# Malaysia

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# Some Contemporary Issues in Socioeconomic Development

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# FOREWORD

Once a year, the Malaysian Economic Association holds an economic Convention which is designed to provide a professional forum for analysis and discussion on current issues and problems facing the Malaysian economy.

The 1976 Annual Convention coincided with the launching of the Third Malaysian Plan. The Convention thus focussed on a review of the Second Malaysia Plan (SMP) and a forecast of implications of the Third Malaysia Plan (TMP). Since various other contemporary issues were also crucial to evaluating the success of the Plans, the theme of this Convention proved more broad and wide-ranging compared to earlier Conventions. This was reflected in the papers presented; and the studies selected here for publication.

Some of the studies review the achievements and shortfalls during the SMP period; others trace the likely implications of the TMP targets and policies on growth and income equality during the coming years; and the rest deal with more specific contemporary problems and policy issues in Malaysian society which have not been explicitly dealt with in the SMP and TMP documents, but which are nonetheless very critical problems requiring in-depth study by academics and practitioners alike.

The emphasis of the Convention and therefore of this publication, reflects some of the main concerns of Malaysia today. The commitment of policy-makers and planners in the post-1970 era for the restructuring of Malaysian society is reflected in the studies on Distribution of Income & Wealth; and Housing, Landownership & Urban Development. The role of the manufacturing sector as the leading growth sector has been given explicit recognition, and the selected studies chose to focus on issues germane to the future performance and direction of this sector. The problem of population growth and unemployment and the need for proper manpower planning has also been selected as an important area of enquiry. The vital questions of the management of the increasingly important public enterprises and the financing of the Plans have also been necessarily touched upon.

Owing to various constraints, it has not been possible for the Association to publish every single one of the large number of useful papers presented for discussion at the Convention. Only those papers have been incorporated in the present volume which have a direct bearing on the underlying theme and unity of the book.

This publication, given its focus on the Third Malaysia Plan, will appear in the market at an opportune time when the Review of the Third Malaysia Plan will have been released and debated upon in the Malaysian Parliament. It is the hope of the Association that its appearance at this juncture will be a timely one and that it will contribute to a more informed assessment of planning possibilities and limitations in this country.

Mokhzani Abdul Rahim
President
Persatuan Ekonomi Malaysia

## ACRONYMS AND ABBREVIATIONS OF INSTITUTIONS, GOVERNMENT DEPARTMENTS, STATUTORY BOARDS AND OTHER ORGANIZATIONS

| | |
|---|---|
| ACDA | Asian Centre for Development Administration<br>[Now renamed APDAC: Asian & Pacific Development Administration Centre] |
| ADB | Asian Development Bank<br>[Based in Manila] |
| BSN | Bank Simpanan Nasional<br>[National Savings Bank] |
| CGC | Credit Guarantee Corporation |
| DARA | Lembaga Kemajuan Pahang Tenggara<br>[Pahang Tenggara Development Authority] |
| EPF | Employees Provident Fund |
| EPRD | Educational Planning, Research & Development Unit of the Ministry of Education, Malaysia |
| FAMA | Federal Agricultural Marketing Authority |
| FELCRA | Federal Land Consolidation and Rehabilitation Authority |
| FELDA | Federal Land Development Authority<br>[Previously known as FLDA] |
| FIDA | Federal Industrial Development Authority |
| FIMA | Food Industries of Malaysia |
| FOA | Farmers' Organization Authority |
| FPA | Family Planning Association |
| IDB | Islamic Development Bank |
| IDB, Malaya | Industrial Development Board, Malaya<br>[Superseded by FIDA] |
| ITM | Institiut Teknologi MARA<br>[MARA Institute of Technology] |
| KADA | Kemubu Agricultural Development Authority |
| LPN | Lembaga Padi dan Beras Negara<br>[National Padi and Rice Board] |
| MADA | Muda Agricultural Development Authority |
| MAJUIKAN | Lembaga Kemajuan Ikan Malaysia<br>[Fisheries Development Authority] |
| MAJUTERNAK | Lembaga Kemajuan Ternakan Negara<br>[National Livestock Development Corporation] |

| | |
|---|---|
| MARA | Majlis Amanah Rakyat<br>[Council of Trust for the Indigenous People<br>Reconstituted from RIDA: Rural Industrial<br>Development Authority] |
| MARDEC | Malaysian Rubber Development Corporation |
| MIDF | Malaysian Industrial Development Finance<br>[Previously known as MIDFL: Malaysian Industrial<br>Finance Ltd. Now renamed: MIDA: Malaysian<br>Industrial Development Authority.] |
| MISC | Malaysian International Shipping Corporation |
| MTUC | Malaysian Trade Unions Congress |
| NEB | National Electricity Board<br>[Now known as LLN: Lembaga Letrik Negara] |
| NFPB | National Family Planning Board |
| NPC | National Productivity Council |
| NSB | National Savings Bank<br>[*Officially known as* Bank Simpanan Nasional: BSN] |
| PERNAS | Perbadanan Nasional<br>[National Body] |
| PETRONAS | Petroliam Nasional<br>[National Petroleum Authority] |
| POSB | Post Office Savings Bank<br>[Now reconstituted as: BSN] |
| RISDA | Rubber Industry Smallholders' Development Authority |
| SEDCs | State Economic Development Corporations |
| SIRIM | Standards and Industrial Research Institute of Malaysia |
| SOCSO | Social Security Organization |
| TDC | Tourist Development Corporation |
| UDA | Urban Development Authority |
| UKM | Universiti Kebangsaan Malaysia<br>[National University of Malaysia] |
| UM | University of Malaya |
| UPM | Universiti Pertanian Malaysia<br>[Agricultural University of Malaysia] |
| USM | Universiti Sains Malaysia<br>[University of Science, Malaysia] |
| UTM | Universiti Teknologi Malaysia<br>[University of Technology of Malaysia] |

## TERMINOLOGY AND OTHER ABBREVIATIONS USED

| TERMINOLOGY | MEANING |
|---|---|
| *Bumiputra* | 'Son(s) of the soil': the indigenous people |
| *Orang asli* | 'Indigenous people': term specifically used for the aborigines |

| ABBREVIATIONS | FULL FORM |
|---|---|
| **Plan period & Plan document** | |
| FMP | First Malaysia Plan period, 1966–70. |
| *FMP* (the document) | Malaysia, *First Malaysia Plan, 1966–1970,* Kuala Lumpur, Government Printer, 1965. |
| *MTR of the FMP* (the document) | *Mid-term Review of the First Malaysia Plan 1966–1970,* Kuala Lumpur, Government Printer, 1969. |
| SMP | Second Malaysia Plan period, 1971–75. |
| *SMP* (the document) | Malaysia, *Second Malaysia Plan, 1971–1975,* Kuala Lumpur, Government Printer, 1971. |
| *MTR of the SMP* (the document) | *Mid-term Review of the Second Malaysia Plan, 1971–1975,* Kuala Lumpur, Government Printer, 1973. |
| TMP | Third Malaysia Plan period, 1976–80 |
| *TMP* (the document) | Malaysia, *Third Malaysia Plan, 1976–1980,* Kuala Lumpur, Government Printer, 1976. |
| **Other Abbreviations Used** | |
| GDP | Gross domestic product |
| GNP | Gross national product |
| ISIC | International Standard Industrial Classification Numbers |
| LDCs | Less developed countries |
| MITC | Malaysian Industrial Trade Classification Numbers |
| NEP | The New Economic Policy [Launched under the Third Malaysia Plan] |
| SITC | Standard International Trade Classification Numbers |

# I. DISTRIBUTION OF INCOME AND WEALTH

# THEORETICAL ORIENTATIONS OF THE SECOND MALAYSIA PLAN*

Shamsul Amri Baharuddin

Existing literature on the Second Malaysia Plan are mostly in the form of seminar papers, articles in journals, academic exercises, and reports in newspapers. The general pattern is one of too little attention being given to theoretical basis, though there is some attempt to tackle this aspect by Razak Yahya and Mohd. Dahlan Hj. Aman.[1] The emphasis is, in the main, directed to aspects of policy implementation. In this study, I shall try to discuss the theoretical premises, and thereafter make an evalution and critique of, the Plan.

## APPROACHES TO DEVELOPMENT

Broadly, there are two approaches to development: the *practical approach;* and the *theoretical approach.*

By practical approach is meant the conscious efforts made by a nation to change and develop itself, in all aspects, through development planning. The one common factor in all these planning efforts is that they serve the ideological prerequisites of the nation concerned. In this respect, they cannot, for practical reasons, really be free from political considerations.[2]

*For an elaboration on this paper, see my MA thesis, 'Second Malaysia Plan – its Aim and Implementation until Early 1975', submitted to the Faculty of Arts and Social Sciences, University of Malaya, 1976. The help given by Mohd. Dahlan Hj. Aman who willingly went through the draft of this study, is gratefully acknowledged. The normal disclaimer applies.

[1] See Razak Yahya, 'Reform from Above with Reference to Rural Development in Malaysia', MA thesis, Institute of Social Studies, The Hague, 1974; and Mohd. Dahlan Hj. Aman, 'Theories and Policies of Modernization', MA thesis, Dept. of Anthropology and Sociology, Monash University, 1973.

[2] See D. Goulet, *The Cruel Choice,* New York, Atheneum, 1973, and B. Galeski, 'Conflict and change as an aspect of development', in *Sociologie Ruralis,* Vol. 12 (1972), pp. 273–87.

On the other hand, the term 'theoretical approach' refers to the theory and model constructions used by social scientists. These constructions are never free from their ideological orientations as well as their discipline persuasions. In other words, it refers to the methodology of social scientists in piecing together development strategies in real and practical terms.

Though at first sight these two broad approaches may seem to have little connection with each other, they in fact are partners in a dynamic relationship. For example, every development plan has its group of planners. The group represents a certain theoretical leaning, though the training and expertise of the group members may vary. Thus when the group plans, it has to begin with the broad theoretical issues pertaining to ends and goals, or the objectives, of the Plan. It is only thereafter that policies and strategies of implementation are worked out.

The interaction between these two approaches depends on how the planners concerned sort out the theoretical basis for the Plan, and this basis lends ideological legitimacy to development models thereafter created. Such a basis is generally rooted in a combination of concepts regarding the social, cultural and political processes and traditions of the society. From this 'synthesized' theoretical framework, the planners would arrive at their own working definition of 'development'; which would in turn determine strategies for action. It is because of this close interlinkage that it is generally most difficult to identify the true theoretical perspectives of a Plan.

To do this, I propose to analyze the objectives and aims to isolate them from the strategies of the Plan, in order to draw the proper inferences on the theoretical orientation of the SMP.

## THE THEORETICAL ORIENTATIONS OF THE SMP

The SMP states that there exists two distinctively different sectors in the Malaysian economy: the traditional and the modern sector. The former is characterized by its 'low-productivity, relatively stagnant and economically backward activities', and the latter by the fact that it is engaged in more 'organized, relatively capital-using and more highly specialized and productive activities'.[3] Each sector is further divided into the (a) low-productivity urban traditional sector; (b) the rural traditional sector; (c) the medium-productivity rural modern sector. In terms of ethnic composition, the urban modern sector, the rural modern sector and the urban traditional sector are predominantly non-Malay in character; while the government sector and the rural traditional sector are predominantly Malay.

According to the SMP, between these components there exist income imbalances, the most striking being between the predominantly non-Malay urban modern sector and rural modern sector, and the predominantly Malay rural traditional sector. This means income imbalances between sectors, ethnic groups, as well as regions and has resulted from ethnic identification with economic function.[4]

[3] *SMP*, p. 37.

[4] See *SMP*, pp. 36–38 for details regarding these differences and how income and ethnic variables correlate.

With these problems in mind, the government has set out the following as objectives of the Plan:

(i) the over-riding objective of the Plan is to achieve and foster national unity because the government feels that the nation has reached the stage of 'economic and social development where greater emphasis must be placed on social integration and more equitable distribution of income and opportunities'.

(ii) This objective is expressed as the New Economic Policy, through which the Plan hopes to achieve maximum realization of national unity.

The New Economic Policy itself has two-pronged objectives. The first prong is aimed at reducing and eventually eradicating poverty while the second one is aimed at restructuring Malaysian society by correcting economic imbalances between regions and ethnic groups.

In order to achieve these objectives, the following strategies have been outlined: raising income levels, increasing employment opportunities through modernization of rural life, a rapid and balanced growth of urban activities, the creation of a Malay industrial entrepreneurial community so that the Malays and other *bumiputra* groups will become full partners in all aspects of the economic life of the nation. To realize these objectives government participation to a certain extent is deemed necessary, so as to create 'equilibrium and integration' between ethnic groups and regions. This is to be achieved by implementing policies of modernizing the rural traditional sector; of urbanization and industrialization; and of economic balance between regions.[5]

Fundamentally there is a long-term commitment to the private enterprise system.[6] So government involvement is based on policies that promote and reinforce the interests of large-scale economies and the private sector.[7]

What is implicit in these objectives and strategies is the fact that the underdeveloped, traditional sector is assumed to be isolated from and unintegrated with the modern sector. Thus, it is conceived that the integration of traditional perepheries into the modern centres would, in the final analysis, bring about economic modernization and development to the majority in society.

Such an approach to development is intrinsically based upon a dualistic perception.[8] The existing dualistic whole is conceived of as comprising a predominantly non-Malay modern sector and a predominantly Malay and *bumiputra* traditional sector. Therefore, the Plan suggests that before the traditional sector can be functionally integrated into the modern sector, it is imperative that there is deliberate reallocation of available resources towards rectifying economic imbalances between ethnic groups and regions. Since underdevelopment of the traditional sector is attributed to deficiencies in organization and dysfunctional values,[9] the Plan then adopts an organizational approach towards stimulating economic development in this sector. This means that the government is prepared to be actively involved in

[5] *SMP*, pp. 43–47.

[6] *SMP*, p. 43, para. 140.

[7] *SMP*, p. 8, para. 30.

[8] See Appendix I.

[9] See *ibid.*

promoting a more modern and scientifically based mode of production and a more extensive control of all factors at all stages of production. It also advocates the policy of eliminating rural poverty by injecting new technology into the rural environment, embarking upon manpower training schemes, extensive land development and agricultural modernization through the application of technology and wider credit and marketing facilities.

As a second set of important prerequisites, the Plan recommends a diffusion of science and technology, and new cultural values such as individual achievement, functional specificity, objective behaviour, plurality of diverse attachments and self-reliance.[10] This implies that the rural population have to be socialized to the values and world-views of the modern centres, which is, in essence, the rules and conduct of capitalism.

By adopting strategies to raise the level of productivity of the traditional sector and by a deliberate 'integrating' of the traditional sector into the modern sector the common interests of all members of Malaysian society would be served.

## AN EVALUATION OF THE PLAN'S THEORETICAL ORIENTATIONS

Although the SMP has never explicitly stated its theoretical orientations, nonetheless its objectives, aims and strategies seem to infer that the SMP is essentially based on the Integration-Equilibrium-Diffusionist Model.[11] The similarities are so numerous it is difficult to think otherwise. How well then, has this orientation served planning in this country?

The dualistic perception of centre and periphery as one being modern and the other being traditional is often misleading, if not altogether wrong, because it confuses ideal-types with the reality of underdevelopment and development. More important, it does not explain the phenomenon of under-development in the traditional sector in which the traditional and the modern sectors are mutually dependent parts in a whole social totality.

Moreover, these two sectors, considered as being isolated from and unintegrated with each other, are in reality very closely integrated. In fact, the traditional sector is now very much part of the whole *laissez-faire* economic system with the modern sector at the national centre.

The early development and progress of the modern sector in Malaysia (British Malaya then) was subjected to the technological progress and change in the West, namely Britain. The traditional sector then was the supplier of raw materials for industries and factories in Britain, and as Malaysia moved into the ambit of the international capitalist economic system, the introduction of the money economy and cash crops, the subsistence-cum-feudal economy of the traditional sector was slowly done away with. This sector has long been brought into contact with capitalistic economic activities and production, though perhaps by the nature of its incorporation

[10] See Senu Abdul Rahman (ed.), *Revolusi Mental*, Kuala Lumpur, Utusan Melayu Press, 1971 and *MTR of the FMP*, para 194, p. 47 on 'Jayadiri'.

[11] See Appendix II.

into the system, it has not been able to actively participate in it as the centre does. Thus the 'integration' as envisaged would not solve the pathological situation of poverty in the periphery.

This further implies that the Plan's policies, such as creating institutions and processes that are designed to facilitate the 'integration' of the traditional sector into the modern sector would in the long run only favour the elite or upper-class group. Even the reconstruction of ethnic composition in the entrepreneurial class in the modern sector, for example, would not break the vicious circle of poverty and underdevelopment in the traditional sector.

## CONCLUSION

The SMP's idea that economic imbalances between race and regions can be corrected under the existing *laissez-faire* structure is an illusion. By reconstructing the existing economic function to ensure racial balance would merely serve to create a new class of capitalists amongst the power elites. Therefore, the majority of the population, especially in the traditional sector, would still be subject to the same vicious circle of poverty.

If the state remains committed to its present policies of safeguarding the interests of the modern sector or the economic centres, the possibility of solving the problems of the poor through policies of inter-regional equalization would hardly be successful. This is because state participation and control over the interplay of market forces are limited by the simultaneous need to protect and promote the interests of the modern sectors thereby leaving the traditional sector underdeveloped.

APPENDIX I
MAJOR APPROACHES TO THE STUDY OF DEVELOPMENT WITH ATTENDANT ASSUMPTIONS AND CONCEPTS UNDER EQUILIBRIUM MODEL

| Types of Approaches to the Study of Development | Major Assumptions | Frequent Concepts |
|---|---|---|
| **1. Behavioural** | | |
| Persons (1960)<br>Homans (1961)<br>Erasmus (1961)<br>Eisenstadt (1966)<br>Lipset (1967)<br>Kunkel (1970) | Individuals suffer deprivations that are contextually determined; behaviour can be changed at any time, development will occur through new learning experiences. | Modernization, learning curves, internalization deprivation, attitudes, values, rationality, adult socialization, intra-generational change. |
| **2. Psychodynamic** | | |
| McClelland (1961)<br>Hagon (1962) | Early childhood socialization largely predetermines future behaviour which may impede innovativeness; cleavage between individual behaviour and current social environment occurs through new socialization patterns. | Personality, backward – ness, childhood experiences, status withdrawal inter-generational change modernization. |
| **3. Diffusionist** | | |
| Barnett (1953)<br>Hirschmann (1958)<br>Hoselitz (1960)<br>Levy (1966)<br>Nash (1963)*<br>Rogers (1969) | Simplistic dualism-societal cleavage based on degree of use of modern technology; development occurs through new capital, institutions and technological inputs.* | Diffusion curves, rates of change for ecological units, lagging sectors, productivity, technological, growth modernization |

*Additions by Author

*Source:* A.E. Havens, 'Methodological issues in the study of development', *Sociologie Ruralis*, Vol. 12 (1972), p. 257.

APPENDIX II
DIFFERENCES IN ASSUMPTIONS BETWEEN THE EQUILIBRIUM AND CONFLICT APPROACHES TO DEVELOPMENT

| | Approaches | |
|---|---|---|
| | *Equilibrium* | *Conflict* |
| 1. Interests | Uniting | Dividing |
| 2. Social Relations | Advantageous | Exploitative |
| 3. Social Unity | Consensus | Coercion |
| 4. Society | System with needs | State for class struggle |
| 5. Nature of Man | Requires restraining institutions | Institutions distort basic nature |
| 6. Inequality | Social necessity | Promotes unnecessary conflict |
| 7. State | Promotes common good | Instrument of oppression |
| 8. Class | Heuristic device | Social groups with different interests |

*Source:* *Ibid.*, p. 255.

# THE THIRD MALAYSIA PLAN AND SOCIAL ECONOMICS

Paul Chan

## INTRODUCTION

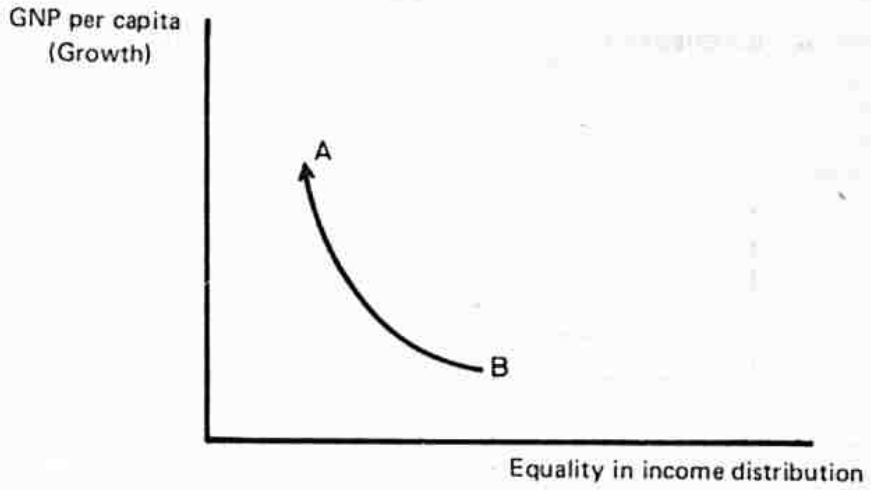
The Third Malaysia Plan has been formulated within the framework of political challenges, the need for rapid and balanced economic development, and the urgent necessity for social changes. As repetitively expressed in the TMP, the two principal areas of great concern to the government are nation building and economy building. With regard to the former, the government aspires to establish a united and integrated society in which it has complete sovereignty. The economic and social goals are aimed at attaining sound and stable growth which is to be accompanied by balanced development for all ethnic groups and regions. The government has committed itself to 'seek an economic order within a democratic system in which the opportunity for self-fulfilment will be guaranteed for all who are prepared to make the effort'. In its attempts to fulfill such noble aspirations the government has adopted two broad strategies, viz., to eradicate poverty, and to restructure society in its social and economic functions. Implicit in the latter, and necessary for the realization of the former, is the intended reduction in inequality in income and wealth amongst the people and between regions. This is the New Economic Policy (NEP). All policy instruments and measures are designed and directed to achieve the objectives of the NEP.

This study intends to survey some of the issues connected with the poverty and inequality theme in a comprehensive manner. On such a complex and profound topic, it would be both pretentious and presumptuous to claim that definitive solutions are offered. Indeed there are none. The discussion here is more in the nature of raising issues for further analysis.

## THE PROBLEM

Let us introduce the discussion by portraying the historical development path the Malaysian economy has traversed over time in Figure I.

FIGURE I




In Figure I, the ordinate shows growth which may be represented by per capita income or such related variables. The abscissa shows equality in income distribution. Other surrogates like consumption or wealth could be used.

During the historical development of the Malaysian economy, the country has enjoyed economic growth in per capita income. But the country, and the various groups within it, has not benefited from a more equitable distribution of this income. In fact, the movement of the country from B to A indicates an experience of growth with inequality. The exact shape of the curve and the development path may be slightly different from that shown in Figure I. However, the movement of the economy has exhibited the general tendency and direction shown in the diagram.

Besides the growth and inequality issue there is also the growth and poverty problem.

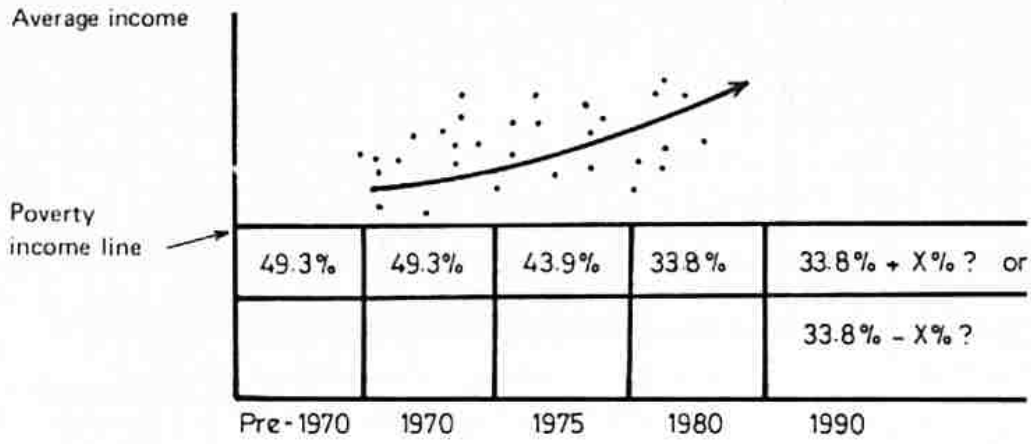
According to data provided in the TMP, the growth rate of GDP at factor cost between 1970–75 was about 7.4% per annum. During this period there were 49.3% of all households (in West Malaysia) below the poverty line in 1970 and 43.9% in 1975. There was growth, which was accompanied by a high incidence of poverty. The projected growth rate for GDP during the TMP is 8.0% per annum. The percentage of households below the poverty income line is expected to be 33.8% (for West Malaysia). We are not sure whether this figure can be attained, and what will be the situation by 1990.

Figure II shows that whilst a substantial percentage of the population is below the poverty income line the rest of the population has been enjoying economic growth in different degrees. Economic growth in the Malaysian economy has thus been accompanied by poverty and increasing inequality in income and wealth distribution.

It may be pointed out here that the TMP has implicitly interpreted poverty in the absolute sense. It is defined in terms of minimum physiological and nutritional needs and basic necessities. But the TMP does not give a definite quantitative poverty income level. Consequently this has reduced the usefulness, if not the relevance, of the statistics on the incidence of poverty in West Malaysia.

FIGURE II

DISTRIBUTION OF VARIOUS GROUPS ABOVE POVERTY LINE ENJOYING INCOME GROWTH OVER TIME




FAILURE OF THE MIXED ECONOMY

The proper approach to explain the phenomenon of poverty and inequality amidst economic growth is to examine the institutional structure of production, distribution, and consumption from the national perspective. If only emphasis is given to a few major variables at the sectoral level then the analysis becomes partial in scope and restricted in perspective. Consequently, such approaches are inadequate in explaining poverty and inequality as a national problem, and not merely as a sectoral issue, over time.

The principal hypothesis offered for discussion here is that poverty and inequality are inherent in our mixed economy system. They, particularly inequality, are functionally necessary for the operation of this type of socio-economic system. As such, poverty and inequality cannot be eradicated unless the institutional structure and the social *cum* economic values and motivations are restructured. If there is reluctance to execute such changes then we have to accommodate poverty and inequality as an acceptable characteristic of our system. The question will then be the extent of poverty and the degree of inequality which are considered tolerable and desirable for the functioning of this mixed economy system.

We shall expand on this theme later. First let us try to explain why poverty and inequality are integral elements of our mixed economy system.

In orthodox economics the major role of the price system is the classical allocative function. Under certain conditions, principally the Paretian ones, the price system would distribute resources efficiently in terms of flows and end-uses over time. The corollary of this is efficiency and growth in the economic system. This idealized price system has remained only as a theoretical construct.

In the Malaysian mixed economy system the allocative role of the price system functions very imperfectly. Because of the existence of monopolistic – monopsonistic elements, externalities, inadequate information, and the imperfect nature of the decision-making process itself, over time, resources are not allocated amongst producers and consumers in the manner socially desired or desirable. Consequently,

the private and social preference ordering, and also the private and social welfare functions, need not match.

This aspect of resource allocation between groups in their consumption and accumulation over time has a direct impact on poverty and inequality. The major consequence of an imperfect price system in this country is that resources become monopolized and concentrated in the hands of a few. Resource control and utilization is therefore not for the social good but only for private gains at the expense of others who have no command over such resources. This directly leads to inequalities in income, consumption and wealth distribution. The relative position of any group therefore directly depends on its relative control over resources. Groups which are deprived or dispossessed in the competitive battling for economic opportunities and resource control will end up in the poverty company.

What aggravates the malfunctioning of the price system in this regard is that the price system does not guarantee equitable development. As Myrdal has pointed out, the price system disequalizes by causing cumulative disequilibrating movements in income, consumption, and wealth distribution and in economic opportunities for enhancement. This situation may be likened to a bout between heavyweights (the 'haves' and the powerful) and featherweights (the 'have nots' and the weak and weakened) with the referee (the price mechanism) always favouring the former.

Inequalities, whether in income, wealth or economic opportunities in general, are inevitable in a mixed economy – essentially capitalistic in characteristics – which depends on an imperfect price system for its functioning. For such inequalities are functionally necessary in this type of production and distribution system. A hierarchy of income differentials and unequal opportunities is required to exist as an incentive system. Indeed, both incentives and productive efficiency will be adversely affected if income inequality and unequal asset ownership are reduced. Thus inequalities are an inherent feature in our system.

Income inequality arises from two principal sources: unequal labour incomes and unequal ownership of assets. The distribution of income in an economy at a given point in time depends on factor income shares among the unskilled and skilled labour and those who own and control assets. We have no accurate data to provide a breakdown of the exact sharing amongst the three broad categories of producers *cum* consumers. However, the information and evidence given in the Second and Third Malaysia Plans provide us a sufficient idea of the problem. To cite one piece of evidence, the SMP gave the distribution of household income in West Malaysia as shown in Table 1.

It is obvious that the distribution of income is extremely skewed in one direction. In 1970 only 1.4% of the households earned more than $1,500 and above, but 59% earned $200 and less. From this evidence and those provided by the TMP on education and wealth we can deduce that the total output in this country is monopolized by the educated (skilled labour) and asset owners. This uneven spread of income and asset ownership will not be reduced in the natural course of development in this social economic system. Its very nature will cause it to not only perpetuate but also to accentuate the gap.

Why? Because the functional characteristics of the mixed economy disequalizes the various differentials. In general there are two major institutional forces in operation which reinforce the ensconced position of the 'haves' *vis-a-vis* the 'have-nots'. First, accessibility to opportunities for advancement is only available to those who have

TABLE 1

| Income Range (Per Month) | Percentage Distribution | |
|---|---|---|
| $ 1 – 99 | 27.1 | 58.5 |
| 100 – 199 | 31.4 | |
| 200 – 399 | 25.9 | |
| 400 – 699 | 9.6 | |
| 700 – 1,499 | 4.7 | |
| 1,500 – 2,999 | 1.1 | 1.4 |
| 3,000 | 0.3 | |

*Source:* *SMP*, Table 1.1

already established themselves. Secondly, concentration in asset ownership is not diffused between groups because of low inter-generational mobility in such ownership and control. These two features need little elaboration. In the case of the first, only those who are already 'successful' would have sufficient command over 'resources' (political, social, economic) to avail themselves of existing opportunities and resources, or to create new ones, for further advancement at the expense of those who do not have. The second feature is tied to the question of inheritance and the institution of private property. These are necessary components of the mixed economy system.

The effect of these two features is not only income and wealth inequality but it also causes income immobility. This means that the system of income differential in one generation is likely to be perpetuated, if not widened, in the next. Consequently, this precludes equality of income-earning opportunity, which in turn causes further inequality and immobility in income.

## SOME POLICY ISSUES

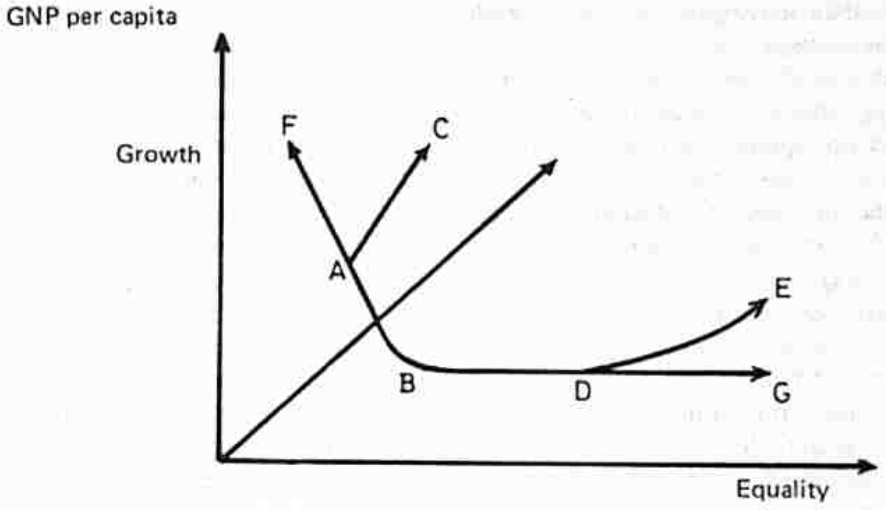
A Plan, if wisely thought out and effectually implemented, can remedy and rectify the imperfect working of the mixed economy system. There is, however, no guarantee. For a 'bad' plan, or a 'good' plan badly executed, can aggravate the deteriorating situation.

Depending on the aspirations of the government and the people, a plan can aim at accelerating the growth of output, altering its composition, and changing its distribution over time. A 'useful' plan should thus incorporate economic and social goals, and in which the necessary institutional reforms are explained. The TMP has some, but not all, such ingredients.

In effecting a change in the development path, as depicted in Figure I, there are two alternative strategies. This is shown in Figure III below.

An ideal development path is the 45 degree line. There is both growth and equality. But this is not feasible. One practical alternative is to direct the economy to move from B to D to E. This is the command economy type of strategy in imperative planning. Very drastic measures are used to redistribute income and wealth downwards to achieve equality. The cost is high, with great loss in incentives and efficiency in the beginning. It is hoped that from point D, the economy will pick itself up after the

FIGURE III




initial sacrifices. The time period between D to E is an uncertainty. If the system fails it moves along G.

The other alternative is the one depending on market forces. Here the economy moves along B to A. There is rapid economic growth with inequality. It is hoped that the economy can then move from A to C. But it may not and it may end up travelling towards F.

In Malaysia, the development path has been from B to A. Here there is a difference compared to economies depending on market forces. As manifested by the TMP, the government will try to reach C via planning.

The planning approach is the indicative type which provides the framework and fundamental guidelines for private enterprise to flourish. In indicative planning the intervention of the government can be active or passive, direct or indirect. The extent and degree of intervention depends on what the government perceives its appropriate role should be. In Malaysia, the role of the government is an expanding one. The government, in its attempts to construct a united and socially just society, has marshalled all its resources and efforts to eradicate poverty and to build a new society which is not to be identified by its ethnic social-economic functions. In so doing, the government has extended the public sector considerably on all fronts.

Realizing that the major poverty areas are in the rural sector, particularly in agriculture, the TMP emphasizes the establishment of a more modernized and progressive rural economy. Not forgetting the urban poor, economic and social measures are also to be implemented to uplift their standard of living.

The critical components of the poverty redressal policy as enunciated in the TMP include the following:

(1) Creating, and making available, employment to all,
(2) Providing both basic and higher education to the uneducated.
(3) Supplying housing to the lower income group.
(4) Increasing the productivity of the low income workers.
(5) Providing the necessary infrastructures and basic amenities.
(6) Providing social security and welfare services to all, especially the poor.

The emphasis, as reflected in the size and pattern of expenditures allocated in the TMP on the above items is rather uneven. In particular, the provision of social security and welfare services to the urban and rural poor leaves much room for improvement. At the moment, the basic social security and welfare services are more easily available to public employees and workers in the organized sectors. The poor in the unorganized sectors, whether in urban or rural areas, are generally neglected. But the government should not ignore this aspect of development. The principle of providing such social security and welfare services, both general and specific ones, to the poor, the deprived, and the dispossessed embodies the fundamental concept of social responsibility. After all, this is what development is all about.

In its efforts to reduce the incidence of poverty the government has given too much emphasis on expenditure at the sectoral level. There is not enough emphasis on the implementation aspects of the policy measures. What is the significance and point, for instance, of building low-cost housing when they are not accessible to the poor? It is a public secret that in many cases only the 'rich poor' can afford such low-cost houses. This is because during the implementation stage of the policy programme on housing, the poor applicants for low-cost houses have to pay not only the actual price of the house but also 'coffee money'. Or else they will be at the back of the queue. Thus, it is not just the creation of and spending on such services which must be emphasized. They must be made readily available and accessible to those who really need them.

The policy measures of the government in reducing the incidence of poverty by themselves are inadequate unless there are also institutional reforms in the structure of production and distribution, and in inheritance regarding properties and land. Expenditures allocated for improvement in productivity would be wasted if any increase in productivity and output is absorbed by other groups in the system.

Since poverty and inequality are epiphenomena there should therefore be a parallel policy to tackle the problem of inequality besides those measures on poverty. The major policy goal with regard to inequality is clearly expressed through the New Economic Policy.

Given the existing distribution of income and wealth along ethnic, and along local and foreign-owned lines, it is both politically wise and socially just to correct this imbalance. However, this is only one facet of the national phenomenon of social and economic inequality. As such the government must adopt a more comprehensive approach and solve the inequality problem as a national disease. Otherwise government policy will only change the form but not the substance of the problem. The disease is not cured, it is only shifted to another part of the system. And if the inequality problem is not solved on a national basis it is not likely that the poverty problem can be solved either. For poverty and inequality are both a cause and consequence of each other.

Inequality involves not only inequality in income and wealth but also involves over-concentration of economic power in the hands of a small group. The latter is broadly interpreted to include the control and ownership of a disproportionate share of resources and their utilization in ways not conformable to the desirable social goals of the community. Reducing inequality therefore also means breaking the concentration of economic power.

The TMP however, has not expressedly defined its policy goal with regard to solving the overall national inequality problem. At the moment, those existing measures, like fiscal ones, are not adequate and effective in redistributing income and wealth and

are quite impotent as tools for diffusing economic power concentration. More powerful measures must be designed, and existing ones must be made more equalizing, to attack inequality. Even socialization (an abominable word to some) of some of the means of production and certain resources (like natural resources) may have to be used if really necessary.

There are two broad policy measures for reducing inequality in wealth distribution which should be explored further. The first set of measures is aimed at controlling the maximum level or amount of certain assets or wealth which an individual should have. The second policy instrument is aimed at establishing a ceiling or ceilings on inheritance of wealth.

Both are aimed at curbing and diluting the flow of wealth and economic power into the hands of a few. Since concentration in the ownership of wealth and income is a major cause of inequality in income and economic opportunities, its diffusion can help to improve income mobility and economic opportunities for all. If there is any justification for advocating the above policy it is found in the principle of social justice.

It is not just a question of redistributing downwards in reducing the inequality gap. The government must also design and implement a policy of minimum income and the ownership of certain basic assets, like the ownership of a house, for all. There should be a target date for this. Because of the vastness of this type of programme it is suggested that such policies can be implemented in stages and by sectors, starting with the poorest in the community.

The objective of providing a certain minima in income and in asset ownership and that of limiting the maximum level of certain asset ownership will not destroy private enterprise and incentives for growth and development. Efficiency and incentives will be destroyed only if there is a complete levelling down of all incomes and wealth.

The question which remains to be asked and to be answered then is, what is the degree and the extent of inequality in income and wealth that is considered politically and socially tolerable and economically acceptable? There is unfortunately no satisfactory answer to this question as there is no optimal solution to the income and wealth distribution problem. At the same time there is little precious time for our society to experiment with all sorts of alternatives.

Concepts like 'fair' and 'equitable' distribution have not only emotive connotations but are in practice beyond scientific assessment or measure. Because of its normative nature, any income distribution can be both equitable and inequitable at the same time. It depends on who gains and who loses. Given such conceptual difficulties, an equitable distribution (whether of income, wealth or other variables) has to be defined operationally. It becomes an issue in the process of political decision-making.

In the Malaysian situation, since the mixed economy framework for development is the acceptable one it is not anticipated that the reduction in inequality can be successful without some of the above fundamental reforms being implemented. However, it must be remembered that such reforms should be carried out with the introduction of minimal additional inequities. Unless this is ensured, the Malaysian society will still have to endure the inequality and poverty problem. The only difference is that now different groups are suffering from it. But is this sensible economics and sound politics? And is this what we want?

# REGIONAL ECONOMIC DIFFERENCES: A CASE STUDY

Fong Chan Onn & Wan Abdul Rahim

Regional development to reduce substantially if not equalize income between regions and community groups is well accepted as a development strategy by the Malaysian Government. This strategy implicitly regards each state as a homogeneous unit, and seeks to direct development towards the least developed states.[1] The limitation of this assumption is that the least developed areas within the developed states, particularly Selangor, receive low priority for development. Although Selangor has the highest GNP per capita among the states,[2] this indicator is not representative of the less developed districts like Kuala Selangor and Sabak Bernam, since the bulk of the state's industrial activities and wealth are concentrated in the Klang Valley.

The assumption of the state as a homogeneous income unit may have been necessitated by the paucity of data disaggregated by regions within each state. In this paper we present a methodology to derive three socio-economic indicators (namely the gross regional product per capita, the income per capita and income per household) for four rural districts[3] in Selangor. These district indicators are further subclassified by racial groups. This methodology differs from that of Simonsen[4] in that the latter uses district infrastructure characteristics (e.g. number of motor vehicles per capita) as

[1] See, for example, *TMP*, pp. 214–7.

[2] See Economic Planning Unit, 'Regional Development Strategy: Report on a Research Project', Kuala Lumpur, Nov. 1974. In 1970, the GNP per capita of Selangor is estimated at $1520, about 166% that of the Peninsular Malaysia mean of $912. It should be noted by Selangor we mean Selangor including the Federal Territory.

[3] These districts are Kuala Langat, Kuala Selangor, Sabak Bernam and Ulu Selangor.

[4] O.C. Simonsen, 'Indicative Urban and Non-Urban Income Disparities in Peninsular Malaysia and its Implication for Development', Malaysia Economic Planning Unit, July 1973.

income indicators, instead of estimating the income data directly. The use of income proxy variables has its limitations, the most important of which is the absence of perfect correlation between the proxy variables and income itself.

Using the socio-economic indicators derived, we then examine the differences in economic conditions between the four rural districts and the rest of Selangor as well as other less developed states in the country and draw the policy implications therein.

## METHODOLOGY

Basically, two approaches can be utilized to derive the socio-economic indicators at district level. The first approach involves the estimation of the values added and income of each sector of activity based on a thorough investigation of the district acreages under agriculture, number and types of industries, units of commercial and retail activities etc. The second approach involves the determination of the total state income and its components, and then the apportionment of these amounts among the districts of the state by means of the best set of indicators available.[5] In this study, we adopt the first (micro) approach since fairly accurate data, especially for the agricultural sectors, are available or can be derived at district level. Further, since Klang Valley is the administrative capital and industrial hub of Malaysia, the apportionment of the Selangor income among the districts, as is required by the second (macro) approach, would entail the difficult step of estimating the amount of income flowing into Klang Valley from the rest of the country.[6]

### Computation of Value Added

The first step in the micro approach calls for the computation of the value added of the various sectors in each district. In this respect, the method used for the agriculture sectors (including primary processing) differs somewhat from that used for the non-agriculture sectors. Wherever data are available on the acreage of any crop, the value added of that crop has been calculated by deducting the estimated costs of material inputs and other charges from the estimated gross value of output.[7] This includes all the major crops of the four districts concerned, and since agriculture is the predominant activity in these areas, this procedure can improve somewhat the accuracy of the district income estimation. For the remaining agricultural sectors their value added have been calculated by multiplying the estimated labour productivity with the number employed based on the 1970 Census figures.[8] The sources for these productivity estimates are presented in Table 1.

[5] For a detailed discussion of these two approaches, see, for example, Walter Isard, *Methods of Regional Analysis: an Introduction to Regional Science*, New York, The Technology Press of MIT, 1960.

[6] For example, many plantations, mines and industries have their headoffices in Kuala Lumpur. The amount of profits these firms channel back to Kuala Lumpur would have to be estimated if the macro approach is used.

[7] This includes padi, rubber planting on estate and smallholding, oil palm planting on estate and smallholding, rubber processing, oil palm processing, coffee and coconut. We are indebted to Dr. Abdul Halim Ismail for providing these computations.

[8] Department of Statistics, *1970 Population and Housing Census of Malaysia*, Kuala Lumpur, 1970.

TABLE 1
AGRICULTURAL SECTOR: LABOUR PRODUCTIVITY, SALARIES AND WAGES/VALUE ADDED RATIO AND PERCENTAGE OF NON-WAGE VALUE ADDED RETAINED

| Sector | Labour Productivity Estimate *($ per person)* | Salaries & Wages Value Added (%) | % of Non-wage Value Retained in District |
|---|---|---|---|
| Padi | Not needed – (See Footnote 7) | 100 | 100 |
| Agriculture & Livestock other than padi | 1,302 | 100 | 100 |
| Forestry & Logging | 10,851 | 41 | 0 |
| Fishing | 898 | 100 | 100 |
| Rubber planting & Processing in estates | Not needed – (See Footnote 7) | 56 | 0 |
| Rubber planting & Processing on smallholdings | – do – | 100 | 100 |
| Oil palm planting on estates | – do – | 28 | 50 |
| Oil palm planting on smallholdings | – do – | 100 | 100 |
| Coffee & Tea | – do – | 100 | 100 |
| Coconut | – do – | 100 | 100 |
| Saw-milling | 4,562 | 100 | 100 |
| Rice-milling | 3,167 | 22 | 100 |
| Coconut oil milling | 18,667 | 22 | 100 |

*Sources:* Malaysia, *FAO Report and Forest Industry Development.*
Malaysia, Department of Statistics, *Census of Manufacturing Industry, 1968.*
Ng Choong Sooi, 'Profitability and Investments in Replanting and New Planting on Estates', Proceedings of RRIM Planters' Conference.
C.O. Fong & W. Rahim, 'Sample Survey of Selected Rural Districts-Selangor' (Unpublished) 1975.

The value added of the mining, manufacturing, construction, utilities, transport and storage, commerce and services sectors are derived by multiplying the estimated sectoral productivity (see Table 2) by the number of people in each sector. For greater accuracy, the sectors are broken down to the three-digit level of MSIC (Malaysian Standard Industrial Classification), and the productivity figures relevant to the districts

in this case study are given in Table 2. The 1970 Census provides employment figures for sectors at two-digit level. These are adjusted to three-digit level by adjusting the labour force figures (which are available at the three-digit level) under the assumption of constant ratio of labour force to employment in all three-digit level activities within a two-digit level sector.

TABLE 2
NON-AGRICULTURAL SECTOR: LABOUR PRODUCTIVITY, SALARY & WAGES/VALUE ADDED RATIO AND PERCENTAGE OF NON-WAGE VALUE ADDED RETAINED

| Industry | Productivity Value | Salary & Wages Value Added (%) | % of Non Wage Retained in District |
|---|---|---|---|
| Metal ore mining | 30,550.00 | 29 | 0 |
| Food manufacturing[a] | 12,789.00 | 22 | 100 |
| Beverage[b] | 9,931.00 | 20 | 100 |
| Tobacco[c] | 20,850.00 | 23 | 100 |
| Textiles[d] | 4,827.68 | 26 | 100 |
| Leather products | 3,773.58 | 33 | 100 |
| Footwear (except vulcanized or moulded rubber or plastic footwear) | 2,254.00 | 23 | 100 |
| Wood and cork products, expect furniture | 4,548.61 | 45 | 100 |
| Furniture & Fixtures except primarily of metal | 3,601.44 | 49 | 100 |
| Paper & Paper products | 6,341.15 | 32 | 100 |
| Printing, publishing and allied industries | 8,443.00 | 37 | 100 |
| Chemicals and chemical products[e] | 15,728.00 | 28 | 100 |
| Rubber products[f] | 6,022.28 | 47 | 100 |
| Non-metallic mineral products[g] | 9,838.00 | 39 | 100 |
| Basic metal industry | 12,796.00 | 29 | 100 |
| Metal products except machinery & equipment | 5,758.80 | 38 | 100 |
| Machinery except electrical[h] | 4,094.22 | 49 | 100 |
| Electrical machinery apparatus, appliances & supplies[i] | 4,535.48 | 26 | 100 |
| Transport equipment[j] | 4,980.00 | 34 | 100 |
| Other manufacturing industries | 3,959.28 | 38 | 100 |

*Table 2* (cont'd)

| Industry | Productivity Value | Salary & Wages Value Added (%) | % of Non Wages Retained in District |
|---|---|---|---|
| Utilities | 11,043.00 | 41 | 0 |
| Construction | 3,760.00 | 60 | 30 |
| Wholesale trade[k] | 13,436.00 | 21 | 70 |
| Retail trade | 3,303.00 | 29 | 100 |
| Transport & Communication | 3,411.00 | 49 | 50 |
| Banking, Insurance & Finance | 12,176.00 | 51 | 0 |
| Services | 2,876.03 | 77 | 70 |

*Sources:* ***Census of Mining Industries in West Malaysia 1969,*** Kuala Lumpur, Statistics Department.

***Census of Manufacturing Industries, 1968,*** Kuala Lumpur, Statistics Department.

***Survey of Manufacturing Industries, 1971,*** Kuala Lumpur, Statistics Department.

***MTR of the SMP.***

***Survey of Construction Industries, 1970,*** Kuala Lumpur, Statistics Department.

***Census of Wholesale and Retail Trades, 1970,*** Kuala Lumpur, Statistics Department.

Fong & Rahim, ***op. cit.***

*Notes:*

[a]Excluding Dairy products, coconut oil processing & rice mills.

[b]Only soft drinks and carbonate beverages.

[c]Excluding cigarettes manufacturing.

[d]Includes only Tailoring and Dressmaking.

[e]Medicinal & Pharmaceutical preparations, and candles, incense, joss sticks and chemical products.

[f]Includes only Tyre retreading and vulcanizing.

[g]Includes only structural clay products, pottery, china and earthenware, cement and concrete products, and other non-metallic mineral products.

[h]Excluding refrigerating, exhaust, ventilating and air condition machinery.

[i]Includes manufacture of dry cells, batteries and related articles and repairing electrical appliances.

[j]Includes only Motor vehicle repair and Spray-painting shops and Bicycle repair shops.

*Table 2* (cont'd)

Notes:

[k]This includes only:

1. Meat and Poultry
2. Fish
3. Fruits and Vegetables
4. Confectionery
5. Cakes, biscuits, bread, etc.
6. Rice, other grains, flour, etc.
7. Bean curd
8. *Mee* and *kueh teow*
9. Other foods
10. Tobacco, cigarettes
11. Building materials and builders hardware
12. Rubber dealers and agents
13. Livestock dealers and agents
14. Other agricultural products
15. Fertilizers
16. Fuel merchants (firewood, charcoal, *etc.*)
17. Mineral, metal dealers (except scrap merchants)
18. Secondhand goods (bags, bottles, scrap metal, old newspapers)
19. Other wholesalers (e.g. fibres, *etc.*)
20. Large general wholesalers.



The value added of the dwelling sector is computed by assuming several average rental values of the houses in the districts. These rental values are arrived at on the basis of sample surveys conducted in the districts. The type and number of dwelling units are available from the Housing Tables of the 1970 Census.

For the houses in urban areas, the rental values assumed are:

| *Type* | *Structure* | *Rental per month (S)* |
|---|---|---|
| House/Bungalow | Brick & concrete | 100.00 |
| | Other types | 50.00 |
| | Brick & concrete | 30.00 |
| | Brick & plank | 30.00 |
| | Plank & others | 20.00 |
| | Brick & concrete | 20.00 |
| | Brick & plank | 15.00 |
| | Other types | 10.00 |

For those houses in the rural areas, the rental values assumed are:

| *Type* | *Structure* | *Rental per month ($)* |
|---|---|---|
| House/Bungalow | Brick & concrete | 60.00 |
| | Other types | 30.00 |
| | Brick & concrete | 20.00 |
| | Brick & plank | 20.00 |
| | Plank & others | 10.00 |
| | Brick & concrete | 20.00 |
| | Brick & plank | 14.00 |
| | Plank & others | 10.00 |

**Computation of Socioeconomic Indicators**

To derive the socioeconomic indicators the following ratios have been calculated:

(i) Ratio of salary and wages to value added for each sector (see Table 2 for sources)

(ii) Proportion of non-wage (or profit) component of value added that is retained in district for each sector (see Table 2 for sources).

(iii) Proportion of retained non-wage component of value added accruing to Malays for the four districts (See Table 3 for estimation).

Using the above ratios, the procedure for the derivation of the socio-economic indicators from the sectoral value added data is summarized in Figure I. Referring to the Figure, the sectoral value added is either estimated directly or as the product of sectoral employment and productivity. The sectoral value added multiplied by the wage and salary/value added ratio gives the salary and wage component of the value added. This is distributed to the various racial groups based on the distribution of employment and under the assumption of equal productivity for all workers, irrespective of race, within a sector.[9] All wage and salary incomes are assumed to be retained within the district.[10] The non-wage component of the value added is then multiplied by the percentage of non-wage retained within districts to arrive at the total sectoral profits retained within a district. The profits retained are then apportioned between Malays and non-Malays based on the estimate of racial ownership of establishments. The sum of the wages and the profits retained gives the sectoral income subclassified by Malays and non-Malays.

For each district we compute the value added per capita and per household and the income per capita and per household. This is derived by summing the sectoral value

[9]We prefer to make this assumption, rather than adopting a higher productivity figure for non-Malays, because for the same job there is no valid justification to assume that non-Malays are more efficient than Malays. The agriculture and industrial establishments in the districts concerned are mainly small and traditional in nature. Within a small traditional establishment there is hardly any room for hierarchical division of workers, resulting in differences in productivity.

