structural diversification, see D. Lim 1973.) Due to the lack of adaptability of existing resources (including capital, technical skills and managerial ability) to new manufacturing activities, certain promotional effects on the part of the government were regarded as essential (IBRD 1957, p. 417).

The first “blue-print” for Malaysia’s industrial policy came from the IBRD mission’s report of 1957. This report suggested that the initiative and responsibility for determining the pattern of industrial development be left to the private sector, with the government confining itself to the creation of a “favourable climate” for private investment, especially towards private foreign capital. The second general measure was to encourage private investment through the provision of an extensive infrastructure in the form of industrial estates, power and communication facilities. Thus during the first two Five-Year Malaysian Plans (1956–1965), the emphasis was on infrastructure development, whereby more than 50 per cent of total public sector investment went to power and water utilities, transport facilities and communication.

At the same time, the first policy measures taken for the stimulation of industrial development were fiscal incentives rather than tariff protection (as was adopted by most other developing countries). It was only in the late 1960s that Malaysia approached the familiar pattern of a medium to high tariff-protected developing country.

In the 1960s, the steady worsening of the country’s terms of trade made it even more necessary to pay greater attention to the development of the manufacturing sector — in the short run as a source of import savings and in the long run as an alternative source of export earnings. This gave rise to the rapid growth of the import substitution industries in the 1960s, resulting in a considerable percentage drop in the import on consumption.

However, in a country with a small domestic market, such as Malaysia, import substitution could be a means of growth for only a short period of time. When the possibilities for further import substitution were exhausted, the manufacturing sector’s growth rate could not exceed that of domestic demand for such commodities, unless it was small in absolute terms (and currently only about 14 per cent of the total working population of 4.8 million people); such a low growth rate could therefore hardly contribute to a reduction of unemployment. The problem was further compounded by the need to restructure society (that is, to draw the predominantly rural traditional sector into the mainstream of economic