[10]This assumption is not unrealistic since on the average there is an almost equal number of in and out commuter-workers in each district.

FIGURE 1

COMPUTATION OF SOCIO-ECONOMIC INDICATORS

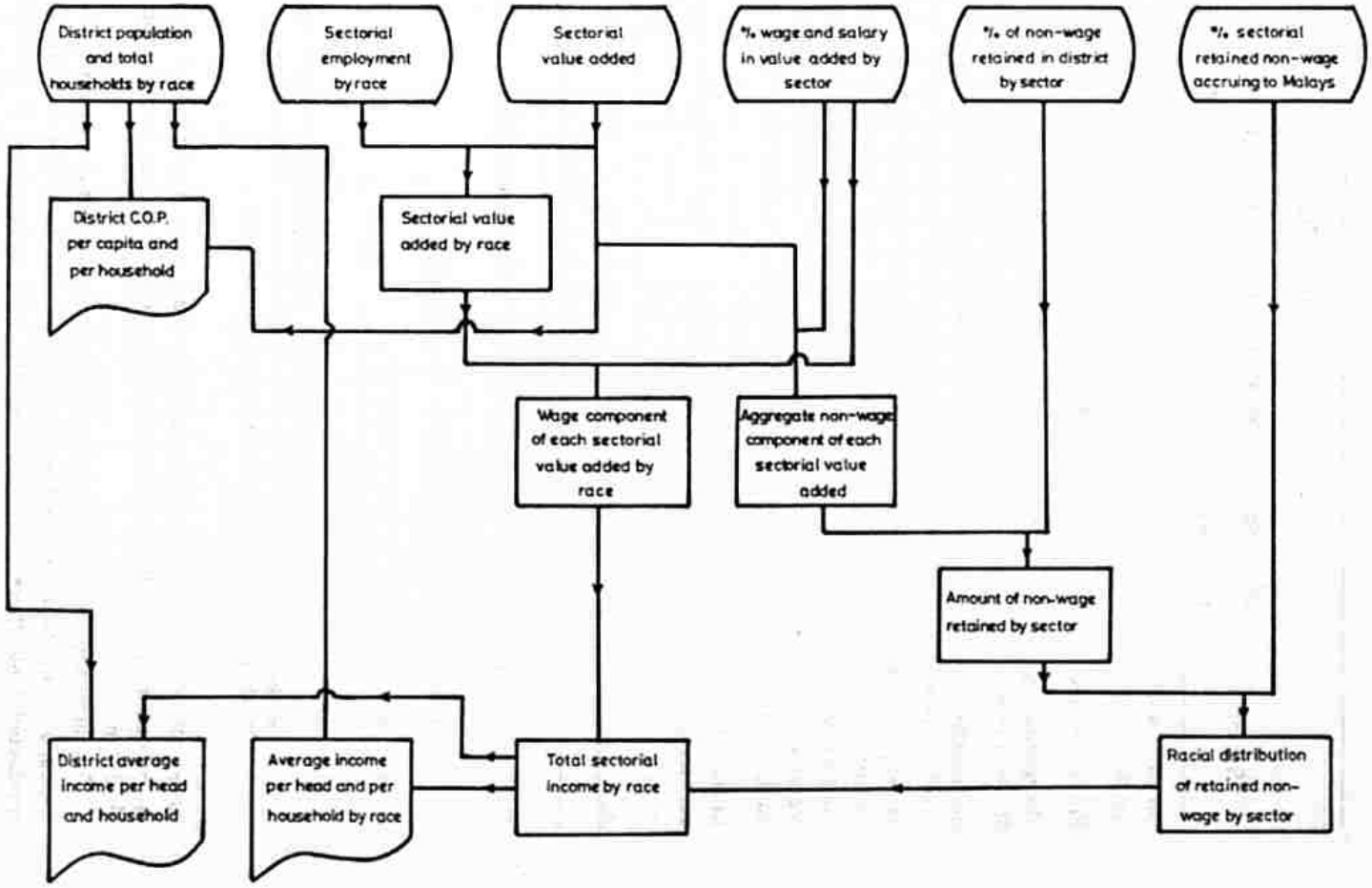


TABLE 3
PROPORTION OF RETAINED NON-WAGE VALUE ADDED ACCRUING TO RACIAL GROUPS (BASED ON ESTIMATES OF OWNERSHIP PAPERS BY RACIAL GROUP)

| Sector | Percentage Share | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Kuala Langat | | Sabak Bernam | | Kuala Selangor | | Ulu Selangor | |
| | *M* | *N-M* | *M* | *N-M* | *M* | *N-M* | *M* | *N-M* |
| Oil palm small-holdings | 75 | 25 | – | – | 30 | 70 | 30 | 70 |
| Food industry | 20 | 80 | 26 | 74 | 8 | 92 | 6 | 94 |
| Manufacturing of wood products | – | 100 | – | 100 | 25 | 75 | – | 100 |
| Manufacturing or rubber products | – | 100 | – | 100 | 11 | 80 | 6 | 94 |
| Metal products except machinery & transport equipment | 9 | 91 | – | 100 | – | 100 | – | 100 |
| Special trade contractors | 10 | 90 | 10 | 90 | 10 | 90 | 10 | 90 |
| Transport | 30 | 70 | 50 | 50 | 43 | 57 | 23 | 77 |
| Services | 15 | 85 | 25 | 75 | 15 | 85 | 15 | 85 |

*Sources:* *Census of Manufacturing Industry, 1973,* Kuala Lumpur, Department of Statistics. (Unpublished census frame).

FIDA list of approved industries (unpublished).

*Notes:* M = Malays
N-M = Non-Malays

The percentage shares are computed on the basis of ownership of establishment by racial groups. For the rest of the manufacturing industries not stated in the above table, 100% of the profit retained is assumed to accrue to non-Malays.

added and income and dividing them by the number of households or the population as the case may be. These socio-economic indicators are also further subclassified by Malays and non-Malays.

The accuracy of the district socio-economic indicators derived above depends critically on the reliability and accuracy of the data used. Wherever possible, we have conducted field checks to verify that the data we used are of the right order of magnitude. Since fairly accurate micro data are available for the agricultural sectors, this methodology can provide fairly accurate estimates of socio-economic indicators of rural agricultural districts.

## THE CASE STUDY

In this section we present the estimates of our socio-economic indicators for four rural districts in Selangor; namely, Kuala Langat, Kuala Selangor, Sabak Bernam and Ulu Selangor. The intention is to compare their present economic situation in relation to Selangor as a whole and the less developed states of Malaysia. This comparison has some policy relevance. Located within the most properous state, these districts are regarded as well developed and are generally given low priority in the allocation of public expenditures.[11]

### POPULATION AND SETTLEMENT OF THE FOUR DISTRICTS

The population in the four districts was estimated at 477,000 in 1975, and this represented about 23% of the total population of Selangor. This estimate is based on the 1970 Census, which showed a population of 442,000 and an estimate of employment growth. The growth rate of population from 1970 to 1975 is low, only 1.5% p.a., implying that these districts experienced a net out-migration of more than 2,000 people per year since 1970. The majority of the out-migrants have moved to the Klang Valley area. The annual out-migration from 1970 to 1975 is about 500–800 people, higher than the one recorded during the previous 5-year period.

The average household size in the four districts is 5.9 persons. The largest household sizes are found among the Chinese (7.0), while those of the Malays and Indians are 5.8 and 5.6 respectively. This distribution is also reflected in the urban and rural household sizes. The urban households, which are mainly Chinese, consists of 6.2 persons on an average, compared to 5.8 in rural areas.

The geographical distribution of the population and densities (which is defined here as 'settled' acres per person) in the four districts are shown in Table 4. The settled area includes urban, mining and agricultural land.

Table 4 shows that there is about one 'settled' acre per capita in the four districts. Only one district, Ulu Selangor, differs significantly from this average, having 1.3 acres per capita. If density calculations are based on gross acreages, the densities decrease to 2 acres per person in all districts except Ulu Selangor. This district has more than 4 gross acres per person.

TABLE 4
POPULATION DENSITIES BY DISTRICTS, 1975

| District | Population | Density *(Person/settled acre)* |
|---|---|---|
| Kuala Langat | 121,000 | 1.07 |
| Kuala Selangor | 153,000 | 1.02 |
| Sabak Bernam | 87,000 | 0.97 |
| Ulu Selangor | 116,000 | 1.31 |
| Study Area | 477,000 | 1.09 |

[11] Also, no locational incentives are given for industries located in any part of Selangor.

The inter-racial distribution of population by district is shown in Table 5. Sabak Bernam is exceptional in its high ratio of Malays and low ratio of Indians, and Ulu Selangor in its substantial Chinese population.

TABLE 5
COMMUNITY DISTRIBUTION BY DISTRICT, 1970
*(Figures adjusted for under-enumeration)*

| | Malays | | Chinese | | Indians & Others | |
|---|---|---|---|---|---|---|
| | *No.* | % | *No.* | % | *No.* | % |
| Kuala Langat | 51,714 | 46.3 | 36,738 | 32.9 | 23,169 | 20.8 |
| Kuala Selangor | 81,110 | 57.5 | 31,584 | 22.4 | 28,483 | 20.2 |
| Sabak Bernam | 61,546 | 76.1 | 14,434 | 17.8 | 4,955 | 6.1 |
| Ulu Selangor | 34,756 | 32.1 | 44,963 | 41.5 | 28,577 | 26.4 |

About 27% of the people in the four districts live in urban areas. Thus the degree of urbanization increased only slightly since 1957. All towns are small rural service towns with a high proportion of agricultural households.

As shown below the degree of urbanization in 1975 differed widely between the districts:

| | |
|---|---|
| Kuala Langat | 27% |
| Kuala Selangor | 18% |
| Sabak Bernam | 16% |
| Ulu Selangor | 46% |
| Average | 27% |

## ECONOMIC CONDITIONS

### Economic Conditions in the Four Districts as a Whole

This section presents a number of indicators of the general living standard within the four districts and analyzes their economic structure. The main socio-economic indicators that we have computed are: Gross Regional Product (GRP) or value added per head of population, and income per capita and per household. Since the question of disparity in income and wealth ownership among the races is a very important aspect of development in Malaysia, estimates of production and income level for all districts are sub-classified by racial groups.

Table 6 column (1) shows that GRP per head for the four districts is below the national average by 13%. Studies by EPU[12] have indicated that the GRP per capita of Selangor is 67% above the national average. This indicates the extreme differences in average GRP per capita between the four districts and the Klang Valley

[12] Economic Planning Unit, *op. cit.*

TABLE 6
GRP PER CAPITA, INCOME PER CAPITA & INCOME PER HOUSEHOLD, 1970

| Region (1) | GRP/Capita (2) | | Income/Capita (3) | | Income/Household (4) | |
|---|---|---|---|---|---|---|
| | *($)* | *(%)* | *($)* | *(%)* | *($)* | *(%)* |
| Four districts | 773.00 | 86.8 | 601.00 | 96.3 | 3,800.00 | 108.6 |
| Klang Valley[a] | 1,684.00 | 184.6 | 753.00 | 120.7 | 4,236.00 | 121.0 |
| Selangor[b] | 1,530.00 | 167.7 | 714.00 | 114.4 | 4,150.00 | 181.6 |
| Peninsular Malaysia[c] | 912.00 | 100.0 | 624.00 | 100.0 | 3,500.00 | 100.0 |

*Sources:* [a]Shankland Cox, *Klang Valley Regional Planning and Development Study*, Kuala Lumpur, May 1973.

[b]Economic Planning Unit, *op. cit.*

[c]Col. (2): *ibid.*

Cols.(3) & (4): Department of Statistics, *Household Budget and Income Survey*, Kuala Lumpur, 1973 (Unpublished data).

area. Our estimate indicates that GRP per capita for the four districts is less than half that of Klang Valley region.

The GRP per capita of the four districts is only slightly higher than the average estimated for Malacca, one of the poorer states in Peninsular Malaysia, as shown in Table 7. If GRP for the four districts is compared to GRP per capita for other rural areas in Malaysia, it is not likely to be above the national average.

Agriculture is, of course, the main economic base of the four districts. About 40% of their GRP orginates from the agricultural sector. For Selangor as a whole the share of the Agricultural sector is only 14% which is considerably below the figure of about 30% for Peninsular Malaysia.

The Manufacturing sector (including primary processing of agricultural and forestry products) accounts for about 14% of the total GRP of the four districts. This contrasts with the corresponding figure of 32.5% for the Klang Valley area.

Approximately 66% of total employment in the four districts is in agriculture; out of this, about one-third are actually engaged in traditional agricultural activities, mainly rice farming and fishing, while the rest are engaged in the cultivation of permanent crops, especially rubber, oil palm and coconuts. The share of employment in other sectors is well below those for Selangor. The same generally applies when the employment distribution in the four districts is compared to those for Peninsular Malaysia.

Table 6 (cols. 3 and 4) also presents our estimates of income per capita and per household for the four districts. We estimate that the average income per household

TABLE 7
GDP PER CAPITA, 1970

| State | $ |
|---|---|
| Selangor (including Federal Territory) | 1,520 |
| Penang | 939 |
| Perak | 911 |
| Negeri Sembilan | 907 |
| Pahang | 855 |
| Johor | 835 |
| **Four districts** | **773** |
| Melaka | 761 |
| Kedah & Perlis | 605 |
| Trengganu | 536 |
| Kelantan | 420 |
| **Peninsular Malaysia** | **912** |

*Source:* Economic Planning Unit, *op. cit.*

for the four districts is around $3,800 per annum compared with $4,236 for the Klang Valley area as a whole and about $7,200 for Kuala Lumpur. The Department of Statistics' Socio-Economic Survey (SES) of 1967/1968 indicates that the mean income of households in Peninsular Malaysia was between M$2,500 to $3,000. Considering that mean household income in Peninsular Malaysia did increase between 1967/68 and 1970 and considering that 1968 was a very depressed year in terms of commodity prices, it is possible that the mean household income in Peninsular Malaysia was between $3,000 to $3,500 in 1970. Thus, although the estimate of GRP per capita in the four districts is below the national average, income per household seems somewhat higher than the national average. This is possible considering that the national GDP and GNP per capita includes incomes of the public sector which do not directly flow to households. The same point explains the observation that the Klang Valley income per household appears only slightly higher than that for the four districts.

**Differences in Economic Conditions Among the Four Districts**

Table 8 gives the estimates of value added per capita and income per household for the four districts.

The per capita value added for Ulu Selangor of around $850 seems to be significantly higher than those of other districts, especially Sabak Bernam and Kuala Langat, which were estimated at $647 and $761 respectively. The GRP per capita for Sabak Bernam is 16% below the average for the whole area.

The marked differences in the per capita value added figure between Sabak Bernam and the other districts follows from the significant difference in the economic structure of Sabak Bernam from those of the other districts. While agriculture is the

TABLE 8
VALUE ADDED PER CAPITA, INCOME PER CAPITA AND PER HOUSEHOLD, 1970

| | Kuala Langat | Sabak Bernam | Kuala Selangor | Ulu Selangor | Average |
|---|---|---|---|---|---|
| Value Added Per Capita *($)* | 761 | 647 | 796 | 850 | 773 |
| % of average | 98 | 84 | 103 | 110 | 100 |
| Income Per Capita *($)* | 582 | 597 | 622 | 617 | 606 |
| % of average | 96 | 99 | 103 | 102 | 100 |
| Income Per Household *($)* | 3,883 | 3,858 | 4,100 | 3,703 | 3,907 |
| % of average | 99 | 99 | 105 | 95 | 100 |

most important activity in all the districts, 'traditional agriculture' such as rice farming and fishing which has the lowest average labour productivity, is by far the most important type of agriculture in Sabak Bernam. The low productivity of these activities is demonstrated by the observations that although they account for about 52% of total employment in Sabak Bernam, they contribute to only 37% of the district's total value added.

The cultivation of permanent crops is a very important activity in all the other districts. In Ulu Selangor this accounts for 28% of total value added and about 40% of total employment. In Kuala Langat it accounts for 34% of the district's value added and 52% of total employment. Even in Kuala Selangor, where traditional agriculture is also very important, it accounts for about 22% of total value added and 33% of total employment.

The only permanent crops of significance in Sabak Bernam are coconut and cacao. In the other districts rubber and oil palm are the major permanent crops, although coconut is also an important crop in Kuala Selangor. In Kuala Langat, coffee cultivation adds considerably to the importance of permanent crops in the district.

Another important difference in the economic structure of the districts is the importance of mining activities in Ulu Selangor and Kuala Selangor. In the former, it accounts for about 15% of the district's total value added and 7% of employment while in the latter it accounts for 7% of value added and 2.5% of employment.

The ranking of various districts in terms of retained income per capita differs from the ranking in terms of value added per capita. Kuala Selangor now emerges as the district with the highest income per capita while Kuala Langat turns out to be the district with the lowest income per capita. But the disparity among the districts' income per capita is much less than the disparity in value added per capita. The largest deviation in income per capita by district from the average is 4%. This is the average income of Kuala Langat district.

The main reason for the change in ranking and the lower disparity in income per capita among districts stems from our assumption that a high percentage of the profit income from estates, mines and factories flow out of the districts. Thus, Ulu Selangor and Kuala Langat with high shares of permanent crops and mines in their total GRP are more affected by such outflow of funds than Kuala Selangor and Sabak Bernam.

When we consider average income per household, there appears to be an even more drastic change in the original ranking based on GRP or value added per capita. Ulu Selangor, which occupies the top position under the ranking based on GRP per capita appears to be the district with the lowest average income per household. The main reason for this is that Ulu Selangor has the lowest average household size among all the districts. It also has, according to the 1970 Census, the lowest ratio of employment to labour force. The average household size in Ulu Selangor is 5.5 while the average size for all districts is about 6.0. The relatively low ratio of employment to labour force seems to indicate that unemployment, especially among the Malays, is higher in Ulu Selangor than in other districts. It is not possible, though, to confirm this without a detailed field investigation. However, as in the case of income per capita, the disparity among districts of income per household is quite small. Income per household in Kuala Selangor (which appears to be the highest) is only 10% higher than that of Ulu Selangor which has the lowest figure. None of the estimates of income per household by district deviates from the average for the four districts by more than 5%.

**Differences in Economic Conditions Among Racial Groups**

Table 9 indicates that there is a marked difference in income per capita and income per household between the Malays and non-Malays in all four districts. For the area as a whole the average non-Malay income appears to be about 40% higher than the average Malay income per capita and per household.

Malays in Kuala Selangor seem to earn a higher average income than those in other districts. The lowest average Malay household income is in Ulu Selangor. In this district the rural Malays turn out economically to be the most depressed of all groups. The low average household income in Ulu Selangor is therefore due mainly to the very low Malay household income. The average non-Malay household income is actually not significantly different from those for other districts.

TABLE 9
COMPARISON OF RACIAL INCOME PER CAPITA & INCOME PER HOUSEHOLD FOR FOUR DISTRICTS, 1970

| District | Income/Capita ($) | | | | Income/Household ($) | | | |
|---|---|---|---|---|---|---|---|---|
| | Malays | Non-Malays | Ratio Col. 2:3 (%) | Average | Malays | Non-Malays | Ratio Col. 6:7 (%) | Average |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Kuala Langat | 477 | 632 | 75 | 582 | 3,674 | 5,238 | 51 | 3,800 |
| Sabak Bernam | 522 | 835 | 63 | 597 | 3,603 | 4,490 | 80 | 3,858 |
| Kuala Selangor | 559 | 707 | 79 | 622 | 3,791 | 4,514 | 84 | 4,110 |
| Ulu Selangor | 410 | 715 | 57 | 617 | 1,999 | 4,814 | 42 | 3,703 |
| Average | 508 | 700 | 73 | 606 | 3,027 | 4,784 | 63 | 3,907 |

The racial difference in income arises at least partly from the difference in the occupational distribution of Malays and non-Malays. In all districts, a much higher percentage of Malays than non-Malays are occupied in the low productivity traditional agricultural sector. In Kuala Selangor 68% of Malays are occupied in rice farming and fishing compared with 23% in the case of non-Malays. In Sabak Bernam the corresponding figures for Malays and non-Malays are respectively 55% and 25%.

Another factor that contributes to the relatively low Malay household income is that the employment rate (employed population divided by total population) among the Malay population is significantly lower than that of the non-Malays in all districts. From the 1970 Census, it appears that the racial differences in formal education received are so insignificant that they cannot be a factor in explaining inter-racial income differences.

### Income Distribution[13]

Table 10 (a) and (b) show the percentage distribution of all households by income size. About 15% of all households earn less than $100 per month and about 40% earn less than $200 per month. If one considers a household income of less than $100 per

TABLE 10

PERCENTAGE DISTRIBUTION OF GROSS HOUSEHOLD INCOME FOR THE FOUR DISTRICTS, 1973

*(a) All Households*

| Income Class ($) | All Households (%) | Cumulative (%) |
|---|---|---|
| 1 – 99 | 15 | 15 |
| 100 – 199 | 27 | 42 |
| 200 – 399 | 33 | 75 |
| 400 – 499 | 9 | 84 |
| 500 – 699 | 8 | 92 |
| 700 – 999 | 4 | 96 |
| 1000–1499 | 2 | 98 |
| >1500 | 2 | 100 |

*Source:* Department of Statistics, 'Household Expenditure and Income Survey', Kuala Lumpur, 1973 (Unpublished data).

[13] The discussion presented in this section on income distribution is, of course, quite independent of the methodology which provides only average socio-economic indicates. It is because a discussion on the distribution of income is mandatory to complete the analysis of the economic condition of the four districts that this section is included.

(b) By Racial Groups

| Income Class ($) | Malays (%) | Cumulative (%) | Chinese (%) | Cumulative (%) | Indians & Others (%) | Cumulative (%) |
|---|---|---|---|---|---|---|
| 1 – 99 | 22 | 22 | 3 | 3 | 12 | 12 |
| 100 – 199 | 33 | 55 | 18 | 21 | 22 | 34 |
| 200 – 399 | 28 | 83 | 37 | 58 | 42 | 76 |
| 400 – 499 | 6 | 89 | 18 | 76 | 6 | 82 |
| 500 – 699 | 5 | 94 | 11 | 87 | 12 | 94 |
| 700 – 999 | 3 | 97 | 7 | 95 | 2 | 96 |
| 1000 – 1499 | 2 | 99 | 3 | 98 | – | – |
| > 1500 | 1 | 100 | 2 | 100 | 4 | 100 |

*Source:* Department of Statistics, 'Household Expenditure and Income Survey', 1973 (Unpublished data)

month as representing 'extreme poverty', there appears to be less incidence of extreme poverty in the four districts than in such states as Kelantan, Perlis, Trengganu and Kedah. The extent of extreme poverty in the Study Area seems to be close to the average for Peninsular Malaysia. The majority of households with very low income is expected to be found among the fishing community, rice and coconut farmers and farm labourers. About 84% of all households earn less than $500 per month.

This very high percentage of households with income less than $500 per month has been found in other studies as well. The Gini coefficient of 0.44 for the four districts is slightly below the national average of about 0.48.[14]

There are also marked differences in the distribution of income within racial groups as shown in Table 10 (b). The incidence of poverty is certainly much higher among the Malay families than either the Chinese or the Indian families. Eighty-nine percent. of Malay families in the four districts earn less than $500 per month. In the case of Chinese and Indians the corresponding figures are 76% and 82%.

## CONCLUDING REMARKS

From the analysis, it is evident that significant differences in economic conditions exist between the urban and rural parts of Selangor. For example, Klang Valley has a GNP per capita about double that of the four rural districts. Hence the often-quoted per capita GNP figure of $1,520 for Selangor in 1970 misrepresents the true economic situation in its rural hinterland. Taking the four districts as a whole, its economic well-being is about the average or slightly below the average of Peninsular Malaysia. For Sabak Bernam, its GNP per capita is only slightly above that of Kedah and Perlis – states for which substantial investments have been channelled under the Third Malaysia Plan regional development programme. To ensure parity of treatment, it is necessary that these areas, and other less developed areas within rich states, be given their due share of development benefits if they are not to lag behind.

[14] See Lim Lin Lean, 'Income Distribution in West Malaysia', a paper present at the Joint JERC-CAMS Seminar on Income Distribution, Employment & Economic Development in South-east Asia, Tokyo, 1974.

# CONCENTRATION OF WEALTH AND POWER IN THE TOP CORPORATIONS IN MALAYSIA

Lim Mah Hui & Mary Anderson

## INTRODUCTION

In Malaysia, as in many other countries, economic growth has prompted increasing economic inequality. In the period 1957–70, although the Gross National Product (GNP) more than doubled, the share of the total household incomes of families in the bottom 20% declined from 5.8% to an even more meagre 4.0% of the GNP; while the top 10% have increased their share from 34% to 40%.[1]

Politicians can no longer point to the successes in economic growth while the failures in distributive justice are so glaring. In Malaysia most studies on income distribution focus on the problems of the poor groups and the problem of racial inequality. For example, the study by Lim Lin Lean on income distribution is for employees with income of less than $500 per month.[2] The economic inequalities between employees of different racial groups below this income level are compared. However, no attempt is made to relate the poverty of the lower classes to the concentration of wealth in the hands of the upper classes. Like the development theorists who study the underdevelopment of the satellite countries without relating it to the development of the metropolitan centres, these studies likewise neglect the symbiotic interconnection between the position of the poor and that of the rich.

Another weakness of most income distribution studies is their tendency to underestimate the degree of inequality in society. Calculations of household income attempt to cover all money and non-money incomes received by all members of a household. These include wages, salaries, rents, interests, dividends and goods produced for their

[1] See Malaysia, *Economic Report 1973–74*, Kuala Lumpur, Ministry of Finance, 1973, p. 63.

[2] Lim Lin Lean, *Some Aspects of Income Differentials in West Malaysia*, Kuala Lumpur, Faculty of Economics & Administration, University of Malaya (Monograph Series on Malaysian Economic Affairs, No. 2), 1971.

own consumption. On the other hand these computations exclude undeclared profits and the huge business expense accounts of the corporate executives. Thus, while the money-in-kind of the lower classes are included, the money-in-kind of the rich are excluded. Furthermore the practice of under-reporting of income by the super-rich tends to hide the real extent of income inequality.

This study examines the problem of inequality with respect to concentration in wealth. Income and wealth are different though the two are closely interrelated. Income in a capitalist economy comes from two sources: ownership of property or wealth (we shall use these two terms interchangeably); and sale of labour. A study of the degree of concentration of wealth will reveal that the most serious source of inequality in society stems not from inequality of labour income i.e. wages and salaries, but from inequality of property ownership. This most important aspect of inequality has also been the most neglected. Studies which focus on inequality of earned income between members of the lower classes of different races not only miss the central issue of distribution but also introduce the element of racial antagonism between members of different races.

In the analysis that follows we are interested in the following questions:

(a) Is economic wealth and power widely dispersed, or is it concentrated in the hands of a small group of wealthy people who have the power to make important decisions affecting the economy in accordance with their own interests?

(b) What are the effects of this concentration of wealth on any attempt to restructure society in the sense of reducing inequality?

(c) What are the main determinants of economic inequality in society?

## ECONOMIC DOMINANCE OF GIANT CORPORATIONS

The concentration of wealth in the Malaysian economy occurs on two levels. First, a few large corporations own and control a disproportionate percentage of the total physical, financial and human capital in the economy. Second, within these large corporations a relatively small number of individuals or groups own and control the share capital, and an even smaller number of men occupy the positions of power (namely directorships) in these corporations.

Stock ownership is increasingly becoming the most important form of wealth in the Malaysian economy. In 1975, the total value of share capital of all limited companies in Malaysia was $9,890 million or about 76% of the Gross Domestic Product.[3] This study will focus on the concentration of wealth in the seventy-seven largest corporations in Malaysia.[4]

While there were 8,000 registered limited companies in Malaysia in 1971, about 6,000 of which were in active operation, the outstanding feature of the economic

[3] *TMP*, Table 4—16, p. 86.

[4] An explanation should be made here on the procedure for selecting the largest 77 corporations in Malaysia. It is accepted that no single criterion, whether total assets, sales or paid-up capital can satisfactorily be used to rank firms with different economic activities. For example, the criterion of total assets would bias in favour of financial firms, while the criterion of sales would bias in favour of commercial firms. As such, the choice of the criterion used here was based on the availability of data. The Department of Statistics made available to the authors a list of the top 50 companies ranked according to turnover. The authors found that three important sectors were under-

structure is that economic production was and continues to be concentrated in the hands of a few giant corporations. For all practical purposes, the small-scale industries, though predominant in numbers, are insignificant in terms of economic power. Today a small group of powerful corporations are responsible for a disproportionately large volume of economic activity and these firms share amongst them a relatively small group of men who are their directors.

One can determine the degree of economic concentration using various measures such as the amount and percentage of total assets, fixed assets, sales, employment, share capital and net profit accounted for by the large corporations. The degree of economic concentration in Malaysia as shown in Table 1 is impressive. In 1972, the top 10 companies (0.14% of total number of companies) owned 3% of the total assets of all operating limited companies. The top 50 companies (0.7%) owned 10.4% of the total assets and the largest 77 companies (1%) owned 33% of the total assets. Using other criteria, the same 77 corporations owned 21.8% of total fixed assets and accounted for 30% of the total net profit of all limited companies. Other criteria such as paid-up capital, employment and sales are unavailable, but there is no reason to believe that the degree of concentration will be different.



TABLE 1
PERCENTAGE SHARE OF TOP 77 CORPORATIONS IN TOTAL ASSETS, FIXED ASSETS AND NET PROFITS (BEFORE TAX) OF ALL LIMITED COMPANIES IN MALAYSIA, 1972

| Companies with Limited Liability Enumerated | | Percentage Share in | | |
|---|---|---|---|---|
| Number | % of Total | Total Assets (%) | Fixed Assets (%) | Net Profits (%) |
| Top 10 | 0.14 | 3.11 | 4.14 | 5.08 |
| Top 20 | 0.28 | 4.64 | 5.25 | 6.74 |
| Top 50 | 0.70 | 10.38 | 14.56 | 19.51 |
| Top 77 | 1.00 | 33.50 | 21.80 | 29.70 |
| All limited companies N = 7009 | 100.00 | $25,275.8 mil. | $6,408.5 mil. | $1,471.3 mil. |

represented in this list, namely, plantations, mining and banking sectors. Hence an additional top 10 plantation companies, top 10 mining companies and top 7 banks all ranked according to total assets were selected from the *Handbook* of the Kuala Lumpur Stock Exchange and included to make the final list of the top 77 largest corporations. As no statistics on top corporations were available for other years, these same companies were also used as the top corporations for these years. We can safely assume that there will not be any substantial changes in the list of top corporations.

It is important to note that 51 of these top 77 corporations were either foreign-owned or controlled.

We must emphasize that these figures *underrate* the economic wealth and power of these top corporations because the financial figures were taken from the unconsolidated accounts. If consolidated figures were used i.e. figures which include the profits and assets of the parents, subsidiary and associate companies, the degree of concentration will be much higher. For example the Sime Darby group has forty subsidiaries and associates and the consolidated total assets of the group in 1972 was $613 million as compared to the total assets of Sime Darby Sdn. Bhd. which was only $51.8 million.

Although exact data for time series studies are unavailable, there is little to doubt that the degree of concentration will increase over time. As the economy grows the position and role of the large corporations will become more significant. The processes of merger, of conglomeration, of expansion of large industries and elimination of smaller industries that are concomitant with the logic of capitalistic development will concentrate more and more economic power in the hands of a few large corporations. Similar studies of economic concentrations in other economies such as those of the US, Canada and Chile, show this trend of increasing concentration. In the US, for instance, the top 100 manufacturing companies owned 40% of total assets of all manufacturing companies in 1929. This figure had increased to 49% by 1962.[5]

At this juncture a point can be raised. If the greater concentration of economic power in the hands of a few large corporations is also accompanied by the dispersion of ownership and control of these corporations, will the consequent problem of worsening economic inequality be arrested? To answer this question we must now examine the distribution of stock ownership in these large corporations.

## CONCENTRATION OF STOCK OWNERSHIP

Is the ownership and control of the large corporations becoming more concentrated or more dispersed? While it is undeniable that more people, especially those from the middle classes, are able to own shares and that big amounts and possibly even the majority of shares of a corporation are and can be owned by a large number of individuals, the concomitant argument that economic power has also become dispersed and democratized does not necessarily follow. The two processes are logically separable. We shall examine the above argument in two parts. First we shall examine the distribution of share ownership and, following that, examine the distribution of economic power.

An examination into the share register of the large corporations was made for the period 1974–6. Of the 77 companies, 38 companies were excluded because 24 companies were fully-owned subsidiaries and complete data was not available for the remaining 14 companies. Hence only the share registers of 39 companies were examined. For each company, the top twenty-five shareholders were identified and ranked. The shareholders here include individuals as well as institutions such as nominee and trustee companies, foundations, and ordinary companies.

Table 2 demonstrates clearly that ownership of stocks in these firms is highly concentrated in the hands of a small number of investors and not dispersed as is often believed to be the case. In 34 companies or 87% of the cases, the largest 25 share-

[5] See Gardiner Means, 'Economic concentration' in Maurice Zeitlin, *American Society, Inc.*, Chicago, Markham Publishing Company, 1970, p. 15.

TABLE 2
PERCENTAGE SHARE OF TOTAL STOCKS HELD BY THE 25 LARGEST SHAREHOLDERS AND THE DISTRIBUTION BY SIZE OF SHAREHOLDERS OF 39 LARGE CORPORATIONS IN MALAYSIA, 1974–6

| % Share of Stocks Held by Top 25 Shareholders in Each Corporation | Distribution of the Large Corporations | | | | | | | | Distribution of the Large Corporations by % Share of Stocks Held by the Top 25 Shareholders | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *25* | *26-100* | *101-500* | *501-1,000* | *1,001 3,000* | *3,001-6,000* | *6,001-10,000* | *10,000+* | *Number* | *%* | *Cumulative Total %* |
| >91% | 6 | 1 | 4 | | | | 1 | | 12 | 30.7 | 30.7 |
| 81–90 | | | 1 | 1 | 3 | | 2 | | 7 | 18 | 48.7 |
| 71–80 | | | | | 2 | 3 | 1 | 1 | 7 | 18 | 66.7 |
| 61–70 | | | | | 2 | 2 | | | 4 | 10.2 | 76.9 |
| 51–60 | | | | | 3 | 1 | | | 4 | 10.2 | 87.1 |
| 41–50 | | | | | 3 | | 1 | | 4 | 10.2 | 97.3 |
| 31–40 | | | | | | 1 | | | 1 | 2.5 | 99.8 |
| 21–30 | | | | | | | | | | | |
| 11–20 | | | | | | | | | | | |
| 6–10 | | | | | | | | | | | |
| 1–5 | | | | | | | | | | | |
| Total | 6 | 1 | 5 | 1 | 13 | 7 | 5 | 1 | 39 | 100 | |
| Percentage | 15.3 | 2.5 | 12.8 | 2.5 | 33.3 | 18 | 12.8 | 2.5 | 99.7 | 100 | |

*Note:* Totals do not add up to 100 because of rounding-off.

holders owned more than 51% of the ordinary stocks. In no case did their share fall below 30% and only in one company did their share amount to less than 40%. Excluding the seven extreme cases of private limited companies, i.e. those with less than 100 shareholders, we still find that despite the large number of shareholders in all companies, the majority of shares is still concentrated in the hands of the top 25 investors. In the case of the company with more than 100,000 shareholders, the top 25 investors, who formed only 0.25% of the total shareholders, owned 74% of the total ordinary stocks of the company. In short, the proliferation of shareholders do not indicate that ownership is widely dispersed. The contrary can occur.

A similar study by Gordon on the ownership of shares by the top 20 investors in 176 large corporations in the US revealed that they owned an average of 28.6% of the value of ordinary stocks – a percentage which happens to be lower than that found in Malaysia.[6]

TABLE 3
STATISTICS ON SHAREHOLDERS AND SHARES OWNED
IN 39 LARGE CORPORATIONS 1974–6

| | | |
|---|---|---|
| (1) | Total number of top 25 shareholders in 39 corporations | 576 |
| (2) | Total number of all shareholders in 39 corporations | 102,507 |
| (3) | Total value of all shares in 39 corporations | $972,345,000 |
| (4) | Total value of shares held by top 576 shareholders | $715,950,000 |
| (5) | Item (4) as percentage of Item (3) | 73% |

If we analyze the issue from another angle, we arrive at the same conclusions. Table 3 shows that the total number of people represented by the 25 largest shareholders in the 39 companies (excluding double-counting) was 576, or 0.5% of the total number of all shareholders. This tiny top 0.5% own $716 million or 73% of the total paid-up capital of the 39 companies.

As far as can be established, no study has ever been done on the differential distribution of wealth (in the form of stock ownership) in Malaysia. The reasons are not hard to find. Much of conventional economics and sociology emphasize the distribution of income as the main source of inequality in society. As labour income forms the bulk of income for the overwhelming majority of the population, most social scientists wrongly assume that occupation is the single most important variable in determining stratification. This explains the predilection of many social scientists to use income, occupation and status as the main indicators of social class.[7]

[6]Robert A. Gordon, *Business Leadership in the Large Corporations*, Washington D.C., Brookings Institution, 1945, pp. 32–34.

[7]The best examples in sociology are the works of Lloyd Warner *et al.*, *Social Class in America*, Chicago, Science Research Associates, 1949, and Milton M. Gordon, *Social Class in American Sociology*, Durham, N.C., Duke University Press, 1958.

By emphasizing the income and occupational variables, the definition of classes is seen from the point of consumption units i.e. a class consists of individuals or families with similar buying power and similar tastes and life styles. The more important issue of economic power which comes from the ownership of the productive resources in society are either totally ignored or relegated to the periphery.

It must be stressed, however, that if we are serious in understanding the *structure* of inequality in society we must look at the distribution of property. The chief determinant of stratification in our society has been, and will continue to be, the unequal ownership of property and consequently the immense power accruing to its holders. The main cleavage of inequality is between the unearned income of property owners and the wages earned by the majority of the working labour force. We concur with Anderson who argues for the 'reintroduction of property as the central variable in social class analysis, assisted by mainly income analysis and secondarily by occupational analysis'.[8]

**Inequality in the Distribution of Wealth**

We now make an attempt to estimate the degree of inequality in the distribution of wealth in Malaysia. We do not have complete data on the stockholdings of the more than 100,000 shareholders of the 39 companies to compute their degree of inequality of ownership. It is suspected that this will be very high. However we have sufficient data to compute the degree of inequality of ownership of shares among the top 576 shareholders in these companies. Table 4 shows an astoundingly high degree of inequality of wealth distribution even amongst these big shareholders. The top 1% of the shareholders owns 25% of the stocks held by the 576 large shareholders. The top 5% own 63%; the top 10% own 78% and the top 50% own 98%. The bottom 35% of the large investors own a meagre 1% of the stocks.

TABLE 4
DISTRIBUTION OF SHARES AMONGST THE TOP 576 SHAREHOLDERS IN 39 LARGE CORPORATIONS IN MALAYSIA 1974–6

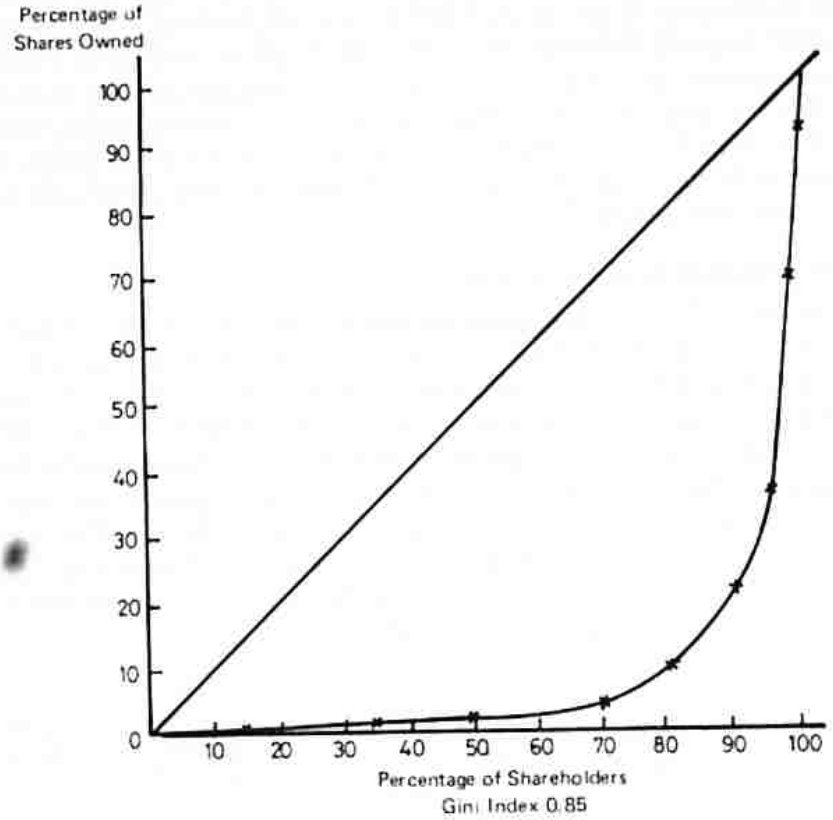
| Shareholders | Percentage of Wealth Owned |
|---|---|
| Top 1% | 25 |
| Top 5% | 63 |
| Top 10% | 78 |
| Top 20% | 92 |
| Top 50% | 98 |
| Bottom 35% | 1 |
| Total: 576 | $717.0 million |

[8] Charles H. Anderson, *The Political Economy of Social Classes*, New Jersey, Prentice-Hall, 1974, p. 134.

The Lorenz curve of this distribution is plotted in Figure I. The Gini Index of this distribution is 0.85 – an incredibly high degree of inequality.[9]

FIGURE I

LORENZ CURVE SHOWING CONCENTRATION OF LANDOWNERSHIP IN GEORGETOWN, 1975.




It must be stressed that these estimations are an *understatement* of the degree of inequality for several reasons. First, we treated each shareholder given in the share register as a separate entity even though some of them may be related to one another and therefore should be aggregated as one shareholder. If this were done the degree of concentration would be even higher. We did not follow this procedure because of the unavailability of complete and accurate information on the relationships between the different shareholders. The splitting of blocks of shares among family members, the placing of stocks under different nominee and trustee companies or the use of street names, *etc.*, are very common practices among the members of the rich for tax and publicity evasion purposes. In fact the present company laws have many loopholes that enable and perhaps even encourage the rich to indulge in such practices.

Secondly, if we were to extend the same analysis to cover the whole population of Malaysia, i.e. to estimate the degree of inequality of ownership of stocks for the whole

[9]The Gini Index of income distribution in Malaysia in 1970 is 0.51. *Economic Report 1973–74*, *op. cit.*, p. 63.

population, we can safely predict that the Gini Index would almost reach the theoretical limit of one – absolute inequality. No more than a few hundred families own the majority of stocks in Malaysia. In short, wealth is very much more unequally distributed than income.

Data on the distribution of ownership of wealth in the US – an advanced capitalist economy, shows the same pattern of inequality. Lampman's study shows that the top 1% of adult population in 1953 owned 76% of all corporate stocks in the economy.[10] Robert Heilbroner quoted a Senate Committee estimate that less than 1% of the families own over 80% of all publicly held industrial stocks in the US.

What are the implications of these findings for the claims of attempts to reduce inequalities in society? First, any attempt to reduce inequality of earned income without addressing the more fundamental problem of inequality of wealth ownership will be insignificant. Bearing in mind that no more than 1.4% of Malaysian households earn an income in excess of $1,500 per month, only this proportion of households are likely to have the capacity to own any stocks.[11] Second, if there are a few hundred thousand individuals owning stocks in the limited companies in Malaysia, it is also the case that most of them own very little stocks. The majority are owned by no more than a tiny fraction of the adult population.

Therefore when the Third Malaysia Plan states that it aims to increase the share ownership of the Malays to 30%, of the non-Malays to 40% and to reduce the share of the foreigners to 30%, it still leaves the problem of inequality untouched. The crucial questions to raise are: First, irrespective of race, what percentage of the population have the capacity to own any stocks? Second, if the above targets were met, what percentage will own most of the stocks? Third, how will these then alter the structure of inequality in our society? The answers to these questions are already partly furnished by the above analysis.

We now turn to the second part of the question – Is there a dispersion of control over the large corporations? The proponents of the thesis of people's capitalism argue that modern day capitalism has enabled more and more people especially from the middle classes to own stocks in public limited companies. They continue to assert that since the majority of stocks in many of these companies are owned by thousands of small shareholders, the economic power and control of the corporation has slipped from the hands of the few big shareholders and directors into the hands of the managers and the small shareholders. In other words the democratization of economic power in these corporations has taken place.[12]

In cases where ownership is concentrated, control will continue to be concentrated. The problem of whether control is dispersed arises in cases where ownership is dispersed. In the case where an identifiable group of top investors own only a minority of the shares, the crucial factor is whether the remainder of the shares are scattered and held by a multitude of small shareholders or whether there exists any other identifiable group with blocks of shares that can rival the leading group. If there is

[10] Robert Lampman, *The Share of Top Wealth Holders in National Wealth*, New Jersey, Princeton University Press, 1962, Table 3, p. 209.

[11] *MTR of the SMP*, Table 1–1, p. 3.

[12] See for example, Adolf A. Berle Jr., *Power Without Property*, New York, Harcourt, Brace and World, 1959, Chs. 1–3; Peter Drucker, *America's Next Twenty Years*, New York, Harper and Brothers, 1957, Ch. 3.

none, then a group of top investors can take control of a company by owning as little as 5% of the ordinary voting stocks.

In more general sociological terms we may state that the degree of economic power and control is a function not only of the size of the group or the resources it owns, but also of its degree of cohesion and organization. It is because the masses are usually dispersed, atomized or disorganized compared to the cohesion of the upper class that the latter are able to exercise much power in society despite their numerical inferiority.[13] To quote Mosca, 'A hundred men acting uniformly in concert, with a common understanding will triumph over a thousand men who are not in accord and can therefore be dealt with one by one.'[14]

## CONCENTRATION OF POWER: INTERLOCKING DIRECTORATES

The concentration of economic power should be studied not only from the point of ownership of wealth but also from the point of positions of power held in the various corporations.

In the social analysis of power, what matters is not personal power but institutional power. According to C.W. Mills:

> The elites are not simply those who have the most, for they could not 'have the most' were it not for their positions in the great institutions. For such institutions are the necessary bases of power, of wealth and of prestige, and at the same time, the chief means of exercising power, of acquiring and retaining wealth, and of cashing in the higher claims for prestige.[15]

No one can retain his wealth and power unless they are anchored in and exercised by means of institutions such as corporations, political parties or other organizations. As such, we must study the distribution of positions of power in the large corporations, namely the system of interlocking directorates.

Interlocking directorates refer to the situation in which a director of one company also sits on the board of other companies. It is one of the key devices for concentrating corporate power since it enables one corporation to exert influence over the others.

A central fact of modern economy is the ubiquity of interlocking directorates. This practice has enhanced the power of the corporate rich over the whole economy. The negative consequences of this have resulted in various legislations in the US to curb the overwhelming power of the large corporations. However, these laws are usually ineffectual because the relationships and interests of the political and economic elites are inseparable.

In the 1930's, the National Resource Committee found that 225 out of 250 of the largest corporations in the US interlocked. It further discovered that 106 of these corporations belonged to at least one of the eight interest groups identified.[16] A more

[13] This is a basic argument of many elite theorists for the superior power of the ruling minority in society. See Gaetano Mosca, *The Ruling Class*, New York, McGraw-Hill, 1939, and Robert Michels, *Political Parties* translated by Eden and Cedar Paul, New York, Free Press 1962.

[14] Gaetano Mosca, *op. cit.*, p. 51 *ff.*

[15] C. Wright Mills, *The Power Elite*, New York, Oxford University Press, 1959, p. 9.

[16] US National Resources Committee, *The Structure of the American Economy: Part I, Basic*

recent study in 1965 revealed the same pattern of interlocking directorships among the top 250 companies in US. In fact, more of the top 250 corporations interlocked in 1965 than in 1935.[17]

We can study the system of interlocking directorates at two levels. First, from the level of the corporation that interlock and second from the angle of the positions of the directors that interlock. We must stress that we only analyzed the interlocking directorates *within* the top 77 companies. If we were to extend the analysis to include all the companies outside the 77 then the degree of interlock will be much higher. Another factor that underestimates the degree of interlock is the number of companies chosen to be studied. The greater the number, the higher the degree of interlock.

Our study of the 1974 directors of the top 77 companies shows that 53 out of 77 companies i.e. 68% of them interlocked (Tables 5 and 6). The 24 non-interlocked companies consisted of 11 commercial, 5 manufacturing, 4 plantation, 3 banking and financial and 1 processing companies. Table 6 shows that the average number of director interlocks for all firms was 4.3. Mining companies have the highest rates of interlocks – an average of 10 per company, followed by Plantations with 5.5, Processing 4.3 and Banking and Finance with 4.3.

Of the interlocked firms, the majority of them (23 companies) interlocked between 5–9 times, 5 firms interlocked between 10–14 times and 4 firms between 15–19 times. Those firms which interlocked more than 10 times are from the plantation, mining and processing sectors. Incidentally these companies are mainly foreign-owned and they also come from the most traditional and important sectors of the economy. We can hypothesize that the degree of interlocks tend to increase with the length of period of operation of the firms.

The banking and finance sectors usually show the highest rates of interlocks in most other countries. For example Dooley's study shows that banks and finance companies in the US interlock an average of 16.1 and 15.2 times respectively in comparison to the average of 9.9 for all companies.[18] Why is this not the case in Malaysia? A few reasons can be proposed. First, the number of companies we chose for our study is too small to show the actual degree of interlocks of the banks. For example, we estimate that Overseas Chinese Banking Corporation owns and/or controls directly and indirectly more than 100 companies. Many of these would have been caught in the net if we had extended our study to the top 250 firms. Second, four out of the seven banks in our list are relatively new banks with less than fifteen years of operations. The oldest local bank exhibited a high degree of interlocks. Third, two of the biggest oldest banks in our list are actually branch operations in Malaysia. As such the directors of these two banks are all foreigners with substantial interests in their home countries.

If the above factors were considered and corrected for, we believe that the banks and financial firms will also tend to have the highest degree of interlocks in Malaysia. The reason is not difficult to find. Banks and finance companies form the focus of control of many economic interest groups. They become the financiers spreading their tentacles of influence and power to virtually every sector of the economy. They are, so to speak, the hub of the wheel of the economic system.

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*Characteristics*, Washington, D.C., 1939, p. 161.

[17] Peter C. Dooley, 'The interlocking directorate' in *American Economic Review*, Vol. 59 (June 1969), p. 315.

[18] *Ibid.*, Table 3, p. 316.

TABLE 5
INTERLOCKING DIRECTORATES AMONG THE TOP 77 COMPANIES IN MALAYSIA BY TYPE OF COMPANIES 1974

| Types of Companies | No. of Companies | No. of Companies Interlocked | No. of Directors Interlocked |
|---|---|---|---|
| Manufacturing | 14 | 39 | 44 |
| Commerce | 21 | 35 | 41 |
| Banking & Finance | 8 | 30 | 34 |
| Plantations | 15 | 44 | 82 |
| Mining | 11 | 68 | 110 |
| Construction, Utilities, Properties | 3 | 3 | 3 |
| Processing: agricultural & metal | 4 | 16 | 17 |
| Services & others | 1 | 2 | 2 |
| Total | 77 | 237 | 333 |

TABLE 6
DISTRIBUTION OF DIRECTOR INTERLOCKS BETWEEN 77 LARGEST CORPORATIONS IN MALAYSIA BY SECTOR 1974

| Number of Director Interlocks per Corporation | Manufacturing | Commerce | Banking & Finance | Plantation | Mining | Construction | Processing | Services | Total |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 5 | 11 | 3 | 4 | 0 | 0 | 1 | 0 | 24 |
| 1–4 | 4 | 6 | 1 | 2 | 2 | 3 | 2 | 1 | 21 |
| 5–9 | 5 | 4 | 4 | 7 | 3 | 0 | 0 | 0 | 23 |
| 10–14 | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 0 | 5 |
| 15–19 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| 20–24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25–29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| >30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 14 | 21 | 8 | 15 | 11 | 3 | 4 | 1 | 77 |
| Total no. of director interlocks | 44 | 41 | 34 | 82 | 110 | 3 | 17 | 2 | 333 |
| Average no. of director interlocks | 3.1 | 1.9 | 4.3 | 5.5 | 10.0 | 1 | 4.3 | 2 | 4.3 |

TABLE 7
DISTRIBUTION OF DIRECTORSHIPS IN TOP 77 COMPANIES 1974

| No. of Directorships Held by One Man | Number of Men | % | Number of Directorships |
|---|---|---|---|
| 1 | 391 | 87.0 | 391 |
| 2 | 26 | 5.8 | 52 |
| 3 | 18 | 4.0 | 54 |
| 4 | 6 | 1.3 | 24 |
| 5 | 2 | 0.4 | 10 |
| 6 | 1 | 0.2 | 6 |
| 7 | 1 | 0.2 | 7 |
| 8 | – | | – |
| 9 | – | | – |
| 10+ | – | | – |
| Total | 445 | 100% | 544 |

We now examine interlocking directorates from the level of directors. Table 7 shows that there were 544 directors in the 77 corporations held by 445 men i.e. each corporation had an average of 7 directors and each man held an average of 1.2 directorships. Of the 445 directors, 391 or 87% held only 1 directorship, 26 or 5.8% held 2 directorships, 18 or 4% held 3 directorships, 6 or 1.3% held 4 directorships and 4 or 0.8% held 5 or more directorships. Of those 54 men who held 2 or more directorships, on the average each of them sat on 3 companies.

The above figures at first glance may seem to suggest that interlocking directorships are not very significant. However if we examined all the companies outside the top 77 companies which these directors sat on, the picture will be different, and their influence and power will readily emerge. An example may be cited of a few directors of foreign banks who hold over 100 directorships. We have also a number of local directors with directorships in over 30 companies.

From this brief survey we can conclude that interlocking directorates is a major device to concentrate economic power in the hands of a few individuals and corporations. The complex and sophisticated interrelationships between the members of the corporate rich can be seen from the interlocks between the directors. The interchange of officers and directors is an essential feature of this interlocking system. It sets up a social system of interconnected members whose influence is multiplied. This fluid mobility between members with high positions is not confined to the economic sector but also extends into other important institutions in society – namely between the economic, political, social and military sectors.[19] This extremely

[19] See the classic study done in this field for the American Society by C.W. Mills, *op. cit.*

important phenomenon with far-reaching implications for the power configuration in society is an area which is understudied in Malaysia.

We have alluded earlier to the cohesion and integration of the members of the upper class in contrast to the disunity among the members of the lower classes in society. Interlocking directorates stands as an important method through which members of the upper class enhance their degree of cohesion and increase their power over the economy.

We may conclude by addressing ourselves briefly to the questions we raised at the beginning. The class that owns and controls the productive resources in society undoubtedly is invested with much wealth, prestige and power in society. In Malaysia a few giant corporations own and control the major share of the economy. The share capital of these corporations and their positions of power are in turn concentrated in the hands of a small group of individuals and families. Various mechanisms exist to increase the power and cohesion of this small propertied class. The extremely unequal ownership of the productive resources is the single most important source of economic inequality in our society.

# II. HOUSING, LANDOWNERSHIP AND URBAN DEVELOPMENT

# A STUDY OF URBAN POVERTY: THE KUALA LUMPUR EXPERIENCE

Ishak Shari

## INTRODUCTION

Poverty is still a very serious national problem in this country. In 1970, 49.3% of all households in Peninsular Malaysia (or 791,600 households)[1] received incomes below the poverty line.[2] Despite the millions of dollars spent on various development projects under the Second Malaysia Plan, the total number of poor households continued to increase and in 1975 the number had risen to 835,100 households[3] – an increase of 43,300 households or an average annual increase of 1%. These poor households of all communities are found in both rural and urban areas, but the bulk of them are Malays (about 74% of all poor households) who are chiefly in the rural areas (about 86% of the total).

Although only 14% of the households were in the urban areas, the urban poverty problem needs to be given greater attention than has been the case in the past for the following reasons:

(i) It is increasingly evident that the problem of urban poverty in this country is growing in magnitude and seriousness. It has been estimated that the total number of poor non-agricultural households has increased from 89,500 in 1970 to 105,200 in 1975, or an average annual increase of 3.3% as compared with a 0.7% increase among the poor agricultural households during the same period. This relatively rapid increase in the number of urban poor during the last five years has been partly due to the government policy of increasing the Malay share in the modern sector of the economy,

[1] *TMP*, p. 160.

[2] The 'poverty line' income here refers to income required for minimum subsistence. It takes account of minimum nutritional and other non-food requirements of each household to sustain a decent standard of living. It is estimated to be at M$33 per capita monthly household income.

[3] *TMP*, p. 73.

which implies accelerated urbanization of the predominantly rural Malay population and to the 'push factors' in the rural areas.[4] Table 1 shows that the number of Malay migrants to metropolitan areas of Selangor (i.e. Kuala Lumpur, Petaling Jaya and Klang) increased substantially from 9,319 during the period September 1968 to August 1969 to 20,417 during the period September 1969 to August 1970. Available indicators suggest that this trend continued during the 1971–5 period. Since the majority of these migrants are rural poor, their migration to the urban centres has inevitably increased the number of the urban poor.

(ii) The problem of inequalities in income distribution in this country are on the whole greater in the urban areas than in the rural area. This is true for all communities taken together as well as each individual community taken separately (except 'others'). Table 2 shows that in 1970, the Gini coefficient[5] for all communities in metropolitan towns is 0.5082 as compared to 0.4582 in smaller towns and 0.4505 in the rural areas.

It is the objective of this study to examine and analyze some aspects of urban poverty in this country and to offer tentative suggestions for solution. However, due to unavailability of data[6] the ensuing discussion will be limited to some aspects of poverty in Kuala Lumpur only. Kuala Lumpur has special attraction for the people throughout the country; it attracts not only rural migrants but also migrants from smaller towns. Between 1957 to 1970, the average annual growth rate of the popu-

TABLE 1
METROPOLITAN URBAN SELANGOR: ARRIVAL OF MIGRANTS BY ETHNIC GROUP

| Period of Arrival | Malays | Chinese | Indians | Others | Total |
|---|---|---|---|---|---|
| Sept. '69 – Aug. '70 | 20,417 | 13,920 | 4,632 | 247 | 39,216 |
| Sept. '68 – Aug. '69 | 9,319 | 8,862 | 2,673 | 166 | 21,020 |
| Sept. '67 – Aug. '68 | 8,593 | 10,315 | 2,983 | 189 | 22,070 |
| Sept. '66 – Aug. '67 | 7,873 | 9,039 | 2,713 | 236 | 19,861 |
| Sept. '65 – Aug. '66 | 6,288 | 6,025 | 1,823 | 141 | 14,277 |
| Sept. '64 – Aug. '65 | 5,476 | 5,058 | 1,832 | 100 | 12,466 |
| Sept. '59 – Aug. '64 | 15,294 | 17,032 | 5,803 | 458 | 38,587 |
| Before Aug. '59 | 14,073 | 29,378 | 8,425 | 716 | 52,592 |

*Source:* S. Narayanan, 'Urban In-Migration and Urban Labour Absorption: a Study of Metropolitan Urban Selangor, Unpublished M. Econs. thesis, University of Malaya, 1975.

[4] S. Narayanan, 'Urban In-Migration and Urban Labour Absorption: Study of Metropolitan Urban Selangor', Unpublished M. Econs. thesis, University of Malaya, 1975, pp. 313–4.

[5] The Gini coefficient is the ratio of income received under conditions of inequality compared to that received under conditions of perfect equality. The ratio has a value ranging from zero to one and the higher the ratio, the greater the degree of inequality.

[6] *TMP*, p. 29.

TABLE 2
MALAYSIA: GINI COEFFICIENTS BY ETHNIC GROUP AND STRATA

| Ethnic Group | Metropolitan Towns | Towns | Rural | Total |
|---|---|---|---|---|
| Malays | 0.4505 | 0.4358 | 0.4272 | 0.4553 |
| Chinese | 0.4862 | 0.4449 | 0.4045 | 0.4542 |
| Indians | 0.5648 | 0.4924 | 0.4115 | 0.5003 |
| Others | 0.5270 | 0.6759 | 0.7896 | 0.7071 |
| All Communities | 0.5082 | 0.4582 | 0.4505 | 0.4980 |

*Source:* S. Anand, 'The Size Distribution of Income in Malaysia', Part I, Development Research Centre, World Bank, p. 40. (Mimeograph.)

lation of Kuala Lumpur and Petaling Jaya was about 8.2%[7]. The major part of this rapid growth (about 5.0%) was due to migration.[8] This rapid increase in population has accentuated the unemployment and underemployment problem and aggravated the housing shortages in the City and thus worsened the problem of poverty.

## URBAN POOR GROUPS

### The Squatter Settlements

One of the major manifestations of poverty in Kuala Lumpur (KL) is the existence of the large number of slums[9] and squatter settlements. In 1967–68, it was estimated that there were about 26,500 squatter households (i.e. about 32% of the total households) in the Kuala Lumpur Municipal area comprising a population of 150,000.[10] In 1973, the number of squatter households in the same area was estimated to have increased to 29,000 households comprising a population of 165,000.[11] For the whole of the Federal Territory, the number of squatter households in that year was estimated at 36,000 with a squatter population of about 200,000.[12] 'This figure is double the

[7] Calculated from data in Narayanan, *op. cit.*, p. 311.

[8] Zainal Mahmood, 'Local Government and the Eradication of Poverty', July 1975, p. 3 (Mimeograph.)

[9] The slum-dwellers are occupants of run-down, dilapidated and often over-crowded dwellings, which are generally located in the downtown areas. Although they usually have access to all infrastructural facilities, they also face the problem of low living standards. But, unlike the squatters, they are in legal possession of their premises. Unfortunately, there is very little research carried out on them and therefore it is not possible to discuss their problems in detail.

[10] Kuala Lumpur Municipality, *Report on Surveys of Squatters on State Land and Private Land*, 1970, p. 3.

[11] Emiel A. Wegelin, 'Some characteristics of squatters in Kelang Valley area', *Development Forum*, Vol. IV (December 1974).

[12] *Ibid.*

population of Petaling Jaya (93,447 in 1970) and double the population of any other average Malaysian district'.[13] The latest available estimate shows that the number of squatter households in the Federal Territory has increased to 39,000[14] with a population of about 226,000.

The 1967–8 Survey shows that 20.4% of them are Malays, 67.2% Chinese and 12.4% Indians and others. However, as the result of the rapid flow of Malay migrants to the capital city, especially after 1970, the racial composition of the squatters has changed considerably. The latest estimate shows that 45% of them are Malays, 45% Chinese and 10% Indians.[15] This fact only confirms that poverty as manifested by the squatter problem cuts across racial lines.

The squatter population in Kuala Lumpur can be classified into three categories, *viz:*

(i) **Squatter-tenants:** Normally the recent migrants and the poorest (58% of KL's squatter population).[16]

(ii) **Owner-squatters:** Squatters who own their own houses in the squatter settlement (34%).[17]

(iii) **Opportunist 'squatters':** Generally well-to-do people who stay in squatter settlements for various opportunistic reasons such as to avoid paying rents and taxes.

The majority of the squatters are poor or very poor. They have low occupational status, low earnings and high dependency burdens (average household size is about 5.7 persons). They subsist at a low level of nutrition and live under congested living conditions. It has been estimated that 'approximately 80% of the squatters have no electricity, 75% are without water and 35% without sanitation'.[18]

Table 3 shows the income distribution of the squatters in Kuala Lumpur derived from the various surveys[19] carried out so far. Taking the monthly household income of $200 as our poverty line, 60.7% of all squatter households in the KL Municipal Survey, 57.7% in the Wegelin/UDA Survey and 65.0% in the Kg. Kelantan Survey can be classified as poor households. More realistically, if we take $300 household income

[13] Raja Azman Raja Ismail, 'Appropriate Land Policies for the Planning and Implementation of Human Settlements and Housing in Malaysia', Kuala Lumpur, 1976, p. 21. (Mimeograph.)

[14] *TMP*, p. 167.

[15] *TMP*, p. 167.

[16] Kamal Salih, *Socio-Economic Considerations in the Planning, Design and Implementation of Human Settlements and Housing for the Lower Income Groups in Malaysia*, Kuala Lumpur, May 1976, p. 30–31.

[17] *Ibid.*

[18] M.K. Sen, *The Rehabilitation and Resettlement of Squatters – the KL Experience*, Kuala Lumpur, 1973, p. 7.

[19] The surveys are: 1967/8 KL Municipal Survey, 1972 Wegelin/UDA Survey and 1974 Kg. Kelantan Survey. For more details, see also Ishak Shari, 'Squatters: the urban poor in Kuala Lumpur' and Toh Kin Woon, 'Urban poor: the case of the Cheras Road flat dwellers' in B.A.R. Mokhzani & Khoo Siew Mun (eds.), *Some Case Studies on Poverty in Malaysia: Essays Presented to Professor Ungku A. Aziz*, Kuala Lumpur, Persatuan Ekonomi Malaysia, 1977.

TABLE 3

KUALA LUMPUR: PERCENTAGE DISTRIBUTION OF MONTHLY HOUSEHOLD INCOMES OF SQUATTERS

| Monthly Income *(S)* | Kg. Kelantan Survey, 1974[a] *(All Malays)* | Wegelin/UDA Survey[b] | | | | KL Municipal Survey, 1966/68[c] | | | | All Urban Households,[d] Peninsular Malaysia 1970 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | *Malays* | *Chinese* | *Indians* | *Total* | *Malays* | *Chinese* | *Indians* | *Total* | |
| Below 100 | 6.83 | 4.9 | 4.9 | 10.8 | 5.4 | 12.5 | 7.0 | 17.1 | 9.2 | 10.7 |
| 101 – 200 | 58.23 | 66.2 | 44.7 | 64.3 | 52.1 | 61.3 | 47.5 | 61.7 | 51.5 | 26.0 |
| 201 – 300 | 21.69 | 18.6 | 30.3 | 18.7 | 26.3 | 18.5 | 29.1 | 14.5 | 25.4 | 20.2 |
| 301 – 400 | 7.23 | 6.1 | 14.1 | 4.1 | 11.1 | | | | | 12.6 |
| 401 – 500 | 2.01 | 1.6 | 3.3 | 0.4 | 2.5 | | | | | 7.8 |
| 501 – 600 | 1.61 | 1.6 | 2.6 | 1.7 | 2.3 | 7.8 | 16.5 | 16.7 | 13.9 | 4.8 |
| 601 and above | 2.41 | 1.0 | | | 0.3 | | | | | 17.9 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Mean income *(S)* | 216 | 194 | 201 | 160 | 213 | 181 | 191 | 153 | 203 | 428 |
| Sample size | 250 | 1,641 | 316 | 245 | 2,202 | 3,722 | 8,451 | 1,373 | 13,565 | |

*Sources:* [a]Ishak Shari, *op. cit.*

[b]Emiel A. Wegelin, 'Some characteristics of squatters in Kelang Valley area' ' *Development Forum*, Vol. IV No. 3 (December 1974).

[c]Calculated from data in KL Municipality *Reports on Surveys of Squatters on State Land and Private Land*, Kuala Lumpur, 1970.

[d]*MTR of SMP*, pp. 3–4.

per month as our poverty line,[20] then 83.7% of the squatter households in the Wegelin/UDA Survey and 86.7% in the Kg. Kelantan Survey received incomes below this poverty line.

The major reason for their low incomes is the nature of their economic activity. Although there are greater job opportunities in the urban sector compared to the rural sector, over 90% of the squatters in Kuala Lumpur are petty traders, industrial, manual and transport workers, semi-skilled and unskilled workers, part-time workers, *etc.*[21] The Kg. Kelantan Survey also confirms this observation: 32.4% of the sampled household heads work as labourers in public services, 28.2% as factory workers, 13.6% as drivers and lorry-attendants, 7% as security guards (*jaga*) and 4.5% as petty traders. As a result, 97.5% of them earn monthly incomes of less than $300.

This pattern of employment among the squatters is largely due to their low level of educational attainment and the lack of opportunity to acquire the required skills in urban employment. This is especially so among the recent migrants. The Kg. Kelantan Survey, for instance, shows that 4.4% of the sampled household heads do not have any formal education, 80.4% have only primary education, 11.6% have lower secondary education and 3.6% have upper secondary education. The same survey also shows that only 9.5% of the sampled household heads have skills which are relevant to their types of employment, 7.4% with skills irrelevant to their work and 83.1% were without any skill. Under such circumstances, their chances of improving their economic well-being is very limited.

### *Rumah Pangsa* Tenants

In 1975, there were 5,688 households, with a total population of 34,301, who were tenants of *rumah pangsa* (high-rise flats) in seven low-cost housing schemes in the City. The majority of these tenants were previously squatters whose houses had either been demolished by the government or destroyed by flood or fire. For example, a survey[22] conducted on 290 households in several *rumah pangsa* at Jalan Ceras (henceforth referred to as the Ceras RP Survey) shows that about 88% of the sampled households were formerly squatters.

The aim of resettling the squatters into *rumah pangsa* is to give them a higher standard of living both in terms of physical living conditions (e.g. provision of tapped water, modern sanitary facilities, electricity, *etc.*) as well as in terms of social conditions (e.g. provision of a variety of community facilities and a more secure social environment). However, resettlement of the squatters into *rumah pangsa* alone will not go far towards abolishing poverty. On the contrary, it may 'aggravate urban poverty and sustain the culture of poverty'.[23] In exchange for relatively better physical living

[20] Calculated as $33 per capita (official definition), inflated by 35% (price increase 1970–1973/74), multiplied by 5.7 (average squatter household size).

[21] Sen, *op. cit.*, p. 6.

[22] This survey was conducted in May–June 1974 by a team of Universiti Kebangsaan lecturers from various disciplines. Out of 290 households (comprising a population of 1,357) interviewed, 197 were Malays, 84 Chinese and 9 Indians.

[23] Zaharuddin Alias, 'The Jalan Pekeliling low-cost flats: an attempt at the provision of cheap housing', *Geographica*, Vol. 9 (1974), p. 66.

conditions, the *rumah pangsa* tenants have to allocate a greater portion of their incomes on rents,[24] water and electricity bills and higher cost of transportation. In most cases, those increments in their expenditures posed a considerable financial burden on the tenants with the possible effect of having less money available to buy nutritious food.

Table 4 shows the distribution of household incomes of the *rumah pangsa* tenants. Although there is a possibility of under-reporting, it is obvious from the data that a substantial proportion of the tenant-households in *rumah pangsa* in Kuala Lumpur can be classified as poor households. Of the tenant-households 59.3% in the Ceras RP Survey are below the poverty line of $300 household monthly income while from the Dewan Bandaraya Records Office (DBRO) data, the percentage of all tenant-households below the poverty line is 87.3%.

As in the case of the squatters, the major factors explaining the low incomes among the *rumah pangsa* tenants is their employment pattern. From the available data, about 88% of them work as hawkers, factory workers, unskilled labourers in public services, construction workers, drivers, *etc.* At the same time, the possibility of job advancement is also limited.

While the majority of the *rumah pangsa* tenants received low incomes, their expenditures on rents, water and electricity and transportation are relatively high. The Ceras RP Survey shows that those households with monthly household incomes of less than $300 have to spend about 12% to 36% of their monthly incomes on rent alone.[25]

TABLE 4
PERCENTAGE DISTRIBUTION OF MONTHLY HOUSEHOLD INCOME OF KULA LUMPUR *RUMAH PANGSA* TENANTS

| Monthly Income ($) | Ceras Survey (1974) | Dewan Bandaraya Record Office Data[a] | | | | |
|---|---|---|---|---|---|---|
| | | *Jln. Ceras* | *Jln Shaw* | *Jln. Perkeliling* | *Tun Razak* | *Total* |
| 0 – 100 | 1.7 | 2.79 | 2.93 | 2.59 | 1.93 | 2.46 |
| 101 – 200 | 21.7 | 45.49 | 29.19 | 31.73 | 40.37 | 38.38 |
| 201 – 300 | 35.9 | 38.30 | 59.22 | 50.69 | 44.29 | 46.41 |
| 301 – 500 | 28.6 | 11.54 | 8.52 | 13.79 | 10.99 | 11.14 |
| 501 – 700 | 7.5 | 1.30 | 0.14 | 1.03 | 1.64 | 1.17 |
| 701 – 1000 | 3.9 | 0.48 | 0 | 0.17 | 0.64 | 0.36 |
| 1001 & above | 0.7 | 0.10 | 0 | 0 | 0.14 | 0.08 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

[a]Computed from available data on all the tenants (flat-dwellers) in these housing schemes. The data, compiled in 1974, were the latest available.

[24]The tenants have to pay $36 per month for a 2-room unit (one bedroom and a living room), $47 for a 3-room unit (two bedrooms and a living room) and $75 for a 4-room unit (three bedrooms and a living room).

[25]Raja Azman, *op. cit.*, p. 17, stated that those earning less than $300 per month could only afford to pay 15% of their monthly incomes for rental.

In addition they have to pay an average of about $10–$15 per month for water and electricity. Furthermore when about 48% of the sampled household heads in the Ceras RP Survey have to travel more than 6 miles to work,[26] nearly half of them will be expected to spend at least $20 per month per person on transport.

The majority of the *rumah pangsa* tenants have big families. The Ceras RP Survey shows that only 18.2% of the tenants have less than 3 persons in their families; 55.8% have between 4–6 persons; and 26% have 7 or more persons. The data from the DBRO shows that 54.3% have 7 or more persons. Bearing in mind that most units in the *rumah pangsa* contain one or two bedrooms, the problem of overcrowding is evident.

## PROBLEMS FACED

### Unemployment

Urban unemployment is one of the most serious problems in developing countries and a prime determinant of poverty. In Peninsular Malaysia, the rate of unemployment is relatively higher in urban areas than in rural areas, being 10.6% for urban areas and 6.5% for rural areas in 1971. Furthermore, on the basis of available evidence, 'the rate of open unemployment in urban areas appears to be positively associated with the size of the urban concentration'.[27] Therefore, we can expect that the unemployment rate in KL to be one of the highest in the country. While no data on the unemployment problem in KL city are available, it was estimated in 1970 that there were about 16,600 unemployed persons in the metropolitan area of Selangor i.e. about 6.5% of the total labour force in the area. This estimate may understate the actual unemployment situation since the unemployment rate deviated greatly from the above estimates for all metropolitan areas which is about 10%. Furthermore, it is most likely that the unemployment situation in the metropolitan area of Selangor has deteriorated during the 1971–5 period as a result of the rapid increase in the number of migrants into the area and the slackening of economic activities during the 1974–5 recession.

As in the rest of the country, one of the salient features of the unemployed in the metropolitan area of Selangor is youth unemployment. Table 5 shows that 77% of the unemployed in the metropolitan area of Selangor were in the 15–24 age group.

Another salient feature of the unemployed in the area is the fact that they are educated: 93% of the unemployed in metropolitan Selangor had some formal education. In fact, 56.6% of them had been to secondary schools and some had even received university education.[28]

### Rising Crime Rate

As a consequence of the above-mentioned problems, particularly the rising unemployment among the young people, petty crime and other social vices (especially drug-addiction as a form of escapism from the cruel rigours of city life) are on the increase. Table 6 below shows the occurrence of various types of crimes in Kuala

[26] In the Kg. Kelantan Squatter Survey, only 12% of the sampled household heads travelled more than 6 miles to work.

[27] D.J. Blake, Unemployment: the West Malaysian example', in David Lim (ed.), ***Readings on Malaysian Economic Development***, Kuala Lumpur, Oxford University Press, 1975, p. 190.

[28] Narayanan, *op. cit.*, pp. 325–7.

TABLE 5
METROPOLITAN URBAN SELANGOR: UNEMPLOYMENT BY AGE GROUP, 1970

| | Age Group (*Years*) | | | | | |
|---|---|---|---|---|---|---|
| | 15–19 | 20–24 | 25–34 | 35–44 | 45–54 | All Age Groups |
| Total unemployment (*1000*) | 7.8 | 4.9 | 2.1 | 0.9 | 0.9 | 16.6 |
| Total labour force (*1000*) | 41.2 | 64.6 | 72.7 | 41.4 | 37.2 | 257.0 |
| Unemployed as a % of labour force | 19.0 | 7.6 | 2.9 | 2.2 | 2.4 | 6.5 |

*Source:* Soon Lee Ying, 'An Economic Analysis of Internal Migration in West Malaysia with Special Reference to Economic Imbalances and Regional Development', M. Econs. thesis, University of Malaya, 1975, p. 188.

TABLE 6
NUMBER OF VARIOUS CRIMES COMMITTED IN KUALA LUMPUR, 1970 AND 1975

| Type of Crime | 1970 | 1975 |
|---|---|---|
| Murder | 12 | 36 |
| Attempted Murder | 3 | 12 |
| Injury | 70 | 126 |
| Rape | 32 | 17 |
| Kidnapping for ransom | 0 | 2 |
| Gang robbery | 195 | 1,058 |
| Extortion | 74 | 227 |
| House-breaking & theft | 813 | 2,286 |
| Motor-car theft | 145 | 569 |
| Scooter/motor-cycle theft | 289 | 766 |
| Bicycle theft | 491 | 612 |
| Other theft | 1,643 | 5,299 |
| Total | 3,779 | 10,198 |

*Source:* Malaysia, Crime Statistics Dept., 1976.

Lumpur in 1970 and 1975. The crime rate in the City had been rising very rapidly – an increase of 270% for all types of crimes taken together during the period. It is interesting to note that the total crimes committed in KL in 1975 was about 18% of all crimes committed in the country as a whole (estimated at 55,388). To the unemployed, 'the prevalence of illegal activity . . . represents a perfectly rational response to their limited employment opportunities within the "legitimate labour market" – to the threat of unemployment, low wage in dead-end jobs, and pervasively alienating condition in many jobs'.[29]

SOME POLICY PROPOSALS

In the past, the problem of urban poverty had received some attention from the government. Under the Second Malaysia Plan, for example, various attempts were made to deal with the problem. The measures included:

(i) provision of housing and other social amenities;
(ii) stimulating the expansion of employment in the manufacturing and construction sectors.

However, as the above discussion has shown, the progress towards eradication of urban poverty is far from satisfactory. The government is also cognizant of this fact when it says:

> Although historically the growth of the economy and employment was significant, it was not sufficient to produce a meaningful impact upon the alleviation of urban poverty. While the incidence of poverty declined in most sectors, the absolute number of non-agricultural households in poverty expanded by 23% reflecting the upsurge in the size of the urban population during the 1971–75 period.[30]

In the Third Malaysia Plan, the central features of government's urban poverty redressal strategy will comprise the implementation of policies which enlarge the scope of employment for the poor and improve their access to basic public services including housing, water supply and sewerage, transportation and family planning.[31] Apart from opening up new land schemes in order to reduce the population pressure in the urban areas and the promotion of migration to new urban centres, the programmes envisaged under this strategy include:

(i) Provision of tariff protection and fiscal incentives to encourage the development of efficient labour-intensive enterprises so as to increase the direct and indirect employment absorption capacities in the industrial and construction sector;
(ii) Provision of financial, technical and other assistance for the development of small-scale enterprises and petty-trading;
(iii) Construction of 100,000 units of low-cost housing within the means of urban households earning less than $200 per month; and the
(iv) KL Urban Transport project with its emphasis on high-density public bus transport and high-occupancy private car usage.

[29] D.M. Gordon, *Problems in Political Economy: an Urban Perspective*, Lexington, Heath, 1971, p. 276.

[30] *TMP*, p. 177.

[31] *TMP*, p. 177.

The success of these programmes to redress the problem of urban poverty is yet to be seen. However, considering the magnitude and the seriousness of the problem of urban poverty, particularly in KL, one might be rather sceptical of the success of those programmes in achieving their goals. Therefore, more concerted efforts are necessary if the government is to achieve success in eradicating urban poverty. As short-term measures, apart from hastening the building of low-cost houses and *rumah pangsa* which are within the means of the urban poor, the government could also consider:

(i) Extension of the 'policy of accommodation' toward the squatter community, i.e. the provision of essential services such as water supply, rubbish collection, electricity, community halls as well as play-grounds to the squatter areas. The government could also grant temporary occupation licences (TOL) to squatters in areas where their communities are relatively more stable. It is important to recognize the fact that the squatter settlements represent a tremendous social and political investment in the community organization as well as a *de facto* solution to a most difficult housing problem in a rapidly expanding city like KL. Furthermore, these measures are very much in keeping with the policy of creating a just society because justice is not only measured in terms of a fairer distribution of income but also the provision of social amenities. This would also inject a further sense of security and responsibility among the squatters, thus bringing greater stability to the squatter communities as well as cooperation from them. In the past, the government has been willing to undertake the first of the two measures mentioned above, but there is still great reluctance on its part to grant TOL to the squatters on the grounds that it would encourage more people to resort to squatting. Nevertheless the granting of TOL to some squatters can at least solve part of the problem.

(ii) Introduction of a minimum-wage policy. Considering the fact that the earnings of a substantial proportion of urban population are low it is necessary that the government fix a minimum wage level in this country which is based on the understanding of the economic realities facing the average worker in maintaining himself and his family. In the past, the government has been slow in evolving a rational wage policy mainly on the grounds that such attempts might discourage both local and foreign investors and thus worsen the unemployment problem. But this conventional wisdom that low wages are the prime determinant in the decision to invest has often been challenged. As Arudsothy has pointed out:

> Investigations into the decision-making processes of foreign firms and multinationals have shown that wage levels and trade union organizations have played only minimal roles in their final decisions to invest or not to invest. Much more important considerations have been political stability, the size of the market, tax structures, availability of skilled labour and conditions affecting repatriation of profits.[32]

At the same time, in order to lessen the problem of housing among the urban poor, employers in the private sector should also be made to shoulder the social responsibility of providing housing facilities to their employees. As many of them enjoy

[32] P. Arudsothy, 'Poverty in the wage sector and the problems of formulating minimum wage policy' in Mokhzani & Khoo, *op. cit.*, p. 92.

various privileges (e.g. pioneer status), it is only fair to make them provide housing facilities for their workers. Employers must become more committed to the concept of social justice for their workers.

Short-term measures, however, have their limitations. The problems of urban and rural poverty are very much interrelated and they are the product of the socio-economic system of the society. Therefore, there must be *overall* balanced economic and social planning. As mentioned earlier, urban poverty has been aggravated by the migration of rural population to the urban centres as the result of the inability of the rural sector to absorb its population effectively and productively, and also because of the 'pull' of the urban centres. Therefore, to slow down the process of migration to the urban centres, particularly KL, the traditional rural sector will have to be transformed via an increase in yields through better machinery, seeds and fertilizers, via thorough-going land reform programmes, rural industrialization, as well as the creation of better rural infrastructures. It is, for instance, necessary to redistribute land. Such developments in the rural sector needs to be coordinated with the expansion of the industrial sector which will be able to give more jobs and better incomes. An encouraging sign in the TMP is the proposed emphasis on regional growth centres which we can assume will, in time, provide sufficient 'pull' of their own.

Apart from the economic aspects, there will also be the social and cultural barriers that have to be overcome. In this respect, comprehensive social planning to minimize the dislocation caused by integration into a more regulated way of life is also needed. Much more research is needed in this area.

Furthermore, it must also be recognized that there exists an organic link between economic dualism in the economy and the international position of dependence of the economy as a result of a long-established colonial trade pattern, and the economic, political and cultural implications of it. This dependence must also be lessened as a precondition of integral national development.

The government has also to reconsider very seriously its policy of urbanizing the Malays. Publicity regarding benefits of urbanization have generated unrealistically high expectations on the part of migrating rural folk. Urban unemployment, housing problems, the high cost of living, the squalour and bewildering anonymity which often greet those flocking to the city, so disillusion and disappoint them that many find it very difficult to readjust. This plea for a review of the policy of urbanizing the Malays in no way imply that we are against the policy, since it does help to facilitate more contact and mingling between the people of various races. However, what must be stressed is that the policy of urbanizing the Malays must be complemented with the creation of real opportunities to meet the rising expectations generated by the promises.

Finally, it must be stressed again that a comprehensive research programme is necessary to investigate various aspects of urban poverty so as to enable us to have a better grasp of the causes of the problem and its consequences upon the people in political, economic and social terms, the successes and failures of the attempts carried out so far to solve the problem, and also to recommend possible new approaches to handle the problem. It was announced recently that the government will conduct a study on urban poverty next year. It is hoped that the study will be carried out as planned so that more concrete measures could be formulated to tackle this increasingly serious and urgent problem.

APPENDIX I

WEST MALAYSIA UNEMPLOYMENT BY STATE, AGE AND ETHNIC GROUP, 1971

| Age | Unemployment As a Percentage of Labour Force[a] | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Urban[b] | | | | Rural | | | |
| | Malay | Chinese | Indian | All Communities[c] | Malay | Chinese | Indian | All Communities[c] |
| 15 – 19 | 39.5 | 20.5 | 45.8 | 28.3 | 24.0 | 11.4 | 17.4 | 19.9 |
| 20 – 29 | 16.6 | 7.9 | 17.1 | 11.2 | 8.8 | 5.8 | 10.6 | 8.1 |
| 30 – 44 | 2.5 | 3.9 | 5.8 | 3.8 | 1.3 | 2.1 | 2.5 | 1.6 |
| 45 – 64 | 2.6 | 5.2 | 7.3 | 4.9 | 0.6 | 4.6 | 4.0 | 1.6 |
| Total | 13.2 | 8.3 | 16.2 | 10.6 | 6.6 | 5.3 | 8.1 | 6.5 |

*Source:* Unpublished data of the Labour Force Survey 1971 from the Department of Statistics, Kuala Lumpur, quoted in Soon Lee Ying, *op. cit.*

*Notes:*

[a] Labour force defined as persons between ages 15 – 64 employed or unemployed.

[b] Urban defined as towns of population 10,000 and above.

[c] Includes 'Other Races'.

# PATTERNS OF LANDOWNERSHIP: CASE STUDIES IN URBAN INEQUALITIES*

Goh Ban Lee

## INTRODUCTION

The basic justification for the Third Malaysia Plan's budget of about $16.8 billion is that it will attempt to narrow the inequalities among the various ethnic groups and between the haves and the have-nots.

In this study, I propose to present a picture of the extent of inequalities in the possession of urban land. Data from a survey of six towns, namely Georgetown, Butterworth, Bukit Mertajam, Alor Star, Kulim and Kota Bharu are used.[1] In the process, the implications of such inequality as exists will be discussed, and some suggestions on measures to bring about a better distribution of urban landownership will be made.

The basic hypothesis is not one of achieving a perfectly equal society. In the belief that a perfectly equal society would be very dull, and that it is the inequality which makes any society function, we but follow Dahrendolf, who says 'Utopia is not the home of freedom . . . it is the home of total terror or absolute boredom.'[2]

On the other hand, too great an inequality poses a danger to a stable society. In the case of landownership, extreme inequality is intrinsically undesirable and is also the basic cause of many of the crucial problems we face today. Land is a basic resource for

*I gratefully acknowledge the help given me by some of my colleagues, especially that of Prof. Hans Dieter-Evers, at the Centre for Policy Research. Computerization of the data was mainly done by Puan Long Jet Heng. The usual disclaimer applies.

[1] The data are part of a larger project to study the patterns of landownership in 18 towns in Peninsular Malaysia. The project is partly financed by the Urban Development Authority and is jointly conducted by Prof. Hans Dieter-Evers and the writer. Data for the six towns were collected in 1975.

[2] R. Dahrendolf, 'On the origin of inequality among men' in A. Betells (ed.), *Social Inequality*, Penguin Books Ltd., 1969, p. 42.

the survival of every human being. Ideally, like fresh air and sunshine, land should not be 'owned' by any individual or institution. Unlike other material goods which can be hoarded by the rich, land is too essential to leave the distribution of its ownership entirely to market forces. Unfortunately, with the institution of private ownership, land is cut into varying sizes and owned by some individuals, companies or institutions so that 'before anybody can build a house, a blackmail price must be paid to some dogs in the manger.'[3]

It may be interesting to note that the institution of private ownership of land is not a natural phenomenon. It is a man-made institution and is being perfected through the various stages of development of human society. It is reported that under the traditional Malay laws:

> . . . all land was held by the Sultan and a property was created only by clearing of the land followed by continuous occupation. The right of occupancy which was permanent, transferable and inheritable, existed as long as there was continuous occupation and cultivation of land.[4]

But with later economic development, and the issuing of land titles to individuals which makes it possible for land to be bought and sold and used as collateral for loans, it is inevitable that the rich will tend to accummulate more and more land and the poor to remain landless. It must be borne in mind however, that many of the early landowners came to own large areas of land in the urban areas through their own hard work, foresight and thriftiness,[5] and in the early days of Malaysia's economic development, were held in high regard by society, often being held up as examples for the poor migrants. Towards these 'honest rich', the landless might have felt some envy, but it is doubtful if there was much bitterness felt.

But with the later rapid rise in land values, the high rents demanded by the landowners and often the withholding of land from use, the landless cannot own but 'view with envy and often with bitterness the lucky few who are protected by law in the possession of land and enriched in fact by the surging demand for it'.[6]

The problems of uneven distribution of landownership in the rural areas have long been recognized, and steps have been, and are constantly being taken, to lessen them. Unfortunately this cannot be said for urban areas. Given the type of market economy as in Malaysia, the need to own land in the urban areas is as great as that in the rural areas. The only difference may be in the size of land needed. With the price of urban land rising as fast as two to three times within a period of three years (as was experienced in Penang from 1972 to 1974), it is hardly surprising that everyone wants

[3] H. George, *The Crime of Poverty: on Land and Land Policy*, New York, Doubleday, 1911, p. 215.

[4] C.E. Teoh, 'A Study of Land Alienation in Segamat Town, Johore', 1971, p. 8 (Mimeograph).

[5] For some discussions on the socio-economic background of some of the biggest landowners in Georgetown, see Goh Ban Lee, *The Pattern of Land Ownership in Central Georgetown*, Universiti Sains Malaysia, Centre for Policy Research, Monograph No. 2, 1975.

[6] C. Abrams, *Man's Struggle for Shelter in an Urbanizing World*, Conn., Mass., MIT Press, 1964, p. 27.

to own land. This desire, almost bordering on obsession to acquire and own land is inevitable since the social system not only allows land to be owned by private individuals, but it also looks upon landownership as a mark of success in life. It is in this light that landownership patterns in the specified areas is examined.

## PATTERN OF DISTRIBUTION OF LANDOWNERSHIP BY ETHNIC GROUPS

As far back as the 1920's, there was already fear among the Malays that they were beginning to lose control of the land, especially urban land. This led to the Malay Land Reservation Act and the declaration of many areas outside the township as Malay Reserves. Inspite of this Act, many state governments, unhappy about the apparent lopsided ownership of properties in many towns, have implemented rulings which require housing developers to reserve at least 30% of all house-lots for Malays.

This study attempts to establish whether the common belief that the Malays own very little land in the towns is true. At the same time, the amount of town land owned by the Chinese and the Indians is investigated,[7] so as to establish the current pattern of ethnic distribution of ownership of land so that policies can be formulated to achieve a better balance if extreme imbalances exist.

Data from the survey suggest that there are significant variations in the proportions of land owned by each ethnic group in different towns. It was found that Malays own about 5% out of about 3,116 acres of land in Georgetown,[8] 8% in Butterworth, 13% in Bukit Mertajam, 29% in Kulim, 61% in Alor Star and 86% in Kota Bharu. The Chinese own about 9% in Kota Bharu, 20% in Alor Star, 53% in Kulim, 70% in Georgetown and 77% in Bukit Mertajam and Butterworth. And finally, the Indians own less than 1% in Kota Bharu, about 5% in Bukit Mertajam, 6% in Georgetown, 12% in Alor Star, 14% in Butterworth and 17% in Kulim. These variations in the distribution pattern may be explained by the fact that there are also variations in the proportions of each ethnic group in the different towns (Table 1).[9]

When we take population distribution into consideration, we find that in Georgetown and Butterworth, the Malays still own less land in relation to their population. On the other hand, they own more land in proportion to their population in Kota Bharu and Alor Star. Similarly, the Chinese own less land in proportion to their population in Kota Bharu and Alor Star, but own more land in Butterworth. In Georgetown, Bukit Mertajam and Kulim, there is little difference between the landownership percentages and those of the population. With the exception of Kulim, in which the Indians own more land in relation to their population, they own relatively less land in all other towns. However, the differences are not big.

The above data on the distribution of landownership are for the towns as a whole.

[7] In this study, the classification of ethnicity of landowners is by name on the land titles. As a result, the classification cannot be 100% watertight.

[8] The percentages given here are based on land where we can infer ethnicity of owners from the names on the land titles. Land belonging to the states, statutory bodies and local councils and companies which do not indicate ethnicity is excluded.

[9] In some towns, the boundaries of the Statistics Department may be different from those used in this study. The time gap between the 1970 Census and this study may be the reason. Therefore, the comparison between the data on land distribution and population are approximations only.

TABLE 1
PERCENTAGE DISTRIBUTION BY COMMUNITY GROUPS OF SIX TOWNS, 1970

| Town Community | Malays | Chinese | Indians | Others | Population |
|---|---|---|---|---|---|
| Georgetown | 13.8 | 71.6 | 13.3 | 1.4 | 269,000 |
| Butterworth | 23.9 | 58.9 | 15.9 | 1.2 | 61,000 |
| Bukit Mertajam | 9.5 | 77.5 | 12.4 | 0.6 | 27,000 |
| Alor Star | 39.6 | 48.8 | 11.0 | 0.6 | 66,000 |
| Kulim | 24.8 | 61.7 | 13.3 | 0.2 | 19,000 |
| Kota Bharu | 67.7 | 29.0 | 2.6 | 0.6 | 55,000 |

*Source:* Statistics Department.

There are also significant variations in the distribution in terms of geographical areas within the towns. For example, although the Malays own about 61% of the land in Alor Star, most of the land is located outside the original township of Alor Star. In the commercial centres, the Malays own very little land as compared with the Chinese and the Indians.

On the other hand, although the amount of land owned by the Malays in Butterworth is relatively small, many Malay-owned lots are found in the central parts of the town rather than at the fringes. However, most of this land is still used as *kampung* style residential areas.[10]

The amount of land owned by the Chinese and the Indians also varies from one town section to another. For example, in Alor Star, there is relatively little Chinese and Indian-owned land at the fringes such as town sections 6, 9 and 10, where new developments are taking place.

Similarly, in Kota Bharu, Chinese-owned land is mainly confined to town sections 1, 11 and 19 which together account for about 54% of the total amount of land owned by the Chinese.[11] In six town sections, the Chinese own less than 1% of the land. Likewise, the Indians own less than 1% of the land in nineteen town sections.

From the patterns of distribution of landownership in the selected towns, it can be seen that there are variations in the amount of land owned by the major ethnic groups in the country. Furthermore, although the non-Malays own very little land in Kota Bharu, it does not necessarily mean that the rest of the town is owned by the Malays. Large areas of choice land in the town centre are still owned by the government and business organizations. These business companies are not solely Malay. In like manner, the whole of Georgetown is not owned by Chinese or Indians. Again, large areas of choice land such as those around Penang Road, Beach Street and Northam Road are owned by the government, foreign-based companies and the churches.

[10] Goh Ban Lee & Hans Dieter-Evers, *Land Ownership and Urban Development in Butterworth*, Universiti Sains Malaysia, Centre for Policy Research, Project Paper Series No. 4, 1976.

[11] There are twenty-eight town sections in Kota Bharu.

The patterns of landownership shown above suggest that the problems of land distribution are more complicated than normally assumed. The patterns of distribution in different towns show that it is wrong to have one strategy for all towns in the country. Different towns need different strategies to solve the problem of inequality of distribution and even within a town, a uniform strategy cannot always be used. The data presented above also show that it may not be feasible to expect all urban areas to show an even distribution in the short period of twenty years given by the government to correct imbalances. The present picture is the result of more than 200 years of evolution and it will take more than twenty years to achieve a good balance.

## PATTERN OF LANDOWNERSHIP BETWEEN THE HAVES AND THE HAVE-NOTS

Landlessness is a burden irrespective of ethnicity. A landless Malay or Chinese or Indian is not going to be any happier with the knowledge that the biggest landowner in town is one of his ethnic stock, therefore we should be committing a grave error if we only see inequality of distribution of landownership in ethnic terms. Inequality of distribution between the haves and the have-nots is more critical, and it is very likely that the solution for the latter problem will also partly solve the former.

If one takes into account that many large pieces of land are being subdivided into housing-lots and sold to individuals, the ownership of urban land should become more decentralized as the town develops. This may be true in absolute terms, i.e. there are more landowners in Georgetown today than say, fifty years ago. But if we take into consideration that the population of Georgetown has increased considerably during the same period, there may be relatively fewer people owning land. Unfortunately we are not able to provide proof of this. What we will show is that inspite of the substantial number of housing schemes, the distribution of land is still very uneven.

At this point in time, it is not possible to give perfectly accurate figures on the concentration of landownership. For instance, it is very likely that some big landowners also have substantial shares in business companies which also own land. Since it is very difficult to find out how many companies and how many shares in each company an individual has, this study had to treat every company as a separate landowner. Similarly, as we cannot determine the kinship relationships of all the names which appear on land titles, all different names have been treated as being different landowners. Therefore, husbands and wives or fathers and sons are being counted as different landowners although they in fact belong to the same household. On the other hand, if a piece of land is jointly owned by two or more individuals, be they kin or friend, the piece of land is treated as belonging to one owner.[12]

Subject to the above considerations, data for the six towns studied show that the number of landowners is very much smaller than the number of *households* in each town. For example, there are about 2,500 landowners in Butterworth in contrast to

[12] The last assumption may give a slightly inflated picture of concentration as there is a significant number of holdings with more than one owner. For example, in Kota Bharu, out of a total of 6,358 lots for which we have information, 76% have one name per lot; 11% have 2 names; 5% have 3 names; 3% have 4 names; 2% have 5 names; 1% has 6 names and 2% have 7 or more names. However, we believe that many individuals who jointly own a piece of land are siblings. Further, the two earlier assumptions are likely to affect, at least partly, the bias resulting from present simplification.

the more than 10,000 households there in 1970.[13] In Kulim, there are about 760 landowners to its 3,000 households; in Georgetown, about 9,500 landowners to its 43,000 households; in Alor Star, about 4,400 landowners to its 11,000 households; in Bukit Mertajam, about 1,400 landowners to its 4,000 households and in Kota Bharu, about 3,500 landowners to its 9,700 households. Therefore if we take into account that a substantial amount of land is owned by public companies, foreign companies and people who reside in other towns, the number of households which are landless in every town is very high. An estimate of 80% can be regarded as conservative.

Even all those who own land, cannot be grouped into one homogeneous category. Data for all the six towns show that out of those who own land, a very high percentage are petty landowners, owning less than 3,000 sq. ft. each, i.e. the very land they live on. If we take only the landowners into consideration, we find that in all the towns, there is a very high concentration of landownership in the hands of a very few people and companies. For example, a mere 1% of the landowners own about 17% of private land in Kota Bharu, about 24% in Bukit Mertajam, about 28% in Kulim; about 32% in Georgetown, about 36% in Alor Star and about 40% in Butterworth.

With the exception of Kota Bharu,[14] the top 5% of the landowners own more than half of the private land of the towns studied. And the top 10% of them own about 53% in Kota Bharu, about 66% in Alor Star, about 67% in Georgetown, about 72% in Kulim, about 76% in Bukit Mertajam and about 80% in Butterworth.

This inequality of landownership even among the landowners themselves can be seen clearly on the Lorenz curves for the biggest and the smallest towns, namely Georgetown and Kulim (Figs. I and II). Furthermore, the Gini concentration indices for almost all the towns show very high concentration. For example, it is 0.6 for Kota Bharu, 0.7 for Georgetown and Alor Star and 0.8 for Bukit Mertajam, Butterworth and Kulim.

When we taken the landless households into consideration, the concentration of landownership in the hands of a few is even greater. In this case, 1% of the households of the town (assuming the landowners are residents of the town) own about 36% of private land in Kota Bharu, about 56% in Georgetown and Alor Star, about 59% in Bukit Mertajam, about 62% in Kulim and about 68% in Butterworth. Furthermore, 10% of the households of the town own more than 90% of the private land of all the towns, ranging from the lowest of 91% for Georgetown and Kota Bharu to the highest of 98% for Butterworth.

As there are differences in the sizes of the six towns, we find that the absolute number of landowners and the amount of land they own vary. Generally, the bigger the town, the smaller the percentage of private land owned. Therefore, for example, in Georgetown, the top ten landowners own about 14% of the private land as compared to 30% in Kulim. The top 100 landowners of each town own about 25% of private land in Kota Bharu, 35% in Georgetown, 47% in Alor Star, 64% in Butterworth, 67% in Bukit Mertajam and 81% in Kulim.

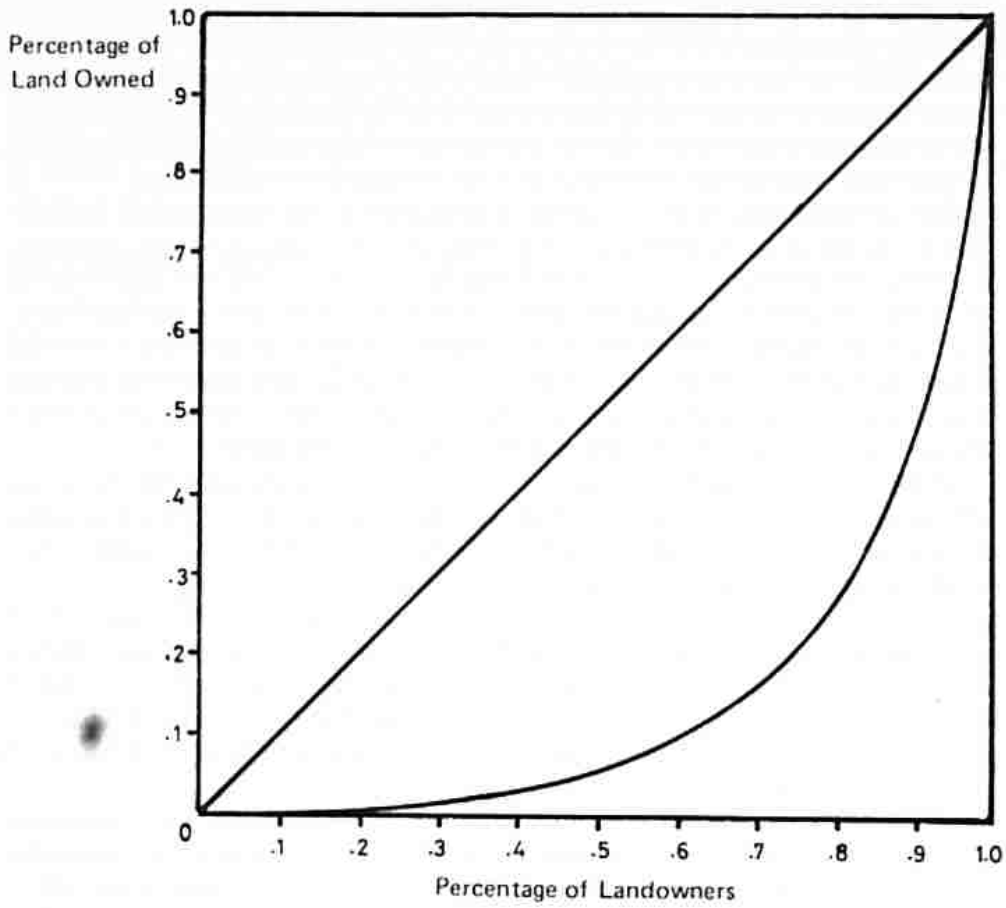
The above figures should not be taken to mean that the absolute amount of land owned by the top hundred landowners of Georgetown is less than that of Kulim. In fact, the top 100 landowners of Georgetown own about 735 acres as compared to

[13] See the earlier remark on town boundaries in Footnote II above.

[14] In Kota Bharu, the top 5% of the landowners own about 36% of the private land. It appears that inequality of distribution among the landowners is the least in Kota Bharu.

FIGURE I

LORENZ CURVE SHOWING CONCENTRATION OF LANDOWNERSHIP IN GEORGETOWN, 1975



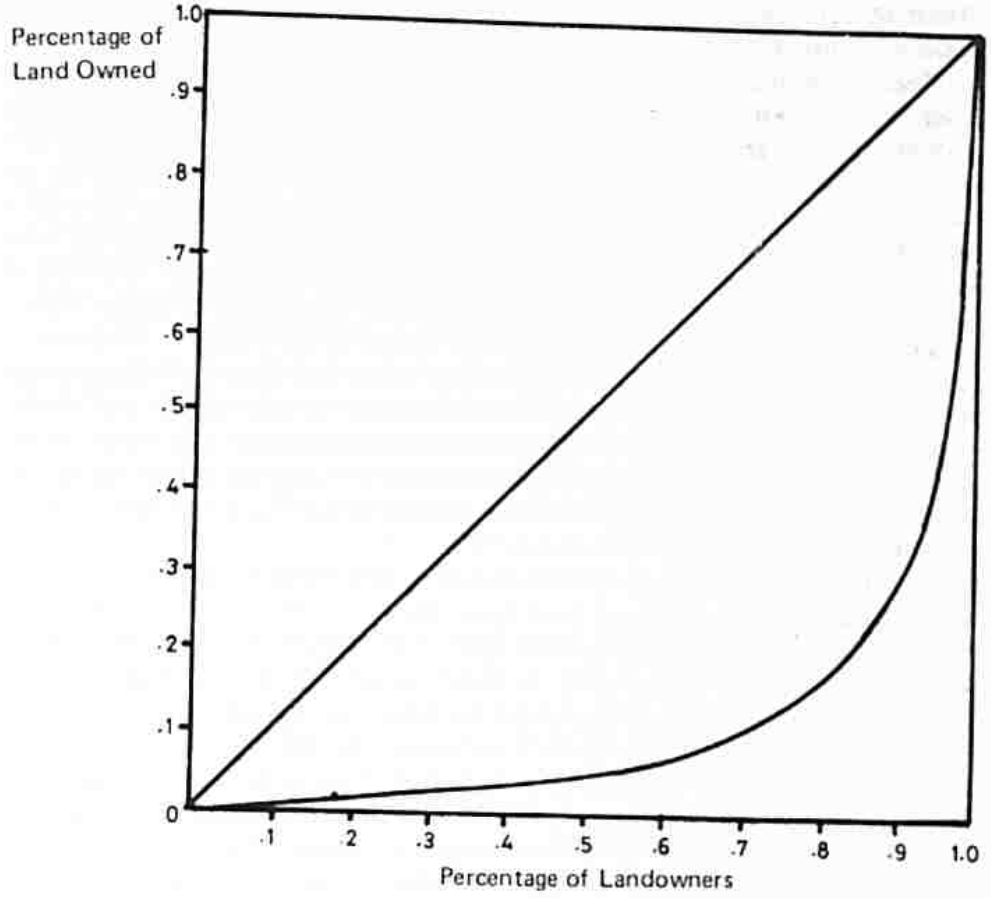

about 593 acres for Kulim. Taking into consideration that the land in the bigger town such as Georgetown is much more valuable than that of a small town like Kulim, the top 100 landowners of Georgetown definitely own much more wealth than their counterparts in the smaller towns.

For all the six towns combined, there are altogether 24 landowners who each owned more than one million square feet of land. In addition, there are 443 landowners who each owned more than 100,000 sq. ft. When we consider that an average size of a semi-detached or a detached house is about 4,000 to 6,000 sq. ft. each and a terrace house about 2,000 sq. ft. each, it does appear that the degree of concentration is very high.[15]

[15] Some of the big landowners may be able to justify their large holdings by the fact that they are land developers.

FIGURE II

LORENZ CURVE SHOWING CONCENTRATION OF LANDOWNERSHIP IN KULIM, 1975




One striking picture that emerges is that this high concentration of landownership prevails in all six towns. It is possible that the bigger the town, the less concentrated is the ownership distribution among the landowners. This can be seen by comparing the Gini indices. However, we cannot form a definite conclusion as the differences are not significant.

It appears that concentration of landownership cuts across ethnic lines. For example, in Alor Star where the ethnic distribution of landownership is the least unequal of the six towns, the top 10 Malay, Chinese and Indian landowners account for about 27%, 23% and 54% of all land owned by their respective ethnic group in the town. The study also shows that there are big landowners in each ethnic group. For instance, out of the 24 landowners who each owns more than a million square feet of town land, there are 9 Chinese, 5 Malays, 4 Indians and 6 others (meaning business companies for which we cannot determine the ethnicity of the owners and foreign-owned companies).

## IMPLICATIONS AND CONCLUSION

Although Malaysia is a generally free economy and has a property-owning society, leaving the distribution of wealth to market forces, she has also realized that a

completely free economy will lead to undesirable results. The government has openly declared its intention to achieve a *masyarakat adil* (just society). The Second and Third Malaysia Plans stated very clearly that the gap between the haves and the have-nots must be narrowed, if not eliminated altogether.

Since ownership of land carries with it power, wealth and status, an extreme inequality of the distribution of its ownership creates implicit economic inequalities. In addition, there are also other intrinsically adverse social consequences when we have a few people owning very large areas of land while many others desire, but have not even one square foot. The future development of a town must depend on the actions of a few rich people. At the moment the government has the power to say what cannot be built on the land, but not what to build or when to build. Therefore we have people who withhold their land from present use and set in motion what is commonly termed as 'leap-frog' development. This partly contributes to the growth of squatters. Furthermore, in times of rapid rise of land prices, these few landowners just have to 'sit tight' and watch their wealth multiply. With the two- to three-fold increase in urban land values in the early 1970's some big landowners must have added millions of dollars to their already large store of wealth, while the average worker has to work for every dollar which, in fact, has shrunk in actual value. This definitely cannot lead to a *masyarakat adil*.

In theory at least, the state is the actual owner of all land. It can alienate and also acquire land. Under the National Land Code, the whole authority of the state is used to guarantee the indefeasibility of the rights of landowners. The very fact that the Third Malaysia Plan is proposing to spend about $18 billion shows that the interference of the state in bridging the inequality gap is acceptable in a basically capitalistic society. The passing of the Land Speculation Tax Act, and its subsequent amendments, the Land Acquisition Act and all the Planning Bye-laws have put some limits on the rights of landowners. This is entirely defensible. If at present, there are laws which limit the ownership of other relatively less important goods like sugar and flour, or to control the prices of some less essential items like cars, there is every justification and need for government intervention in the distribution of ownership and the price of such an important resource as land.

This call for government intervention is not something new. The UMNO Youth annual assembly of 1974 passed resolutions calling for a sweeping land reform 'aimed at creating landownership among the people to eliminate any possibility of a "class struggle" between the rich and the poor' and urging the government to pass legislation to restrict landownership to Malaysians and to limit land size for any individual.[16] Furthermore, there have been many calls, both by the opposition and government members of Parliament, for the government to distribute urban land to the landless, free or at very low rates and to limit landownership per individual.[17] The late Prime Minister of Malaysia, Tun Abdul Razak, has also said that the 'government had decided to alter its strategy . . . to enable the lower income group to possess a place to live in'.[18]

[16] *The New Straits Times*, 1 September 1974, p. 1.

[17] *Utusan Malaysia*, 15 November 1974.

[18] *The Star*, 31 July 1975.

Unfortunately, to this day, we do not have a clearly defined urban land policy. As summarized by a Director of Land and Mines:

> Since 1958 up to 1975, there is a concentration of policies related to human settlements and housing in the rural areas only. Policies related to human settlements and housing in the urban areas could only be implied from the National Land Code and other related Land Laws.[19]

There is now a need for an urban land policy to act as a general guide for all other measures related to the distribution of landownership, land values, land tenures, land taxation, rent control and squatter problems so as to improve the quality of urban life.

Generally an urban land policy should aim at utilizing urban land appropriately for urbanization and urban development. At any given time, urban land is very limited, therefore the basic objectives of a land policy are to make this limited amount of urban land readily available where and when it is needed and at a price within reach of the users, and at the same time help in solving the existing inequalities in the distribution of land. To achieve these difficult and diverse objectives, the government must obtain facts and figures to back up whatever action that is taken. In this connection, it is heartening to note that the government is currently working on setting up a Land Data Bank.

Since there is general agreement that a better mix in the ethnic distribution of landownership will go a long way to lessen the envy of one ethnic group towards the others, there should be attempts to help the ethnic group which own very little land to acquire more. For instance, non-Chinese, particularly the Malays, must be helped to acquire more land in Georgetown and Butterworth and the non-Malays must be allowed to do the same in Kota Bharu. Even within a town the data also suggest that there is a need to take action for a better mix. For example, in the town of Alor Star, where the distribution as a whole shows a more balanced pattern of landownership, there are town sections which are completely owned by one or two ethnic groups only. As the Malays own very little land in the commercial centres, they should be helped to acquire more urban land while the non-Malays should be allowed to acquire more land in the suburbs.

While it is useful to use the ethnic breakdown of the population of the town to explain the pattern of landownership, it does not mean that we should accept the principle that the distribution of landownership by ethnicity be pegged to the population pattern. Even if there are very few Malays in a particular town, it does not necessarily follow that they, as a whole will not feel resentful about the absence of Malay-owned land in the town because it is the nerve centre of the state or a district. Therefore, steps should be taken to help an ethnic group to acquire urban land irrespective of their percentage population.

The government should also take steps to foster a better distribution of landownership between the very rich and the poor. In each town, there are literally thousands of

[19] Raja Asman Ismail, 'Appropriate Land Policies for the Planning and Implementation of Human Settlements and Housing in Malaysia', paper presented at the Conference for the Rakyat, the Lower-Income Groups, Kuala Lumpur, 1976.

households which are landless while there are families who each own more than 1,000,000 sq. ft. of land. Steps should be taken to acquire a portion of land from the big landowners and resell it at reasonable prices to the very poor. The government actually possesses such power in the Land Acquisition Act. It is to be expected that the landowners affected will not be happy. But the increase in value of his remaining portion (due to the development of infrastructures using public funds) and adequate compensation for the acquired land, will hopefully go some way towards pacifying them. The actions to acquire and redistribute land must follow a certain formula so as to dispel suspicion of victimisation of a few landowners or the persecution of an ethnic group. This may seem difficult, but if the government has complete data on land-ownership for fair implementation of a consistent land redistribution policy, we believe that it can be done.

In addition to the direct steps taken to narrow the gap of inequality, other indirect methods can also be used. One of the most effective methods is to convert all land granted or leased in perpetuity to a leasehold nature for a specified number of years, say 99 years. This will prevent land 'hoarding' and also keep the prices of land relatively low because for each year that passes, the lease of the land will be nearer to the expiry date than before. Furthermore, leasehold land of a specified period means that the state periodically gets back land which can be either realienated or used for public purposes without having to go through the difficult process of acquisition and the paying of compensation which the state may ill afford.

The government can also enact laws to control the increase of prices of urban land. For example, it can limit the price increase of urban land to a certain percentage per year. However, price increases can be offset if, in every intending transaction, the state had the first option to buy the land. At present we have the Land Speculation Tax Act to prevent land speculation.[20] However, this does not really control the rapid rise in land prices. It merely attempts to tax away excessive gains.

The measures stated above are likely to be strongly opposed by the present big landowners. Whatever steps the government take, if they are effective, will lessen the amount of wealth of some big landowners, not necessarily in terms of absolute dollars, but in terms of what they foresee they can get if the steps are not taken. Human greed being what it is, there will surely be protests by those affected adversely. Even worse, being in very powerful positions, they may do everything to frustrate the measures. But if the government is determined and if the adverse consequences of extreme inequalities can be impressed upon some enlightened landowners, some of the measures, if not all, can be realized.

[20] See Goh, *Patterns of Land Ownership in Central Georgetown, op. cit.*, on the weaknesses of the Act.

# SQUATTER SETTLEMENTS IN KUALA LUMPUR*

Peter Pirie

The proportion of squatter settlers to total urban population in Kuala Lumpur–Petaling Jaya, currently about 20%,[1] has been the cause of increasing concern to the authorities burdened with the orderly development of the nation's capital and largest urban centres. Their very definition, in terms of illegal occupation of land, implies conflict between squatters and the agents of urban government. For any agency to extend services which imply *de facto* official recognition has been to say the least, awkward. The attitude of individual civil servants towards working with squatters is usually one of diffidence and apprehension. But the *need* of squatters for services exceeds that of any other urban group. A preliminary socio-demographic survey of a sample of squatter households is therefore of considerable relevance.

*The author gratefully acknowledges the help given by Laila Wati Judin, Magesprant Sinivasan, Mohd. Kamal Hariri, Ng Lee-Kiang, and Wong Lee-Lan, third-year students at the Faculty of Economics and Administration, University of Malaya, who conducted the field-research.

This study has been very much a cooperative effort. I think it is obvious from this study that the five students who did the fieldwork have my admiration; they also have my thanks for assisting me in various ways to produce this advance report. I am also most grateful to Mr. Choong Kooi Yoon and Miss Koh Swee-Neo, of the University of Malaya Computing Centre, for the data processing, Miss Janet Low Sow Ching, Radiology Department, for typing, and the Printing Office in the Faculty of Economics & Administration. Mrs. Ng Swee-Hua, the Population Librarian, Faculty of Economics & Administration was also very helpful in tracking down materials. My research assistant, Miss Sulochana Nair survived an abrupt introduction to social science research in fine style. None of this could have occurred without support from the United Nations Fund for Population Activities.

[1] K. Wehbring. 'Squatters in the Federal Territory: Analysis and Program Recommendations', Report submitted to the Urban Development Authority, 1976. This report estimated 153,500 squatters in the Federal Territory, living in 22,700 housing units, 45% of whom were Chinese, 41% were Malay, 4% Indian, with 10% mixed (i.e. not separable given the method of survey employed). One of our *kampung*, Kampung Muniandy, is in Petaling Jaya and is therefore outside the Federal Territory.

RESEARCH DESIGN

Five students of the Faculty of Economics and Administration were sent to conduct pilot surveys on selected squatter areas in 1976. The five coordinated their fieldwork and utilized a common series of instruments, in the form of three question schedules, but maintained independence in the actual gathering of data, writing and production of the final report. They included a special study, on a topic of their own choosing, and adhered to the core socio-demographic outline mutually agreed upon. They spent most of the three months living in the chosen squatter settlement, so that in addition to the statistical bare-bones, they would be able to acquire some insight into how it is to be a town-dweller whose lot seems to be forever poverty and insecurity.

The *kampung* selected were:

1. Chan Sow Lin,
2. Kampung Haji Abdullah Hukum,
3. Kampung Muniandy, and
4. Kampung Pandan.

Although it was found that none of these *kampung* was composed entirely of one communal group, for fieldwork purposes, the students were encouraged to confine themselves to the survey of households speaking their own language or dialect. The populations therefore are Chinese-speaking (mainly Cantonese and Hakka, but with some Hokkien, Hainanese and Teochew) in Chan Sow Lin; predominantly Malay in Kampung Haji Abdullah Hukum and Kampung Pandan; and Tamil in Kampung Muniandy. Each student was asked to interview about 100 households (for a total of 500), and it was anticipated that the survey would cover 500–600 persons in each *kampung*. A total of about 2,670 persons were actually enumerated. While the results are believed to be representative of squatter settlements in the Kuala Lumpur-Petaling Jaya area, there is no attempt to assess the degree to which this is so.

This study is a preliminary report on the first results of the five surveys.

Assistance in introducing the students to their selected *kampung* was obtained from the National Family Planning Board working through the National Unity Board. In some cases, the students used their own prior connections to obtain the necessary introductions. In each case local political organizations were utilized to obtain acceptance for the idea of doing a survey and for field support during the survey. Contrary to our early expectations, little difficulty was encountered in obtaining cooperation from the local leaders, and the students were found accommodation and provided with moral and practical support at a very adequate level.

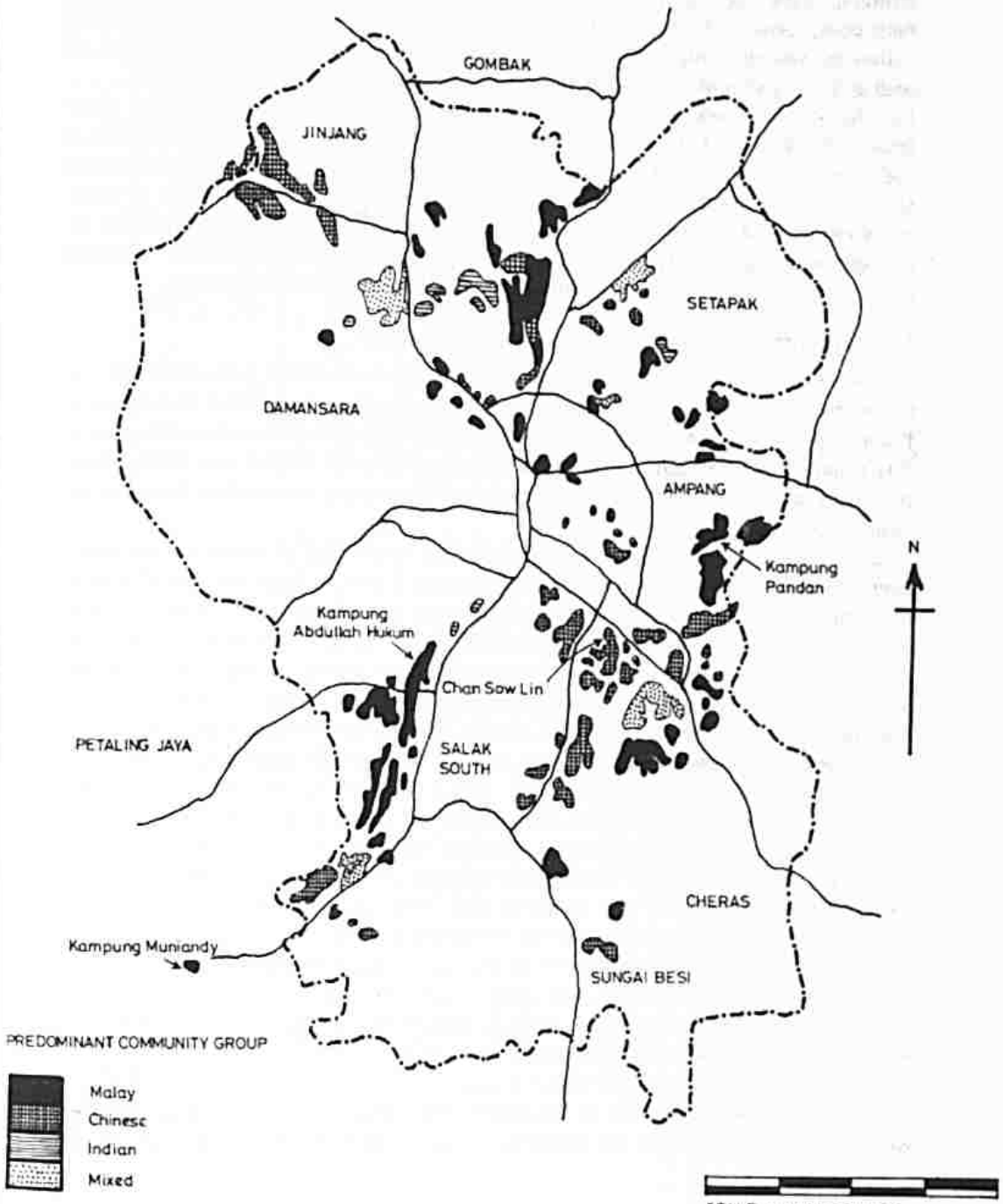
Response from householders was also reasonably good in almost all cases, although the students reported that lengthy explanations were often necessary to gain the confidence of the persons being interviewed. Anxiety that the interviewers were representatives of government was particularly noticeable although there was some variation in the response according to the communal group being interviewed. The Malays were noted to be the least suspicious and most cooperative.

The three schedules developed for the survey were:

(a) *An Individual schedule,* completed for each member of a household, noting Age, Sex, Relationship to head of household, Ethnic group, Duration of residence, Place of birth, Marital status, Place of birth of own father, Place of birth of own mother, Places of previous residence, Religion, Education type and level attained, Employment status and, for women 15 years and over, Fertility.

FIGURE I

LOCATION OF SQUATTER AREAS SURVEYED, KUALA LUMPUR–PETALING JAYA



(b) *A Household schedule,* completed for each household unit, including questions on age of building, floor area, number of rooms, improvements or additions to original building, type of construction, furnishing, distance from nearest and furthest neighbour, provision of amenities such as electricity, water, waste disposal and deliveries, characteristics of the site, environmental problems, occupation status of land and ownership of house (including costs involved), and level of possessions.
(c) *An Adult schedule,* asked of the Head of Household, wives and/or other responsible adults of 18 or over. This schedule was concerned with the individual life-styles and problems of squatters. It covered aspects such as organizations belonged to, ascription of leadership, availability of assistance in times of need, types of transportation utilized, distances from household to workplace and to relatives, perception of well-being, possibility for improvement, propensity to move under specified conditions, knowledge of family planning, and relationship with government.

## THE CHARACTERISTICS OF THE SQUATTER HOUSEHOLD

The description of all four *kampung* as 'squatter settlements' was verified by the replies to a question on form of land tenure (Table 1). Every household interviewed in Kampungs Muniandy and Pandan admitted to having 'informal' tenancy of their land. The situation in Chan Sow Lin and Kampung Haji Abdullah Hukum was slightly more complicated, with a few households claiming Temporary Occupation Licences or having a Grant.

Chan Sow Lin was exceptional in its antiquity. Nearly 60% of the houses were over twenty years old, and many were over thirty years (Table 2). Some are now scheduled for removal and the area is to be redeveloped, but the occupants are to be paid some compensation. Payments to illegal occupants forced to move will strike some as the tacit bestowal by the authorities of belated land rights.[2] Houses in Kampung Muniandy had an average age of about 8 years, with 15% being over 11 years old. Both Kampungs Pandan and Haji Abdullah Hukum are older settlements. Kampung Pandan had houses with an average age of about 10 years, but with 3% exceeding 20 years; and Kampung Haji Abdullah Hukum's was about 12 years on the average, with 8% exceeding 20 years. In general less than 10% of the houses are new (less than 2 years). In all four *kampung* the land occupied nominally belongs to the government.

The acquisition of a house in a squatter area may be achieved in several ways. In the more recently established, the majority have either built the house themselves, or 'commissioned' its construction by an entrepreneur. Another method is to buy an existing house and the implied 'right' to the land it occupies; about a fifth of all the households surveyed were acquired 'used' (Table 3). Another alternative is to rent from the owner. Again an entrepreneurial element is involved here. Some landlords make a regular business of this and may own several houses in these areas. Renting was most prevalent in the older Chan Sow Lin area.

Where purchase costs could be established, the average seemed to be about M$600, with about M$2,000 being the maximum price. It was difficult to find anything for

[2] In this connection it should perhaps be noted that under some legal systems covering land tenure, but not that in Malaysia, unchallenged occupation for periods such as 20 years, or even less, gives to occupier permanent rights to ownership.

TABLE 1
LAND TENURE

| Settlement | Temporary Occupation Licence (TOL) | | Grant | | Informal | | Removal Scheduled | | Not Specified | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % |
| Kampung Muniandy | – | – | – | – | 100 | 100.0 | – | – | – | – |
| Chan Sow Lin | 2 | 1 | 1 | 0.5 | 167 | 83.5 | 29[a] | 14.5 | 1 | 0.5 |
| Kampung Haji Abdullah Hukum | 3 | 3 | 7 | 7.0 | 90 | 90.0 | – | – | – | – |
| Kampung Pandan | – | – | – | – | 100 | 100.0 | – | – | – | – |

*Note:* [a]These residents are 'informal' occupants but have received letters giving them notice of removal. The land is to be redeveloped for industrial sites.

F = Frequency.

TABLE 2
AGE OF BUILDINGS
*(Years)*

| Settlement | <1 | | 1–2 | | 3–5 | | 6–10 | | 11–20 | | >20 | | Not Specified | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of Households | % | No. of Households | % | No. of Households | % | No. of Households | % | No. of Households | % | No. of Households | % | No. of Households | % |
| Kampung Muniandy | 1 | 1 | 8 | 8.0 | 19 | 19 | 41 | 41.0 | 15 | 15 | – | – | – | – |
| Chan Sow Lin | – | – | 1 | 0.5 | 4 | 2 | 21 | 10.5 | 40 | 20 | 118 | 59 | 16 | 8 |
| Kampung Haji Abdullah Hukum | – | – | 7 | 7.0 | 11 | 11 | 26 | 26.0 | 48 | 48 | 8 | 8 | – | – |
| Kampung Pandan | 2 | 2 | 11 | 11.0 | 5 | 5 | 40 | 40.0 | 37 | 37 | 3 | 3 | 2 | 2 |

TABLE 3
TYPE OF ACQUISITION

| Settlement | Built by Household | | Bought by Household | | Renting | | Not Specified | |
|---|---|---|---|---|---|---|---|---|
| | *No.* | % | *No.* | % | *F* | % | *F* | % |
| Kampung Muniandy | 69 | 69.0 | 22 | 22 | 7 | 7 | – | – |
| Chan Sow Lin | 91 | 45.5 | 40 | 20 | 68 | 34 | 1 | 0.5 |
| Kampung Haji Abdullah Hukum | 39 | 39.0 | 19 | 19 | 40 | 40 | – | – |
| Kampung Pandan | 66 | 66.0 | 17 | 17 | 17 | 17 | – | – |

F = Frequency.

under M$200. Rental payments, where these were made, were about M$18 per month on the average in Chan Sow Lin, M$24 in Kampung Muniandy, M$29 in Kampung Haji Abdullah Hukum and M$31 in Kampung Pandan. Buying a house usually involves cash and no case was found where mortgages or regular payments on loans using the house as security were made. Professional money-lending is sometimes involved, but more often relatives are called upon for informal loans.

The average 'squatter house' was found to be about 700 sq. ft. in Chan Sow Lin, 500 sq. ft. in Kampung Muniandy, 400 sq. ft. in Kampung Pandan and 350 sq. ft. in Kampung Haji Abdullah Hukum. While in the other three *kampung* even the largest very seldom exceeded 1,000 sq. ft., in Chan Sow Lin 27% exceeded this limit and several exceeded 2,000 sq. ft. This variation is also reflected in the number of rooms. The average number of bedrooms (in addition to the living room and kitchen which most houses possess) was three in Chan Sow Lin, two in Kampung Muniandy and only one in Kampung Pandan and Kampung Haji Abdullah Hukum. Twenty percent of the units in Chan Sow Lin had five or more bedrooms (Table 4). It is quite common for householders to make additions or substantial improvements to their houses, with half of those in Kampung Pandan claiming to have done this, and 40% in Kampung Muniandy. The rate was much lower in Chan Sow Lin and Kampung Haji Abdullah Hukum, at only 16% and 18%. However, in Chan Sow Lin only 45% are first owners, so the incidence is not all that low (36% of those eligible). Roofing was almost entirely of galvanized iron, except in Chan Sow Lin, where a quarter of the houses had *atap* cover. Most houses, except those in Kampung Muniandy, were unpainted. The interiors were mostly furnished with what the 6 student field workers classed as 'basic' needs. Even those classed as 'adequate' offered little in the way of comfort but there would be for instance, some upholstered chairs. In a few cases, there was no furniture at all (Table 5).

While the provision made by the 'squatters' themselves is often adequate in terms of living space, the provision of external amenities, particularly of the municipal kind are almost entirely lacking. Water mains supplies are extremely rare but occur sometimes if the houses are located along a main road. Everyone else depends on water carried from public stand-pipes or wells (Table 6). Mains electricity is also unusual with only about 5% so supplied, but an additional 8% have installed their own generators. The rest have no electric power. Modern waste disposal is similarly lacking. Night-soil buckets, pit-latrines and the use of abandoned mining pools or streams for drop toilets, in that order, are the most prevalent types (Table 7). Sewered toilets, septic tanks, and even the water-seal system are very rare or entirely absent. Rubbish disposal is also at a primitive level, with individual burning, dumping in pools or streams, small communal dumps and burying being the major techniques (Table 8). A very few residents, again those who happen to live along principal roads, have city collection. Postal deliveries are similarly erratic in their application: some households in Chan Sow Lin (6%) and Kampung Haji Abdullah Hukum (19%) have regular deliveries. In Chan Sow Lin an additional 27% get letters only if they are from an official source! Communal letter drops have been arranged in some areas, but most have no receiving access to the mails. Telephones are also almost entirely absent.

Provision of services by the private sector is much superior to that from government. These householders are supplied with a range of deliveries which, for instance, would excite envy on the part of an upper-middle class American housewife. Bread, meat, fish, vegetables, cooked foods, ice-cream, groceries, and other sundries are all

TABLE 4
NUMBER AND TYPE OF ROOMS IN HOUSEHOLDS

| Settlement | Number of Bedrooms | | | | | | | | | | | | Living Room | | | | Own Kitchen | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | Yes | | No | | Yes | | No | |
| | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % |
| Kampung Muniandy | 38 | 38.0 | 41 | 41 | 15 | 15.0 | 3 | 3 | 1 | 1.0 | – | – | 93 | 93.0 | 7 | 7.0 | 97 | 97 | 3 | 3.0 |
| Chan Sow Lin | 29 | 14.5 | 56 | 28 | 61 | 30.5 | 34 | 17 | 13 | 6.5 | 7 | 3.5 | 199 | 99.5 | 1 | 0.5 | 198 | 99 | 1 | 0.5 |
| Kampung Haji Abdullah Hukum | 68 | 68.0 | 14 | 14 | 5 | 5.0 | 2 | 2 | – | – | – | – | 83 | 83.0 | 17 | 17.0 | 81 | 81 | 19 | 19.0 |
| Kampung Pandan | 59 | 59.0 | 38 | 38 | 3 | 3.0 | – | – | – | – | – | – | 98 | 98.0 | 2 | 2.0 | 100 | 100 | – | – |

TABLE 5
QUANTITY OF INTERIOR FURNISHING

| Kampung | None | | Little | | Basic | | Adequate | |
|---|---|---|---|---|---|---|---|---|
| | *F* | % | *F* | % | *F* | % | *F* | % |
| Kampung Muniandy | 6 | 6 | 26 | 26 | 32 | 32 | 36 | 36 |
| Chan Sow Lin | – | – | 44 | 22 | 110 | 55 | 46 | 23 |
| Kampung Haji Abdullah Hukum | 12 | 12 | 57 | 57 | 30 | 30 | 1 | 1 |
| Kampung Pandan | 6 | 6 | 36 | 36 | 40 | 40 | 18 | 18 |

TABLE 6
WATER SUPPLY TO HOUSEHOLDS

| Settlement | Water Piped to House | | Private Hose Supply | | Public Standpipe | | Well | | Well and Public Standpipe | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % |
| Kampung Muniandy | – | – | – | – | 100 | 100.0 | – | – | – | – | – | – |
| Chan Sow Lin | 12 | 6 | 3 | 1.5 | 7 | 3.5 | 105 | 52.5 | 68 | 34 | 5 | 2.5 |
| Kampung Haji Abdullah Hukum | 9 | 9 | 13 | 13.0 | 76 | 76.0 | 1 | 1.0 | 1 | 1 | – | – |
| Kampung Pandan | – | – | 1 | 1.0 | – | – | – | – | 99 | 99 | – | – |

F = Frequency.

TABLE 7
TOILET FACILITIES

| Settlement | Water Seal | | Drop Toilet | | Night Soil Bucket | | Pit Latrine | | Public Toilet Access Only | | Share With Neighbour | | Other | | Not Specified | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % |
| Kampung Muniandy | – | – | – | – | 51 | 51 | – | – | – | – | 32 | 32.0 | 17 | 17.0 | – | – |
| Chan Sow Lin | 1 | 0.5 | 39 | 19.5 | 146 | 73 | 7 | 3.5 | – | – | 1 | 0.5 | 5 | 2.5 | 1 | 0.5 |
| Kampung Haji Abdullah Hukum | – | – | 5 | 5.0 | 45 | 45 | 4 | 4.0 | 26 | 26 | – | – | 20 | 20.0 | – | – |
| Kampung Pandan | – | – | 40 | 40.0 | 3 | 3 | 29 | 29.0 | – | – | 27 | 27.0 | – | – | 1 | 1.0 |

TABLE 8
GARBAGE DISPOSAL

| Settlement | Burning | | Communal Dump | | Throw into River or Pool | | City Collection | | Burying | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % |
| Kampung Muniandy | 74 | 74.0 | 20 | 20 | 6 | 6.0 | – | – | – | – | – | – |
| Chan Sow Lin | 153 | 76.5 | 12 | 6 | 29 | 14.5 | 6 | 3 | – | – | – | – |
| Kampung Haji Abdullah Hukum | 46 | 46.0 | 22 | 22 | 25 | 25.0 | 1 | 1 | – | – | 6 | 6 |
| Kampung Pandan | 21 | 21.0 | 6 | 6 | 68 | 68.0 | – | – | 4 | 4 | 1 | 1 |

F = Frequency.

available on a regular basis, or at least frequently, by itinerant hawkers, to most households. Lack of demand seems to be the only limitation, as in the case of newspaper deliveries, for instance (Table 9).

The absence of basic public utilities affects access to several modern amenities. Refrigeration for instance is very rare, with only 3% of the households surveyed owning units. This is partly related to the lack of electricity, although the possibility of using the kerosene variety would indicate that inability to pay is the more important limitation. Pressure lamps as a substitute for electric light are owned by about 80% of all households. In Kampungs Muniandy, Pandan and Haji Abdullah Hukum however, oil-lamps are the best lighting available in many households. Similarly, charcoal irons far outnumber the electric version, but the ownership of an iron of any kind is not characteristic of all households. In Kampung Haji Abdullah Hukum (61%) and in Kampung Muniandy (56%) have none at all. In Kampung Pandan and in Chan Sow Lin, ownership is more widespread with only 3% in Kampung Pandan and 1% in Chan Sow Lin being without. Ethnicity affects the possession of some goods. Rediffusion,[3] unknown in Kampungs Haji Abdullah Hukum, Muniandy and Pandan is enjoyed by 60% of the households in Chan Sow Lin. Together however, most households have some form of radio. Not unexpectedly, television is much rarer, but about 10% of all households have it.

Access to modern transportation is fairly prevalent. In Chan Sow Lin, 16% of the households have a car, 45% have a motor-cycle or scooter, and 74% have a bicycle. In the other settlements, car ownership is not so widespread, but 8% of households in Kampung Pandan and 3% in Kampung Muniandy have cars. Motor cycles or scooters occur in 41% of the Kampung Pandan households and 30% of those in Kampung Muniandy. The inhabitants of Kampung Haji Abdullah Hukum and Kampung Muniandy are noticeably worse off for motorized transport than the other two.

A characteristic of squatter settlements overseas has been crowding and congestion, and those in the Kuala Lumpur-Petaling Jaya area, while following this trend, are not excessive in this respect. The houses are mostly built close together, but density of

TABLE 9
NEWSPAPER DELIVERY TO HOUSEHOLDS

| Settlement | Yes | | No | |
|---|---|---|---|---|
| | *F* | % | *F* | % |
| Kampung Muniandy | 25 | 25 | 75 | 75 |
| Chan Sow Lin | 154 | 77 | 46 | 23 |
| Kampung Haji Abdullah Hukum | 33 | 33 | 67 | 67 |
| Kampung Pandan | 9 | 9 | 91 | 91 |

F = Frequency.

[3] A local commercial radio service.

persons to land area is not very high. The nearest neighbours are less than a yard away on the average in Kampung Muniandy, and in 36% of all cases, no distance at all, the houses being built right against one another. The fire hazard in such situations is acute. In Kampung Pandan the situation is slightly better. Here it is very unusual for houses to be built one against the other, but 93% have less than 6 feet separating them from their nearest neighbour. The dispersal in Chan Sow Lin is slightly greater, but with the average still quite low at about 2 yards.

Other environmental problems mentioned frequently included proneness to flooding, particularly in Kampung Muniandy (84%) where it seems to be an event occurring several times a year. Householders in Chan Sow Lin and Kampung Haji Abdullah Hukum also mentioned this in about one quarter of all cases, but in Kampung Pandan only 16% were bothered enough to raise it. Drainage in general was a much more frequent source of complaint; in both Kampung Pandan (44%), and Kampung Muniandy (38%) it was a major problem. Mud was featured in Kampung Muniandy as a major nuisance (57%) and a somewhat lesser one in Kampung Haji Abdullah Hukum (38%). Dust also occurs as a perceived problem in both these settlements (82% in Kampung Haji Abdullah Hukum and 68% in Kampung Muniandy). Those who marvel at the tolerance of Chinese for noise will be surprised to note that this was a major source of complaint in Chan Sow Lin, where Traffic (18%), Railway (15%) and General (37%) were all cited as sources of nuisance. The worst area for noise however is undoubtedly Kampung Haji Abdullah Hukum where 83% complained of noise in general, 78% of traffic noise and 92% of railway noise. This settlement also suffers from traffic dangers and hazards to children to a greater extent than any other. Inaccessibility by car was raised as a problem in Chan Sow Lin (50%) and Kampung Muniandy and Kampung Haji Abdullah Hukum (33%).

Distance from major amenities was not seen as a problem by most of the households interviewed. Few children had to go more than 1½ miles to school. Marketing facilities were also close at hand, being never more than 1½ miles from any household. In Chan Sow Lin and Kampung Muniandy however, distance to clinics or other forms of medical assistance was more than 3 miles. For households without own transportation even these distances can be a problem if they have to be covered on foot, but this is now rare.

One alleged advantage of squatting is that distance to workplace can be minimized, thus one of the objections to relocation is often that the distance to existing employment is excessively increased. This situation was not very well borne out by this survey. While the persons who travel to work from Chan Sow Lin, which is itself located in a heavily industrialized area, were mostly within a mile of their workplace (64%), those in Kampung Muniandy, Kampung Haji Abdullah Hukum and especially Kampung Pandan were on the average considerably further away (Table 10). In Kampung Pandan 31% travelled more than 5 miles a day to work. The proportion travelling a similar distance from Chan Sow Lin was only 5%.

The structure of squatter households is predominantly the nuclear type, that is with the Head of Household (in this case normally the husband), wife and own children; the proportion is similar in all four *kampung* (Table 11). Extended families, including parents of the Head of Household or spouse were also quite common, as were households in which other miscellaneous relatives were included (complex households). Living alone or only with a spouse was very unusual. A frequent feature of squatter settlements in some overseas locations was households containing children but only

TABLE 10
DISTANCE FROM RESIDENCE TO PLACE OF WORK
*(Working Population)*

| Settlement | None: Work at Home | | < 1 mile | | 1–2 miles | | 3–5 miles | | > 5 miles | | Not Specified | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % |
| Kampung Muniandy | 51 | 19.5 | 42 | 16.1 | 87 | 33.3 | 56 | 21.4 | 23 | 8.8 | 2 | 0.7 |
| Chan Sow Lin | 40 | 9.7 | 211 | 51.3 | 43 | 10.5 | 57 | 13.9 | 18 | 4.4 | 42 | 10.2 |
| Kampung Haji Abdullah Hukum | 1 | 0.7 | 35 | 23.5 | 24 | 16.1 | 68 | 45.6 | 21 | 14.1 | – | 0 |
| Kampung Pandan | 75 | 29.8 | 42 | 16.7 | 24 | 9.5 | 55 | 21.8 | 54 | 21.4 | 2 | 0.8 |

F = Frequency.

TABLE 11
HOUSEHOLD TYPE

| Settlement | Nuclear (H + spouse + children) | | Individual (H only) | | Dual (H + spouse only) | | Extended (H + spouse + children + parents of H) | | Broken Nuclear (H – spouse + children) | | Multiple Wife (H + 2 or more wives + ?) | | Complex (H + own family + misc. other relatives) | | Sibling (H + sibling(s) only) | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % |
| Kampung Muniandy | 57 | 57 | 1 | 1 | 1 | 1.0 | 14 | 14 | 8 | 8 | – | – | 17 | 17.0 | – | – | 2 | 2 |
| Chan Sow Lin | 116 | 58 | 8 | 4 | 9 | 4.5 | 26 | 13 | 22 | 11 | – | – | 13 | 6.5 | 6 | 3 | – | – |
| Kampung Haji Abdullah Hukum | 54 | 54 | 6 | 6 | 9 | 9.0 | – | – | 6 | 6 | – | – | 12 | 12.0 | 3 | 3 | 9 | 9 |
| Kampung Pandan | 58 | 58 | 1 | 1 | 5 | 5.0 | 6 | 6 | 2 | 2 | 1 | 1 | 24 | 24.0 | 3 | 3 | – | – |

H = Head of Household.

F = Frequency.

one parent; this was not usual here although 11% of all households in Chan Sow Lin were so classified (broken nuclear).

## CHARACTERISTICS OF THE POPULATION

The origin of the squatter population in these *kampung* is surprisingly urban, given the common assumption that the whole phenomenon is principally a result of rural to urban drift.

The urban origins are particularly noticeable among the inhabitants of Chan Sow Lin, which is not perhaps unexpected, although the proportion (76%) is very high. Even in Kampung Pandan however, 30% are Kuala Lumpur born. Less than1% of those classified as Malays claimed to be born in Indonesia, but the number of Tamils and Chinese born in the parent country was appreciable (Table 12). Responses to questions on previous places of residence showed a similar urban stress except for the inhabitants of Kampung Pandan; in this settlement, 55% of those who moved came directly from a rural *kampung*, compared with 43% who came from urban surroundings (Table 13). Even in this village the single largest source of population who moved in was from elsewhere in Kuala Lumpur. In the case of Kampung Muniandy, the largest proportion of incoming persons had come from another urban situation (52%), but the single largest source was Selangor (excluding Kuala Lumpur) and this was the only *kampung* to draw a considerable proportion of its inward migrants from rural estates (31%).

The squatter population did not prove to be very mobile. Persons living in Chan Sow Lin particularly showed that a little less than half had *ever* lived anywhere else (Table 14). The relative stability of the settlements is also emphasized by the data on length of stay in the community (Table 15). Although Kampung Pandan shows some evidence of short-term residence (15% less than 1 year), possibly evidence of circular migration, the duration of residence in each *kampung* on the average was well over 5 years, with Chan Sow Lin again showing most evidence of very durable residence (13% over 25 years).

The age structure of the *kampung* reflected this variation in duration of stay, with Chan Sow Lin showing a more mature population, in terms of age, than the others; the mean age for males, for instance, being nearly 25 years. The population of Kampung Pandan is considerably 'younger' in structure.

Although the numbers enumerated in each *kampung* are so small that random variations for which no processual explanations can be offered will be characteristic, the age and sex structures shown are interesting and instructive (Fig. II). In no case for instance, does the structure follow the classic pyramidal pattern. Instead, marked contraction is obvious at some of the lower age-groups, least obvious but present in the case of Kampung Pandan, but most obvious in Chan Sow Lin.

There are several possible explanations for this phenomenon. One is the likelihood of under-enumeration. This has been noted in past enumerations in Malaysia, particularly at age 0, and there is evidence, from the direction of the discrepancies between responses to the question on age where the answer was 0 years, and those asked of mothers about births in the preceding 12 months, of some under-enumeration in this count. However, the combination of under-enumeration and possibly some mistatement of age is insufficient to account for the smaller than expected numbers in the youngest age-group in Chan Sow Lin, Kampung Muniandy and to a lesser extent in the two predominantly Malay *kampung*. Another possibility is that the age and sex structure is deficient in females of reproductive age, so that in turn, the number of

TABLE 12
PLACE OF BIRTH
*(First Five Ranked)*

| Kampung Muniandy | | Chan Sow Lin | | Kampung Haji Abdullah Hukum | | Kampung Pandan | |
|---|---|---|---|---|---|---|---|
| 54% | Selangor (except Kuala Lumpur) | 76% | Kuala Lumpur | 37% | Kuala Lumpur | 30% | Kuala Lumpur |
| 24% | Kuala Lumpur | 7% | China | 11% | Selangor | 20% | Malacca |
| 8% | India | 6% | Selangor | 9% | Malacca | 14% | Selangor |
| 5% | Perak | 4% | Perak | 7% | Negri Sembilan | 12% | Negri Sembilan |
| 4% | Negri Sembilan | 3% | Negri Sembilan | 5% | Penang | 9% | Perak |

TABLE 13
SOURCE AREA TYPE FOR INCOMING MIGRANTS
*(Persons not born in kampung of enumeration only)*

| Settlement | Rural *Kampung* | | Rural Estate | | Urban | | Not Specified | |
|---|---|---|---|---|---|---|---|---|
| | *F* | % | *F* | % | *F* | % | *F* | % |
| Kampung Muniandy | 54 | 16.4 | 103 | 31.2 | 170 | 51.5 | 3 | 0.9 |
| Chan Sow Lin | 73 | 12.4 | 1 | 0 | 485 | 82.6 | 28 | 4.8 |
| Kampung Haji Abdullah Hukum | 118 | 90.0 | 13 | 10.0 | 0 | – | 0 | – |
| Kampung Pandan | 179 | 54.9 | 3 | 0.9 | 140 | 42.9 | 4 | 1.2 |

F = Frequency.

FIGURE II

AGE AND SEX PROFILES, SQUATTER AREAS IN KUALA LUMPUR–PETALING JAYA 1976

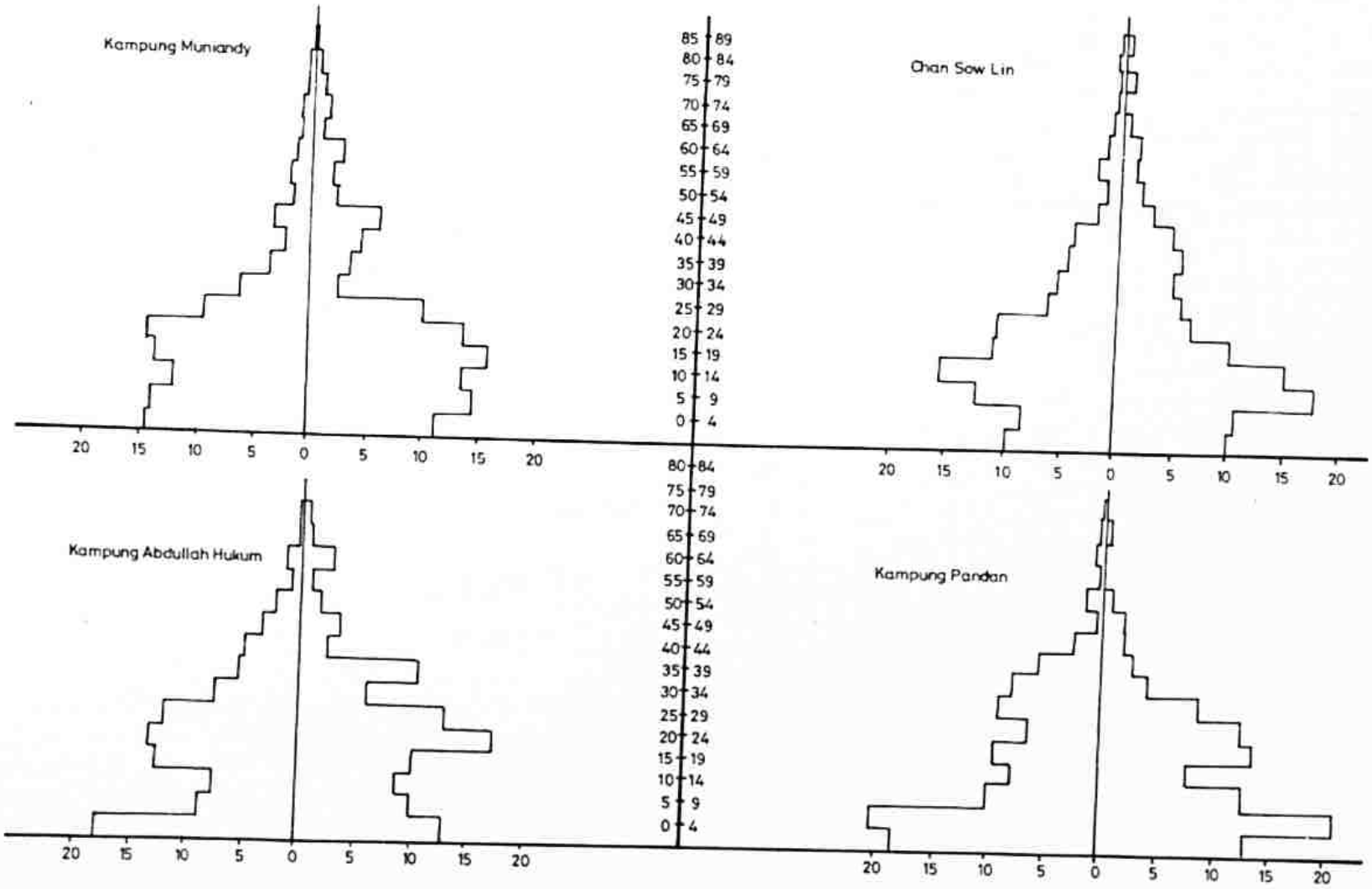


TABLE 14
PROPORTION HAVING LIVED IN ONE, TWO AND THREE PLACES OTHER THAN THE PLACE OF ENUMERATION

| Settlement | I (%) | II (%) | III (%) |
|---|---|---|---|
| Kampung Muniandy | 71 | 36 | 18 |
| Chan Sow Lin | 54 | 11 | 2 |
| Kampung Haji Abdullah Hukum | 80 | 20 | 7 |
| Kampung Pandan | 63 | 30 | 9 |

TABLE 15
DURATION OF RESIDENCE

| Settlement | <1 Month | | 1–6 Months | | 7–11 Months | | 1–2 Years | | 3–5 Years | | 6–10 Years | | 11–15 Years | | 16–15 Years | | >25 Years | | Not Specified | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | F | % | F | % | F | % | F | % | F | % | F | % | F | % | F | % | F | % | F | % |
| Kampung Muniandy | 7 | 1.09 | 7 | 1.09 | 9 | 1.40 | 52 | 8.11 | 127 | 19.81 | 273 | 42.59 | 78 | 12.17 | 85 | 13.25 | – | – | 3 | 0.47 |
| Chan Sow Lin | 7 | 0.64 | 30 | 2.73 | 9 | 0.82 | 94 | 8.57 | 110 | 10.03 | 299 | 27.26 | 208 | 18.96 | 197 | 17.96 | 141 | 12.85 | 2 | 0.18 |
| Kampung Haji Abdullah Hukum | 2 | 0.49 | 24 | 5.93 | 13 | 3.21 | 55 | 13.58 | 111 | 27.41 | 84 | 20.74 | 79 | 19.51 | 30 | 7.41 | 7 | 1.73 | – | – |
| Kampung Pandan | 7 | 1.35 | 44 | 8.48 | 25 | 4.82 | 57 | 10.98 | 92 | 17.73 | 171 | 32.95 | 107 | 20.62 | 8 | 1.54 | 8 | 1.54 | – | – |

F = Frequency.

children produced are reduced. This is not reflected in the small differences in proportion of women in the 15–49 age range observed, nor in the direction of their variation (Table 17).

The other possibility is that fertility is declining in these settlements. That this is likely to be so is reflected in the child-woman ratio (CWR). There is a large difference between the ratios for each *kampung*. All are below the average for Peninsular Malaysia (1970) as a whole, that for Chan Sow Lin dramatically so. While this ratio is an indirect reflection of recent fertility, it has been found to correlate highly with measures of a more precise kind. The size of the population involved here is too small to permit this measure being accepted as an indicator of actual fertility in the population from which the samples were taken, but the low level observed, particularly in Chan Sow Lin are of the order found in countries of established low fertility.[4] The variations among the *kampung* are also suggestive. Additional information on fertility was gathered from women over 15 years who were asked the number of children they had ever borne. The results, in Table 18, although affected by the same problems of small sample size, are also instructive. The performance of women of recently completed fertility reflects the levels applying one to two decades ago, with the Malay component showing fairly moderate fertility (average 5–6 children) and the Chinese and Indian component showing high fertility (average 6–8 children). The more modern levels are indicated by the recent childbearing age group (e.g. 20–24 years) which show a very different pattern, with the Chinese component with low fertility, the Indian component somewhat higher, and the Malay component highest. The data suggests, albeit inconclusively, that within the span of childbearing life represented in this Table, a transition of some magnitude has taken place; the relatively high fertility levels achieved by the women about to pass out of this group will not be characteristic of the younger women in the first stages, who are not only marrying later (Table 19), but who are in many cases significantly limiting the number of children born to them within marriage. This is most clearly apparent in the case of Chan Sow Lin, but movement is also apparent in Kampung Muniandy and to a lesser extent in Kampung Haji Abdullah Hukum and Kampung Pandan as well.

TABLE 16
AVERAGE AGE OF INHABITANTS
*(Years)*

| Settlement | Males | | Females | |
|---|---|---|---|---|
| | Median | Mean | Median | Mean |
| Kampung Muniandy | 19 | 21.8 | 18 | 21.3 |
| Chan Sow Lin | 20 | 24.9 | 18 | 23.6 |
| Kampung Haji Abdullah Hukum | 21 | 21.5 | 22 | 23.2 |
| Kampung Pandan | 17 | 20.5 | 18 | 19.6 |

[4] E.g. Norway, 1960, 378; USA, 1960, 488.

TABLE 17
CHILD-WOMAN RATIO[a]

| Settlement | Child (0–4 years) | | | Percentage of Total | Women *(15–49 years)* | Proportion of Women 15–19 Years in Total Population | Ratio $\frac{PO-4}{(F\ 15-49)}$ |
|---|---|---|---|---|---|---|---|
| | *Male* | *Female* | *Total* | | | | |
| Kampung Muniandy | 44 | 35 | 79 | 12.3 | 169 | 26.4 | 467 |
| Chan Sow Lin | 53 | 53 | 106 | 9.6 | 285 | 25.7 | 372 |
| Kampung Haji Abdullah Hukum | 42 | 22 | 64 | 15.8 | 106 | 26.2 | 604 |
| Kampung Pandan | 49 | 32 | 81 | 15.7 | 125 | 24.2 | 648 |

[a] The CWR for Peninsular Malaysia in 1970 was 681.

TABLE 18

NUMBER OF CHILDREN EVER BORN BY AGE OF MOTHER IN 5-YEAR AGE GROUP

| Settlement | 15–19 Years | 20–24 Years | 25–29 Years | 30–34 Years | 35–39 Years | 40–44 Years | 45–49 Years |
|---|---|---|---|---|---|---|---|
| Kampung Muniandy | 0.10 | 0.8 | 3.3 | 3.9 | 5.5 | 6.8 | 7.7 |
| Chan Sow Lin | 0.05 | 0.4 | 2.1 | 2.8 | 4.2 | 4.7 | 5.8 |
| Kampung Haji Abdullah Hukum | 0.06 | 0.9 | 2.2 | 3.3 | 5.2 | n.a. | n.a. |
| Kampung Pandan | 0 | 1.2 | 2.7 | 3.4 | 4.7 | 5.7 | 4.2 |

The products of the past high levels of fertility must be of some concern however. Young persons, in the age groups about to enter the workforce in the near future or who are at those ages in which unemployment occurs most frequently (10–24 years), are a very high proportion of the population in all four *kampung*. In both Chan Sow Lin and Kampung Muniandy, this group was 41% of the total population, and although the proportions were lower in Kampung Haji Abdullah Hukum (35%) and Kampung Pandan (30%), they must still be classed as high. Some indication of the problems is shown in Table 20. That the problem of unemployment will not be solved easily in the near future is demonstrated by the proportions of children 10–14 years who do not attend school: in Kampung Muniandy 3%, Chan Sow Lin 1%, Kampung Haji Abdullah Hukum 17% and Kampung Pandan 4%. The educational status of the populations of the four *kampung* is shown in Appendix I, and the employment structure in Appendices II & III. Persons in paid full-time employment are shown in Table 21, and their incomes in Table 22. The estimated mean monthly earnings of those in paid employment or having other sources of income, are shown to vary over only a narrow range, from Kampung Muniandy, the lowest at MS186 per month, to Kampung Pandan at MS241. When these mean incomes are adjusted, taking the number of persons dependent upon each income into account, the range narrows considerably and Chan Sow Lin emerges with the highest per capita estimated income. Kampung Muniandy retains its position as the lowest of the four.

## CONCLUSIONS

None of the mean incomes estimated for the squatter settlements studied can be described as offering much above a barely subsistence level, given the cost of living in Malaysia. Squatter settlements as a class have been universally characterized by poverty, and certainly the four examined here conform to this expectation. From these income levels arise all their other problems. But by building makeshift houses on land to which all but a few have no legal rights the squatters have been able to minimize their housing costs. In economic terms the institution is almost sensationally successful.

The so-called 'low-cost housing' which government has in mind exceeds in cost the squatter unit by factors which range from 5 times and up. In squatter eyes all these schemes are distinctly middle-class. Wehbring for instance, has established that the cost of the cheapest of the units proposed is beyond the financial reach of 80% of the squatting community.[5]

Apart from the impossible cost levels the squatters perceive many other disadvantages to the type of public housing they have been offered in the past; these include small floor areas with no possibility of extension or addition of extra rooms, excessive density of population, frequently increased distance from places of employment, disruption of existing social patterns which, in many communities, the inhabitants find very satisfying. The only advantages all agree on are the availability of piped water, electricity and improved waste disposal and drainage. Some refer to the advantage of 'security', but squatters living in settlements which have existed unharassed for 20–30 years in many cases cannot really be feeling very insecure on a

[5] Wehbring, *op. cit.*, p. 28.

TABLE 19
MARITAL STATUS BY AGE IN 5-YEAR GROUPS
*(Females)*

| Settlement | % | 15–19 Years | 20–24 Years | 25–29 Years | 30–34 Years | 35–39 Years | 40–44 Years |
|---|---|---|---|---|---|---|---|
| Kampung Muniandy | NM | 90 | 52 | 23 | 14 | – | – |
| | M | 8 | 48 | 74 | 86 | 100 | 80 |
| | W | – | – | – | – | – | 20 |
| | D | 2 | – | – | – | – | – |
| Chan Sow Lin | NM | 96 | 68 | 14 | 13 | 4 | 3 |
| | M | 4 | 32 | 83 | 81 | 92 | 93 |
| | W | – | – | 3 | 6 | 4 | 3 |
| | D | – | – | – | – | – | – |
| Kampung Haji Abdullah Hukum | NM | 88 | 31 | 9 | – | – | – |
| | M | 13 | 69 | 86 | 100 | 89 | 100 |
| | W | – | – | – | – | – | – |
| | D | – | – | 5 | – | 11 | – |
| Kampung Pandan | NM | 89 | 30 | 7 | 5 | – | – |
| | M | 11 | 70 | 93 | 95 | 100 | 100 |
| | W | – | – | – | – | – | – |
| | D | – | – | – | – | – | – |

NM = Never married
M = Married
W = Widowed
D = Divorced

TABLE 20
PERSONS CLASSIFIED AS UNEMPLOYED
*(% of Age Group)*

| Settlement | 15–19 Years | 20–24 Years | 25–29 Years | 30–34 Years | 35–39 Years | 40–44 Years |
|---|---|---|---|---|---|---|
| Kampung Muniandy | 10.0 | 13.3 | 6.6 | – | – | – |
| Chan Sow Lin | 13.6 | 8.0 | 3.4 | 2.9 | – | – |
| Kampung Haji Abdullah Hukum | 23.3 | 9.7 | 3.6 | – | – | 8.3 |
| Kampung Pandan | 23.8 | 4.2 | 5.6 | – | – | 6.3 |

TABLE 21
PERSONS IN EMPLOYMENT
*(Number and population of total kampung population)*

| Settlement | In Paid Employment *(Full time)* | | In Paid Employment *(Part time)* | | In Paid Employment *(Two jobs)* | |
|---|---|---|---|---|---|---|
| | *F* | % | *F* | % | *F* | % |
| Kampung Muniandy | 182 | 28.4 | 49 | 7.6 | 5 | 0.8 |
| Chan Sow Lin | 380 | 34.6 | 62 | 5.7 | 2 | 0.2 |
| Kampung Haji Abdullah Hukum | 142 | 35.1 | 5 | 1.2 | 2 | 0.5 |
| Kampung Pandan | 139 | 26.8 | 16 | 3.1 | 4 | 0.8 |

TABLE 22
INCOME RECEIVED BY PERSONS
*(S Per month)*

| Settlement | $1–39 | | $40–79 | | $80–129 | | $130–179 | | $180–279 | | $280–479 | | $480–679 | | >$680 | | Not Specified | | Estimated Mean *(SM per month)* | No. Depending on Each Income | Estimated $M Per Capita |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | *F* | % | | | |
| Kampung Muniandy | 11 | 1.72 | 27 | 4.21 | 46 | 7.18 | 54 | 8.42 | 58 | 9.05 | 32 | 4.99 | 6 | 0.94 | – | – | 2 | 0.31 | 186 | 2.7 | 69 |
| Chan Sow Lin | 1 | 0.09 | 41 | 3.74 | 121 | 11.03 | 42 | 3.83 | 91 | 8.30 | 118 | 10.76 | 15 | 1.37 | 4 | 0.36 | 4 | 0.36 | 221 | 2.5 | 88 |
| Kampung Haji Abdullah Hukum | 3 | 0.74 | 4 | 0.99 | 18 | 4.44 | 28 | 6.91 | 60 | 14.81 | 30 | 7.41 | 5 | 1.23 | 1 | 0.25 | – | – | 237 | 2.7 | 87 |
| Kampung Pandan | 2 | 0.39 | 7 | 1.35 | 19 | 3.66 | 30 | 5.78 | 70 | 13.49 | 23 | 4.43 | 3 | 0.58 | 4 | 0.77 | 2 | 0.39 | 241 | 3.3 | 73 |

F = Frequency.

day-to-day basis. The aesthetics of the existing examples of alternatives compared to squatter settlements are of course a matter of taste, but many will be found who find the more formal settlements no useful improvement. On the income levels available to squatters, any form of housing within reach is not likely to be pretty.

One advantage of 'informal' housing not often appreciated by city officials is its impermanence, compared to other low-cost housing. There is great inbuilt flexibility to squatter settlements when the time comes to re-plan and re-build compared to housing more formally organized and solidly built.

Recent studies on squatters have usually arrived at the recommendation that some way be found to accept and formalize the *de facto* arrangements, and to use this process as a basis for providing services and amenities such as water, sanitation and electric power, giving some security of tenure, if only short-term leases for instance, but of preserving the individual enterprise and self-help characteristics which squatter settlements show. We have found nothing in this survey which could be used as an argument against such recommendations, and much evidence to support them.

Our surveys also suggest that the squatter communities are already sharing, to an unanticipated extent, in the demographic transition which is on the move in Malaysia. While perhaps more investigation should be carried out to further test our suggestion that the Chinese component is already planning fertility quite efficiently, the National Family Planning Board should find a fairly receptive and willing audience for any services they provide in all the settlements we surveyed.

The Third Malaysia Plan is dedicated to the improvement and preferably the elimination of communities of the type we have examined here. Although it is possible to say that conditions among squatter settlements are 'not unfavourable'[6] in Malaysia, it should also be said that little in these communities justifies their being perpetuated. But their ultimate removal must await a very substantial raise in the wages paid to poorly educated workers with meagre skills and presumably low productivity. Until these increases occur, squatting must continue, because families on MS150–$300 per month truly have no alternative. Urban squatters can be said to have solved the problem of low-cost housing. It is the rest of the urban population who will not accept their solution. The question is: Will the Malaysian Government be willing to bear the enormous costs involved in restructuring this segment of society?

APPENDIX I
EDUCATION BY AGE (MALE & FEMALE)
*(Percentage)*

| Educational Level | Settlement | 15–19 Years | | 20–24 Years | | 25–29 Years | | 30–34 Years | | 35–39 Years | | 40–44 Years | | 45–49 Years | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *M* | *F* | *M* | *F* | *M* | *F* | *M* | *F* | *M* | *F* | *M* | *F* | *M* | *F* |
| Primary 6 | Kampung Muniandy | 55.8 | 50.0 | 28.3 | 35.7 | 46.7 | 32.3 | 42.9 | 28.6 | 18.2 | 15.4 | 42.9 | 15.8 | 42.9 | – |
| | Chan Sow Lin | 48.9 | 54.2 | 40.3 | 49.1 | 35.6 | 38.9 | 65.7 | 29.0 | 59.4 | 18.5 | 38.5 | 10.0 | 8.3 | 12.0 |
| | Kampung Haji Abdullah Hukum | 53.3 | 35.3 | 19.4 | 44.8 | 28.6 | 68.2 | 55.6 | 20.0 | 61.5 | 44.4 | 66.7 | 50.0 | 12.5 | 33.3 |
| | Kampung Pandan | – | 15.8 | – | 33.3 | – | 63.3 | – | 47.6 | – | 20.0 | – | 14.3 | – | 20.0 |
| Lower Certificate of Education (LCE) | Kampung Muniandy | 27.9 | 20.0 | 37.0 | 21.4 | 26.7 | 9.7 | 19.0 | – | 18.2 | – | 14.3 | – | – | – |
| | Chan Sow Lin | 42.0 | 34.9 | 45.2 | 22.6 | 45.8 | 5.6 | 14.3 | 6.5 | 9.4 | – | 7.7 | 6.7 | 8.3 | – |
| | Kampung Haji Abdullah Hukum | 40.0 | 41.2 | 35.5 | 24.1 | 32.1 | 9.1 | 33.3 | – | – | – | 25.0 | – | 12.5 | – |
| | Kampung Pandan | – | 21.1 | – | 21.2 | – | 6.7 | – | – | – | – | – | – | – | – |
| Malaysian Certificate of Education or Equivalent (MCE) | Kampung Muniandy | – | 2.0 | 8.7 | 4.8 | 6.7 | – | 9.5 | – | – | – | – | – | – | – |
| | Chan Sow Lin | 4.5 | 2.4 | 11.3 | 15.1 | 11.9 | 2.8 | 2.9 | – | – | 7.4 | – | – | 12.5 | – |
| | Kampung Haji Abdullah Hukum | 6.7 | 5.9 | 22.6 | 13.8 | 32.1 | 4.5 | – | – | – | – | – | – | – | – |
| | Kampung Pandan | – | 15.8 | – | 12.1 | – | – | – | 4.8 | – | – | – | – | – | – |
| Higher School Certificate (HSC) | Kampung Muniandy | – | – | 2.2 | – | – | – | – | – | – | – | – | – | – | – |
| | Chan Sow Lin | – | – | – | – | – | – | – | – | 3.1 | – | – | – | 4.2 | – |
| | Kampung Haji Abdullah Hukum | – | – | 16.1 | – | – | – | – | – | – | – | – | – | – | – |
| | Kampung Pandan | – | – | – | 3.0 | – | – | – | – | – | – | – | – | – | – |

F = Frequency.

APPENDIX II

EMPLOYMENT STATUS BY AGE (FEMALES)

*(Percentage)*

| Age Group | Settlement | 0–4 Years | 5–9 Years | 10–14 Years | 15–19 Years | 20–24 Years | 25–29 Years | 30–34 Years | 35–39 Years | 40–44 Years | 45–49 Years | 50–54 Years | 55–59 Years | 60–64 Years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Too Young for School | Kampung Muniandy | 100.0 | 39.1 | – | – | – | – | – | – | – | – | – | – | – |
| | Chan Sow Lin | 96.2 | 50.0 | – | – | – | – | – | – | – | – | – | – | – |
| | Kampung Haji Abdullah Hukum | 95.5 | 41.2 | – | – | – | – | – | – | – | – | – | – | – |
| | Kampung Pandan | 97.0 | 32.7 | – | – | – | – | – | – | – | – | – | – | – |
| At School | Kampung Muniandy | – | 60.9 | 76.6 | 22.0 | – | – | – | – | – | – | – | – | – |
| | Chan Sow Lin | 1.9 | 50.0 | 88.8 | 25.6 | – | – | – | – | – | – | – | – | – |
| | Kampung Haji Abdullah Hukum | 4.5 | 47.1 | 86.7 | 17.6 | – | – | – | – | – | – | – | – | – |
| | Kampung Pandan | 3.0 | 65.4 | 90.6 | 36.8 | – | – | – | – | – | – | – | – | – |
| Of School Age But Not at School | Kampung Muniandy | – | – | 9.3 | 2.0 | – | – | – | – | – | – | – | – | – |
| | Chan Sow Lin | – | – | 3.1 | 3.7 | – | – | – | – | – | – | – | – | – |
| | Kampung Haji Abdullah Hukum | – | 11.9 | 13.3 | – | – | – | – | – | – | – | – | – | – |
| | Kampung Pandan | – | 1.9 | 6.3 | – | – | – | – | – | – | – | – | – | – |
| In Paid Employment (Full-time) | Kampung Muniandy | – | – | – | 32.0 | 33.3 | 25.8 | – | 15.4 | 21.1 | – | 40.0 | 22.2 | – |
| | Chan Sow Lin | – | – | 1.0 | 41.5 | 62.3 | 13.9 | 19.4 | 22.2 | 40.0 | 4.0 | – | 10.0 | 11.1 |
| | Kampung Haji Abdullah Hukum | – | – | – | 29.4 | 37.9 | 22.7 | 20.0 | 11.1 | – | 33.3 | – | – | – |
| | Kampung Pandan | – | – | – | 26.3 | 18.2 | 10.0 | 14.3 | – | – | 40.0 | – | 10.0 | – |

*Appendix II: (Continued).*

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Part-time Employment | Kampung Muniandy | – | – | 14.0 | 12.0 | 9.5 | 25.8 | 14.3 | 15.4 | 21.1 | 28.6 | 40.0 | – | – |
| | Chan Sow Lin | – | – | 2.0 | 3.7 | 7.5 | 19.4 | 12.9 | 22.2 | 16.7 | 12.0 | 7.1 | – | 22.2 |
| | Kampung Haji Abdullah Hukum | – | – | – | 5.9 | – | – | 10.0 | 5.6 | – | – | – | – | – |
| | Kampung Pandan | – | – | – | – | 3.0 | 10.0 | 4.8 | 10.0 | 28.6 | – | 60.0 | – | – |
| Two Jobs | Kampung Muniandy | – | – | – | – | 2.4 | – | – | – | – | – | – | – | – |
| | Chan Sow Lin | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Kampung Haji Abdullah Hukum | – | – | – | – | – | – | – | – | – | 16.7 | – | – | – |
| | Kampung Pandan | – | – | – | – | – | – | – | – | – | – | – | – | – |
| House Duties | Kampung Muniandy | – | – | 22.0 | 47.6 | 48.4 | 85.7 | 69.2 | 52.6 | *57.1 | | 33.3 | – | – |
| | Chan Sow Lin | – | – | 2.0 | 8.5 | 24.5 | 66.7 | 67.7 | 55.6 | 43.3 | 80.0 | 85.7 | 30.0 | 22.2 |
| | Kampung Haji Abdullah Hukum | – | – | – | 35.3 | 58.6 | 77.3 | 60.0 | 77.8 | 100.0 | 50.0 | 100.0 | 50.0 | 60.0 |
| | Kampung Pandan | – | – | – | 21.1 | 75.8 | 76.7 | 81.0 | 90.0 | 71.4 | 60.0 | 20.0 | – | – |
| Retired | Kampung Muniandy | – | – | – | – | – | – | – | – | 5.3 | 14.3 | 20.0 | 33.3 | 100.0 |
| | Chan Sow Lin | – | – | – | – | – | – | – | – | – | 4.0 | 7.1 | 50.0 | 44.4 |
| | Kampung Haji Abdullah Hukum | – | – | – | – | – | – | – | – | – | – | – | 50.0 | 40.0 |
| | Kampung Pandan | – | – | – | – | – | – | – | – | – | – | 20.0 | – | – |
| Unemployed | Kampung Muniandy | – | – | – | 8.0 | 7.1 | – | – | – | – | – | – | – | – |
| | Chan Sow Lin | – | – | – | 3.0 | 15.8 | 5.7 | – | – | – | – | – | – | – |
| | Kampung Haji Abdullah Hukum | – | – | – | 11.8 | 3.4 | – | – | – | – | – | – | – | – |
| | Kampung Pandan | – | – | – | 15.8 | 3.0 | 3.3 | – | – | – | – | – | – | – |

## APPENDIX III

## EMPLOYMENT STATUS BY AGE (MALE)

*(%)*

| Educational Level | Settlement | 0–4 Years | 5–9 Years | 10–14 Years | 15–19 Years | 20–24 Years | 25–29 Years | 30–34 Years | 35–39 Years | 40–44 Years | 45–49 Years | 50–54 Years | 55–59 Years | 60–64 Years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Too Young for School | Kampung Muniandy | 93.3 | 32.6 | – | – | – | – | – | – | – | – | – | – | – |
| | Chan Sow Lin | 100.0 | 45.8 | – | – | – | – | – | – | – | – | – | – | – |
| | Kampung Haji Abdullah Hukum | 100.0 | 50.0 | – | – | – | – | – | – | – | – | – | – | – |
| | Kampung Pandan | 96.0 | 36.4 | – | – | – | – | – | – | – | – | – | – | – |
| At School | Kampung Muniandy | – | 62.8 | 92.3 | 40.0 | 4.4 | – | – | – | – | – | – | – | – |
| | Chan Sow Lin | – | 54.2 | 94.3 | 23.9 | – | – | – | – | – | – | – | – | – |
| | Kampung Haji Abdullah Hukum | – | 50.0 | 72.2 | 36.7 | 16.1 | – | – | – | – | – | – | – | – |
| | Kampung Pandan | – | 61.4 | 96.3 | 28.6 | – | – | – | – | – | – | – | – | – |
| Of School Age But Not at School | Kampung Muniandy | – | 2.3 | 2.6 | 2.5 | – | – | – | – | – | – | – | – | – |
| | Chan Sow Lin | – | – | 1.4 | 2.3 | – | – | – | – | – | – | – | – | – |
| | Kampung Haji Abdullah Hukum | – | – | 16.7 | – | – | – | – | – | – | – | – | – | – |
| | Kampung Pandan | – | – | 3.7 | – | – | – | – | – | – | – | – | – | – |
| In Paid Employment (Full-time) | Kampung Muniandy | – | – | 2.6 | 42.5 | 71.1 | 83.3 | 85.7 | 100.0 | 100.0 | 85.7 | 83.3 | 50.0 | 40.0 |
| | Chan Sow Lin | – | – | 2.9 | 55.7 | 82.3 | 96.6 | 95.7 | 93.8 | 84.6 | 87.5 | 66.7 | 75.0 | – |
| | Kampung Haji Abdullah Hukum | – | – | – | 36.7 | 74.2 | 92.9 | 94.4 | 92.3 | 91.7 | 87.5 | 100.0 | 50.0 | 66.7 |
| | Kampung Pandan | – | – | – | 38.4 | 95.8 | 94.4 | 88.0 | 95.7 | 93.8 | 85.7 | 100.0 | 40.0 | – |

*Appendix III: (Continued).*

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Part-time Employment | Kampung Muniandy | – | – | 2.6 | 5.0 | 8.9 | 3.3 | 4.8 | – | – | 7.1 | – | 33.3 | 40.0 |
| | Chan Sow Lin | – | – | 1.4 | 3.4 | 8.1 | – | 0.7 | 6.3 | 11.5 | 12.5 | 8.3 | 12.5 | 21.4 |
| | Kampung Haji Abdullah Hukum | – | – | – | 3.3 | – | 3.6 | – | – | – | – | – | – | – |
| | Kampung Pandan | – | – | – | 9.5 | – | – | 4.0 | – | – | – | – | – | – |
| Two Jobs | Kampung Muniandy | – | – | – | – | 2.2 | 3.3 | 9.5 | – | – | – | – | – | – |
| | Chan Sow Lin | – | – | – | – | 1.6 | – | 2.9 | – | – | – | – | – | – |
| | Kampung Haji Abdullah Hukum | – | – | – | – | – | – | – | 7.7 | – | – | – | – | – |
| | Kampung Pandan | – | – | – | – | – | – | 8.0 | 4.3 | – | 14.3 | – | – | – |
| House Duties | Kampung Muniandy | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Chan Sow Lin | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Kampung Haji Abdullah Hukum | – | – | – | – | – | – | – | – | – | – | – | – | – |
| | Kampung Pandan | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Retired | Kampung Muniandy | – | – | – | – | – | – | – | – | – | – | | 16.7 | 20.0 |
| | Chan Sow Lin | – | – | – | – | – | – | – | – | – | – | 25.0 | 12.5 | 71.4 |
| | Kampung Haji Abdullah Hukum | – | – | – | – | – | – | – | – | – | – | – | 50.0 | 33.3 |
| | Kampung Pandan | – | – | – | – | – | – | – | – | – | – | – | 60.0 | 100.0 |
| Unemployed | Kampung Muniandy | – | – | – | 10.0 | 13.3 | 6.6 | – | – | – | 7.1 | 16.7 | – | – |
| | Chan Sow Lin | – | – | – | 13.6 | 8.0 | 3.4 | 2.9 | – | – | – | 7.1 | – | – |
| | Kampung Haji Abdullah Hukum | – | – | 5.6 | 23.3 | 9.7 | 3.6 | – | – | 8.3 | 12.5 | – | – | – |
| | Kampung Pandan | – | – | – | 23.8 | 4.2 | 5.6 | – | – | 6.3 | – | – | – | – |

# III. FINANCING THE THIRD MALAYSIA PLAN

# FINANCING OF THE THIRD MALAYSIA PLAN

Abdullah bin Ayub

## THE NEP AND THE EXPANSION OF THE PUBLIC SECTOR

The NEP marked a watershed in the planned development of the Malaysian economy. Formulated after the trauma of the 1969 racial disturbances, the policy stressed a more dynamic approach to the elimination of poverty amongst all races, and for the first time incorporated a qualitatively new objective, that of restructuring society to reduce the socio-economic imbalances existing in the Malaysian economic environment.

The NEP intended a more vigorous, rapid and intensive approach to the target of raising the quality of life of the poor, especially those in the rural sector. The implementation of this objective saw a concentration on agricultural development, and modernization with the creation of a number of new agencies, added emphasis on new land development schemes, establishment of regional development schemes, and a more comprehensive delivery of medical, health, education and other social services.

In pursuing the restructuring objective, the government for the first time expressly stated its intention to establish and operate commercial and industrial enterprises parallel to, and in competition with, the activities of the private sector. Such enterprises are initially to be held in trust for the Malays and other indigenous people until such time that a viable *bumiputra* commercial and industrial community could be created to take over the operation and running of such enterprises. The growth of large public enterprises, PERNAS, UDA, the SEDCs and others owe their origins and growth to this expressed intention.

The TMP enlarges the attack on poverty with the specific identification of a number of poverty groups. In line with this priority, increased allocations have been given to the least developed states and certain depressed regions in the more developed states. Equal emphasis will also be given to furthering the creation of viable and progressive *bumiputra* commercial and industrial community in line with the restructuring objective. The twin objectives of the NEP are complementary and mutually reinforcing and will be implemented with equal strength and emphasis. There will also be increased allocations for security in order to strengthen the security forces to enable them to effectively meet the security threat.

The incorporation of the NEP in the SMP and the progressive escalation of the momentum of its implementation in the TMP has had a direct bearing on the magnitude and scope of public investment and consumption expenditure, compared to previous plans.

Public investment constituted 9% of total GNP for the SMP period, but it grew at an unprecedented 17.6% p.a. (in real terms) during the SMP, as compared to 1.9% p.a. under the FMP. The share of public investment to total gross capital formation grew from 28.1% in 1970 to 49.1% in 1975.

Public consumption comprised 19% of cumulative GDP during the SMP period, growing at 9.0% per annum over the period. The rate of growth of public consumption was more than twice the rate of growth of private consumption. Taken together public consumption and investment comprised almost 29% of total GNP for the SMP period. The size of the public sector therefore in final demand in the national economy, is already significant and plays a critical role in the management of the economy. This role will be enhanced, as in 1980 it is projected that public consumption plus investment will comprise almost 35% of GNP.

This large increase in the role of the public sector in the national economy has been directly the result of the implementation of the NEP together with the expansion and improved spread of government services during the SMP period. Increases in personnel and wage increases have also had a marked effect on increases in public consumption.

## THE SECOND MALAYSIA PLAN: TRENDS AND FINANCING

Total development expenditures under the SMP amounted to $9.8 billion. This was 125% more than total development expenditures under the FMP. Public development expenditures grew at an average rate of about 17.7% per annum during the SMP period, compared with a growth of only 4.8% per annum during the FMP period.

Out of the $9.8 billion only $1.7 billion or about 17% was financed by a current account surplus. About 81% of this surplus came from state governments and public authorities. The current account of the federal government yielded a small surplus of $300 million. Federal government ordinary revenue grew at an annual rate of 18.3%, almost matching the growth in ordinary expenditure at 18.2%. The near equality of these rates of growth reflects the close scrutiny exercised by the Ministry of Finance in trying to match revenue and current expenditure growth so as to achieve a balance, or at best a small surplus, in the current account over the longer term.

Total current revenue which grew at a rate of 18.3% during the SMP period was about 1.5% faster than GNP growth at an average of 12.3% (in current prices), reflecting the built-in elasticity of the tax system. The proportion of total direct taxes to total revenue increased from 26% during the FMP period to about 31% in the SMP period. The increase in the proportion of direct taxes in total revenue reflected the widening of the tax base in line with the growth of the economy and incomes. The tax incidence (tax revenue as a proportion of GNP) has consequently grown from 17% in 1970 to about 24% in 1975.

Federal government current expenditure more than doubled during the period. Social services accounted for a large part of this increase, growing at an annual rate of 33% p.a. for the SMP period. Security expenditure grew by 26% p.a. over the period. Wages, which formed about 42% of total current expenditure during the FMP period, increased to about 46% of current expenditure, largely as a result of salary revisions implemented during the period. Debt servicing gained some significance during the

period, registering an average growth of 21% p.a. Debt servicing in 1975 took up almost 14% of the total operating budget, compared with only 10% in 1970. This reflects the increasing use of debt for the financing of government development expenditures.

The distribution of development expenditures during the FMP and SMP periods is shown in Table 1. Expenditures on economic services showed a big increase of 157% in the SMP over the FMP with the share as a proportion of total expenditures increasing from 62.3% to 72.3%. Commerce and industry took 16.5% of total expenditures in the SMP, compared with only 5.7% in the FMP, directly in line with the more active role of the government in commercial and industrial activities. However the share of public utilities fell from 15.7% to 9.5% with the shift in expenditure priorities. Defence expenditures also showed a fall in terms of percentage of total expenditures, decreasing from 15.8% in the FMP to 10.4% in the SMP.

An interesting feature of federal government development expenditure under the SMP period was the large increase in the proportion of gross lending to total development expenditures. The proportion of gross lending to public enterprises and state governments under the FMP amounted to only 18%. This increased sharply to 38% under the SMP, with an annual average rate of growth of 23%, compared to the growth of direct expenditures of only 11% per annum. In absolute terms, total loans outstanding increased from $1,181m in 1970 to $3,856 million in 1975, an increase of 22.6%. This large increase in federal government lending served to directly increase the capability of state governments to carry out infrastructural development. A part of these loans also went to the SEDCs for the establishment of industrial estates and investments in commerce and industry. The most significant increase in loans were for the companies, either wholly or partly owned by government.

Federal government investments also showed a sizeable increase growing from $308 million in 1969 to $838 million in 1975 (a 172% increase). The pattern of investment also changed, from investments in purely public authorities in the field of public utilities, to those engaged in commerce and industry.

This brief discussion on federal government loans and investment will suffice to show the impact of the NEP on the pattern and structure of government expenditures. It also underscores the conviction and belief of the government to resort to the use of corporate device or public enterprises in a number of sectors to intensify the implementation of the NEP. The success of these bodies will therefore be crucial to the success of the NEP and government's concern for greater control and accountability over the operations and activities of these bodies has correspondingly grown.

No major difficulties were experienced in raising funds for development needs under the SMP. However, a greater resort to foreign financing, especially in the later years of the Plan, was found necessary. Administrative and implementation constraints posed the greatest difficulties in the implementation of the Plan. Table 2 shows the sources of financing in relation to the total public sector allocation for the SMP.

The domestic financial market bore the main burden of plan financing. Domestic borrowing financed 57% of the overall deficit during the Plan period. Non-inflationary sources of financing, consisting of borrowings mainly from the EPF and the Post Office Savings Bank (now BSN) provided about 50% of total funds raised in the domestic market. Insurance companies and others (RISDA, SOCSO, discount houses, *etc.*) provided the remaining 17% of domestically raised funds. Borrowings from the

TABLE 1

ALLOCATIONS OF DEVELOPMENT EXPENDITURES BY SECTOR, 1966–80

| Allocation | FMP (1966–70) | | SMP (1971–75) | | TMP (1976–80) | |
|---|---|---|---|---|---|---|
| | $m | % | $m | % | $m | % |
| **Total allocation** | **4,352** | **100** | **9,820**[a] | **100** | **18,554**[b] | **100** |
| **Economic** | **2,762** | **64** | **7,099** | **72** | **12,665** | **68** |
| Agriculture & Rural development | 1,098 | 25 | 2,129 | 22 | 4,735 | 26 |
| Commerce & Industry | 250 | 6 | 1,618 | 16 | 1,735 | 10 |
| Transport | 532 | 12 | 1,781 | 18 | 2,819 | 15 |
| Communications | 195 | 5 | 604 | 6 | 1,192 | 6 |
| Utilities | 687 | 16 | 931 | 10 | 2,143 | 12 |
| Others | – | – | 36 | 0.4 | 41 | 0.2 |
| **Social** | **667** | **15** | **1,347** | **14** | **3,092** | **17** |
| Education | 257 | 6 | 676 | 7 | 1,671 | 9 |
| Health | 143 | 3 | 173 | 2 | 377 | 2 |
| Social & Community services | 267 | 6 | 498 | 5 | 1,043 | 6 |
| **General Administration** | **234** | **5** | **348** | **4** | **598** | **3** |
| **Security** | **689** | **16** | **1,024** | **10** | **2,200** | **12** |

[a]Estimated actual expenditure.

[b]TMP allocation.

TABLE 2

CONSOLIDATED PUBLIC SECTOR EXPENDITURE AND FINANCING, 1966–80

| | FMP (1966–70) | SMP (1971–75) | | TMP (1976–80) | |
|---|---|---|---|---|---|
| | *$m.* | *$m.* | *% Increase over FMP* | *$m.* | *% Increase over SMP* |
| Government revenue | 11,831 | 21,700 | 83 | 43,300 | 99 |
| –Government current expenditure | 10,371 | 20,800 | 100 | 42,500 | 104 |
| Current surplus | 1,460 | 900 | | 800 | |
| +Public authorities current surplus | 354 | 800 | | 900 | |
| =Public sector surplus | 1,814 | 1,700 | –6.3 | 1,700 | 0 |
| –Public sector development expenditure | 4,352 | 9,820 | 126 | 18,555 | 89 |
| =Overall deficit | 2,538 | 8,120 | 219 | 16,855 | 108 |
| **Sources of Financing** | | | | | |
| Net foreign borrowing | 457 (18) | 2,300 (28) | 403 | 5,800 (34) | 152 |
| Net domestic borrowing | 1,751 (69) | 4,650 (57) | 165 | 11,000 (65) | 136 |
| Use of accumulated assets/special receipts | 330 (13) | 1,170 (14) | 227 | 100 (1) | –91.5 |

Figures in brackets ( ) indicate source of financing as % of overall deficit.

banking sector, which could be considered inflationary as it influences money supply, only provided 38% of domestically raised funds. The impact of public sector operations on money supply during the SMP was however not sizeable, as the private sector was the main source of expansion, contributing to about 65% to the growth in private sector liquidity during the period.

Foreign financing accounted for about 28% of the overall public sector deficit, in contrast to a low of about 18.2% in the FMP. The use of foreign funds were particularly marked during the last two years of the Plan, when foreign market and project loans financed about 30% of the overal deficit as compared to 21% in the first three years of the Plan. Lower revenue collections because of the recession of 1974/75 which affected incomes and employment, and caused constraints in raising domestic loans necessitated a greater use of foreign funds to finance development at a time when government had to step up expenditures to mitigate the effects of the down-swing in economic activity. Government also exercised some caution to restrict borrowings from the banking sector, so as not to avoid any expansionary effects on money supply, which could have adversely affected the fight against inflation. The favourable treatment accorded to Malaysia by international lending institutions and the credit-worthiness of the country in foreign money markets also facilitated the increase in foreign financing. The World Bank and the ADB, which were not tapped much during the FMP, substantially increased their lendings to Malaysia with about $1.3 billion being committed during the SMP. Project implementation difficulties however slowed down disbursements on these commitments. Market loans accounted for 45% of total foreign borrowing during the period, on generally favourable terms.

## THIRD MALAYSIA PLAN MOBILIZATION OF RESOURCES

The magnitude of the public sector development target of $18.6 billion will pose an exciting challenge to the public sector's ability to mobilize sufficient resources to finance these expenditures. The target is about 90% over the SMP development expenditure of $9.8 billion. Considerable thought has been given to the feasibility of this target, but with appropriate fiscal and financial policies it should be possible to obtain the funds needed for development programmes and projects. The impact of the mobilization of such resources on the availability of funds for the private sector and on inflation has also been taken into account.

Fortunately for us, the launching of the Plan has coincided with a general recovery of world trade and economic activity from the recession of 1974/75. From the information available to us, it is not expected that there will be a fall in trade and economic growth of the proportions of the last recession. World economic growth is expected to be moderate but steady, without the return to the high inflationary rates recently experienced.

Based on this more optimistic outlook, total revenue of the federal and state governments are expected to register an average annual growth of about 13.3%. The share of direct taxes in federal government revenue is expected to rise sharply from about 31% during the SMP to about 43% during the TMP, growing at an average of 17.3% p.a. With GNP projected to grow at an average of 8.2% p.a. this will suggest that direct taxes will grow at more than double the rate of growth in total incomes. This will reflect the progressive widening of the tax base as incomes increase in line with growth of the economy. Income tax from petroleum promises to be a major contributor to direct tax revenue with the increases in production that could be expected.

Indirect and non-tax revenue is expected to contribute about 50% of total federal government revenue, as compared to a higher proportion of 69% during the SMP period. Import duties and excise are expected to decline, in proportional terms, from about 30% of total revenue during the SMP to about 23% during the TMP. The share of export duties however will remain stable at around 13% of total revenue, mainly as a result of steady export prices for our primary commodities in foreign markets. It can be seen therefore that the tax structure has undergone some fundamental changes with income tax progressively becoming the major source of federal government revenue. This is primarily due to the development and growth of the economy.

Total federal and state government current expenditures are expected to reach a cumulative total of $43 billion for the Plan period, with an average rate of growth slightly below or equal to that of revenue. This will imply a slower rate of growth than that during the SMP. This slower rate presumes deliberate policy restraints to prevent current expenditures from rising too fast. This will not however be done at the sacrifice of efficiency or the curtailment of services. Increases in productivity can be expected from better training and development of staff. In spite of envisaged expenditure controls, total current expenditures will be about 27% of GNP in 1980, compared to an average of 23.7% for the years 1974/75. With the high level of development expenditure planned, the government cannot afford the current account to be continuously in deficit. This is not the strategy on which the Plan is based. The public sector surplus available to meet the planned development expenditure will only amount to 9%, as compared to 17% during the SMP. As a proportion of GNP the current account will deteriorate from about 2% of GNP for the period 1971–75 to only 1% of GNP for 1976/80. The public savings-investment gap in the public sector therefore has steadily worsened through the first and second Malaysia Plans, largely as a result of the large increase in investment and consumption expenditures. Apart from increases due to a higher wage bill it should also be pointed out that some of the increases in current expenditures have arisen from additional expenditures involved in the operating and servicing of newly-completed development projects in previous plans.

Given the small public sector surplus available, there will be a greater reliance on debt to finance development. About 99.6% of the overall deficit is expected to be financed through domestic and foreign borrowing compared to about 86% in the case of the SMP. The use of accumulated assets and special receipts in the financing of the Plan, which constituted about 15% of financing in the SMP, will be negligible during the next five years. The reserve assets of the government have been almost completely drawn down in previous Plans.

Total domestic borrowing will amount to $11 billion for the five-year period, out of which $8.9 billion will be from non-bank sources and $2.1 billion from the banking system. The EPF will continue to figure prominently as the main buyer of government securities and 45% of the domestic debt will come from this source. Bank Simpanan Nasional will contribute about 7%, while SOCSO will be expected to increase its investment in government securities substantially compared to the SMP period. These three institutions, sources of non-inflationary financing, will therefore provide more than 50% of the domestic debt needed. Given the growth of these institutions arising from the growth in employment and incomes, there does not appear to be any major difficulty in these targets being attained.

The amount of funds to be raised from the banking system (of about $2.1 billion) is consistent with the projected growth of money supply for the TMP period, which will be approximately equal to that of nominal GNP growth. This level of borrowing will not give rise to strain on the banking system as private savings and the growth of investible funds will be substantial during the period. The private sector will have sufficient resources for the financing of its own investment as is clearly shown in Table 15–2 of the Plan.* As private investment is expected to be the main source of growth in the TMP, unlike the SMP where the impetus for growth came from the public sector, a close review of the resources available for private sector financing will be made from time to time. These projections on public sector borrowing from the banking sector have taken into account the need for the maintenance of financial stability and reasonable domestic price stability. Public sector operations therefore are not expected to be a source of inflation during the TMP period.

External financing, in the form of project and market loans, will finance about 34.4% of the overall deficit, compared to about 28% in the SMP. Total external borrowings will amount to $5.8 billion which will be about 125% over the amount raised under the SMP. It is expected that project loans will amount to about 60% of total external borrowings. The main constraint to project borrowing will be the ability to formulate and implement projects to be financed from such loans, with the quality and speed that will be required by the lending agencies. This has posed problems in previous plans but with the increasing competence of the public service and closer monitoring, these problems can be minimized to enable a high level of disbursements from committed loans.

The World Bank is expected to be the main source of project loans, with about $1.5 billion estimated to be obtained during the period. More than half of the projects to be financed from these funds will be in agriculture and land development. Other projects include the Kuala Lumpur Urban Transport Project, rural electrification, and sewerage in a number of major towns.

The ADB will be the next biggest source of project loans, and will provide about 25% of project loan resources. Projects will be mainly in agriculture (fisheries and irrigation projects in Sarawak), road transport and others like the establishment of a township in Pahang Tenggara, the Trengganu River Basin project for power and water supply projects in a number of towns.

A new source of financing will be the Islamic Development Bank. Projects to be financed by the IDB will be mainly in agriculture and in most cases, the IDB will co-finance projects in conjunction with the World Bank and ADB.

Saudi Arabia and Kuwait will also be expected to finance a number of projects, mainly in agriculture, education (projects in UTM and UKM, MARA residential colleges), and health (hospital in Sarawak).

There will also be a number of bilateral loans for projects from Japan, the USA, France and Sweden. The total sum involved will however, not be much.

It can be therefore be seen that the bulk of project loans will be concentrated in agricultural, transport, power and utility projects. Such projects will be economically viable with high internal rates of return. It is also encouraging that a number of

*_Editorial note:_ This is as indicated under the columns 'As shown in TMP' in Table 4 of Malek Ali Merican's study on pp. 116–26 below.

projects in the social sector will also be eligible for loan financing. Projects in all these sectors, with a large number being in the less developed areas, will directly contribute to the TMP objective of eradicating poverty and uplifting the quality of life of the people.

Market loans are expected to provide about 40% of externally borrowed funds. Although the demand for loanable funds on the international capital markets will be keenly competitive in a period of rising economic activity, Malaysia has an excellent credit rating and a relatively low level of debt as major assets in its favour. Assessments by international institutions like the World Bank and the IMF place the level of market borrowing planned during the TMP well within the country's borrowing capacity. In fact, market borrowing can be stepped up if circumstances necessitate resorting to more external financing.

The greater use of debt will have its implications in the servicing of the outstanding public debt. External debt servicing as a proportion of export earnings will average about 7% in 1980 compared to the average of about 3.4% for the SMP period. This would still be a low ratio in comparison to other countries in similar stages of development. The proportion of interest payments in the current budget will average around 14% of total federal government operating expenditures for the TMP, showing a slight increase from the 12% average during the SMP period.

This large-scale use of debt as the major means of financing should not generate any apprehensions. The level of debt during the period is well within the country's ability to service. It should be stressed that the debt is being used to finance the build-up of productive resources in the country, which will yield tangible benefits in the future. The tradition of financial and fiscal discipline which we have steadfastly maintained in the past will be carefully protected. The capacity and ability to mobilize resources is one thing, the wisdom and productivity of its use is another. We hope to maintain and strengthen both so that the good access that we now possess in international financial markets will not be lost.

It will be seen therefore that in spite of the tremendous increase in development expenditures, sufficient resources can be mobilized, both internally, for financing. The financing targets are therefore feasible and are consistent with the growth of the economy. What is even more reassuring is that these amounts can be raised within reasonable price stability.

TABLE 1

INVESTMENT AND GNP TARGETS

| | As shown in SMP | | As shown in *MTR of SMP* | | | | |
|---|---|---|---|---|---|---|---|
| | *1966–70* | *1971–5* | *1971–5 (Revised)* | *1971–5* | *1976–80* | *1970* | *1971* |
| **Private Investment** | | | | | | | |
| at current prices | 5,051 | 7,843 | 8,324 | 12,240 | 26,785 | 1,459 | 1,675 |
| at 1970 prices | n.a. | n.a. | n.a. | (9,221) | (13,700) | (1,450) | (1,600) |
| **Public Investment** | | | | | | | |
| at current prices | 3,153 | 4,307 | 6,691 | 8,387 | 15,800/ 17,408[a] | 693 | 852 |
| at 1970 prices | n.a. | n.a. | n.a. | (6,119) | (8,300/ 9,200)[a] | (693) | (796) |
| **Total Investment** | | | | | | | |
| at current prices | 8,204 | 12,150 | 15,015 | (20,627) | 44,193 | 2,152 | 2,527 |
| at 1970 prices | n.a. | n.a. | n.a. | (15,340) | (22,900) | (2,152) | (2,456) |
| **Stock Changes** | | | | | | | |
| at current prices | n.a. | n.a. | n.a. | + 45 | – 240 | + 315 | – 136 |
| at 1970 prices | n.a. | n.a. | n.a. | (+ 108) | n.a. | (+ 315) | (– 105) |
| **Public Sector Development Expenditure** | | | | | | | |
| Allocation | n.a. | 7,250 | 9,350 | 10,255 | *18,555/ 20,000 | | |
| Estimated Actual | 4,242 | 5,000 | n.a. | 9,820 | n.a. | | |
| **Of Which Security Capital Expenditure** | | | | | | | |
| Allocation | n.a. | 1,100 | 1,050 | 1,105 | 2,200 | | |
| Estimated Actual | 667 | n.a. | n.a. | 1,024 | n.a. | | |
| **GNP** | | | | | | | |
| at current prices | 51,931 | 73,067 | 75,848 | 86,566 | 158,984 | 12,155 | 12,501 |
| at 1970 prices | n.a. | n.a. | (71,149) | (76,115) | n.a. | (12,155) | (13,005) |
| **GNP per capita** | | | | | | | |
| at 1970 prices | | | | | | 1,128 | |
| **Population ('000)** | | | | | | 10,777 | |

| As shown in TMP | | | | | Average Growth 1971–5 | Annual Rate 1976–80 |
|---|---|---|---|---|---|---|
| *1972* | *1973* | *1974* | *1975* | *1980* | *(%)* | *(%)* |
| 1,779 | 2,243 | 3,223 | 3,320 | 7,189 | 17.9 | 16.7 |
| (1,609) | (1,750) | (2,140) | (2,062) | 3,315 | 7.2 | 9.9 |
| 1,308 | 1,552 | 2,157 | 2,518 | 4,330 | 29.4 | 11.5 |
| (1,155) | (1,170) | (1,438) | (1,560) | (2,108) | 17.6 | 6.2 |
| 3,087 | 3,795 | 5,380 | 5,838 | 11,528 | 22.1 | 14.6 |
| (2,764) | (2,920) | (3,578) | (3,622) | (5,423) | 11.0 | 8.4 |
| – 63 | + 228 | + 688 | –667 | – 712 | – | – |
| (– 55) | (+ 195) | (+ 515) | (–442) | (– 300) | – | – |
| 8,641 | 17,443 | 21,234 | 21,747 | 39,133 | 12.3 | 12.5 |
| (7,793) | (15,437) | (16,734) | (17,146) | 25,376 | 7.1 | 8.2 |
| | | | 1,224 | 1,548 | 1.6 | 4.8 |
| | | | 12,249 | 18,103 | | 2.7 |

*Continued: Notes to Table 1.*

*Sources:* *SMP* (1970), *MTR* (1973), *TMP* (1976).

*Notes:* [a] *TMP*, p. 233:

As shown in Table 12–1, the total allocation of development expenditure for the public sector for the period 1976–80 is $18.6 billion, 89% higher than the amount expended under the SMP. The amount of public development expenditure required to achieve the public investment target of $17.4 billion in current prices ($9.2 billion, in real terms) discussed in Chapter VI is $20 billion. The allocation which has been made for development expenditure is therefore a minimum, yielding an investment of about $15.8 billion, which in real terms amounts to $8.3 billion or 36.0% greater than in the SMP. It will be the government's strategy to ensure that as more resources become available, the size of the development expenditure programme is increased so that the investment target is fully realized.

projected at only $1.7 billion there is a deficit of $16.9 billion. This deficit is more than two times larger than the deficit incurred during the SMP period and requires a more than doubling in the rate of borrowing (see Table 5).

Domestic borrowing for the TMP is projected at $11 billion, compared to the $5 billion raised for the SMP. But there is only a bland statement that the bulk of this could be raised from the Employees Provident Fund and other non-bank sources within an environment of financial stability and reasonable domestic price stability. To make a reasonable assessment, one would like to see the annual amounts of domestic borrowing from the different sources over the SMP period and an analysis of the EPF position. One would also like to see the projected ratio of domestic debt servicing costs to current revenue to assess its burden.

The TMP projects public sector net foreign borrowing at $5.8 billion, compared to $2.3 billion during the SMP. This is a high target. It is two and a half times more than the amount secured during the SMP, which itself was three times the original SMP target (see Table 5). Even if the amount of loans secured from the World Bank and the ADB is twice the amount secured during the SMP of $1.3 billion, the balance to be obtained from other sources will still represent a sharply expanded programme. It is true that Malaysia's external debt servicing as a proportion of export earnings was less than 4% in 1975 and hence the country has a substantial capacity to increase its foreign borrowing. However, by 1980, this ratio is estimated to increase to about 7%. While this is not high, neither can it be considered to be low. In fact many countries have external debt services burdens of around 15% or more, and these countries usually face serious financial problems.

My assessment of the basic financial plan is generally favourable. The TMP is ambitious in terms of its investment targets, but appropriate policies are being pursued to attain these targets. However they must be implemented in an imaginative and rigorous manner. The intention to curb the expansion of the public sector and promoting private investment is well-conceived. Given international economic recovery, and if the government can maintain a healthy investment and political climate, a judicious management of Malaysia's fiscal and monetary policy should be able to raise the funds required to finance the projected investment targets of the TMP.

TABLE 2

SAVINGS AND INVESTMENT

| | As shown in SMP | | As shown in MTR of SMP | | As shown in TMP | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1966–1970* | *1971–1975* | *1971–1975 Revised* | *1971–1975 Further Revised* | *1976–1980* | *1970* | *1971* | *1972* | *1973* | *1974* | *1975* | *1980* |
| Domestic Savings | 9,268 | 13,268 | 14,192 | 18,754 | 38,792 | 2,492 | 2,062 | 2,326 | 4,269 | 5,272 | 4,825 | 8,940 |
| Gross Investment | 8,204 | 12,150 | 15,015 | 20,672 | 43,953 | 2,467 | 2,391 | 3,024 | 4,023 | 6,063 | 5,171 | 10,816 |
| Balance[a] | +1,064 | +1,118 | – 823 | – 1,918 | – 5,161 | +25 | – 320 | – 698 | +246 | – 791 | – 346 | – 1,876 |
| GNP at Current Prices | 51,931 | 73,067 | 75,848 | 86,566 | 158,984 | 12,155 | 12,501 | 13,641 | 17,443 | 21,234 | 21,747 | 39,133 |
| Domestic Savings as % of GNP | 17.8% | 18% | 18.7% | 21.7% | 24.4% | 20.5% | 16.5% | 17.1% | 24.5% | 24.8% | 22.2% | 22.8% |
| Gross Investment as % of GNP | 15.8% | 17% | 19.8% | 23.9% | 27.6% | 20.3% | 19.1% | 22.2% | 23.1% | 28.6% | 23.8% | 27.6% |
| Private Savings and Investment | | | | | | | | | | | | |
| *Disposable incomes* | | | | | 115,763 | | | | | | 15,897 | 27,980 |
| *Consumption* | | | | | 84,053 | | | | | | 12,052 | 20,661 |
| *Savings* | 6,552 | | | 14,042 | 31,710 | | | | | | 3,755 | 7,319 |
| *Investment (+ change in stocks)* | 5,051 | 7,843 | 8,324 | 12,285 | 26,545 | | | | | | 2,653 | 6,477 |
| *Balance* | +1,501 | | | +1,757 | +5,165 | | | | | | +1,102 | +842 |
| Public Savings and Investment | | | | | | | | | | | | |
| *Revenue* | 11,656 | 17,260 | 18,985 | 21,700 | 44,332 | | | | | | 6,058 | 11,453 |
| *Consumption and transfers* | 8,940 | | | | 37,250 | | | | | | 4,989 | 9,832 |
| *Savings* | 2,716 | | | | 7,082 | | | | | | 1,070 | 1,621 |
| *Investment* | 3,153 | 4,307 | 6,691 | 8,387 | 17,408 | | | | | | 2,518 | 4,339 |
| *Balance* | –437 | | | | –10,326 | | | | | | –1,448 | –2,718 |

*Note:* [a]These Surplus/Deficits are identical to the Surplus/Deficits in the Balance of Payment, Table 3 along the line labelled 'Balance on Current Account'.

TABLE 3

BALANCE OF PAYMENTS

| | As shown in TMP | | | | | | | As shown in SMP | | As shown in MTR of SMP | As shown in TMP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *1970* | *1971* | *1972* | *1973* | *1974* | *1975* | *1980* | *1966–70* | *1971–5* | *1971–5* | *1971–5* | *1976–80* |
| Goods and Services | | | | | | | | | | | | |
| *Receipts* | 5,682 | 5,473 | 5,291 | 7,994 | 11,051 | 10,165 | 19,029 | n.a. | 32,051 | 33,089 | 39,974 | 80,443 |
| *Payments* | 5,397 | 5,665 | 5,831 | 7,597 | 11,702 | 10,386 | 20,840 | n.a. | 30,241 | 33,118 | 41,184 | 85,154 |
| *Net position* | + 205 | – 192 | – 541 | + 397 | – 651 | – 221 | –1,811 | n.a. | +1,810 | – 29 | 1,208 | –4,711 |
| Transfers (net) | | | | | | | | | | | | |
| *Private* | – 199 | – 188 | – 176 | – 185 | – 175 | – 160 | – 110 | – 753 | – 863 | – 923 | – 884 | – 655 |
| *Government* | + 19 | + 51 | + 19 | + 34 | + 35 | + 35 | + 45 | | + 171 | + 129 | + 174 | + 205 |
| *Balance on current account* | + 25 | – 329 | – 698 | + 246 | – 791 | – 346 | –1,876 | +1,064 | +1,118 | – 823 | –1,918 | –5,161 |
| Long-term Capital (net) | | | | | | | | | | | | |
| *Public* | + 21 | + 398 | + 692 | + 120 | + 276 | + 829 | +1,518 | + 381 | + 720 | +1,743 | +2,313 | +5,800 |
| *Private* | + 292 | + 291 | + 493 | + 480 | + 834 | + 525 | + 900 | + 784 | +1,000 | 947 | +2,623 | +3,650 |
| *Basic balance* | + 338 | + 360 | + 487 | + 846 | + 319 | +1,006 | + 542 | +2,229 | +2,928 | +1,807 | +3,018 | +4,289 |
| Errors and Omissions including Short-term Capital | – 270 | – 157 | – 98 | – 270 | + 133 | – 835 | – 400 | –2,082 | –2,928 | –1,154 | –1,227 | –2,450 |
| Overall Surplus (+) or Deficit (–) | + 68 | + 203 | + 399 | + 576 | + 452 | + 171 | + 142 | + 147 | 0 | + 713 | +1,791 | +1,839 |
| Allocation of IMF Special Drawing Rights | + 64 | + 61 | + 60 | – | – | – | – | – | – | + 121 | + 121 | – |
| Net Change in External Reserves (Increase – decrease.) | – 132 | – 264 | – 449 | – 576 | – 452 | – 171 | – 142 | – 147 | 0 | – 834 | –1,912 | –1,839 |
| Special Drawing Rights | – 72 | – 61 | – 60 | + 8 | + 10 | – 11 | – | – | – | – | – 114 | – |
| IMF Gold Tranche Position | – 47 | – 35 | – | – 22 | + 1 | – 21 | – | – | – | – | – 7 | – |
| Gold & Foreign Exchange | – 13 | – 238 | – 389 | – 562 | + 463 | – 139 | – 142 | – 147 | 0 | – 834 | –1,791 | –1,839 |

*Sources*: *SMP*, pp. 35 & 65, *MTR of the SMP*, p. 52, *TMP*, pp. 23 & 122

TABLE 4

PRIVATE INVESTMENT AND ITS FINANCING, 1971–80

*($ million)*

| | Cumulative Totals in M$ Million | | | |
|---|---|---|---|---|
| | As indicated in SMP | As indicated in MTR of SMP | As shown in TMP | |
| | *1971–5* | *1971–5* | *1971–5* | *1976–80* |
| **Private investment target (including change in stocks)** | 7,843 | 8,324 | 12,285 | 26,545 |
| – Private long-term capital inflow | 1,150 | 947 | 2,496 | 3,650 |
| = Domestic financing needs | 6,693 | 7,377 | 9,789 | 22,895 |
| **Domestic financing for private investment** | | | | |
| Private savings before transfers | | | 14,926 | 32,365 |
| – Net transfers | | | 884 | 655 |
| = Private savings after transfers | | | 14,042 | 31,710 |
| – Purchases of government securities | | | 4,300 | 10,400 |
| – Private sector outflow and balance of payments errors and omissions | | | 1,100 | 2,450 |
| – Increase in currency holdings and private sector deposits with Bank Negara Malaysia | | | 2,233 | 2,400 |
| = Self-financing of private sector | 5,951 | | 6,409 | 16,460 |
| + Public sector financing of investment in private sector and other transfers | 742 | | 3,380 | 6,435 |
| = Total domestic financing | 6,693 | 7,377 | 9,789 | 22,895 |
| + Private long-term capital inflow | 1,150 | 947 | 2,496 | 3,650 |
| = Total private investment | 7,843 | 8,324 | 12,285 | 26,545 |

TABLE 5

CONSOLIDATED PUBLIC SECTOR EXPENDITURE AND ITS FINANCING

| | Cumulative Totals in MS Million | | | | |
|---|---|---|---|---|---|
| | As shown in SMP | | As shown in MTR of SMP | As shown in TMP | |
| | *1966–70 (Estimated/ Actual)* | *1971–75 (Original Estimate)* | *1971–75 Revised Estimate)* | *1971–75 (Estimated/ Actual)* | *1976–80 (Original Estimate)* |
| **Government revenue** | 11,656 | 17,260 | 18,985 | 21,700 | 43,300 |
| – Government current expenditure | 10,266 | 16,000 | 17,951 | 20,800 | 42,500 |
| = Current surplus | 1,390 | 1,260 | 1,034 | 900 | 800 |
| + Public authorities current surplus | 340 | 550 | 847 | 800 | 900 |
| = Public sector surplus | 1,730 | 1,810 | 1,681 | 1,700 | 1,700 |
| – Public sector development expenditure | 4,242 | 6,000 | 8,801 | 9,820 | 18,555 |
| = Overall deficit | 2,512 | 4,190 | 6,920 | 8,120 | 16,855 |
| **Sources of financing** | | | | | |
| Net foreign borrowing | 458 | 720 | 1,383 | 2,300 | 5,800 |
| Net domestic borrowing | 1,864 | 3,530 | 4,854 | 4,650 | 11,000 |
| *(from non-bank private sector)* | (1,164) | (2,245) | (3,469) | (n.a.) | (n.a.) |
| *(from banking system)* | (700) | (1,285) | (1,385) | (n.a.) | (n.a.) |
| Special receipts/foreign grants | 243 | 190 | 169 | n.a. | n.a. |
| Use of accumulated assets and special receipts | –53 | –250 | 514 | 1,170 | 100 |
| | 2,512 | 4,190 | 6,920 | 8,120 | 16,855 |

*Sources:* *SMP*, p. 81, *MTR of the SMP*, p. 104, and *TMP*, p. 244.

n.a. – not available.

A failure to achieve the high private sector investment target will not cause financial problems but will impair growth in employment and income, with the attendant social and political problems. A failure to control public sector expenditure growth will increase financial strains and can lead to irresponsible deficit financing. However, the initial strains can be cushioned by the high level of external reserves if corrective actions are taken without delay.[1]

As concluding suggestions, I would like to add certain proposals to the many others that have been made for the implementation of the TMP. If private sector investment is to expand rapidly, it is important not only to maintain a healthy investment climate and to minimize bureaucratic delays in establishing new companies and projects, but it is also important to promote the growth of a well functioning capital market. It seems to be highly desirable that a more urgent and greater administrative effort be made to improve the legal framework and the procedures by which the Kuala Lumpur Stock Exchange, the Capital Issues Committee and the Foreign Investment Committee function.

It may also be pointed out that very often the business of the Stock Exchange seems to be greatly influenced by the trading or speculation of a limited number of individuals and groups. There is insufficient number and influence of professional fund managers because there is insufficient institutional funds invested in equity shares. This is partly the result of the government having in a sense 'nationalized' contributions to provide funds for the EPF. As the coverage of the EPF is extended to include not only all employees in the private sector but also employees in the public corporations, the flow of contributions into provident funds other than the EPF will dry up and there will be even less institutional funds for investment in shares traded on the stock exchange. If the stock market is to develop satisfactorily, if increasing number of shares of good companies are to be listed, and if newly-floated and established companies are to raise equity capital on reasonable terms so that private sector investment can reach the TMP target, then the supply of equity funds should also increase. I propose that a specific plan be framed for the EPF to give out a certain percentage of its total assets to a number of professional funds managers and merchant banks for investment in the Stock Exchange. The government should not monopolize this source of long-term savings. What the Treasury may give up by allowing the EPF to invest a portion of its funds through professional managers in equity shares, can be made up by increasing its domestic borrowing from other sources.

Finally I should like to touch on the subject of borrowing. If a sustained and increasingly large foreign borrowing programme such as the one envisaged in the TMP is to be undertaken, strategies should be carefully worked out and the role of Malaysian institutions should also be considered. I propose that the Treasury specifically exempt all Malaysian banks including merchant banks from withholding tax on interest payable abroad. In addition, rather than burden only the public sector with the task of obtaining foreign loans, the private sector should be clearly encouraged, rather than discouraged, from borrowing abroad, whenever their credit standing and

[1] I should add that the TMP does not include the impact of PETRONAS projects which are being considered in its Master Plan.

special relationships would enable them to borrow on favourable or acceptable terms. The companies should be exempted not only for all *bona fide* loans to finance capital expenditures but also for working capital which they may secure from Malaysian incorporated and foreign banks and merchant banks.

# IV. MANUFACTURING, INDUSTRIALIZATION AND ENTREPRENEURSHIP

# SMALL INDUSTRY – ITS ROLE IN MALAYSIAN INDUSTRIAL DEVELOPMENT

Chee Peng Lim

'Small industry' here refers to that group of establishments which employs 5 to 49 paid full-time workers each and whose activities can be classified as manufacturing activities by the International Standard Industrial Classification.[1] This definition, like any other definition of small industry, is rather arbitrary. The size of an establishment can be represented by other quantitative measures such as sales, output, installed horsepower and capital stock. Qualitative measures such as the degree of modernization in production and management can also be regarded as relevant indices of size.

For a survey, a precise and objective quantitative measure certainly has an advantage over a qualitative one. The employment criterion is chosen because the *Directory of Manufacturing Establishments* which contains the most up-to-date list of manufacturing establishments available at the time of study, classifies the establishments according to full-time employment only.[2] In fact, it matters little which size measures one chooses. Calculations carried out by authorities on a wide variety of measures have shown a high correlation between most measures across a wide range of establishments.[3]

The selection of an upper cut-off point at 50 paid full-time workers is justified on the grounds that by the present standard of the Malaysian economy, any manufacturing establishment which employs 50 or more workers is generally regarded as 'large'. On the other hand, establishments employing less than 5 workers may be properly regarded as belonging to the household or cottage sector. We believe that the above cut-off points will enable us to distinguish between establishments which differ

[1] United Nations (Statistical Office), *International Standard Industrial Classification of All Economic Activities*, New York, 1958.

[2] Malaysia, Department of Statistics, *Directory of Manufacturing Establishments*, Kuala Lumpur [1971–3].

[3] James Bates, 'Alternative measures of the size of firms' in P.E. Hart (ed.), *Studies in Profits, Business Saving and Investment in the United Kingdom, 1920–62*, London, Allen and Unwin, 1965, Vol. I, ch. 8.

markedly in their efficiency of resource utilization, employment or income distribution impact. For the purpose of this study, the manufacturing industry in Peninsular Malaysia is classified into three sectors by paid full-time employment size group:

(i) Petty industry, which covers establishments employing 4 workers and less;
(ii) Small industry, which covers establishments employing 5 to 49 workers; and
(iii) Large industry, which covers establishments employing 50 or more workers.

Small industry occupies an important place in the economy of Peninsular Malaysia. The Survey of Manufacturing Industries, Peninsular Malaysia in 1972, shows that 67.3% of manufacturing establishments belong to this sector (Table 1).[4] The small industry sector employs 24.6% of the total number of paid employees in manufacturing. It is even more important in the provision of part-time employment, providing 55.9% of total part-time employment. The gross value of output from small industry was 20.6% of the total in 1972. Furthermore, it contributed 17.8% of the net value of manufacturing output.[5]

What is perhaps not so obvious is the role which small industry may be able to play in the industrial development of Malaysia. In point of fact, it employs more workers per unit of capital; it helps to increase total savings in the economy; it has a favourable impact on income distribution; it serves as a 'training ground' for developing the skills of industrial workers and entrepreneurs, and finally, small industry plays an important complementary role to large industry in the economy.

## THE SURVEY OF SMALL INDUSTRY

We would now like to examine each of the above arguments in the light of a survey of small industry which was carried out recently.

The survey, sponsored by the World Bank and the Economic Planning Unit and financed by the University of Malaya, the Malaysian Industrial Development Finance Limited, Malayan Banking and Bank Bumiputra, covered 399 establishments in 19 industries in Peninsular Malaysia (Table 2). The selected industries were stratified by six full-time employment size groups as:

(i) 0–4 workers;
(ii) 5–9 workers;
(iii) 10–19 workers;
(iv) 20–29 workers;
(v) 30–49 workers;
(vi) 50 and more workers.[6]

[4] Malaysia, Department of Statistics, ***Survey of Manufacturing Industries, Peninsular Malaysia, 1972***, 2 vols., Kuala Lumpur [1973]. This is the latest survey of manufacturing industries in Peninsular Malaysia.

[5] It would appear that small industry is important not only in Malaysia and other developing countries but also in the developed countries. See E. Staley and R. Morse, ***Modern Small Industry for Developing Countries***, New York, McGraw-Hill, 1965, pp. 19–22. See also, United Nations Industrial Development Organization, ***Small-scale Industry in Latin America***, Wiltshire, David and Charles, 1973, p. 34

[6] Though we are mainly concerned with small manufacturing establishments, petty and large establishments have also been included for comparison. It would have been desirable to subdivide the last group (50 and more workers) but as Tables 1–3 show, there are very few large establishments.

TABLE 1
PRINCIPAL STATISTICS OF MANUFACTURING ESTABLISHMENTS IN PENINSULAR MALAYSIA BY PAID FULL-TIME EMPLOYMENT SIZE GROUP, 1972

| Paid Full-time Employment | Number of Establishments | % of Total | Value Added ($'000) | % of Total | Number of Persons Engaged During December or the Last Pay Period | | | | | | Gross Value of Output | % of Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *Unpaid Workers* | *% of Total* | *Full-time* | *% of Total* | *Part-time* | *% of Total* | | |
| No. paid full-time employee | 93 | | 506 | | 257 | | – | | 196 | | 6,149 | |
| 1–4 | 232 | | 5,008 | | 412 | | 685 | | 156 | | 23,142 | |
| Sub-total 0–4 | 325 | 8.8 | 5,514 | 0.4 | 669 | 13.9 | 685 | 0.4 | 352 | 8.7 | 29,291 | 0.6 |
| 5–9 | 665 | | 25,943 | | 1,146 | | 4,580 | | 538 | | 107,126 | |
| 10–19 | 815 | | 60,407 | | 1,320 | | 11,411 | | 773 | | 248,303 | |
| 20–29 | 501 | | 62,517 | | 703 | | 12,124 | | 505 | | 243,837 | |
| 30–49 | 498 | | 122,904 | | 586 | | 19,051 | | 459 | | 457,496 | |
| Sub-total 5–49 | 2,479 | 67.3 | 271,771 | 17.8 | 3,755 | 78.2 | 47,166 | 23.9 | 2,275 | 55.9 | 1,056,762 | 20.6 |
| 50–99 | 445 | | 234,256 | | 294 | | 31,101 | | 674 | | 726,660 | |
| 100–199 | 244 | | 298,941 | | 75 | | 33,861 | | 322 | | 1,031,764 | |
| 200–499 | 143 | | 395,570 | | 9 | | 43,552 | | 155 | | 1,407,069 | |
| 500 and over | 49 | | 318,876 | | – | | 40,914 | | 286 | | 868,149 | |
| Sub-total 500 and over | 881 | 23.9 | 247,643 | 81.8 | 378 | 7.9 | 149,428 | 75.7 | 1,437 | 35.4 | 4,033,642 | 78.8 |
| Total for all groups | 3,685 | 100.0 | 1,524,927 | 100.0 | 4,802 | 100.0 | 197,279 | 100.0 | 4,064 | 100.0 | 5,119,695 | 100.0 |

*Source:* Malaysia, Department of Statistics, *Survey of Manufacturing Industries, Peninsular Malaysia, 1972*, 2 vols., Kuala Lumpur (1973) Vol. I.

TABLE 2
SELECTED SAMPLE UNITS BY INDUSTRY AND EMPLOYMENT SIZE GROUP

| Industry[a] | Strata by Full-Time Employment Size Group/ Number of Establishments | | | | | | |
|---|---|---|---|---|---|---|---|
| | *0–4* | *5–9* | *10–19* | *20–29* | *30–49* | *50 and Over* | *Total* |
| (3062) Bakeries | 4 | 8 | 7 | 1 | 3 | 1 | 24 |
| (3600) Furniture | 17 | 9 | 5 | 3 | 2 | 2 | 38 |
| (3900) Leather | 4 | 1 | 2 | – | 2 | 3 | 12 |
| (4022) Retreading | 4 | 4 | 3 | 2 | 1 | 1 | 15 |
| (4421) Iron foundries | 6 | 5 | 6 | 1 | 2 | 1 | 21 |
| (4581) Blacksmithing | 15 | 5 | 4 | 2 | 1 | 1 | 28 |
| (4623) Ind. machinery | 9 | 14 | 16 | 5 | 5 | 9 | 58 |
| (4831) M.V. bodies | 6 | 1 | 1 | 1 | 1 | 2 | 12 |
| (1331) Coconut oil mills | 3 | 5 | 3 | 2 | – | 1 | 14 |
| (3021) Ice cream | 12 | 4 | – | – | 1 | 1 | 18 |
| (3140) Soft drinks | 5 | 4 | 4 | 2 | 1 | 3 | 19 |
| (3315) Batik-making | 3 | 3 | 2 | 1 | – | 3 | 12 |
| (3432) Clothing | 6 | 4 | 3 | – | 2 | 6 | 21 |
| (3511) Sawmills | 2 | 1 | 8 | 10 | 3 | 16 | 40 |
| (4192) Medicine | 6 | 1 | 2 | 1 | 2 | 1 | 13 |
| (4510) Structural shapes | 1 | 2 | 2 | 2 | – | 3 | 10 |
| (4530) Wire | 4 | – | – | 2 | – | 3 | 9 |
| (4561) Tin cans | 1 | – | 3 | 1 | 2 | 3 | 10 |
| (4940) Plastic | 3 | 3 | 4 | 4 | 7 | 4 | 25 |
| Total | 111 | 74 | 75 | 40 | 35 | 64 | 399 |

[a]Figures in brackets refer to the Federation of Malaya Industrial Classification Numbers.

TABLE 3
CAPITAL INTENSITY BY PAID FULL-TIME EMPLOYMENT SIZE GROUP

| Paid Full-time Employment Size Group | Fixed Capital (KF) ($1000) | Total Capital (K) ($1000) | Man-Hours (M) ($1000) | Number of Workers (L) | Fixed Capital Per Man-Hour (KF/M) ($) | Fixed Capital Per Worker (KF/L) ($) | Total Capital Per Man-Hour (K/M) ($) | Total Capital Per Worker (K/L) ($) |
|---|---|---|---|---|---|---|---|---|
| 0–4 | 3,164 | 5,026 | 1,407 | 589 | 2.26 | 5,371.82 | 3.57 | 8,532.53 |
| 5–9 | 4,256 | 6,199 | 1,869 | 733 | 2.35 | 5,806.28 | 3.32 | 8,457.94 |
| 10–19 | 7,029 | 12,727 | 3,131 | 1,199 | 2.24 | 5,857.38 | 4.06 | 10,609.67 |
| 20–29 | 6,564 | 14,481 | 2,851 | 1,092 | 2.30 | 6,010.07 | 5.07 | 13,260.07 |
| 30–49 | 8,956 | 13,604 | 3,008 | 1,455 | 2.98 | 6,155.33 | 4.52 | 9,349.83 |
| 50 and over | 55,277 | 87,327 | 22,026 | 7,547 | 2.51 | 7,324.37 | 3.96 | 11,571.09 |
| Total/Average | 85,240 | 139,357 | 34,292 | 12,615 | 2.49 | 6,757.03 | 4.06 | 10,915.34 |

The sample was drawn randomly from the 1968 Census of Manufacturing Industries and represented 14.96% overall coverage of the population.[7]

## THE CASE FOR SMALL INDUSTRY

From the employment angle, small industry presents better opportunities for the use of relatively labour-intensive production techniques; thus under suitable conditions it may employ more labour than would otherwise be the case. Data collected from the survey seem to support this argument. For this purpose let us use the capital-labour ratio which provides a fair indication of labour intensity.[8] The ratio provides a measure of the magnitude of investment required to employ a unit of labour and thus, indirectly, an indication of employment potential in a given industry. The capital-labour ratio may be expressed in terms of man-hours or workers. The former expression will give a more accurate capital-labour ratio than the latter since the number of working hours may differ.

Table 3 shows the capital-labour ratio by size of establishment. Fixed capital per man-hour and per worker generally increase with employment size although the trend is not so obvious with total capital. Still, the total capital per worker for all small establishments on the average is about 14% lower than that for large establishments. Fixed capital per worker for all small establishments on the average is about 20% lower than that for large establishments. Data calculated from the 1968 Census of Manufacturing Industries suggest that fixed capital per worker for all small establishments is, on the average about 65% lower than that for large establishments (Table 4). The higher proportion in the Census data may be explained by the exclusion of rented capital, which is a common feature in small establishments. Finally the same Census also shows that capital expenditure on fixed assets is, on the average, 60% lower in small establishments than in large (Table 5). On all measures, therefore, capital intensity rises with size of establishment.[9]

[7] *Op. cit.* Further details of the population and sample selection are described in Chee Peng Lim, 'The Role of Small Industry in the Malaysian Economy', a Ph.D. thesis submitted to the University of Malaya, 1975, pp. 11–29. (*Forthcoming*, University of Malaya Press)

[8] On the use of capital-labour ratio see John W. Kendrick, 'Productivity trends: capital and labour', *Review of Economics and Statistics*, Vol. 38 (August 1956), pp. 248–57; Joan Robinson, *The Accumulation of Capital*, London, MacMillan, 1956. Some of the difficulties in defining the numerator and denominator of this quotient are discussed in Netherlands Economic Institute, *Capital Labour Ratios of Certain Industries in Some Countries*, Rotterdam, 1966. An alternative measure of capital-intensity is the value-added per employee. See H.B. Lary, *Imports of Labour-intensive Manufactures from Less Developed Countries*, New York, National Bureau of Economic Research, 1968.

[9] Studies in a number of countries show that capital-labour ratio tends to be positively correlated with size. For the Philippines, Columbia, Kenya, India, Pakistan and other countries, see ILO, *Sharing in Development*, Geneva, 1974; R.A. Berry, 'The Relevance and Prospects of Small Scale Industry in Columbia', Connecticut, Economic Growth Center, Discussion Paper No. 142, 1972; P.N. Dhar and H.F. Lydall, *The Role of Small Enterprises in Indian Economic Development*, New Delhi, Asia Publishing House, 1961; M.C. Shetty, *Small-scale and Household Industries in a*

TABLE 4
SELECTED RATIO OF MANUFACTURING ESTABLISHMENT IN PENINSULAR MALAYSIA
BY EMPLOYMENT SIZE, 1968

| Paid Full-time Employment Size Group | Value of Fixed Capital *(KF)* *($1000)* | No. of Paid Employees (L) | Value Added *(V)* *($1000)* | Capital-Output Ratio (KF/V) | Fixed Capital Per Worker (KF/L) *($)* | Value Added Per Worker (V/L) *($)* |
|---|---|---|---|---|---|---|
| No. paid full-time employment | 4,440 | 1,823 | 12,253 | 0.36 | 2,435 | 6,721.3 |
| 1–4 | 14,248 | 8,506 | 29,090 | 0.49 | 1,675 | 3,419.9 |
| Sub-total/Average (0–4) | 18,688 | 10,329 | 41,343 | 0.43 | 1,809 | 5,071.6 |
| 5–9 | 18,502 | 7,725 | 27,330 | 0.68 | 2,395 | 3,537.9 |
| 10–19 | 37,942 | 11,455 | 44,355 | 0.86 | 3,312 | 3,872.1 |
| 20–29 | 34,982 | 10,425 | 41,047 | 0.85 | 3,355 | 3,937.4 |
| 30–49 | 78,227 | 13,138 | 69,589 | 1.12 | 5,931 | 5,276.7 |
| Sub-total/Average (5–49) | 169,653 | 42,793 | 182,321 | 0.88 | 3,964 | 4,156.1 |
| 50–99 | 93,946 | 19,186 | 118,993 | 0.79 | 4,896 | 6,202.1 |
| 100–199 | 204,741 | 18,662 | 189,147 | 1.08 | 10,971 | 10,135.4 |
| 200–499 | 258,111 | 22,617 | 187,495 | 1.38 | 11,412 | 8,290.0 |
| 500 and over | 145,218 | 16,670 | 154,553 | 0.94 | 8,711 | 9,271.3 |
| Sub-total/Average for all groups | 702,016 | 77,135 | 650,188 | 1.05 | 9,101 | 8,475.4 |
| Total/Average for all groups | 809,356 | 130,257 | 873,851 | 1.02 | 6,835 | 6,708.7 |

*Source:* Data calculated from *1968 Census of Manufacturing Industries, op. cit.*

TABLE 5
RELATIVE EFFICIENCY BY PAID FULL-TIME EMPLOYMENT SIZE GROUP

| Scale (Paid Full-time Employment) | Average Productivity of Capital | | Average Productivity of Labour | | Rate of Return on Capital | |
|---|---|---|---|---|---|---|
| | Fixed Capital (V/KF) ($) | Total Capital (V/K) ($) | Man-Hour (V/M) ($) | Worker (V/L) ($) | Fixed Capital (P/KF) | Total Capital (P/K) |
| Petty industry (0–4) | 0.45 | 0.29 | 1.00 | 2,499 | 0.27 | 0.17 |
| Small industry (0–49) | 0.71 | 0.41 | 1.77 | 4,272 | 0.38 | 0.22 |
| Large industry (50 and over) | 1.02 | 0.65 | 2.57 | 7,514 | 0.65 | 0.41 |

There may be several reasons why small industry tends to be labour-intensive and large-scale units tend to be capital-intensive. Firstly, small firms tend to be confronted with factor prices which are much closer to scarcity prices than those facing large firms. Wages are lower while capital costs are higher. Possibly for this reason therefore, small firms are labour-intensive, not because they operate on a small scale, but because they face more realistic factor prices. Secondly, the scope of using capital-intensive methods of production is rather limited in small units. Thirdly, a small firm is also a small buyer. It is likely to get a less advantageous bargain than the large firm from suppliers of machinery. As such, there is an incentive for the small firm to invest in a less capital-intensive technology, for here the relative cost difference may be lower than in capital-intensive technology as compared to the large firm. Finally, the size of the small firm is limited mostly by the limited access to capital.

Two implications seem to follow. Firstly, since small firms use relatively less capital, a given amount of capital will create more employment if it is spread over a large number of small firms than if it is concentrated in a few large ones. Thus, from

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*Developing Economy*, Bombay, Asia Publishing House, 1963; ILO, *Employment, Incomes and Equality: a Strategy for Increasing Productive Employment in Kenya*, Geneva, 1972; Marsden, 'Towards a synthesis of economic growth and social justice', *International Labour Review* (November 1969), pp. 389–418; G. Ranis, 'Industrial Efficiency and Economic Growth: a Case Study of Karachi', Monograph in the Economics of Development, No. 5, Karachi, Pakistan Institute of Development Economics, 1964; Kathleen Ann DiTullio, 'The Role of Small Industries in the Political Economy of Bangladesh', unpublished Ph.D. dissertation, Political Science Department, Syracuse University, 1972. For evidence that small firms can also be relatively capital-intensive see Stephen R. Lewis, *Economic Policy and Industrial Growth in Pakistan*, Cambridge, Mass., M.I.T. Press, 1969 and Gordon C. Winson, 'Capital Utilization, Investment and Employment: a Neoclassical Model of Optimal Shift Work', Karachi, November 1970 (Mimeograph.)

the short-term employment point of view at least, small firms should be given special encouragement at the expense of large enterprises. However, as David Morawetz has pointed out, several considerations suggest that, at least, at the present state of knowledge, it is difficult to draw any definite conclusions.[10] First of all, if small firms tend to produce lower-quality products, which are demanded mainly by poor local consumers, it may take radical redistribution of income before there would be sufficient demand for the output of many extra small firms. Second, estimates of labour intensity in small and large industry generally confine themselves only to direct factor employment, ignoring indirect effects altogether. Morawetz gives the example of the small shoemaker who tends to be producer, transporter and sales distributor all in one; whereas large shoe firms have separate departments for each function, each employing significant numbers of people. Third, and perhaps most important of all, the appropriate policy prescription from the point of view of reducing factor price distribution is not the encouragement of smallness as such, but rather promotion of the use of more labour-intensive techniques in firms of all sizes through readjustments of factor prices to reflect real scarcities.

Secondly, since the capital-labour ratio gives a good indication of the level of mechanization of production we may assume that the smallest size class operates at the lowest level of mechanization, the medium size class at medium level of mechanization and the highest size class at the highest level of mechanization. A second argument in favour of small industry is that it helps to increase total savings in the economy. The principal sources of finance for the small industry sector are the owners' own family, friends and relatives as well as traders who extend them credit. This may be seen in Table 6 which compares the sources of initial capital by employ-

TABLE 6
SOURCE OF INITIAL CAPITAL BY PAID FULL-TIME EMPLOYMENT SIZE GROUP
*(Percentage)*

| Paid Full-Time Employment Size Group | Own | Family/ Relative | Friend | Commercial Bank | Other | Total |
|---|---|---|---|---|---|---|
| 0 – 4 | 81.7 | 11.2 | 4.9 | 0.3 | 1.9 | 100.0 |
| 5 – 9 | 74.0 | 17.2 | 6.1 | 0.1 | 2.6 | 100.0 |
| 10 – 19 | 77.9 | 11.7 | 10.4 | – | – | 100.0 |
| 20 – 29 | 86.5 | 3.3 | 1.4 | – | 8.8 | 100.0 |
| 30 – 49 | 71.5 | 16.6 | 7.6 | 0.6 | 3.7 | 100.0 |
| 50 and over | 55.8 | 9.5 | 4.8 | 6.0 | 23.9 | 100.0 |
| Average | 74.5 | 11.6 | 5.9 | 1.2 | 6.8 | 100.0 |

[10] David Morawetz, 'Employment implications of industrialization in developing countries', *The Economic Journal*, Vol. 84 No. 335 (September 1974), p. 526.

ment size group. For small establishments as a whole, 77.5% of the initial capital comes from the promoters. For large establishments the proportion is only 55.8% Similarly in the case of medium and long-term capital small establishments provide a larger proportion of own capital than large ones (Table 7). One suspects that a large proportion of the capital mobilized for investment in small industry would not have been available to large establishments or to the government for investment. Most of it would have been probably devoted to consumption expenditure if the small establishments had not aggressively sought it. When spread throughout the economy this propensity to save and invest induced by the development of small industry can increase the overall savings ratio of the population.

There is also another aspect of the savings argument which should also be considered. Here one refers to the resources used in small enterprises which would otherwise have been wasted. Consider for example the building in which production is carried out. This often consists of simple structures which makes for the maximum utilization of space. Or consider the use of machinery and equipment in the workshop. These machines and equipment are often purchased second-hand and are usually used to the fullest extent of their economic lives and in many cases even beyond. Productivity may be lower as a result. But the fact is, output is obtained from resources which would otherwise have been condemned by large enterprises. In this sense there is a net savings to society.

Thirdly, small industry has a favourable impact on income distribution. It is plausible to assume that large-scale industry, which tends to produce a relatively small number of high-wage incomes and a relatively small number of quite high-capital incomes has the impact of raising the income of a relatively small number of high-income people by a relatively large amount; correspondingly, it is plausible to conclude that, since small industry produces a large number of relatively low wage payments and of relatively low capital incomes, its impact consists of relatively small increases in income for a relatively large number of people. Under these circumstances one may conclude that the income distribution impact of small industry is more favourable than that of large-scale industry.

TABLE 7
SOURCE OF MEDIUM AND LONG-TERM LOAN BY PAID FULL-TIME EMPLOYMENT SIZE GROUP
*(Percentage)*

| Paid Full-time Employment Size Group | Own | Family/ Relative | Friend | Commercial Bank | Other | Total |
|---|---|---|---|---|---|---|
| 0 – 4 | 63.6 | 9.9 | 7.3 | 9.2 | 9.9 | 100.0 |
| 5 – 9 | 61.6 | 1.6 | 11.2 | 9.6 | 16.0 | 100.0 |
| 10 – 19 | 62.9 | 7.1 | 5.3 | 22.4 | 2.3 | 100.0 |
| 20 – 29 | 72.2 | – | – | 19.8 | 8.0 | 100.0 |
| 30 – 49 | 54.6 | – | 7.6 | 11.4 | 26.5 | 100.0 |
| 50 and over | 66.2 | 0.2 | 0.5 | 22.3 | 10.8 | 100.0 |
| Average | 63.5 | 3.1 | 5.0 | 16.6 | 11.8 | 100.0 |

Something can be deduced about the income distribution characteristics of different establishment sizes by observing the wage rates, the wage share and (to the extent possible) the distribution of labour and capital income. Differences in average labour renumeration by establishment size are shown in Table 8. Small establishments pay their workers, on the average, about 40% less than large establishments. A more interesting statistic of total wages and salaries paid is shown in Table 9. The term 'white-collar' includes managerial, clerical and (unavoidably) general workers. The figures in Table 9 show that the white-collar share is greater in large establishments compared to small. An even more significant positive relationship to size appears when we examine a similar set of data from the 1968 Census of Manufacturing Industries. The term 'white-collar' in the census data excludes general workers. Size of establishment has to be inferred from legal status since the data is not available by employment size. The majority of individual proprietorships and partnerships may be assumed to be small and petty establishments since the census data show that only 1.5% of individual proprietorships and partnerships are large establishments.[11] On the other hand, we may assume that the majority of public limited companies are large establishments since the census data also shows that 67.5% of such companies are large establishments.[12] Bearing this in mind we note that the proportion of white-collar share in total wages and salaries paid in 1968 is about four times larger in public limited companies than in individual proprietorships or partnerships (Table 10).

It is much more difficult to say anything about the proportion of wage and capital income by employment size. The most that we can do is to look at the share of wages and salaries in net value added. This is shown in Table 11. On the average, for all small establishments as a whole, the share of wages and salaries in value added is 41.5% compared to 34.0% for large establishments. The same relationship emerges when we look at data collected by the census (Table 11).

One may also argue that small industry has a favourable impact on income distribution because new entrepreneurs with limited financial resources and technical skill can easily gain entry into the industrial sector through small industry operations. Thus small industry has the effect of creating a new class of small capitalists, leads to the formation of a middle class, and to a wider distribution of income.

To sum up, as industrialization gathers momentum, rising profits will become more equally distributed as small industry plays a more significant role in the economy and as some workers graduate into entrepreneurial status and as windfall profits of large establishments are diminished. This, according to an ILO Report, is not merely academic reasoning about something that *might* happen, for recent experience in industrializing countries of the Far East indicates that it *can* happen.[13] For this reason the realization of the objectives of the New Economic Policy, *viz.* the eradication of poverty and restructuring of society, can be further enhanced through the promotion of small industry.

Fourthly, small industry serves as a 'training ground' for developing the skills of industrial workers and entrepreneurs. Although this argument is the least often men-

[11] *1968 Census of Manufacturing Industries, op. cit.*, p. 69.

[12] *Ibid.*

[13] ILO, *op. cit.*, p. 368.

TABLE 8
INDEX OF MONTHLY AVERAGE WAGE RATE BY PAID FULL-TIME EMPLOYMENT SIZE GROUP

| Paid Full-Time Employment Size Group | Full-Time Employees | | | | | | |
|---|---|---|---|---|---|---|---|
| | Managerial | Clerical | Factory Workers | | Contract Workers | Part-Time Employees | Average |
| | | | Skilled | Unskilled | | | |
| 0 – 4 | 38.8 | 56.8 | 78.7 | 63.1 | – | 55.4 | 61.4 |
| 5 – 9 | 43.6 | 56.9 | 27.2 | 86.7 | 56.0 | 53.7 | 70.1 |
| 10 – 19 | 57.8 | 67.7 | 89.9 | 85.1 | 94.1 | 57.2 | 78.7 |
| 20 – 29 | 79.3 | 72.8 | 103.1 | 91.2 | 88.1 | 60.0 | 90.8 |
| 30 – 49 | 80.5 | 74.8 | 89.5 | 85.3 | 41.0 | 73.7 | 88.4 |
| 50 and over | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 9
WHITE-COLLAR SHARE IN TOTAL WAGES AND SALARIES PAID BY PAID FULL-TIME EMPLOYMENT SIZE GROUP

| Paid Full-Time Employment Size Group | White-Collar Share in Total Wages and Salaries Paid (%) |
|---|---|
| 0 – 4 | 0.5 |
| 5 – 9 | 0.7 |
| 10 – 19 | 1.5 |
| 20 – 29 | 2.2 |
| 30 – 49 | 2.5 |
| 50 and over | 2.3 |
| Average for all groups | 2.2 |

*Note:* White-collar includes general workers.

TABLE 10
WHITE-COLLAR SHARE IN TOTAL WAGES AND SALARIES PAID BY LEGAL STATUS, 1968

| Legal Status | White-Collar Share in Total Wages and Salaries Paid (%) |
|---|---|
| Individual proprietorship | 12.1 |
| Partnership | 11.8 |
| Private limited company | 35.3 |
| Public limited company | 49.6 |
| Average for all groups | 31.1 |

*Source:* Calculated from data in *1968 Census of Manufacturing Industries, op. cit.*, pp. 173–6.

*Note:* White-collar does not include general workers.

TABLE 11
SHARE OF WAGES AND SALARIES IN VALUE ADDED BY PAID FULL-TIME EMPLOYMENT SIZE GROUP

| Paid Full-Time Employment Size Group | Share of Wages and Salaries in Value Added (%) | |
|---|---|---|
| | *Survey Data* | *Census Data*[a] |
| 0 – 4 | 33.3 | 26.2 |
| 5 – 9 | 41.3 | 36.2 |
| 10 – 19 | 42.5 | 40.2 |
| 20 – 29 | 39.9 | 42.0 |
| 30 – 49 | 42.1 | 36.9 |
| 50 and over | 34.0 | 28.5 |
| Average for all groups | 35.8 | 30.5 |

[a]Calculated from data in *1968 Census of Manufacturing Industries, op. cit.*

tioned, it is probably the most important.[14] The low cost of setting up a small manufacturing unit enables an enterprising worker not only to provide himself with a livelihood but also offer employment to others. In the survey we found that 74.8% of the entrepreneurs in small industry did not have any upper secondary education (Table 12). These people would have found it difficult to secure a well-paid job in the labour market. More important, the training and experience which they acquired in the operation of their enterprises have enabled a number of them to expand and to branch out into other fields. A number of entrepreneurs in small industry have acquired considerable expertise. This is particularly the case in the foundry industry where the ability of the entrepreneur is amply borne out by a number of factors. Firstly, most of the large foundries interviewed have grown into their present size from small beginnings. Secondly, many of the foundries have concentrated on product lines which are consistent with their technical competence and the market situation. Thirdly, they have ploughed back into the business considerable amounts of profits. Finally, most of them are responsive to new ideas and innovations and some of them have taken active steps to modernize and diversify production. A few of them have also gone abroad to look for new ideas.

The role of promoting entrepreneurship is not solely confined to small industry. Large industry also has a complementary role to play. A number of the entrepreneurs whom we interviewed received their initiation in a large establishment. The large

[14] Dhar and Lydall, *op. cit.*, pp. 27–32.

TABLE 12
LEVEL OF EDUCATION OF ENTREPRENEUR BY PAID FULL-TIME EMPLOYMENT SIZE GROUP

| Paid Full-Time Employment Size Group | No Formal Education | Primary Education | Secondary | | | University Education | Total |
|---|---|---|---|---|---|---|---|
| | | | Lower | Upper | Post Education | | |
| 0 – 4 | 20 (18.0) | 65 (58.6) | 16 (14.4) | 9 (8.1) | – (–) | 1 (0.9) | 111 (100.0) |
| 5 – 9 | 9 (12.2) | 34 (45.9) | 20 (27.0) | 9 (13.5) | 2 (2.7) | – (–) | 74 (100.0) |
| 10 – 19 | 5 (6.6) | 33 (44.0) | 18 (24.0) | 18 (24.0) | – (–) | 1 (1.3) | 75 (100.0) |
| 20 – 29 | (–) | 13 (32.5) | 15 (37.5) | 7 (11.5) | 1 (2.5) | 4 (10.0) | 40 (100.0) |
| 30 – 49 | 3 (8.6) | 11 (34.4) | 11 (31.4) | 9 (25.7) | – (–) | 1 (2.9) | 35 (100.0) |
| 50 and over | 3 (4.6) | 14 (21.9) | 14 (21.9) | 20 (31.3) | 1 (1.5) | 12 (18.7) | 64 (100.0) |
| Total | 40 (10.0) | 170 (42.6) | 94 (23.5) | 72 (18.0) | 4 (1.0) | 19 (4.8) | 399 (100.0) |

*Note:* Figures in brackets refer to percentages.

establishment provides them with the skill, knowledge and possibly capital to start their own venture. The setting up of the small establishment enables the newly-initiated entrepreneurs to put his skill and knowledge into practice. The small establishment enables him to acquire further experience and to improve his ability gradually with the growth of the firm. In addition, such training can be carried out on an extensive basis. A hundred small establishments offer at least 100 individual opportunities to develop many of the skills required to operate a successful enterprise. Not more than a handful of these 100 individuals can be selected if they are grouped into a large establishment. It is not necessary to add that the need to accelerate the development of entrepreneurs is an urgent one in the Malaysian context, where there is a serious shortage of Malay entrepreneurs.[15] The Malaysian government is seriously concerned over this problem in view of its desire to ensure greater Malay participation in the industrial life of the country.[16] In this connection, small industry can play a very important role by providing an ideal training ground for Malay entrepreneurs.[17]

Finally, small industry plays an important complementary role to large industry in the economy. It supplies a substantial part of the demand for simple and inexpensive consumer goods at prices within the range of the lower income group. It also supplies specialities that would be uneconomic for large firms to produce and brings out products for which the market is too small to justify mass production. Besides, small industry supplies many large firms with parts and components. The absence of these complementary relationships will mean the restriction of choice for the consumers and higher cost of production for the large-scale producers.

## DISCRIMINATION AGAINST SMALL INDUSTRY

Although small industry plays an important role in the Malaysian economy its potential has not been fully developed because of the handicaps and discrimination against small industry operations, the shortage of financing, the inadequate knowledge of modern techniques and the lack of managerial skills. A striking feature of the fiscal incentive system in Malaysia is its attempt to link the value of each incentive with the level of investment.[18] This means that the larger companies (in terms of investment) would receive greater benefits. The effects of this bias towards large establishments may be seen in Tables 13–15. Table 13 shows that of the total investment of $407.3 million by pioneer firms between 1959 to 1968, 53.2% was concentrated in two typically capital-intensive industries, namely manufacturing of petroleum and coal products and manufacturing of chemicals and chemical products. Tables 14 and 15 show the number of pioneer establishments by paid full-time employment size and by

[15] The shortage of Malay entrepreneurs was first noted by Goh Keng Swee in his address to the Malayan Economic Society on 27 September 1957. See Goh Keng Swee, 'Entrepreneurship in a plural economy', *Malayan Economic Review*, Vol. III No. 1 (April 1958), pp. 1–7.

[16] *SMP*.

[17] The role of small industry in the training of entrepreneurs has been noted by many writers. See for example, Everett Hagen, *On the Theory of Social Change: How Economic Growth Begins*, Illinois, Dorsey Press, 1962; and Dhar and Lydall, *op. cit.*

[18] Malaysia, *Investment Incentives Act 1968* and *Investment Incentives (Amendment) Act, 1971*.

TABLE 13
NUMBER OF PIONEER ESTABLISHMENTS BY PAID FULL-TIME EMPLOYMENT SIZE GROUP, 1971

| Paid Full-Time Employment Size Group | Number of Establishments | Percentage |
|---|---|---|
| No. paid full-time employee | – | – |
| 1 – 4 | 2 | 0.8 |
| Sub-total (0 – 4) | 2 | 0.8 |
| 5 – 9 | 2 | 0.8 |
| 10 – 19 | 20 | 8.1 |
| 20 – 29 | 13 | 5.3 |
| 30 – 49 | 27 | 11.0 |
| Sub-total (5 – 49) | 62 | 25.2 |
| 50 – 99 | 53 | 21.5 |
| 100 – 199 | 59 | 24.0 |
| 200 – 499 | 56 | 22.8 |
| 500 and over | 14 | 5.7 |
| Sub-total (50 and over) | 182 | 74.0 |
| Total | 246 | 100.0 |

*Source:* Malaysia, Department of Statistics, *Survey of Manufacturing Industries, Peninsular Malaysia, 1971*, 2 vols., Kuala Lumpur, Vol. 1, p. 91.

fixed assets respectively. In Table 14 establishments employing 50 or more workers form 74% of the total number of pioneer establishments. In Table 15 establishments employing fixed assets of $200,000 and above form 85.0% of the total number of pioneer establishments. In short, available data suggest that the pioneer industry programme has mainly benefited the large establishments.

Apart from fiscal incentives the Malaysian government also provides other incentives to industrialists such as industrial estates. Again there is some evidence to show that the provision of industrial sites has benefited mainly the large establishments. Data collected from the survey shows that 45.0% of the establishments are located in industrial sites (Table 16). In a study of the Tasek Industrial Estate in Ipoh, Arulappu found that of the 56 allocated sites, 57.1% was taken up by large establishments (Table 17).[19] The larger of the small establishments took up the remainder, while the really small establishments were left out altogether.[20]

[19] Alfred F. Arulappu, 'Tasek Industrial Estate: a Case Study of a Development Project by the Ipoh Municipal Council', Graduation Exercise (unpublished), Faculty of Economics and Administration, University of Malaya, 1970/71. The Tasek Industrial Estate was developed in mid-1960 by the Ipoh Municipal Council. It was developed with the aid of a £1.75 million federal government loan and covered 370 acres.

[20] *Ibid.*

TABLE 14
NUMBER OF PIONEER ESTABLISHMENTS BY FIXED ASSETS SIZE GROUP, 1971

| Fixed Assets Size Group | Number of Establishments | Percentage of Total |
|---|---|---|
| Under $10,000 | 5 | 2.0 |
| $10,000 – $ 19,999 | 4 | 1.6 |
| $20,000 – $ 49,999 | 3 | 1.2 |
| $50,000 – $ 99,999 | 6 | 2.4 |
| $100,00 – $199,999 | 19 | 7.7 |
| Sub-total ($10,000 – $199,999) | 32 | 13.0 |
| $200,000 – $499,999 | 37 | 15.0 |
| $500,000 – $999,999 | 42 | 17.1 |
| $1,000,000 – $4,999,999 | 101 | 41.1 |
| $5,000,000 – $9,999,999 | 18 | 7.3 |
| $10,000,000 and over | 11 | 4.5 |
| Sub-total ($200,000 and over) | 209 | 85.0 |
| Total | 246 | 100.0 |

*Source:* *Ibid.*, p. 92.

An even more serious form of discrimination is evident in the system of credit allocation. Small industry has limited access to external institutional finance by comparison with large companies. The survey suggests that at least 75% of small establishments in the sample were outside the system of bank financing. Further details are given in Table 18 which shows the number of establishments which have managed to obtain medium and long-term loans from commercial firms during the last three years. Altogether 66 establishments or 16.5% of the establishments in the sample obtained such loans. The proportion is significantly higher for large establishments. The total value of such loans amounted to nearly $5 million, slightly more than half of which went to the large establishments. If we excluded the largest size category among the small establishments, then only 15.1% of the total value of loans went to small establishments. On the average, the value of a loan received by a large establishment is slightly three times more than that received by a small establishment. Thus not only do small establishments receive a smaller proportion of bank loans, the value of such loans is also much smaller. This observation has been substantiated in a number of other studies. For example, Lee Sheng Yi's study of bank loans in Malaya and Singapore shows that most commercial banks concentrate on large customers and do not provide adequate credit facilities to the medium and small-sized firms. Large customers

TABLE 15
DISTRIBUTION OF INVESTMENT IN PIONEER INDUSTRIES, 1958–68

| | Industry | Percentage of Total |
|---|---|---|
| 1. | Manufacturing of products of petroleum and coal | 34.1 |
| 2. | Manufacturing of chemicals and chemical products | 19.1 |
| 3. | Food manufacturing | 14.7 |
| 4. | Beverages | 5.1 |
| 5. | Basic metal industries | 5.0 |
| 6. | Manufacturing of textiles | 4.9 |
| 7. | Manufacturing of rubber products | 4.7 |
| 8. | Manufacturing of electrical machinery apparatus and supplies | 2.8 |
| 9. | Manufacturing of metal products except machinery and transport equipment | 2.5 |
| 10. | Manufacturing of non-metallic mineral products except petroleum products | 2.2 |
| 11. | Manufacturing of wood, rattan, *mengkuang*, timber and cork products except furniture and footwear | 2.1 |
| 12. | Miscellaneous manufacturing industries | 0.9 |
| 13. | Manufacturing of paper and paper products | 0.6 |
| 14. | Printing, publishing and allied industries | 0.3 |
| 15. | Manufacturing of leather and furs and leather products except footwear and wearing apparel | 0.3 |
| 16. | Manufacturing of machinery except electrical | 0.3 |
| 17. | Manufacturing of transport equipment | 0.2 |
| 18. | Recreation services | 0.2 |
| 19. | Manufacturing of furniture and fixtures | 0.1 |
| 20. | Manufacturing of footwear and other wearing apparel and made-up textile goods | – |
| | Total Investment | $407,318,840 |

*Source:* J.G. Butler, 'The Contribution of Exports to Growth: a Study of Economic Policies in Malaysia', Ph.D. dissertation (unpublished), University of California, Berkeley, 1969, p. 188.

TABLE 16
LOCATION (AREA) BY PAID FULL-TIME EMPLOYMENT SIZE GROUP

| Paid Full-Time Employment Size Group | Industrial Estate | % | Urban Area | % | Rural Area | % | Total |
|---|---|---|---|---|---|---|---|
| 0 – 4 | 2 | 5.0 | 98 | 30.8 | 11 | 26.8 | 111 |
| 5 – 9 | 5 | 12.5 | 62 | 19.5 | 7 | 17.0 | 74 |
| 10 – 19 | 9 | 22.5 | 60 | 18.9 | 6 | 14.6 | 75 |
| 20 – 29 | 1 | 2.5 | 34 | 10.7 | 5 | 12.1 | 40 |
| 30 – 49 | 5 | 12.5 | 28 | 8.8 | 2 | 4.8 | 35 |
| 50 and over | 18 | 45.0 | 36 | 11.3 | 10 | 24.3 | 64 |
| Total | 40 | 100.0 | 318 | 100.0 | 41 | 100.0 | 399 |

TABLE 17
NUMBER OF ALLOCATED SITES IN TASEK INDUSTRIAL ESTATE BY PAID FULL-TIME EMPLOYMENT SIZE GROUP, 1970

| Paid Full-Time Employment Size Group | Number of Allocated Sites | Percentage |
|---|---|---|
| 0 – 19 | – | – |
| 20 – 29 | 8 | 14.3 |
| 30 – 49 | 16 | 28.6 |
| 50 – 99 | 10 | 17.9 |
| 100 and over | 22 | 39.3 |
| Total | 56 | 100.0 |

*Source:* Calculated from data in Alfred F. Arulappu, 'Tasek Industrial Estate: a Case Study of a Development Project by the Ipoh Municipal Council', Graduation Exercise submitted to the Faculty of Economics & Administration, University of Malaya, 1970/71.

TABLE 18
MEDIUM AND LONG-TERM LOANS FROM COMMERCIAL BANKS (1971–3) BY PAID FULL-TIME EMPLOYMENT SIZE GROUP

| Paid Full-Time Employment Size Group | Number of Establishments | % of Sample | Value of Loan ($) | % of Total | Duration (Month) | Value of Collateral ($) | Value of Collateral / Value of Loan | Interest Payable (including other charges) per annum (%) | Length of Time Between Application and Issue of Loan (Month) |
|---|---|---|---|---|---|---|---|---|---|
| 0 – 4 | 9 | 8.1 | 55,870.00 | 1.1 | 22.8 | 61,250.00 | 1.10 | 10.5 | 1.0 |
| 5 – 9 | 13 | 17.6 | 51,090.00 | 1.0 | 27.3 | 86,000.00 | 1.68 | 10.6 | 1.4 |
| 10 – 19 | 11 | 14.7 | 295,500.00 | 6.0 | 28.3 | 402,750.00 | 1.36 | 10.3 | 0.8 |
| 20 – 29 | 5 | 12.5 | 342,000.00 | 6.9 | 42.8 | 1,001,000.00 | 2.93 | 10.1 | 2.1 |
| 30 – 49 | 12 | 34.3 | 1,551,500.00 | 31.4 | 27.7 | 3,866,234.67 | 2.49 | 9.9 | 1.8 |
| 50 and over | 16 | 25.0 | 2,650,000.00 | 53.6 | 21.5 | 5,281,000.00 | 1.99 | 9.5 | 1.7 |
| Total/Average | 66 | 16.5 | 4,945,960.00 | 100.0 | 23.4 | 10,698,234.67 | 2.16 | 10.2 | 1.5 |

(i.e. about 3,000 accounts from $100,000 to $5,000,000 each) obtained more than 70% of total bank loans in 1965, while medium and small customers, which were numerous (about 46,000 accounts) obtained the balance of 30%.[21]

Finally, the activities of the state affect small industry in a number of ways. To begin with, consider the purchasing activities of the state as a major or dominant buyer of a wide range of goods and services. These activities inevitably discriminate, albeit unwittingly, against small industry. Except for the policy of favouring Malay firms in certain cases the state does not buy or give out tenders to any particular group of firms.[22] Such a policy inevitably favours the large establishment.[23] The reason is that in the interests of administrative efficiency and in the search for economies in purchasing, government organizations tend to place their orders in relatively large amounts at a time and often by selective tender. Bulk purchasing and selective tender favours large, well-established firms.

In the field of public finance a particular tax which imposes a relatively heavy burden on small industry is the estate duty. For every dollar of the first $25,000, no estate duty is payable in Malaysia. For every dollar of the next $25,000 the rate of duty is 5%, rising on a graduating scale to a maximum of 50% for every dollar exceeding $2 million.[24] The rates of duty may not be very severe but in view of the limited financial resources of small firms the burden imposed is a heavy one. This is particularly so when death duties are often assessed on a purely notional valuation of non-marketable assets. In this case payment of the duty imposes a severe strain on the firm's liquidity and may force selling off or closure of the business. Even if the duty

[21] Lee Sheng Yi, *op. cit.*, p. 146. This is parallel to the MacMillan Committee Report of 1931 in the United Kingdom, which recommended more financial aid and greater provision of long-term capital to small industries. The lack of such provision was known as the 'MacMillan Gap'. See the *Report of the Committee on Finance and Industry* (Cmd. 3897), London HMSO, 1931, pp. 161–74; also *Minutes of Evidence, Committee on Finance and Industry*, London, HMSO, 1931, pp. 58–69 (Frederick Hyde) and p. 97 (Sir Robert Kindersley). For studies of discriminatory system of credit allocation in other countries see Development Bank of the Philippines, *Annual Report*, 1967; Manila 'Commercial Banks Finance to Medium and Small-scale Business Units'; *Bulletin of the Reserve Bank of India*, Bombay (1959); G. Balakrishnan, 'Financial Experience of Small Companies in India, 1950–1952', unpublished Ph.D. thesis, University of Poona, 1958; Charles Nisbet, 'Interest rates and imperfect competition in the informal credit market of rural Chile', *Economic Development and Cultural Change*, Volume 16 (October 1967), p. 73.

[22] Government ministries and departments are instructed to give price preferences to *bumiputra* contractors and suppliers. In addition, the Public Works Department awards at least 30% of the works contracts to *bumiputra* contractors under a restrictive tendering system.

[23] Anyone who is familiar with the Malaysian government's purchasing system will understand why this is so. See Abdul Aziz Mohd. Ali, 'Government's Purchasing System – its Nature and Problems', unpublished Diploma in Public Administration Project Paper 1974/1975, University of Malaya. The above practice of discriminating against small industry is not confined to Malaysia. According to a survey by the Small Enterprises Agency in Japan, orders placed by major central government offices and the Japan National Railways headquarters reached a total of £524,300 million in 1961 of which those with big enterprises represent 81.2% with only 18.8% going to small enterprises. See T. Ito, 'The high growth of the Japanese economy and problem of small enterprises', *The Developing Economies* (July–December 1963), p. 14.

[24] *Malaysia, Finance (Estate Duty) Act*, No. 38 of 1971.

can be met out of non-trade assets, the firm may be drained of external capital and will face a financial crisis if a second death should occur within a short period.

Another way in which increased state activity has adversely affected the small industry sector has to do with social benefits. Since 1950 the government has passed a series of social legislations which are aimed at the provision of greater social benefits. Some of these legislation are

(a) The Weekly Holiday Ordinance;
(b) The Employees Provident Fund Ordinance;
(c) Workmen's Compensation Ordinance, 1951;
(d) The Employment Ordinance, 1955 (Part IX on maternity leave and allowance); and the
(e) Employees' Social Security Act, 1969,

The above social legislations probably place a bigger financial and administrative burden on small establishments than on large ones. In some instances, as with the Employees' Social Security Act, these measures have directly raised the costs of employing labour in establishments of all sizes. In all cases they have led to increased overhead administrative costs which have inevitably weighed more heavily on the small than on the large establishments.

To sum up, small industry suffers relatively more from a number of disabilities mostly as a result of government policies and activities, which amount to a form of discrimination against the sector. The fact that this discrimination is unintentional is irrelevant. What is significant is that this discrimination, in addition to that already discussed in the field of credit, financial and other forms of assistance restricts the freedom of small enterprises to compete and consequently place them in an inferior position *vis-a-vis* the large enterprises.

## ASSISTANCE FOR SMALL INDUSTRY

In view of the above, special policies and programmes are required within the framework of overall development plans. As a first step, the government should formulate a definition of small industry. At the moment different government agencies use different definitions of small industry in their assistance programmes. In some cases these programmes stress crafts and small industry while in others the definition has been extended to include medium industry. A proper definition should exclude crafts and cottage industries since these employ rudimentary production techniques and their problems are different from those of small industry. It may also be desirable to exclude subsidiaries of large establishments and establishments owned by people with other substantial interests. The definition adopted should be based on two different sets of criteria. For planning purposes, the number of employees should be the deciding factor. For programmes of techniques and financial assistance other criteria may be required, particularly capital, defined as fixed assets. It is easier to administer a development programme if fixed assets is used instead of total investment since capital investment in inventories is hard to measure and is variable. A definition based on employment size would be unsatisfactory since it might discourage the use of labour-intensive techniques. Too low a limit should not be set on the capital of an establishment since that might hinder modernization. The value given to the criteria in the definition should be such as to permit the emergence of a modern and growing sector of small industry. A reasonable cut-off point might be $250,000 in fixed assets

inclusive of land and buildings.[25] Different values for different branches of industries and areas at different levels of development within the country should also be considered.

The second step is to formulate a definite policy for small industry. The existing industrial policy tends to favour large firms. Thus the present frame of fiscal and other incentives have largely benefited large enterprises. This situation has arisen because the government has not formulated any policy for small industry. Thus there is a need to define a suitable policy which should ensure a more even-handed treatment of both large and small industries. Experience of development suggests that a well-balanced industrial structure requires a considerable scale span of enterprises. Thus both sectors have a place in the overall industrialization strategy of the country. At the same time, a development policy for small industry should not overlook the petty industry. Today modern technology and new industrial processess have made many traditional crafts obsolete. Factories have been steadily replacing artisan workshops in the production of certain articles. Artisans in the affected industries should be assisted to become small industrialists in similar lines of business and others should be steered towards new industrial activities.

Any policy for developing small industry should aim at promoting modern, self-supporting and economically viable manufacturing enterprises rather than a group of weak and inefficient industries which would need to be artificially sustained in their production, management and financing. Even though some of the newly-established industrial units would need to be supported over a certain period of time, the purpose of promotion and assistance measures should be to guide and help small industrialists until they are able to stand on their own.

Having agreed on a definite policy for small industry the next step is to formulate a comprehensive plan for the promotion of the sector. Here priorities should be indicated in respect of industries to be encouraged and means of action to be followed. Various means exist to foster small industry, such as technical and financial assistance, improved supply and marketing arrangements, promotion of industrial cooperation and complementarity of industrial activities, training of personnel. *etc.* From the survey we find that the most serious problem is the shortage of working and fixed capital. Small establishments do not have sufficient capital not because they cannot afford the cost of credit but because in many cases it is simply not available (except outside the organized money market). In fact many small establishments would not mind paying a rate of interest slightly above the market rate as long as it is much less than the rate charged by non-institutional sources, as well as the marginal rate of return under self-financing investment using existing techniques. Greater access to credit is especially important in view of the limited sources and type of credit available to a small establishment in Malaysia where the money market is still not fully developed.

Small industry also suffers from a variety of other problems such as out-moded techniques of production, ineffective marketing organization, poor quality of product; and inefficient management. All these problems are probably interrelated. For example, poor management gives rise to problems in production and marketing;

[25] In the survey we found that on the average, the largest establishments in the small industry sector had fixed capital assets of just over $250,000.

inadequate finance gravely limits the capacity of small industry to expand or improve the quality of its product. Thus any approach which aims to minimize problems in one area only is likely to prove futile. In other words, a purely financial solution to small industry problems will obviously have a very limited efficacy. An effective solution will require a comprehensive programme comprising the provision of credit facilities, industrial advisory services and other developmental aids. An integrated programme that works on a carefully selected combination of factors simultaneously is much more likely to prove worthwhile.

A number of institutions already exists to serve small industry in Malaysia. But for a long time to come these institutions, limited by staff and other resources, can only offer limited assistance. Moreover these institutions are more suitably equipped to assist the large rather than the small establishments. In addition many of these institutions operate on the assumptions that the small industrialist knows what is wrong with him and where to look for assistance. However the survey has found that many establishments are hardly aware of their problems, much less know where to look for assistance. These facts seem to suggest the need for an institution which will go out to the small industrialist rather than expect him to come to it. On this basis we would like to endorse Professor Wheelwright's suggestion for the establishment of a Small Industry Development Corporation.[26] Such a Corporation will deal exclusively with the problems and development of small industry. This will ensure that the needs of the industry will not be subordinated to the interests of other sectors. The volume of assistance required by small industry is very large. Moreover the nature of assistance required is different from that required by large enterprises. For this reason only an organization dealing exclusively with small industry can hope to cope with the problem. The proposed Corporation will undertake the supply of suitable equipment and raw materials, training and knowledge of techniques and the provision of market outlets. The most important task of the Small Industry Development Corporation should be the establishment of an Industrial Extension Service for small industry. In view of the manpower constraint we suggest that the Corporation should organize the service in conjunction with the local universities. The service should be provided on a two-tier basis. The bottom tier would be manned by university undergraduates pursuing studies in the relevant disciplines. These undergraduates will be given a brief intensive training before being assigned on missions. With the large number of undergraduates at its disposal the universities can accomplish what the Corporation may take several decades to do, operating by itself. Some of the problems faced by small industry can be sorted out by anyone with some background in legal, accounting and business training. For example, an establishment may be short of funds because it is either ignorant of banking facilities or does not know how to apply for a loan. In this case the undergraduate extension worker can easily solve the problem. The more difficult problem can be referred to an advisory panel of specialists drawn from lecturers in the universities and the consultants employed by the Corporation. Alternatively, some of the problems can be referred to other more specialized institutions such as MIDF and SIRIM. In this way, the specialists can concentrate on 'problem' cases while simple cases can be handled at the bottom level. Not all the problems faced

[26] E.L. Wheelwright, *op. cit.*, pp. 48–56.

by a small industrialist require the services of a highly-qualified or highly-trained expert. Where this is available, it is of course highly desirable. But where it is not available some simple advice from someone relatively more well-informed and better educated may be sufficient to fill the gap.

Another area in which the extension service would be of immense value is marketing. Small firms need assistance in locating distributors and suppliers. They also need information of existing markets as well as potential markets they might exploit. The extension service would channel information and advise regarding existing and potential markets both locally and abroad. It would not sell the products of small industry. But it will make them known and it will try to bring the buyer and seller together. At a more ambitious level the extension service would help the small businessman enter the export market. At the moment small industry in Malaysia has particular difficulties in entering export markets because of the complexity of the commercial transactions involved.

There are certain advantages in promoting a two-tier Industrial Extension Service. Firstly, such a scheme can reach a large number of clients on a relatively small budget. Apart from travelling and a small subsistence allowance the undergraduate will be doing the job as part of a community service and will be working during the vacation. Secondly, the scheme will enable the limited number of specialists available to concentrate on those areas where they are really needed. At the same time the scheme will train a number of future extension workers. However the most valuable function of the service will be to provide a link between the small industrialists and the big institutions.

Another means of support for small industry and one which presupposes a close relationship between small and large industrial units, is subcontracting. At the moment, subcontracting has not been fully developed in Malaysia. Certain factors hinder its development. For example, the sales tax on final products involves cumulative tax payments and thus acts as a disincentive to subcontracting. Taxation on value added would, on the other hand, favour subcontracting. In addition, information on the possibilities of complementary relationship between large and small industries is lacking. The Industrial Extension Service suggested above could collect information on the types of operations that small establishments might carry out for the large ones. Alternatively a subcontractors' exchange could be set up whereby demand and supply are made known and information provided.[27] Thus on the supply side there would be information on the availability of machinery, production capacity and specialization of small industry. On the demand side information would be provided on the demand for parts, components and processing or finishing operations on the part of large establishments.

The government might also consider encouraging small establishments to form cooperative societies.[28] Collective action could be taken by small establishments without losing their independence. In this way they could get together to perform

[27] E. Edwards, 'The Subcontracting Exchange', Paper presented at an expert group meeting on the role and promotion of subcontracting in industrial development, Paris, 6–11 October 1969.

[28] The promotion of small industry through cooperative actions is discussed fully in OECD, *Promotion of Small and Medium-Size Firms in Developing Countries Through Collective Actions*, Paris, 1969.

some functions which, because of their size, they are unable to perform individually. They could undertake joint programmes on such matters as marketing, sales and purchase of raw materials. The system could also enable the small industrialists to participate in fairs and exhibitions, something that would be difficult on an individual basis. Cooperatives are particularly useful in promoting exports of small industry. Collective action could be propagated and initiated through the proposed Industrial Extension Service.

Another method which the government could take to assist small industry is to make use of a maximum number of small industry products.[29] A surprisingly large number of products required by the government in its day-to-day operations are produced by small firms. By taking deliberate measures to place orders with these firms the government can greatly stimulate small industry. Both the governments of India and the United States have established formal organizations to ensure that small manufacturers obtain a fair share of government orders.[30] While such an organization may not be necessary in Malaysia at the initial stage, a positive, unambiguous statement of the government's policy of favouring small manufacturers may be helpful.

Many other developing countries such as India and the Philippines have long been aware of the potentials of small industry in the development strategy of their economies. In India, small industry features prominently in national development plans; in fact, in some of these documents small units have even been identified as a 'sector' and have accordingly received special attention. In the Philippines, a comprehensive programme has been set up to develop small industry. Although only one institution (Institute for Small-Scale Industries) deals exclusively with small industry, many others are involved in providing both financial and technical assistance to this sector. By contrast, in Malaysia, small industry is only mentioned in one short paragraph in the latest development plan.[31] No attempt has been made to use small industry to promote the objectives of industrialization policy, and except for the Advisory Council, which is a purely coordinating body, there is no institution to look after the interests of the small industrialists. Very large sums have been poured into the development of small-scale agriculture. It is time that public funds should be used to do the same for small industry. It should be remembered that assisting small industry to develop is much more difficult than providing stimulus for large-scale enterprises. Thus unless there is adequate financial resources the small industry programme will not be effective. In short, if Malaysia is convinced of the desirability of a strong and growing community of small industry a strong commitment to small industry promotion is essential. An effective programme to promote small industry cannot be successfully initiated and implemented unless the government is truly committed to such action. Subsequently the commitment has to be translated into a system of policies and incentives designed to place small industry in a position to compete on an equal footing with large enterprises for finance and other resources as well as into institutions capable of putting such policies into effect.

[29] An even more severe measure is to reserve certain products and components for the exclusive manufacture of small industry.

[30] K. Weddell, *Aiding Small Industry Through Government Purchases*, Menlo Park, Stanford Research Center, 1960, ch. II and III.

[31] *SMP*.

# MARKET STRUCTURE AND ALLOCATIVE EFFICIENCY IN MALAYSIAN MANUFACTURING INDUSTRIES: SOME EMPIRICAL EVIDENCE AND POLICY IMPLICATIONS*

Gan Wee Beng & Tham Siew Yean

Since the publication of Bain's seminal paper in 1951 [2] there have been a number of statistical investigations into the relationship between market structure and various dimensions of economic performance in the advanced industrialized economies.[1] To our knowledge only two studies [15, 38] have been undertaken to evaluate the impact of market structure on allocative performance in the less developed countries (LDCs). This study attempts to test a more complete structure-performance model which includes the conventional dimensions of market structure together with foreign trade and direct foreign investment (DFI).

A large number of industrial organization studies have tried to isolate those features of market structure which enable firms to raise selling price above their marginal costs of production, thereby earning monopolistic profits. Traditionally, this type of analysis has related industry profitability to such dimensions of market structures as degree of seller concentration, conditions of entry and growth of demand. In a closed economy, these variables would be theoretically sufficient to describe the major determinants of inter-industry variations in profitability. In an open economy like Malaysia a more complete specification of the structure-performance model would have to allow for the influence of international trade on domestic profitability. In view of the importance of foreign equity participation in the Malaysian manufacturing sector, we have also taken into consideration the role of DFI in our analysis.[2]

*We would like to thank Shyamala Nagaraj for valuable comments in the course of preparing this study. We are also grateful to Soon Lee Ying for reading through an earlier draft. The usual disclaimer applies.

[1] For a survey of existing studies in the United States see [36].

[2] In 1969, 62% of the equity capital of limited companies in the manufacturing sector was under foreign ownership [33, p. 151].

## HYPOTHESES AND VARIABLES

### Price-Cost Margin

The dependent variable in the present study is the price-cost margin, defined as the percentage gross return (before taxes, interest, and depreciation) on sales for the industry [10]. Since the price-cost margins are not net of capital costs, variation in the ratio would in part reflect differences in inter-industry variation in capital intensity.[3] To avoid this problem, a capital output ratio is included in the regressions to control for different degree of capital intensity among industries. Two additional assumptions are required. First, the price elasticity of demand for final product within the relevant range must be the same for all industries. Second, the long-run average variable costs are assumed to be constant and equal to the long-run marginal cost.[4]

Given these assumptions, the price-cost margin approximates the classic Lerner index of monopoly power which is commonly employed as a summary indicator of the impact of monopoly on price and therefore upon resource allocation.

From information in various Surveys of Manufacturing Industries held by the Department of Statistics, the margin is computed as:

Price-cost margin = value added − payroll (inclusive of supplemental employee costs) − rentals − advertising and other purchased services[5] ÷ total value of sales.

The margin is taken as an average for the period 1968–71.

### Seller Concentration

Oligopoly theory suggests that the larger the share of the industry sales produced by a few firms, the greater is the probability of successful collusion (either implicit or tacit) among these firms. A perfect collusion would enable cooperating sellers to reap monopoly profit. Hence price-cost margins are likely to be positively related to seller concentration. Given the limitation of data, concentration ratio in this study is measured by the share of industry output supplied by the eight largest establishments.

The 8-establishment concentration ratios are computed, following the method employed by Bain [4], from the frequency distribution of output size class as reported in the 1971 Survey of Manufacturing Industries and is adjusted for the volume of imports as the latter constitutes a substantial share of the domestic market for manufactures (See Appendix). Import data (which are available by 6-digit SITC

[3] If concentrated industries are those that have high capital intensity, a spurious relationship between gross price-cost margins and seller concentration would result [6, 26].

[4] The evidence from most statistical studies indicate that the long-run average cost is constant over large range of output [19].

[5] Supplemental employee costs include payments in kind, government provident funds and social security contributions. Purchased services include accounting, secretarial and other office expenses, insurance and licences.

The inclusion of advertising expenditure in total direct costs lessens the possibility of a spurious correlation between price-cost margin and concentration due to the observed close relationship between advertising and concentration [24].

product categories) are matched against the 4-digit survey industries with the aid of guidelines given in 'Comparable Classifications of Malaysian Industry and External Trade for the Manufacturing Sector', published by the Economic Planning Unit. No adjustment has been made for regional markets as the relevant data are not available.[6] The resultant downward bias in the concentration ratio is, however, likely to be insignificant in a small domestic market like Malaysia.

**Barriers to Entry**

Bain [3] has identified three main sources of barriers to entry: (i) economies of scale, (ii) product differentiation and (iii) absolute capital requirements. Economies of scale pose a significant source of entry barrier if (a) the minimum efficient scale of new entrants constitutes a substantial proportion of the industry sales and (b) the average cost of production increases substantially at sub-optimal scale.

In the LDCs, the trade and fiscal policies commonly employed to promote rapid industrialization tend to raise substantially the economies of scale barriers to entry. The distortions in factor prices caused by such policies tend to encourage adoption of large-scale, capital-intensive equipment and methods of production [23]. New entrants would have to produce large fractions of the small domestic markets in order to exhaust all the scale economies.

We compute the average plant size among the largest plants accounting for approximately 50% of the industry output and then divide this by total industry output to obtain a measure of scale economies.

The product differentiation barriers to entry arise from the preference of buyers for the product of established firms over new ones. New entrants would find it difficult to secure a selling price as high (relative to the average cost) as that of the established firms. Alternatively, the entrants would have to incur large sales-promotion costs. The proxy commonly used to approximate the intensity of promotional effort is the ratio of advertising expenditure to total sales.[7] Our measure of the advertising-sales ratio is averaged for years 1970–1.

Since it can be expected that the ability to raise funds becomes progressively more difficult as the capital required for entry increases, we would expect the amount of capital requirements to be positively related to industry price-cost margins. In the LDCs where the capital markets are relatively imperfect, the ability of new unknown firms to obtain adequate financing may be limited.[8]

The amount of capital required for entry at the scale of a single optimal plant is obtained by multiplying the estimated minimum efficient scale to the ratio of net book value of fixed assets to output for each industry. Generally this proxy tends to understate the amount of capital requirements as the replacement cost of new assets tends to be higher than the book value.

[6] For a review of the kind of data required to make a meaningful adjustment see [37].

[7] The advertising-sales ratio will tend to understate the intensity of promotional effort where relatively heavy reliance is placed on other forms of sales promotion than advertising.

[8] Drake [12] has noted that the stock markets in Malaysia and Singapore tend to be highly selective. Well-established, large industrial firms, especially those of foreign origin, have considerable advantage in raising equity and debt capital over local, less well-known firms.

### Growth of Demand

One can expect that, other things being equal, the growth of industry sales exerts a positive influence on profit [17]. First, firms in industries experiencing rapid increase in sales are less likely to feel competitive pressure than those in industries facing stagnating demand where they might be compelled to get temporary gains. Second, in capital-intensive oligopolistic industries in which overhead costs are high relative to total costs, excess capacity resulting from slow growth or declining demand tends to cause breakdown in established price discipline, leading to lower price-cost margins [31].

### Import Competition

Recently Eposito and Eposito [13] have generalized the theory of conditions of entry to include the threat of potential entry by foreign producers. They have demonstrated that, under reasonable assumptions, a foreign entrant faces lower overall entry barriers than a domestic entrant, despite the fact that the foreign producer faces an additional tariff barrier.[9] Hence, to the extent that actual or potential import competition constrains the ability of domestic firms to reap monopoly gains, price-cost margins would be lower in industries facing a greater degree of competition from imports.

We employ the effective rate of protection (ERP) as a proxy to represent the height of barriers to entry faced by foreign competitors. Data on ERP is taken from Ariff [1].

### Export Opportunities

The existence of a competitive export market tends to compel monopolists (oligopolists) to adopt a more competitive pricing behaviour [9]. When export opportunities exist and at the same time if it cannot discriminate between domestic and world markets, profit maximizing behaviour leads to expansion in domestic production, part of which will be exported, resulting in the reduction of domestic price to international level.[10]

A similar prediction can be made on the influence of export markets on oligopolistic industrial performance. Caves and Jones [9, p. 212] have argued that oligopolistic sellers tend to encounter greater difficulty in achieving tacit collusion with foreign sellers than with their local counterparts, largely because of differences in market environment and the problems of communication. Consequently, they would be forced to adopt competitive pricing strategies when selling in international markets.

[9] The argument holds only if import quotas are non-existent or when quotas are not completely filled. In markets where quotas exist and are completely filled, entry by foreign sellers is effectively blockaded.

[10] The validity of the analysis rests on the assumption that the domestic monopolist is unable to price discriminate between foreign and local markets. Should the existence of trade barriers allow price discrimination, prices and profits are likely to increase with exports. From existing evidence, price discrimination by Malaysian manufacturers appear to be rare. An examination of relative prices of individual Malaysian manufactures (at 6-digit SITC level) by Johns [18] uncovered only one clear-cut case (hard soaps) of price discrimination.

In addition, the presence of alternative export markets may render oligopolists less conscious of their mutual interdependence in the domestic market, lessening the incentive for collusive price behaviour [28]. Export opportunities for each industry are approximated by the ratio of net exports to total industry sales.

**Direct Foreign Investment**

Horizontal direct investment is most likely to occur in industries marked by product differentiation and a relatively small number of sellers, that is, differentiated oligopoly [7, 8]. To the extent that DFI is considered the most effective vehicle for earning further rents on product differentiation assets, one can expect industries with larger flows of direct investment to have greater profitability. The magnitude of DFI in each industry is measured by the ratio of output attributed to foreign firms to total industry output, averaged over 1970–1.

**Administrative Controls**

Since 1968 the Malaysian government has instituted a series of measures to exercise control over private investment in the manufacturing sector. By the end of 1970 a total of thirty-one industries were closed to entry. Apart from the desire to reserve industries for indigenous equity participation, most industries were generally closed to further entry on the grounds that sufficient production capacity exists to meet domestic demand [16].

The system of controls creates an administrative barrier to entry and closed industries can be expected to have higher price-cost margins than industries not subject to administrative control. A dummy variable taking the value of 1 for closed industries and 0 for the rest is included in the regressions to test for differences in the intercepts of the two groups of industries.

The sample consists of forty-two 4-digit manufacturing industries classified under the MITC. The 4-digit ISIC industry, if properly screened, correspond nearest to the theoretical industry [5, p. 128]. The sample is chosen from a population of ninety-two 4-digit industries as reported in the 1971 Survey of Manufacturing Industries in Peninsular Malaysia. The major criteria used in selecting the industries for analysis is the availability of data on frequency distribution of output size classes from which the establishment concentration ratios are computed.

## STATISTICAL RESULTS

Table 1 presents the multiple regression equations relating price-cost margins to various combinations of structural variables for the sample of forty-two industries. In equation (1a) the coefficient of the seller concentration ratio, although exhibiting the expected positive sign, is not statistically significant from zero.[11] The non-significance of the concentration ratio in the context of multiple regression analysis can be attributed to multicollinearity among concentration ratio, economies of scale, capital requirements, and advertising-sales ratio variables. Theory suggest that a high level of market concentration is often caused and maintained by barriers to entry [27].[12]

[11] The non-significance of the concentration ratio is also encountered in some of the major studies for the advanced economies. See for example [11, 13, 17]

[12] The equation with concentration ratio regressed on the other three variables gives an $R^2$ of

TABLE 1
REGRESSION EQUATIONS EXPLAINING PRICE-COST MARGINS
*(Sample of 42 industries)*

| | Intercept | CR8 | MES | ACR | AS | XP | ETP | OWS | GR | ID | KO | Adjusted $R^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1a) | 0.1093 | 0.0171 (0.5697) | 0.6491 (6.2893)[a] | 0.0050 (3.1087)[a] | 1.3692 (5.0647)[a] | −0.0059 (2.3078)[b] | 0.0003 (1.8507)[b] | 0.0418 (1.2881) | 0.0232 (2.1125)[b] | 0.0701 (2.5044)[a] | 0.2411 (8.8733)[a] | 0.7933[a] |
| (1b) | 0.1709 | 0.0238 (0.7949) | 0.6086 (6.1279)[a] | 0.0051 (3.0791)[a] | 1.4485 (5.4469)[a] | −0.0050 (2.0142)[b] | 0.0003 (2.1503)[b] | | 0.0278 (2.6416)[a] | 0.0702 (2.4826)[a] | 0.2445 (8.9533)[a] | 0.7890[a] |
| (1c) | 0.1033 | 0.0519 (1.6269)[c] | 0.6016 (5.4093)[a] | | 1.4779 (4.9603)[a] | −0.0049 (1.7635)[b] | 0.0004 (2.5869)[b] | | 0.0309 (2.6379)[a] | 0.0900 (2.9152)[a] | 0.2568 (8.4760)[a] | 0.7284[a] |

Figures in parentheses are t values. The significance of the regression coefficients is tested using one-tail test and the significance of the coefficients multiple determination is tested using the F test.

a Indicates coefficient is significant at 1% level
b Indicates coefficient is significant at 5% level
c Indicates coefficient is significant at 10% level
CR8: 8-establishment concentration ratio
MES: Minimum efficient scale
ACR: absolute capital requirement
AS: advertising-sales ratio
ETP: effective tariff protection
OWS: ratio of output produced by foreign firm to total industry output
GR: growth of market demand
ID: dummy variable separating 'closed' industries from the rest
KO: capital-output ratio
XP: export-output ratio.

The proxies for the three types of entry barriers all have the theoretically expected signs and are statistically significant at 1% The economies of scale variable appears to be the strongest followed by the advertising-sales ratio. The significance of the latter can be questioned as industry sales appear in the denominator of the price-cost margins and the advertising-sales ratio, raising the possibility of spurious ratio correlation. However, it has been maintained that spurious correlation does not arise where the ratio themselves represent hypotheses to be tested [22, pp. 400–2].

The two trade-related variables come out with the expected signs and are both statistically significant at 5%. Exports have negative influence on industry price-cost margins whereas tariffs enable producers to reap high domestic profits. Direct foreign investment does not have the expected effect on industry profitability. The growth of market has a significant positive impact on price-cost margins.

Equation (Ib) is estimated without the DFI variable. However, the size of the coefficients and the level of significance of the remaining explanatory variables are unaffected. The capital requirement variable is excluded from equation (1c) in addition to DFI. The coefficient of concentration ratio is now significant at the 1% level.[13]

To evaluate the importance of buyer characteristics and other influences on the demand side of the market as sources of differences in price-cost margins, an analysis is made for two separate subsets of consumer goods industries and producer goods industries.[14] Table 2 presents the regression results for the two industry subsets. The coefficients of the concentration ratio in both the consumer goods and producer goods industries are not statistically significant from zero. The economies of scale variable is significant at 1% level in the consumer goods sub-sample but is non-significant at 5% level in the producer goods sub-set. The advertising-sales ratio appears as the most significant determinant of price-cost margins in the consumer goods industries whereas it turns out to be insignificant in the producer goods industries. This suggests the importance of product differentiation in creating markets are more characterized by quality specifications and other 'objective' purchasing criteria, with lesser emphasis on product differentiation by image and brand. The DFI variable is significant at 5% level in the consumer goods industries. The result indicates that product differentiation constitutes a major source of earnings from direct investment. The relatively few

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0.2505, significant at 5% level; the coefficient of ACR being significant at 10% level and the coefficient of the AS variable being significant at 5% level.

[13] The behaviour of the coefficient of concentration ratio when the capital requirement variable is present is symptomatic of the common estimation problem when explanatory variables are highly collinear.

[14] Separation of industries into consumer goods and producer goods industries follows the Kaysen and Turner classification [21, pp. 324–8]. Consumer goods categories include consumer durables and consumer non-durables. Producer goods categories include material input and investment goods industries. There are seven industries in our sample that do not fall into any of the Kaysen and Turner classifications. Categorization of these industries is made with the help of the Peninsular Malaysia Input-Output Tables for 1970. If 50% or more of an industry output goes to final consumption it is classified as consumer and if 50% or more goes to investment plus material inputs it is classified as producer goods. When no category is 50% or more, the industry is classified according to the largest output category.

TABLE 2
REGRESSION EQUATIONS EXPLAINING PRICE-COST MARGINS

| | Intercept | CR8 | MES | ACR | AS | XP | ETP | OWS | GR | ID | KO | Adjusted $R^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | *Sample of 24 consumer goods industries* | | | | | | |
| 2(a) | 0.0652 | 0.0408 | 0.6259 | −0.0022 | 0.9959 | 0.0335 | 0.0003 | 0.1240 | 0.0109 | 0.0444 | 0.2696 | 0.7802[a] |
| | | (0.8915) | (2.6946)[a] | (0.3582) | (2.9197)[a] | (0.72112) | (1.3204) | (2.2535)[b] | (0.7039) | (1.0677) | (7.5525)[a] | |
| | | | | | | *Sample of 18 producer goods industries* | | | | | | |
| 2(b) | 0.1309 | −0.0764 | 0.5071 | 0.0099 | 0.5509 | −0.0037 | 0.0003 | 0.0431 | −0.0014 | 0.0424 | 0.1741 | 0.8179[c] |
| | | (1.3545) | (1.9498)[b] | (0.6884) | (0.0372) | (1.1662) | (0.6125) | (0.5927) | (0.0452) | (0.8124) | (2.5101)[a] | |

*Notes:* Figures in parentheses are t values
a, b, c refer to levels of significance as indicated in Table 1
All abbreviations are the same as in Table 1.

significant variables in the consumer goods and producer goods equations is not totally unexpected in view of the small degrees of freedom in each industry sub-sample.[15]

## SOME POLICY IMPLICATIONS FOR THE THIRD MALAYSIA PLAN

There are two immediate policy objectives of the Third Malaysia Plan which are closely affected by the allocative performance of the manufacturing sector.

(i) *The objective of creating a competitive industrial environment that is consistent with the maximization of consumer welfare and the attainment of price stability.*

It is emphasized in the Plan that as the pace of industrialization develops, there is a need for 'progressive improvement of productivity, increases in the elasticity of supply, removal of artificial restraints on production and distribution, effectiveness in marketing systems and above all increases in the scope for full-play of competitive forces . . . ' [34, p. 137].

As is well known, monopolistic distortions in resource allocation result in welfare loss to the society. In a pioneering study, Harberger estimated the dead-weight loss in the United States manufacturing sector between 1924 to 1928 to be 0.06% of the GNP. Later studies, by adopting more realistic assumptions, have indicated the magnitude of welfare loss to be much greater. For instance, Scherer [31, pp. 403–4] has shown that if the vertical distortion effects are taken into account, the loss may be somewhere between 0.5% to 2% of the GNP. This suggests that attempts to reduce market imperfections could increase national product considerably.

(ii) *The goal of achieving a more equitable distribution of income and wealth.*

The excess profits earned in the manufacturing sector represent a redistribution of income away from purchasers of industrial products to the corporate shareholders. Existing evidence in the LDCs have shown that shareownership is concentrated in a small number of interest groups and individuals [38]. If a similar situation exists in Malaysia, the redistribution effect of market power would aggravate income inequality between higher income asset owners and the middle-level and low-income groups which constitute the bulk of the consumer population.

Our analysis has identified certain structural elements within the control of policy aimed at improving allocative performance. However it would be unwise to suggest wide-ranging policy prescriptions, given the assumptions underlying the analysis and the fact that the results are from one cross-section analysis.[16] Judicious dismantling of existing tariff structure would seem to be the most effective policy measure to promote more competitive market conduct. Import discipline is crucial in small domestic markets where concentration seems inevitable if excess capacity is to be avoided. Technical economies of scale barriers to entry, to some extent, can be overcome by the choice of appropriate technologies induced through corrective relative factor-price policies. Greater emphasis on export promotion would accelerate growth and also improve allocative performance in the industrial sector. Consumer welfare can be further enhanced at the same time minimizing wasteful use of resources through

[15] The size of the standard error of a regression coefficient varies inversely with the number of observations in the sample [35, p. 65].

[16] In a more optimistic tone, Bain has suggested that it is 'scientifically more satisfying to emphasize cross-section analysis' so as to strike 'directly at the goal of valid generalization' [5].

strict control over corporate advertising and other related product differentiation activities.

The Malaysian government has set up a large number of public enterprises to spearhead the participation of the indigenous community in the manufacturing activities [34, pp. 316–7]. These corporations could also be structured and managed in the way that could effectively counteract the market power of private firms in concentrated industries [32, pp. 283–6].

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## APPENDIX I

### A NOTE ON SOURCES OF DATA

All industry data are taken from the *Census of Manufacturing Industries, West Malaysia 1968* and *Survey of Manufacturing Industries,* 1969, 1970 and 1971 (Vols. I & II).

Data on exports and imports are from *West Malaysia Annual Statistics of External Trade,* 1970 and 1971 (Vols. I & II).

**Price-cost margins:** 1968 Census, Tables 2, 62, 67; 1969 Survey Tables 1, 72, 77; 1970 Survey, Vol. I Table 1, Vol. II Tables 313 and 317; 1971 Survey, Vol. I Tables 2 and 39, Vol. II Table 346.

**Concentration ratio:** the maximum and minimum output share of the largest eight establishments are computed from the following formulae:

$$C_m = \frac{A - (N - 8)F}{TO} \qquad C_n = \frac{8(A/N)}{TO}$$

where $C_m$ = maximum share of total output the largest 8 establishments can have

$C_n$ = minimum share of total output the largest 8 establishments can have

A = total output in the largest class size

N = the number of establishments in the largest class size. For N 8 the top 2 class sizes were combined

TO = total output of the industry

F = the lower limit of the largest class size

**The frequency distribution** of output size classes for industries is reported in 1971 Survey, Vol. II, pp. 2–277.

**Capital-output ratio:** net fixed asset data obtained from 1971 Survey, Vol. I Table 26.

**Minimum efficient scale:** computed from frequency distribution of output size class as reported in 1971 Survey, Vol. II, pp. 2–277.

**Advertising-sales ratio:** advertising expenditure from 1970 Survey, Vol. II Table 314 and 1971 Survey, Vol. 1 Table 39.

**Direct foreign investment:** data on total output produced by foreign establishments are obtained from Tables under the heading of 'Principal Statistics by Ownership', 1970 Survey, Vol. I and 1971 Survey, Vol. II.

# V. MANAGEMENT OF PUBLIC ENTERPRISES

# PUBLIC ENTERPRISES IN MALAYSIA: PROBLEMS AND PROSPECTS

R. Thillainathan

## INTRODUCTION

Since the formulation and implementation of the NEP, there has been a rapid and haphazard proliferation of public enterprises or agencies in Malaysia. As a result, many of the enterprises have encountered severe structural problems as well as economic difficulties. It is the aim of this paper to highlight some of these problems and difficulties.[1] On the structural side, the rapid proliferation of public agencies has led to the overlapping and duplication of functions in many areas of activity. This has in turn resulted, not only in difficult problems of coordination, but also in conflicts of interest and competition for scarce resources. On the economic side, many Malaysian public enterprises are bedevilled by economic difficulties. The sources of these difficulties can often be traced to inadequacies in project planning, delays in project implementation, inadequate or irregular supplies in raw materials, labour unrest, cash flow problems, poor management and small markets. Before we examine these problems at length, we will first look into the place public enterprises occupy in the Malaysian economy.

Since the launching of the SMP, the importance of public enterprises in the Malaysian economy has increased enormously. This increase in their importance can be attributed to their being used as an instrument for reducing inter-racial economic differences in the country. The various distributional targets set under the NEP, such as the ownership and employment of composition targets, cannot be obtained if exclusive

[1] For details and substantiation the reader is referred to my two studies which dwell among other things, into some of these issues. The two studies are as follows: – 'Malaysia' (Country Study) in Nguyen Truong, *The Role of Public Enterprise in National Development in Southeast Asia: Problems and Prospects*, Singapore, Regional Institute of Higher Education and Development, 1976, pp. 1–149; and 'An Analysis of the Effects of Policies for the Redistribution of Income and Wealth in West Malaysia 1957–1975' Ph.D. Thesis, London School of Economics, 1976.

reliance is placed on the private sector including the Malay-owned private sector. It is in order to overcome this likely shortfall that the public sector is venturing out into commercial and industrial ventures. The shares in these ventures are being held in trust for Malays until such time as they are able to buy them over from the State. At the same time, discriminatory employment practices in favour of Malays are being instituted to enable them to acquire managerial experience and skills.

The increased importance of public ownership in the country can be seen readily from the mushrooming of public agencies in recent years. The rate of proliferation of such agencies has been so rapid that it has been difficult to keep track of all of them. However, one can gauge the magnitude of this transformation from the volume of funds allocated to some of the major public enterprises in agriculture and industry, as shown in Table 1. The increase in the allocation of public funds to these public enterprises is indeed substantial.

## STRUCTURAL PROBLEMS OF PUBLIC AGENCIES

This section discusses some of the structural problems associated with the mushrooming growth of public agencies in the country. This can be quite vividly illustrated both at the state as well as the federal level.

At the state level, Pahang merits special mention. It boasts of no less than six state corporations. They are as follows: the State Economic Development Corporation (SEDC), the State Agricultural Development Corporation (SADC), the Jengka Development Corporation (JDC), the Pahang Tenggara Development Corporation (PTDC), the Pahang Investment and Industrial Co. Ltd and the Frasers Hill Development Corporation. It is not difficult to justify the existence of separate corporations for planning and coordinating development in the Jengka and Pahang Tenggara regions.[2] However there does not appear to be a case for the establishment of an SADC, when a general development corporation in the form of the SEDC exists in the state. In this regard, Pahang was the first state to set up such an SADC and its example has been followed by Perak and Selangor in recent years. The Pahang experience is interesting, as the SADC in that state seems to be undertaking activities which are being performed quite adequately by the SEDCs in the other states. In fact the SEDCs in other states go further by engaging in commercial and industrial projects. Similarly, there does not seem to be a need for a separate state investment and industrial company as an investment arm of the state since it undertakes only joint-venture projects, which function can be adequately performed by the Pahang SEDC.

This being the case the setting up of separate state corporations, each specializing in particular projects, industries or sectors, does not seem to be justified at the state level at this juncture. This becomes even more apparent when one notes that the scale of operations of many SEDCs themselves are small (both at the individual project level as well as at the aggregate level) and that such operations are usually undertaken on a joint-venture basis. In fact the existence of small separate corporations for each

[2] See my study on 'Malaysia' in N. Truong, *op. cit.*, Part I, Section V.

TABLE 1

ALLOCATION OF PUBLIC DEVELOPMENT EXPENDITURE AMONG PUBLIC ENTERPRISES

| | | $ Million | | |
|---|---|---|---|---|
| | | 1966–1970 | 1971–1975 | 1976–1980 |
| I | *Land Development* | | | |
| | 1. FELDA | 248.4 | 645.1 | 985.0 |
| | 2. FELCRA | 25.4 | 49.4 | 85.5 |
| | 3. Public estates | 34.8 | 61.3 | 47.0 |
| | 4. Land Development Boards | | 164.8 | 497.1 |
| | 5. Jengka Triangle | | 107.8 | 96.2 |
| | 6. Pahang Tenggara Development Authority | | 47.3 | 142.2 |
| | 7. Johore Tenggara Development Authority | | 40.1 | 89.4 |
| | 8. Trengganu Tengah Development Authority | | 5.5 | 63.5 |
| II | *Drainage & Irrigation* | | | |
| | 1. MADA | 204.0 | | |
| | 2. KADA | 40.0 | | |
| III | *Credit & Marketing* | | | |
| | 1. Bank Pertanian | 3.0 | 50.0 | 75.8 |
| | 2. Farmers' Organization Authority | | 17.6 | 95.3 |
| | 3. Co-operatives | 0.4 | 0.4 | 5.0 |
| | 4. FAMA | 10.4 | 4.9 | 26.9 |
| | 5. National Padi & Rice Authority | 9.3 | 56.6 | 29.4 |
| IV | *Commerce & Industry* | | | |
| | 1. PERNAS | 10.0 | 150.0 | 200.0 |
| | 2. MARA | 50.9 | 205.3 | 315.0 |
| | 3. SEDCs | | 227.5 | 423.8 |
| | 4. UDA | | 194.5 | 217.0 |
| | 5. MIDF | 16.0 | 100.0 | – |
| | 6. MARDEC | 2.6 | 60.6 | 132.9 |
| | 7. MISC | 10.1 | 113.0 | 11.0 |

*Sources: FMP, SMP, TMP.*

industry or sector will not make for the effective utilization of the available managerial and technical skills and is only likely to aggravate the problem of personnel shortage, which presently characterizes the Malaysian economy.

It is therefore obviously sensible to avoid the creation of a number of separate corporations at the state level, each requiring separate enactments, separate boards and separate staff. These are bound to duplicate each other's activities. In practice, three or more members of each board would be the same individuals – the *mentri besar*, the ex-officio members (the state secretary, the state financial officer and/or the state legal advisor) and almost certainly some of the other members appointed by the Ruler-in-Council. It is clearly preferable to set up a single corporation, with one board and one director, which can create subsidiaries or divisions without separate enactments, and which can provide services required by several projects from its headquarters, professional and technical staff.

If proper caution is not exercised in this direction, and public agencies are allowed to proliferate the economic scene at the state level, as is apparently developing in Pahang, the SEDC may figure not 'merely as one of the many bits and pieces constituting the jumbled mosaic of the "headless fourth branch" of the government',[3] but it may also become just one of the several 'marginal entities' with limited resources for allocation among scattered industrial and agricultural projects.

In the face of too many public agencies, the potential for inter-agency rivalry is also obvious. The SADC in Selangor, for instance, is to undertake the development of a livestock industry and to engage in agricultural marketing. When the National Livestock Industry Development Authority (NFIDA) and the Federal Agricultural Marketing Authority (FAMA) exist, one may well ask if there is a need for separate corporations to fulfill the same functions at the state level? In fact, there is every likelihood that the existence of both a federal and a state corporation, established under separate laws but undertaking the same functions, is likely to result in rivalry and conflicts between them – since their spheres of activity cannot properly be demarcated. Even where there is a strict demarcation of their respective spheres, there will be problems of coordination, redundancies *etc*. Such a rivalry and conflict has already manifested itself in other instances. UDA, which is a federal corporation, is concerned with urban development and renewal. Similar tasks are performed at the state level by the SEDC. In this context, a conflict has arisen between the UDA and the Selangor SEDC over the use to which the Pudu gaol site in Kuala Lumpur is to be put as there are plans to resite the gaol complex.

In recent years it has also become fashionable for the government to set up public corporations, designed for the specific purpose of taking over development functions from the regular government departments. The best examples of these corporations are the Tourist Development Corporation (TDC), the National Fisheries Industry Development Authority (NFIDA) and the National Livestock Industry Development Authority (NLIDA) and the government departments which have been affected in the process are the Divisions of Tourism, Fisheries and Veterinary affairs. A.H. Hanson has warned that this large-scale 'contracting out' of so-called development

[3]See A.H. Hanson, *Public Enterprise and Economic Development*, London, Routledge & Kegan Paul, 1965.

functions to public corporations can result in the reduction of government departments into 'hollow shells'.

The consequent problem of redundancy is best illustrated by FAMA, itself a public corporation. With the pulling out of the paddy and rice marketing board as well as the fish marketing board from FAMA, the latter has been reduced to undertaking 'surveys and investigations on various aspects of the marketing of agricultural produce'[4] and operating the agricultural produce marketing board and the pepper marketing board. The agricultural produce marketing board was only set up in May 1972, to manage and control the marketing of all minor agricultural crops such as coffee, coconut, *etc.* The pepper marketing board was set up in September 1972 to devise a proper grading system for the commodity, and to license dealers and exporters – to overcome the domestic and external marketing problems of the commodity.[5] In comparison with the control exercised over the marketing of paddy and rice by the National Rice and Padi Board (LPN), the functions vested with the new FAMA marketing boards are indeed minor – and possibly have been undertaken to justify the very existence of FAMA itself. One wonders what will happen to FAMA if special development authorities are also set up for pepper as well as the other minor agricultural produce – as is not unlikely, given the recent trends that are emerging in the public sector in the country.

One of the most difficult problems arising from the proliferation of public agencies in the country is that of coordination. The term 'coordination' between public enterprises has alternative meanings. At the highest level, coordination means common subjugation to the directives of the national economic plan. This is a matter to be decided by the government and the planning agency. The planning and pacing of overall development, especially in the public sector, will depend on some critical factors such as the construction capacity of the state, and the rate of supply of such state-provided intermediate inputs as electricity, water, telecommunications and transport services. Moreover, the sectoral pattern of development given these critical factors will depend on the order of priority that is adopted by the government. This will no doubt be reflected in the national economic plan. Thus if emphasis is placed more on commodity production than on the provision of social services, then the limited construction capacity of the state will be utilized for jungle clearing and the construction of related infrastructure facilities for the planting of such commodities as rubber and oil palm rather than for building more schools and hospitals. Given the accelerated rate of development to which the government has committed itself since the SMP, the authorities have to plan not only for an expanding supply of these critical inputs but also for its coordinated provision to different sectors and enterprises in accordance with some well-conceived ordering of national priorities. If the allocation of the available supply is not based on such priorities, the resultant misapplication of resources will adversely affect efficiency and hence also the rate of economic growth.

At the ministerial level, coordination can mean the formulation and implementation of objectives for a whole area of the economy falling under the supervision of a particular ministry e.g. industry, agriculture and service. The responsibility for such

[4] See Bank Negara, *Annual Report*, 1972.

[5] *Ibid.* p. 118.

coordination is, of course, that of the Minister himself, who can facilitate it by the use of various committees composed of the top-level personnel of the public enterprises within the scope of his jurisdiction. In Malaysia, however, there is no such coordination at the ministerial level. Such coordination is made all the more difficult by the fact that some of the enterprises have not been allocated to the Minister within whose sphere of jurisdiction they naturally lie. This applies to many of the state companies in the industrial sector, which have not been directly placed under the Ministry of Trade and Industry, and to some public enterprises in the agricultural sector, which do not come under the Minister of Agriculture.

At the enterprise level, there is scope for organized inter-enterprise relationships, especially where one public enterprise is related to another as customer or supplier. In Malaysia, there is provision for such inter-enterprise coordination, through the instrument of overlapping directorship i.e. through the appointment of one man to the boards of several different but related enterprises. This has often been carried to extremes, as there are quite a few instances of persons, especially civil servants, holding even ten or more directorships. One wonders whether such persons can really discharge their duties and responsibilities to the different enterprises on whose boards they sit, particularly because they also invariably hold full-time jobs (as in the case of civil servants). There is also provision for special organs of inter-enterprise coordination, such as coordinating committees in some enterprises. Among others, FELDA and MADA have such coordinating committees, mainly comprising representatives of other public agencies which supply services in their project areas. In some instances, a whole enterprise is established and empowered just to coordinate the activities of other agencies in its project area, without being vested with operational functions. This is of course the case at least as originally envisaged with Pahang Tenggara Development Authority (PTDA) and the Johore Tenggara Development Authority (JTDA).

But there are also areas where little scope has been provided for coordination of related enterprises. For instance, in the paddy and rice industry, there is no formal machinery for the vertical coordination of public enterprises engaged in the different stages of production in the industry, such as production, milling and marketing. This is a serious omission, one which can only be attributed to the shortcomings and short-sightedness of our policy-makers and planners – and a glaring one at that, as this industry has witnessed the most rapid proliferation of public agencies, as compared to any other industry, in the economy. There is also very little or no inter-enterprise coordination of the horizontal type among the SEDCs, which are engaged in some competitive activities, as is amply evidenced in their respective industrialization programmes. However, there are organs of coordination for SEDCs above the enterprise level but below the ministerial level – which are concerned with minimizing wasteful competition between SEDCs and providing them with federal resources.

Thus, in short the rapid proliferation of public agencies has made for the duplication and overlap of functions in many areas. At the same time, it has caused monumental problems of coordination of their activities. This is only too clear if we examine, for instance, the paddy and rice industry.[6] The rationalization and re-organization which have been undertaken to-date in this industry still have not

[6] See my study on 'Malaysia' in N. Truong, *op. cit.*, Part I, Section II.

eliminated the root cause of the problem — that of the existence of too many redundant agencies and policies. As we have already discussed this problem at length elsewhere,[7] this point will not be laboured here. All that needs to be reiterated is that, if the problem of coordination is not to become an unmanageable one, one important condition is to check the rapid and almost chaotic proliferation of public agencies in Malaysia.

## ECONOMIC PERFORMANCE OF SOME PUBLIC ENTERPRISES

Public sector investment was initially directed into agriculture, but now it is also being channelled into industry. In agriculture, the public investment has been concentrated in rubber replanting schemes, construction of irrigation facilities for the double-cropping of paddy and the development of land resettlement schemes for the cultivation of rubber and oil palm. In industry, the type of activities undertaken are many and varied.

From our study, it appears that the cultivation of export-oriented agricultural activities such as oil palm and rubber is economically viable. This is not so with many import-competing activities, including some manufacturing activities. This is readily evident from our estimates of rates of returns, which are shown in Table 2. For instance, the social rate of return of FELDA oil palm scheme is 28% whereas that on the integrated sugar project in Negeri Sembilan is only 4%.

In so far as agriculture goes, the results shown in Table 2 are fairly 'representative' of the returns that are likely to be obtained elsewhere in the economy from investment in oil palm and rubber production and from investment in irrigation facilities for padi production. This has been ensured by appropriately standardizing for inputs and outputs in our project studies. In so far as industrial projects go, differences in the scale and technique of production, design and such other factors may reduce the representative character of our results. Nonetheless our findings do provide some interesting insights into the inadequacies of the Malaysian public sector in its newly-acquired role as an industrial entrepreneur.

It will also be readily evident from Table 2 that the imposition of export/import duties serve to reduce the private profitability on agricultural production for export and raise the private profitability on import-replacement activities. Such a pattern of duties appear to divert resources from socially profitable export production into not so profitable import replacement activities. In fact in the 'sixties only 50% of the land alienated to the private sector for agricultural purposes was developed. This may have been caused by the unfavourable market prospects for rubber as well as the adverse impact of rubber export duties.

On the basis of our preceding discussion and the results displayed in Table 2, we can safely assert that the public-sector sponsored rubber replanting scheme as well as the diversification programme based on the cultivation of oil palm have proved to be highly successful. This does not appear to be the case with some of the industrial undertakings. This may be accounted for by the relative inexperience of the public sector in undertakings of this nature. Nonetheless, given the massive investments embodied in these public-sector sponsored industrial projects,[8] there is need for

[7] *Ibid.*

[8] For example the investment in each of the integrated sugar complex is around $100 million.

TABLE 2

PRIVATE AND SOCIAL RATES OF RETURN FOR SELECTED PUBLIC SECTOR PROJECTS

| | Private Rate of Return[a] | | Social Rate of Return[c] |
|---|---|---|---|
| | Before Duty[b] | After Duty[b] | |
| *Export-Oriented Activities* | | | |
| I. Oil palm scheme | 21.21 | 17.23 | 28.10 |
| II. Rubber scheme | 8.04 | 4.44 | 13.45 |
| *Import-replacement Activities* | | | |
| III. Irrigation scheme | 3.03 | 7.34 | 6.80 |
| IV. Integrated sugar project | −2.90 | 7.85 | 3.92 |
| V. Fishmeal project | −0.59 | 4.77 | 5.96 |
| VI. Integrated textile mill | 5.51 | 14.79 | 9.96 |

*Notes:*

[a]The private rate of return is the internal rate of return of the project at market prices. We shall use the abbreviation IRR to denote the internal rate of return from henceforth.

[b]The private rate of return after duty gives the IRR of the various projects after netting out export duties and cess payments from f.o.b. prices and adding on import duties to c.i.f. prices. Both palm oil and rubber are export commodities and bear export duties as well as replanting and research cess. On the projected f.o.b. prices of palm oil of $425 per ton, the export duty is 10% and the replanting and research cess is currently levied at a flat rate of $6 per ton of fresh fruit bunches (F.F.B.). The export duty on rubber on the projected price of 45 cents per lb is 4% and the replanting and research cess works out at 5½ cents per lb. For the industrial projects, the private rate of return has been calculated on the basis of the following tariff rates: sugar 30% fishmeal 10% and cloth 25%. Rice is assumed to bear an import duty of 30%.

[c]The social rate of return is the IRR of the project at shadow prices.

extra care and planning in deciding on industrial projects. Some of the problems and difficulties encountered by public enterprises in this area could have been avoided if there had been the same meticulous planning that seems to characterize our efforts in the agricultural sector. In this context, some of our resource-based industrial projects are often confronted by an inadequate or irregular supply of critical raw materials. With respect to other projects there is sometimes an underestimation of investment requirements, which can eventually result in severe cash flow problems for the enterprises concerned. In the case of yet other projects, delays in construction and implementation can prolong the capital recoupment period, thereby lowering the rate of return on their investment. In this way we can enumerate other problem areas. What has already been enumerated above should suffice as illustrations for our purposes.

However, it will be useful to refer to some concrete examples here. For instance, the fishmeal project listed in Table 2 is highly automated and is very large compared to other fishmeal enterprises in the country. The capital investment per worker for this

project is $80,000.[9] On the other hand, the corresponding figure for the manufacturing sector as a whole is only $20,000. Also, on account of inadequate or irregular supply of trashfish (partly caused by the location of the project in the East Coast and the volatile monsoon weather) only 10% of its capacity is being utilized presently. These factors have no doubt made for the low return on investment for this fishmeal project. As regards the sugar project investigated here, it has encountered a more severe squeeze on its cash flow on account of substantial cost overruns. At the same time, although two years have elapsed since its refinery became operational, only half the required cane plantation for the project has been developed to-date. This will undoubtedly prolong the capital recoupment period for the costly investments associated with the project's milling complex. The feasibility report on this project had provided that the planting and harvesting of canes will be done manually, but on account of subsequent labour problems, about 80% of these operations have had to be mechanized. This has in turn led to steep increases in the cost of land development. This is because not only has the land to be cleared of its jungle, but also it has to be cleared completely of all stumps and roots to facilitate mechanized farm operation. To compound these problems, it has also been discovered that the soil in the project area is poorer than initially anticipated and the consequent need for more fertilizers has led to a steep rise in cane planting cost. Given these numerous difficulties, the dismally low rate of return for the sugar project is not surprising.

The poor performance which has characterized many of the industrial enterprises undertaken by the public sector is not something inherent to this mode of ownership or operation. As our 'case' projects amply testify, their poor performance is simply due to defective planning and foresight on the one hand and poor management on the other. In the case of sugar project, although tens of millions of dollars were entailed in its construction, the feasibility study was done in a rush i.e. within three months. Also the study was undertaken by an interested party, one who was not only to collaborate in the project but also who had the contract to supply the expensive machinery. The weakness of the fishmeal venture can also be traced to poor planning, as manifested by the unfamiliarity of the project planners with the basic conditions in the Malaysian fishmeal Industry.

## CONCLUSION

In this study, we have noted the tendency of public enterprises to multiply at a rather rapid rate in Malaysia in recent years. This tendency has produced a great many undesirable consequences. On the structural side, the proliferation of public enterprises or agencies has led to the overlapping or duplication of functions in many areas of activities, inter-agency rivalry and competition, problem of redundancy and to difficult problems of coordination. If this tendency is unchecked, it is likely to undermine the effectiveness of public enterprises in attaining their assigned objectives. It has also been argued in this study that some of the public-sector activities undertaken in

[9]Despite the $1 million investment, only twelve workers are employed. Where such capital-intensive projects are chosen, the scope for employment generation will be limited. Hence it will be difficult to ease the country's unemployment problem.

the country are not economically viable. Where the activities are not viable, the rates of return on investment can be low, and there is an added possibility that even the capital invested in these programmes may not be recoverable. Where public sector activities do not generate an investible surplus of funds, to that extent the financing of new activities becomes more difficult. To overcome this problem there is a need for ensuring that public investments are productive. This can be ensured by subjecting all public sector projects to a cost-benefit analysis and selecting only those projects which can yield at least a normal rate of return on investment. We have the data and the resources to make the cost-benefit technique usable in the Malaysian context. Recent advances in the technique do allow allocative as well as distributional considerations to be taken into account in a project evaluation exercise. If such evaluations had been carried out, the costly failures of Gula Perak, the pineapple cannery in Johore and other similar projects which involve multi-million dollar investment could have possibly been avoided.

# PUBLIC ENTERPRISES IN MALAYSIA: PERFORMANCE AND PROSPECTS*

Raja Mohd. Affandi

The purpose of this study is to review the role and performance of public enterprises in Malaysia during the SMP period and to discuss the role assigned to them by the government under the TMP. It also attempts to highlight some of their problems and to suggest some means of overcoming them to improve their performance.

For the purpose of this study public enterprises are defined as industrial, agricultural, financial and commercial undertakings which are owned and controlled by the central government (in a unitary state) or by the central and regional governments (in a federation).[1] These undertakings must possess commercial characteristics in that they must sell goods or services and they must finance all or part of their operations out of such sales. With regard to 'mixed enterprises' the criterion employed is that of government control, even though the government may own less than 50% of the shares of the enterprise.

Managing public enterprise is a new experience to Malaysian administrators. Although some public enterprises in the form of public utilities like the National Electricity Board (1949) and the Malayan Railways (1948) were set up about thirty years ago, most of them, especially those dealing with commerce, finance and industry, are of recent origin. Out of 82 public enterprises at the end of 1974, 67 (more than 88%) had been set up since 1965, while 29 (35%) were established only five years ago (since 1971),[2] that is, during the SMP period. Most of the problems relating to the

*The views expressed are the author's personal views and do not necessarily reflect the views of the Implementation Coordination Unit of the Prime Minister's Department.

[1] A.H. Hanson, *Public Enterprise and Economic Development*, London, Routledge & Kegan Paul, 1965, p. 115. See also *Organization and Administration of Public Enterprises: Selected Papers*, New York, United Nations, 1968, p. 1.

[2] Raja Mohd. Affandi, 'Coordinating Public Enterprises: Country Study For Malaysia', Paper presented to ACDA Seminar, Kuala Lumpur, September 1975 (Appendix I, pp. 99–106).

management of public enterprises were due to this newness. To manage public enterprises requires new attitudes and skills. No longer is it adequate for public administrators to see that the laws were complied with and peace maintained in society. They now had to manage economic enterprises in competition with private enterprises so as to make profits and achieve socio-political objectives of the government. In the absence of experience and precedents, the administrators had to learn on the job, and in this process of learning, mistakes were unavoidable but experience was also gained. The overall shortages of qualified manpower in a developing country like Malaysia further added to the problems of managing public enterprises. As such, any discussion of the performance of public enterprises in Malaysia must always bear in mind these two facts of newness and shortage of qualified manpower.

Most of the public enterprises were established in order to help solve the problem of racial economic imbalance, to promote Malay economic development and regional development. This role of the public enterprises is clearly stated in the *SMP*,[3] and the public enterprises set up were assigned a big role in correcting racial and regional economic imbalance in order to help achieve the government's objective of national unity.

One difficulty in discussing the performance of public enterprises in Malaysia is the lack of comprehensive published statistics regarding them. One study has shown that at the end of December 1974, there were 45 public enterprises owned by the federal government with 37 wholly-owned subsidiaries and 93 joint ventures, with equity participation ranging from 20% to 80%. In addition, there were 37 public enterprises owned by the thirteen state governments with 28 wholly-owned subsidiaries and 92 joint ventures with equity participation ranging from 10% to 90%.[4] In 1975, no new public enterprises was established but a few more subsidiaries of the existing enterprises were set up.

## EVALUATION OF MANAGERIAL PERFORMANCE

### Criteria of Evaluation

There is general agreement that the performance of public enterprises should be assessed, but no generally acceptable criteria of measurement have been found. This has given rise to controversy regarding the performance of public enterprises in other countries and those in Malaysia have not escaped. The debate is always between profitability and the achievement of social objectives. J.K. Galbraith pointed out that in developing countries, there seemed to be a general feeling that profit maximization, the yardstick of success of private enterprises, was not acceptable as a measure of performance of public enterprise because public enterprises had other social goals.[5]

However, G.C. Maniatis felt that profitability should still be used as measurement for performance of public enterprises. He stated:

> Indeed, the profitability norm, besides its unquestionable simplicity, is an objective and dependable test as it is based on the measurement of a one dimensional effect

[3] *SMP*, pp. 7–8, paras. 26–28.

[4] Mohd. Affandi, *op. cit.*, pp. 2–3.

[5] John K. Galbraith, *Economic Development*, Cambridge, Mass., Harvard University Press, 1964, p. 96.

> encompassing the entire spectrum of the determinants of efficiency (e.g. initiative, economy, organization, technique, adaptability, ingenuity, flexibility, etc.). Thus, it is divorced from value judgements and 'educated guesses'. More important, the profitability standard ensures a constant effort to reduce costs, since it provides the proper incentives to management to become enterprising and makes for continuing efficiency.[6]

To take into account the social goals of public enterprises, he suggested that a clear distinction should be made between the commercial and social elements of the corporate operations and that the enterprise should be entitled to recoup any extra costs or foregone revenue as a result of social considerations by direct compensation through an explicit subsidy from the government. However, he recognized that such a procedure would be opposed politically and might also encourage managerial inefficiency.[7]

To J.K. Galbraith, the measure of performance of public enterprise should be its success in developing earnings 'that allow it the greatest growth',[8] because one of the major functions of public enterprise was to promote industrial development. The use of this measurement implied that the enterprise must always have surplus or profits, and did not take into account the possibility that a public enterprise might have to sustain losses in order to achieve some other national objectives.

Other writers tend to view profit-making as being secondary and emphasize national goals. A.H. Hanson for example, would permit profit-making 'only if the enterprise is able to make its profits as a result of efficiency and not through exploiting a monopoly position and also if it can do so without putting up prices to the consumer to such an extent that demand becomes unreasonably depressed'.[9] He does visualize cases where the national economic interest might require an enterprise to be run at a loss, as, for instance, to enable impoverished rural dwellers to purchase fertilizers or electricity. H.S. Schloss proposed that social cost benefit analysis be used to assess the performance of public enterprise, although he recognized difficulties in implementing it given the present stage of knowledge.[10] S.S. Khera listed five essential aspects according to which public enterprises should be measured. These were adherence to a given policy; achievement of fixed objectives and targets; adopting of certain methods of management functioning; economical use of resources; and the maintenance of a high standard of quality in the product manufactured.[11]

[6] George C. Maniatis, 'Social calculus, profitability, and the conduct of public corporations', *The American Journal of Economics and Sociology*, Vol. 29 No. 3 (July 1970), pp. 228–9.

[7] *Ibid.*, p. 235.

[8] Galbraith, *op. cit.*, p. 98.

[9] A.H. Hanson, *Managerial Problems in Public Enterprises*, New York, Asia Publishing House, 1962, p. 133.

[10] Henry H. Schloss, 'Productivity in public enterprises', *Annals of Public and Cooperative Economy*, Vol. 41 (Oct/Dec. 1970), p. 230.

[11] S.S. Khera, *Government in Business*, Bombay, Asia Publishing House, 1963, p. 323.

The shortcomings of all the measurements proposed by the above writers were inherent in their approach. They tried to find a single or a few measures applicable to all public enterprises. This approach was not suitable because there were various types of public enterprises performing various functions and they need to be measured differently. Different sets of criteria should be used to measure different types of public enterprises. For example, a public utility like an electricity corporation cannot be compared to an agricultural enterprise, nor can a regional development agency be compared with a manufacturing enterprise.

What should be done is first to categorize the types of public enterprises and then to find different sets of criteria for different types of public enterprises.

**Types of Public Enterprises**

For the above purpose I would suggest that public enterprises be categorized into nine functional types, as follows:

1. **Public utilities** like agencies providing electricity. There were four such enterprises in Malaysia in 1975.
2. **Transport and communication agencies** like port authorities, railways, airlines. There were eleven such enterprises in 1975.
3. **Multipurpose regional development agencies.** There were eighteen such agencies in 1975.
4. **Cultural agencies,** like broadcasting stations and publication agencies. There were only two such agencies in 1975.
5. **Promotional and financial agencies.** The function of these agencies is to promote and finance the development of enterprises both private and public. Examples of these are the various types of banking and credit corporations and insurance companies. These agencies do not necessarily operate enterprises, but do provide technical advice and financial help to such enterprises. In 1975, there were eighteen such agencies.
6. **Strategic industries.** In this category are placed industries considered very important to the country, either for military or for economic purposes. Examples of these strategic industries are those engaged in the production of atomic energy, weapons and ammunitions, iron and steel, and petroleum. In 1975, there were only three such enterprises.
7. **Manufacturing enterprises.** These range from the processing of agricultural produce like the canning of pineapple to the manufacture of electronic equipment. In 1975, there were five enterprises wholly engaged in manufacturing but the eighteen regional development agencies also carried out some manufacturing activities.
8. **Trading enterprises.** In this type of undertaking, the public enterprise buys and sells agricultural or industrial products like any other private trading company, but sometimes they are given monopoly in certain products. There were eighteen subsidiaries of public enterprises carrying out trading activities in 1975.
9. **Agricultural enterprises.** There are some countries whose governments own and operate large-scale agricultural enterprises such as rubber and oil palm plantations. The governments may have developed these from the very beginning or may have taken them over from private enterprises through nationalization. In 1975, there were twenty-one such enterprises.

By using the above classification, it will be easier to find some common criteria as the yardstick of performance evaluation of enterprises within each group.

**Concepts of Productivity and Effectiveness**

To find different sets of criteria of measurement suitable for different types of public enterprises, I would suggest using the concepts of *productivity* and *effectiveness* used in Swedish effectiveness auditing.

By productivity is meant the ratio between the quantity of goods and services produced and the quantity of (or costs of) production resources consumed. It can refer to the entire agency organization or just to parts of it.[12] This is not tied to the concept of profitability. Thus an enterprise can have high productivity but incur losses due to the provision of social services. High productivity is the result of what A.W. Johnson called administrative efficiency, that is the result of reducing administrative expenses, eliminating waste and extravagance and speeding up service to the public.[13] An easy way of measuring productivity is to compare unit costs of public enterprises with similar enterprises in the private sector.

The other concept which should be used together with the concept of productivity is the concept of *effectiveness*. By this is meant the ratio between the expected or achieved result and the cost involved in achieving a specified goal.[14] For example, if the goal of a land development agency is to solve the problem of landless people in a country, then its achievement in opening up new lands and resettling people must be assessed against this goal. In order to facilitate measurement, the goal must be made more specific by breaking and quantifying it (where possible) into subgoals and targets.

It is suggested that in working out these sets of criteria there be open discussion between the Implementation and Coordination Unit, the Economic Planning Unit, the Treasury, the relevant ministries and public enterprises. By having open discussion between these organizations a consensus regarding suitable criteria of measurement can be worked out and made acceptable to all concerned. For example, a possible set of criteria of measurement for a food manufacturing enterprise having the objectives of redressing regional and ethnic economic imbalances can be formulated as follows:

*Activity:*

1. Canning fruits grown on its own plantation as well as those grown by smallholders.

*Output:*

1. Canned fruits.
2. Ensuring steady price of fruits to smallholders.

*Productivity criteria:*

1. Cost of production per can of fruits compared to that of a private producer.

[12] Swedish National Audit Bureau, *Effectiveness Auditing*, Stockholm, 1971, p. 57.

[13] A.W. Johnson, 'Efficiency in government and business', *Canadian Public Administration*, Vol. VI No. 1 (March 1963), p. 247.

[14] Swedish National Audit Bureau, *op. cit.*, p. 57.

*Effectiveness criteria:*

1. A moderate rate of profit e.g. 8% per year.
2. A steady and reasonable price to smallholders.
3. Number of indigenous people given employment and on-the-job training.
4. Dispersal of factories into less developed regions.
5. Extent of transfer of ownership of enterprise to indigenous people.

Once these sets of criteria have been worked out, they should be disseminated to all government agencies as well as the public, and they should be the basis for evaluating the performance of these public enterprises. If the criteria is worked out thus, it will be in line with the suggestion of J.K. Galbraith that 'the goals of public enterprises, whatever they may be, should be specific, measurable, known to all and firmly enforced'.[15] In line with this too, the government should be unremittingly firm in asking the public enterprises to meet these criteria of performance.

**Performance of Malaysian Public Enterprises**

There is no overall study of the performance of Malaysian public enterprises. What exist are a few scattered references regarding their performance based on different criteria in various publications. In the absence of comprehensive information regarding this matter, it is useful to consider some of these references to gain some insight into the performance of these enterprises. In addition, in the face of absence of per unit figures showing comparison between public enterprises and similar private enterprises, it may be appropriate to use the profitability or losses of public enterprises as indicators of their performance because profits are generated to a large extent through the efficiency of the management of the enterprises.

In 1972, M.J. Esman commented that :

> While some of the corporations have behaved very much like regular government agencies, several have generated administrative innovations (Central Bank, Port Swettenham Authority), some have operated their programs with a high degree of technical competence (Rubber Research Institute, National Electricity Board), others have pursued their developmental activities aggressively (FLDA, Selangor State Development Corporation). Their managers are unanimous in attributing their success to freedom from normal Treasury, Public Services Department and ministerial controls. While they have become enclaves of modernization, their innovations have not spread.[16]

[15] Galbraith, *op. cit.*, p. 98.

[16] M.J. Esman, *Administration and Development in Malaysia*, Ithaca, Cornell University Press, 1972, p. 89.

Earlier studies of FELDA by scholars like Robert Ho,[17] Gayl D. Ness,[18] Tunku Shamsul Bahrin,[19] Jaafar bin Awang,[20] Keith Emmerich,[21] while noting some administrative deficiency, have lauded its performance in terms of productivity. In 1965, Robert Ho noted

> . . . that the Authority's costs for establishing cash crops such as rubber average $300 per acre. This is only 7% higher than median plantation (private enterprise) costs. The FLDA achievement here is more creditable when viewed against its ability to plant 5,000 new acres annually. Malaysian estates seldom attempt replanting or new planting of more than 2,000 to 3,000 acres each year, and this with resources of labour and technical skills which FLDA has to purchase on contract.[22]

A report by the Management Analysis Unit of the Public Services Department in 1970 had the following comments on the National Electricity Board:

> . . . our very clear impression is that the NEB is a progressive organization. It is gradually building up its own expertise to undertake highly specialized work which in previous years were given out to consultants. The organization has also responded well to the tremendous rate of development in the country. This is indicated by the growth of its capital expenditure from about $7 million in 1950 to over $110 million in 1968. For the financial year 1967/68, the Board made a net revenue returns of 10.1% on its average fixed assets in operation before meeting interest payments, and that this was more than the Board's target of 8%.

The NEB continued to obtain surplus from its operation during the 1971–75 period.

With regard to profitability or losses, experiences of different categories of public enterprises have been different.[23]

In 1975, public enterprises in the area of public utilities like the NEB, the Sarawak Electricity Board, the Sabah Electricity Board and the Perak Hydo-Electric Company generated surpluses. Similarly most public enterprises in transportation like the port

[17] Robert Ho, 'Land settlement project in Malaya: an assessment of the role of the FLDA', *The Journal of Tropical Geography*, Vol. 20 (June 1965), p. 8.

[18] Gayl D. Ness, *Bureaucracy and Rural Development in Malaysia*, Berkeley, University of California Press, 1967, p. 184.

[19] Tunku Shamsul Bahrin, 'Policies on land settlement in insular Southeast Asia', *Modern Asian Studies*, Vol. 5 pt. 1 (1971), p. 33.

[20] Jaafar bin Awang, 'Federal Land Development Authority, Malaysia: a Case Study in the Administration of Development Projects', MPA thesis, GSPIA, University of Pittsburgh, 1970, p. 121.

[21] Keith Emmerich, 'Behavioural Approach to Rural Development: the Malaysian Case', Ph.D. dissertation, GSPIA, University of Pittsburgh, 1973, p. 234.

[22] Robert Ho, *op. cit.*, p. 8.

[23] Statements regarding profits and losses of various public enterprises mentioned in the following paragraphs were obtained from their annual reports and various references in the newspapers.

authorities, the Malaysian Airline System, the Malaysian International Shipping Corporation were able to obtain profits in 1975. However, the Malayan Railways, the Sabah Airlines and the Sabah Railways continued to suffer losses.

Most of the promotional and financial agencies like Bank Bumiputra, Malayan Banking, Agricultural Bank, MIDF, Development Bank, Malaysia Building Society, Borneo Housing Mortgage Finance, Borneo Development Corporation, National Savings Bank, Pilgrims' Management and Investment Board, Sabah Credit Corporation and the Credit Guarantee Corporation obtained various rates of profits in 1975.

Of the strategic industries, the Malayawata Steel Company made profits, the Malaysia Explosives made losses while PETRONAS was still in the formative stage.

Most of the trading enterprises which were mainly subsidiaries of SEDCs appeared to break even while some experienced losses.

Among the industrial enterprises, while PERNAS obtained profits, FIMA, Malaysia Shipyard and Engineering and Malaysia Batek and Handicraft Centre suffered losses in 1975.

Most of the agricultural enterprises like FELDA, FELCRA, MAJUIKAN, MAJUTERNAK, RISDA, FAMA and FOA, National Tobacco Board were not designed to make profits, but to promote various agricultural programmes and as such had to be subsidized and cannot be assessed in terms of profit or loss.

The performance of the regional development authorities like DARA, Johore Tenggara, Trengganu Tengah, Jengka Development Corporation and the thirteen SEDCs cannot be assessed merely in terms of profit and loss. These authorities, through their subsidiary companies and joint ventures, carried out agricultural, trading, financial, industrial and housing activities which were not purely aimed at making profits, but also to promote development among less-developed ethnic groups and less-developed regions. For example, if the aim was purely to make profits, none of the SEDCs would have set up trading companies to distribute consumer goods. They did this in order to ensure that small Malay retailers in the villages can obtain steady supplies at reasonable prices even if this had to be done at a loss. Similarly, while industrial estates built by the SEDCs in Selangor and Penang could be sold at a profit, industrial estates built by those in Trengganu, Kedah, Kelantan and Pahang could not be sold at a profit in order to attract industrialists to those less-developed areas. As such, most SEDCs could not show profits. Nevertheless, the Johore SEDC and Selangor SEDC managed to obtain some profits during the SMP period.

Although there have been many public enterprises and their subsidiaries which suffer losses because of their pursuing social objectives, some suffer losses due to weakness of management. As stated by the Prime Minister, there were SEDCs that could not implement their projects according to schedule. There were also projects that were not viable and not profitable.[24] However, he also rightly pointed out that the unsatisfactory performance of some SEDC projects were not just due to the weakness of management, but also due to financial problems, lack of firm decision-making, and to some extent problems of political leadership and political direction.

[24] The Prime Minister's speech at the opening of the Seminar on SEDCs on 22 April 1976 at the Dewan Tunku Abdul Rahman, Kuala Lumpur.

Given the above constraints and the shortage of qualified and experienced officers, on balance, it can be said that the overall performance of public enterprises in Malaysia has been satisfactory, though there is a lot of room for improvement.

## EFFECTIVENESS OF PUBLIC ENTERPRISES IN ECONOMIC DEVELOPMENT

Whether and to what extent public enterprises have been effective in achieving government objectives has been the subject of a never-ending controversy. This was because no clear-cut goals and targets were assigned to them. What existed were general government policies and objectives and exhortations by political leaders. In the absence of well-specified goals, academics, national and local political leaders, bureaucrats, the managers of public enterprises, their private competitors, their beneficiaries and the general public have used their own standards of measurement in evaluating the performance of public enterprises.

As pointed out earlier, there is need for different sets of criteria to measure different categories of public enterprises. In the absence of such criteria, I propose to use the following criteria, based on the twin objectives of the NEP of restructuring society and eradicating poverty, to assess the effectiveness of public enterprises in Malaysian economic development.

*Performance criteria based on restructuring of society*

1) Contribution to share ownership of Malays.
2) Contribution to employment of Malays in commerce and industry
3) Promotion of Malay participation in commerce and industry.
4) Contribution to development of less-developed areas.

*Performance criteria based on poverty eradication*

1) Overall economic growth.
2) New employment generated.
3) Increased income to poverty groups
4) Provision of amenities to the poverty groups.

### *Contribution to Share Ownership of Malays*

The government has set a target that by 1990 Malays should own at least 30% of share ownership in commerce and industry, while the target for non-Malays is 40% and that for foreigners is 30%. The target to be achieved by the Malays, in phases, was set in the *MTR of the SMP* as 9% by 1975, 16% by 1980, 23% by 1985 and 30% by 1990.[25] The public enterprises were assigned the task of holding in trust their share capital for the Malays. According to the *TMP*, taking the ownership of share capital of limited companies as representative of ownership in commerce and industry, the shares of Malays and Malay interests was estimated to have increased from 2.4% ($125.6 million) in 1970 to 7.8% ($768.1 million) in 1975 as a proportion of total share capital. Of this, the share capital held in trust for Malays by public enterprises

[25] *MTR to the SMP*, p. 96.

increased from 0.8% in 1970 to 5.5% in 1975.[26] The achievement fell short of the target of 9% by only 1.2%. This achievement, in which the public enterprises played a major role, was very creditable in view of the fact that this was the formative phase. It is to be noted that the share of foreigners decreased from 63.3% ($3,377.1 million) in 1970 to 54.9% ($5,434.7 million) in 1975, in line with government policy.

*Contribution to Employment of Malays in Commerce and Industry*

It is the government's objective that employment in commerce and industry should reflect the racial composition of the population in the country. More specifically it has been targetted that Malay employment in mining, industry, construction and commerce will be 50% of the total by 1990.[27] Although no target had been set for 1975, it was observed that the share of Malay employment in these fields had increased from 25.3% in 1970 to 32% in 1975.[28] Exactly how much employment in public enterprises contributed to this was not known, but it is believed a substantial amount came from public enterprises.

*Promotion of Malays in Commerce and Industry*

One objective of the government was to promote the growth of a viable Malay commercial and industrial community that can participate on par with other ethnic groups in Malaysia. There are three programmes that are being carried out by the government to achieve this.[29] First is the setting up of certain public enterprises like PERNAS, FIMA, MARA and SEDCs to operate commercial and industrial enterprises and employ Malays. These enterprises are to be sold to the Malays once they had the capability to buy them. By participating in various fields of commerce and industry from the making of steel cutlery to the manufacture of electronic parts, the public enterprises will enable a core of Malay managers to grow and prepare the ground for progressively wider participation of Malays in commerce and industry. During the SMP, about $435.65 million were spent by bodies like PERNAS ($216.25 million providing 777 jobs), MARA ($78 million providing 3,000 jobs), Kompleks Kewangan ($48 million) and SEDCs ($93.4 million providing 10,900 jobs) for the above purpose.[30]

The second programme by the government is to provide facilities such as credit and business premises to Malay entrepreneurs. During the SMP, total credit of about $669 million was provided by MARA ($163 million to 27,700 borrowers), MIDF ($70 million), UDA ($15 million), Bank Bumiputra ($294 million) and CGC ($127 million) to Malay entrepreneurs.[31]

The third programme is to provide training in business subjects to Malays to enable them to be employed in commerce and industry and to provide technical assistance to

[26] *TMP*, p. 184.

[27] *MTR to the SMP*, p. 93.

[28] *TMP*, p. 186.

[29] *TMP*, p. 192.

[30] *TMP*, 195, 316–7.

[31] *TMP*, p. 192, 193, 195, 315.

Malay entrepreneurs. By 1975, MARA had provided scholarships and loans to 8,932 Malays enrolled in science, technological and professional courses while enrolment at ITM increased from 2,142 in 1970 to 7,872 in 1975. The MARA Vocational Institutes provided training to 5,747 students during 1971–5.[32]

All these programmes have contributed to the creation of a viable Malay commercial and industrial community.

*Contribution to Development of Less-Developed Areas*

Apart from contributing to Malay participation in commerce and industry, the SEDCs have also contributed to the development of less-developed areas. At the end of 1975, the SEDCs were associated in varying degrees of involvement with over 220 commercial and industrial ventures.[33] Of course there were varying degrees of achievement among the SEDCs – the ones in Selangor, Johore and Penang doing very much better than those in other states. Partly because they were faced with problems of finance, personnel and inexperience during the SMP, the SEDCs concentrated their attention on commercial and industrial development in the respective state capitals and on more profitable projects. Because of this, they did not spread out their activities evenly in their respective states and a substantial part of their projects like shop premises, office spaces and houses were beyond the reach of the lower income groups. This shortcoming has been criticized by the political leaders, central agencies of government and the public in general. However, they did promote more dispersal of development from the national capital and within the country as a whole. In addition the regional development authorities have been able to bring some agricultural and infrastructural development in less developed areas.



*Overall Economic Growth*

To eradicate poverty, it is necessary to ensure the overall growth of the economy so that more wealth and income can be shared among more people. During the SMP the Malaysian economy achieved a creditable rate of growth. It is estimated that the GDP at factor cost, in real terms, grew by 7.4% per annum during the period as compared with the original SMP target of 6.8% and the revised SMP target of 7.8% in the Mid-Term Review. The fastest growing sectors were transport, manufacturing, public administration and other services with average annual rates of growth of 12.6%, 10.9%, 8.6% and 7.2% respectively. However, in terms of relative contribution to total growth, agriculture continued to predominate accounting for over a quarter of the growth in real GDP. Manufacturing and trade accounted for 19.3% and 14.4% of the growth, whilst transport, administration and other services accounted for about 10% each of the increase.[34] Various public enterprises contributed to this overall growth.

*New Employment Generated*

One strategy to alleviate poverty is to generate new employment. For this purpose the various public enterprises had been able to generate a large amount of new employ-

[32] *TMP*, pp. 387–9.

[33] *TMP*, p. 196.

[34] *TMP*, pp. 11–13.

ment. During the SMP, over one million acres of land were developed, of which around 412,000 acres (41%) were developed by FELDA to settle over 13,700 families. Other land developed programmes were undertaken by FELCRA, the SEDCs and other state agricultural development agencies in conjunction with the private sector.[35] In the commercial and industrial field, the public enterprises like PERNAS, SEDCs and MARA had been able to provide jobs to more than 14,677 people.[36]

*Increased Income to Poverty Groups*

There is no general agreement as to what constitutes a poverty-line income or what measurement is to be used to determine poverty. Taking levels of household income required for minimum subsistence based on minimum nutritional and other non-food requirements it was estimated that as much as 49.3% of all households (some 792,000 out of 1.6 million households) received incomes below the poverty line in 1970. The bulk of these (90% or 708,000 households) was in the rural areas.[37] Ten poverty groups were identified. They were padi farmers, agricultural labourers, fishermen, rubber smallholders, coconut smallholders, estate workers, new village residents, urban poor, *orang asli* and poor groups in Sabah and Sarawak. The reduction of poverty is the task of the whole nation. Within this overall effort, some public enterprises were set up to help reduce poverty among specific groups by carrying out projects to increase their income. During the SMP, RISDA provided funds to rubber smallholders to replant 412,000 acres; the Malaysian Rubber Development Corporation provided better marketing outlets to many smallholders; MADA and KADA increased the incidence of double-cropping of padi from 276,000 acres in 1970 to 327,000 acres in 1975; LPN raised the price of rice by 75% and stabilized it at that level,[38] and the FOA encouraged better utilization of land in some rural areas.

*Provision of Public Amenities to Poverty Groups*

The provision of public amenities like water, electricity, sewerage, housing and health facilities help to reduce the impact of poverty among poverty groups. These efforts were carried out mostly by government departments. However the NEB and the electricity boards of Sabah and Sarawak spent $69.8 millions during the SMP.[39] The other public enterprises played a minor role in providing such amenities.

As can be seen in Table 1, during the SMP the public enterprises were allocated $3,876.92 million, 55% of the government development expenditure in the sectors of agriculture, commerce, finance, industry, transport, and public utilities. Judging from expenditure patterns, although a few of them experienced shortfalls, most of them were able to implement more than 90% of their projects and programmes.

In conclusion, based on the above facts, it is evident that public enterprises had been effective in achieving a major part of their assigned task of restructuring society

[35] *TMP*, p. 27.

[36] *TMP*, p. 316–7.

[37] *TMP*, pp. 160–1.

[38] *TMP*, pp. 171–2.

[39] *TMP*, p. 371.

## TABLE 1

## FUNDS ALLOCATED TO PUBLIC ENTERPRISES UNDER THE SECOND AND THIRD MALAYSIA PLANS

*($ million)*

| Agency | Revised SPM Allocation 1971–5 | Estimated Expenditure 1971–5 | Percentage | TMP 1976–80 |
|---|---|---|---|---|
| **Agricultural Agencies** | | | | |
| RISDA (rubber replanting) | 190.16 | 158.41 | 83.3 | 674.94 |
| FELDA | 679.27 | 645.14 | 95.0 | 985.02 |
| FELCRA | 51.69 | 49.43 | 95.6 | 85.50 |
| Land Development Boards | 188.48 | 164.83 | 87.5 | 497.12 |
| Bank Pertanian | 50.00 | 50.00 | 100.0 | 75.77 |
| FOA | 22.00 | 17.60 | 80.0 | 95.30 |
| FAMA | 10.00 | 4.88 | 48.8 | 26.85 |
| LPN | 70.00 | 56.62 | 80.9 | 29.40 |
| MARDEC | 76.71 | 60.59 | 79.0 | 132.86 |
| **Regional Development Agencies** | | | | |
| Jengka Triangle | 133.14 | 107.78 | 81.0 | 96.20 |
| DARA | 68.75 | 47.25 | 68.7 | 142.15 |
| Johor Tenggara | 40.33 | 40.10 | 99.4 | 89.43 |
| Trengganu Tengah | 7.11 | 5.54 | 77.9 | 63.49 |
| SEDCs | 192.93 | 227.53 | 117.9 | 423.80 |
| **Commercial, Financial and Industrial Enterprises** | | | | |
| PERNAS | 150.00 | 150.00 | 100.0 | 200.00 |
| MARA | 215.21 | 205.21 | 95.4 | 315.00 |
| Bumiputra Investment Fund | – | – | – | 200.00 |
| UDA | 175.00 | 194.46 | 111.1 | 217.00 |
| MIDF | 100.00 | 100.00 | 100.0 | – |
| Other investments in economic enterprises (including Bank Pembangunan) | 225.73 | 235.51 | 104.3 | 182.59 |
| Others (SIRIM, NPC, TDC, FIDA) | 60.15 | 36.42 | 60.5 | 52.27 |
| **Transport Agencies** | | | | |
| MISC | 107.04 | 113.01 | 105.6 | 11.00 |
| Railways | 97.71 | 104.49 | 106.9 | 200.00 |
| Ports, shipping, marine | 366.15 | 441.96 | 120.7 | 630.30 |
| **Utilities** | | | | |
| NEB | 649.30 | 634.10 | 97.7 | 1,579.50 |
| TOTAL | | | | |
| (a) Total expenditure through public enterprises | 3,876.92 | 3,848.22 | 99.0 | 6,995.29 |
| (b) Total government development expenditure | 6,955.73 | 6,767.24 | 97.0 | 12,065.60 |
| Percentage of (a) over (b) | 55% | 55% | | 58% |

*Sources*: Compiled from *TMP*, Tables on pp. 307–8, 323, 343, 369, 371 & 374.

and eradicating poverty. Of course, there were some shortfalls in their achievements, and much more has to be done to achieve the overall target, but it must be borne in mind that the SMP is the first phase of a 20-year plan. Based on the experience of the SMP public enterprises appear to be an effective instrument of economic development.

## PROSPECTS FOR THE THIRD MALAYSIA PLAN

The TMP is the second phase of the implementation of the NEP. In the TMP, public enterprises are expected to play a greater role in achieving government objectives and to perform better than during the SMP because of the following reasons.

(i) As indicated in Table 1, the allocation of public funds to public enterprises has almost doubled and it constitutes about 58% of the total development expenditure in agriculture, commerce, finance, industry, transport and utilities. With this increased allocation, public enterprises should be able to implement more projects and to spread them out more evenly over the various states.

(ii) During the TMP there will be an increased number of Malay graduates in various fields of study to undertake the management of these enterprises. About 20,547 Malay students have enrolled in diploma and degree courses in 1975 in Malaysia and about 6,050 will be graduating from overseas institutions during the TMP.[40] They will provide the qualified manpower for expansion and more effective management of public enterprises. This will, to a great extent, overcome the problem of shortage of qualified personnel faced by the enterprises during the SMP period.

(iii) The SMP period has provided a core of experienced managers who learned through trial and error and this pool of experience can be utilized during the TMP to produce better results for the public enterprises.

(iv) The central agencies of government and the administrative ministries have also gained useful experience in monitoring the progress of the public enterprises and can be expected to be more effective in their duties.

(v) The political leaders and the public in general are more watchful of the activities of the public enterprises and expect them to deliver the goods.

With the increased availability of financial resources and qualified manpower and the continuous monitoring of their activities by the government and the public, we can expect public enteprises to perform better during the TMP in restructuring society and eradicating poverty.

[40] *TMP*, pp. 403, 406.

# THE CONTROL OF PUBLIC ENTERPRISES WITH SPECIAL REFERENCE TO STATE ECONOMIC DEVELOPMENT CORPORATIONS

Mavis Puthucheary

State Economic Development Corporations (SEDCs) were created in the late 'sixties and early 'seventies with two objectives – to act as a catalyst in increasing the rate of development in the states and to implement the NEP. SEDCs were required to perform a broad range of development functions. They were 'to promote the development of agricultural, industrial, commercial, trading and residential areas and to undertake agricultural, industrial, commercial trading and housing enterprises'.[1]

The establishment of SEDCs was the first attempt to decentralize the development function to the state level. Previous to their creation, the system of government and administration was highly centralized, despite a federal system of government. Under the Constitution the most important matter that fell within the jurisdiction of the state governments was that of land and natural resources. It was expected that the creation of SEDCs as a commercial instrument of the state would result in the state governments alienating more land and natural resources for development, thus contributing positively to and playing a more dynamic role in development than they had hitherto done.[2]

SEDCs were thus expected to be regional development agencies, coordinating and integrating all development efforts at the state level. The objectives and strategy of regional development in the context of the NEP is clearly stated in the TMP:

> The regional development strategy under the New Economic Policy (NEP) seeks to bring about closer integration among the States of Malaysia. This will be achieved

[1] Penang Development Corporation Enactment 1971, Part IV. The wording in the other state enactments are very similar.

[2] R. Thillainathan, 'Malaysia', in Nguyen-Truong (ed.), *The Role of Public Enterprise in National Development in Southeast Asia: Problems and Prospects*, Singapore, Regional Institute of Higher Education and Development, 1976, p. 59.

> through redressing economic and structural imbalances among the regions within the country. It will draw and build upon the strengths of each region for agricultural and industrial development particularly in the less developed States, to ensure that regional development contributes towards the national goals for economic development. The underlying aim is equitable distribution not only of income but also of facilities for health, education, utilities, services, recreation, housing and most important of all, opportunities for social and economic advancement of the people in accordance with the goals of the NEP.[3]

The strategy of regional development aims at reducing regional imbalances as well as ethnic imbalances. The NEP is seen within the context of an expanding economy in which the less developed states and the poorer sections of the community would get a larger share of the expanding cake. The TMP which attempts to define more clearly the objectives of the NEP stresses this:

> The objectives of social justice underlying the NEP cannot be viewed independently of growth objectives. The level and growth of income of socio-economic groups in poverty is to be raised in the context of rising standards of living. At the same time, the restructuring of the racial composition of employment and wealth ownership is to be effected in ways which do not deny opportunities to others as well. Accordingly, the distributional objectives of the NEP must depend on accelerated economic growth.[4]

The role of SEDCs is also clearly stated in the TMP:

> The SEDCs constitute the principal arms of the State Governments in the promotion of economic development generally as well as greater participation by the Malays and other indigenous people in commerce and industry.[5]

## THE PERFORMANCE OF SEDCs

The performance of SEDCs may be conveniently analyzed in this study from two aspects, namely in terms of their contribution to economic development and the creation of a *bumiputra* entrepreneurial class.

### Contributing to Economic Development

It is extremely difficult to assess the contribution of SEDCs towards achieving economic development in the respective states. Part of the problem is that the SEDCs are not the only agencies involved in achieving economic development at the state level. In addition to the various federal departments which are vertically organized at state and district levels, there are also state departments which are involved in matters relating to land and natural resources. Even more important, there are several federal

[3] *TMP*, p. 199.

[4] *TMP*, p. 8.

[5] *TMP*, p. 196.

public enterprises which operate at the state level. FELDA, for example, is involved in massive land settlement schemes throughout the country. There are also several regional development agencies such as the Johore Tenggara Development Authority and the Trengganu Tengah Development Authority. These regional development agencies have full jurisdiction within their boundaries. Therefore, despite their name, SEDCs do not have full jurisdiction over their respective states but only those areas that are not covered by federal development agencies. Thus, almost one-third of Pahang is under the jurisdiction of FELDA (including the Jengka Triangle Scheme) and the Pahang Tenggara Development Authority. The Pahang State Development Corporation has jurisdiction only in the areas outside the control of these federal agencies. Thus the more federal regional development agencies there are in a particular state, the less are the powers of the SEDCs to coordinate and integrate all development at the state level.

Furthermore, in some states there are several agencies involved in development. For example, in Pahang, Perak and Selangor there are State Agricultural Development Corporations with powers over all state agricultural activities. In these states, therefore, the powers of the SEDCs are confined to non-agricultural activities.

Despite the proliferation of federal and state agencies however, SEDCs could still perform a coordinating and integrating role at the state level so that all development efforts by both federal and state agencies are integrated into a meaningful development programme. But the highly centralized system of government and administration has not been changed to adjust to the more decentralized philosophy underlying the creation of SEDCs. The coordinating role, therefore, continues to be undertaken by the federal-appointed state development officers and the State Economic Planning Units. As such, the SEDCs' role is much more circumscribed than might be expected from their various state enactments. Their powers are usually limited to that of undertaking direct investments, housing projects, building of shophouses and shopping complexes and in establishing agricultural and industrial estates. To assess blame or credit to SEDCs for the general development of their respective states would, therefore, be assuming that they have powers which they do not actually possess.

Nevertheless it is interesting to see that there has been little improvement in the regional distribution of income between states as indicated in the TMP. The reason for the inability of the less developed states to increase their per capita GDP at the same rate as the more developed states is due to the 'lead time required before policies and programmes initiated since the inauguration of the NEP bear fruit'.[6] Many of the programmes started in the period of the SMP are likely to show results during the period of the TMP.

### Contributing to the Creation of a *Bumiputra* Entrepreneurial Class

In assessing the contribution of SEDCs to the creation of a *bumiputra* entrepreneurial class, one is faced with several problems of interpretation regarding the criteria for measuring performance. In the first place there is considerable confusion over the several interpretations that are given to the objectives of the NEP. A particular project can be both in accordance with the NEP and against it, depending on

[6] *TMP*, p. 203.

TABLE 1

PER CAPITA GDP BY STATE 1970 AND 1975

*($)*

| State | 1970 | 1975 | Increase/Decrease |
|---|---|---|---|
| Johore | 900.4 | 1,262.0 | +361.6 |
| Kedah/Perlis | 665.4 | 828.4 | +163.0 |
| Kelantan | 462.9 | 588.8 | +125.9 |
| Malacca | 798.3 | 1,105.7 | +307.4 |
| Negri Sembilan | 979.4 | 1,382.0 | +402.6 |
| Pahang | 975.2 | 1,197.2 | +222.0 |
| Penang | 987.2 | 1,323.0 | +335.8 |
| Perak | 981.1 | 1,101.1 | +120.0 |
| Sabah | 1,777.4 | 1,539.3 | −238.1 |
| Sarawak | 881.1 | 1,118.6 | +237.5 |
| Selangor | 1,616.5 | 1,917.4 | +300.9 |
| Trengganu | 597.7 | 765.4 | +173.7 |
| Malaysia | 993.6 | 1,250.3 | +256.7 |

*Source:* ***TMP,*** pp. 201 and 204.

what interpretation one gives to the objectives of the NEP. For example, a particular project can be justified as being in accordance with the NEP if it results in an increase in *bumiputra* wealth, but the same project can also be criticized as being against the NEP if it competes with private *bumiputra* businesses. Thus there are many objectives of the NEP, and it is not clear which objective should be given priority in cases where there is a conflict.

Therefore, the vagueness in the interpretation of the NEP allows SEDCs to justify almost any kind of activity as contributing to its achievement. Investment projects can, for example, be justified as fulfilling any of the following criteria:[7]

(1) Generating significant employment;
(2) Adding to the skills of the *bumiputra;*
(3) Producing products which can be substituted for imports;
(4) Generating additional business opportunities;
(5) Producing products for export;
(6) Contributing to the rural economy;
(7) Upgrading natural resources;
(8) Diversifying the base of the economy;

[7]These criteria have been adapted from the list of 'favourable' criteria for the establishment of enterprises by the Botswana Development Corporation which is quoted in N.S. Carey Jones *et al., Politics, Public Enterprise and the Industrial Development Agency,* London, Croom Helm, 1974, p. 153.

(9) Contributing to the creation of a *bumiputra*-owned commercial and industrial sector; and

(10) Raising the share of *bumiputra* ownership of productive wealth including land, fixed assets and equity capital.

These various objectives provide ten different scales by which the success of SEDCs might be measured. It is thus possible for a particular project to be measured in terms of criterion No. 10 if the project is earning profits and by criterion No. 4 if it is not. In this way, all projects can be justified by finding the appropriate criterion to measure its success. In the same way, SEDCs can also be criticized by using different criteria to measure their performance.[8]

To make matters worse, there are several agencies involved in the achievement of these objectives, so that even if it were possible to choose one criterion for measuring the success of SEDCs it would not be possible to isolate the contributions of SEDCs from the other agencies involved. For example, it would be impossible to assign weights to each project undertaken by SEDCs, MARA, UDA or PERNAS in their efforts to achieve the objective of creating a *bumiputra* entrepreneurial class.[9]

It is little wonder therefore, that SEDCs have been subject to considerable attack from the private sector for failing to achieve the objectives of the NEP. The private sector, particularly the private *bumiputra* sector, perceive the role of SEDCs as agencies to provide facilities and inducements to encourage private enterprise, especially private *bumiputra* enterprise. Inducements such as low rents for office premises and residential houses, land at reasonable prices for factories, supplies of basic contruction materials at prices below the market rates, and preferences to *bumiputra* contractors in government contracts are some of the ways in which SEDCs are expected to assist local *bumiputra* to become successful businessmen.

There appears, however, to be some contradiction in the interpretation of the role of SEDCs by the government and the private sector. Although SEDCs are expected to encourage the private *bumiputera* commercial and industrial sector, they are also expected to act as catalysts in undertaking enterprises wholly or in partnership with the private sector. This second role has been given more emphasis than the less active role of promoting private development. The reason for this is not difficult to find. The promotional role is not a profit-making one. SEDCs therefore, are forced to undertake some projects which are profit-making in order to continue in business. As their main source of funds is from loans, from the federal government, the state governments, or the commercial banks, they are unable to carry on their operations unless their projects bring in some profits. Problems of liquidity can adversely affect operations as seen in the recent financial situation facing the Selangor SEDC.[10] Short-term profits

[8] I was told the story of a certain SEDC which had several projects which were financially not successful, and, at a meeting with certain federal officers, was taken to task for undertaking projects that did not bring a satisfactory rate of return. Finally the General Manager of the SEDC came to a project which was making profits and he proudly referred to it. He was, however, cut short by an officer who wanted to know why the SEDC was making profits when its function was not to make profits but to provide incentives to *bumiputra* entrepreneurs!

[9] Sieh Mei Ling, 'A frame for measuring effectiveness of public enterprises in Malaysia', *MIM Review*, Vol. 10 (April 1975), pp. 25–26.

[10] 'PKNS to mobilise private capital', the report of an interview with the General Manager of Selangor SEDC, *Asian Trade and Industry*, Vol. 8 No. 6 (1976).

such as housing projects are therefore preferred by most SEDCs to their long-term projects because 'they can be completed fast and can be counted on to generate more cash'.[11]

Financial constraints therefore restrict SEDCs from undertaking projects which are not profit-making in themselves but which provide inducements to private enterprise. Long-term investment projects in which SEDCs play the 'gap filling' role of undertaking projects which have a long gestation period before profits accrue, are also discouraged through lack of funds. Instead, SEDCs choose to invest in activities where there is a high expected rate of return. These are also the activities that the private sector is interested in. The SEDCs therefore appear to be competing rather than assisting private enterprise.

The involvement of SEDCs in profit-making investments is justified on the grounds that this activity is in accordance with the objective of *bumiputra* ownership of wealth. If it is targetted that by 1990 *bumiputra* will own at least 30% of equity capital in the country, it is necessary for public enterprises such as the SEDCs to contribute towards creating wealth which can later be transferred to private *bumiputra* ownership.

The problem however, is that SEDCs have engaged in profit-making activities that are not making profits. By 1975, SEDCs were involved in 220 commercial and industrial ventures.[12] In a recent speech the Prime Minister indicated dissatisfaction with the 'far from satisfactory' performance of SEDCs.[13] About 80% of the total investments of SEDCs, amounting to about $158 million, are not making profits and some are even running at a loss.[14] How then are these projects to be sold to private enterprise? It is significant that when a particular SEDC offered its projects for sale to members of the Malay Chamber of Commerce, after the latter accused the former of deviating from its policy to assist *bumiputra*, there were buyers for only one project, a successful oil palm estate which naturally the SEDC was not prepared to sell!

## PROBLEMS FACING SEDCs

The main problems facing SEDCs are problems arising out of: (i) lack of professional and technical staff, (ii) weak management boards, (ii) finance, and (iv) corruption.

### (i) Lack of Professional and Technical Staff

Like other public enterprises, SEDCs have not been able to recruit sufficient numbers of qualified professional and technical men and women. SEDCs in the less developed states of the east coast region of Peninsular Malaysia have suffered more than in the other states from lack of sufficient numbers of qualified staff. The problem

[11] *Ibid.*

[12] *TMP*, p. 196.

[13] Speech at the opening of the Seminar on State Economic Development Corporations held in Kuala Lumpur in April 1976. Reported in the *New Straits Times*, 23 April 1976.

[14] 'The Perak SEDC invested about $26.9 million into various projects from the time it was formed in 1967 to June 1976. Except for the $138,350 profit of one of its subsidiaries, it was a dismal failure.' *Malay Mail* editorial, 28 April 1976.

is exacerbated by the policy, existing in all the states except in Penang and Malacca, to fill the senior posts in SEDCs with *bumiputra*. As there is a dearth of qualified *bumiputra* in the country as a whole, there is little chance of SEDCs being able to attract qualified *bumiputra* in sufficient numbers to fill the vacancies at the senior levels. Like other statutory corporations SEDCs cannot offer salaries and other inducements that are high enough to attract qualified personnel as they are bound by the salaries and conditions of service that are laid down in the *Report of the Commission on the Remuneration and Conditions of Service in Local and Statutory Authorities* (better known as the *Harun Report*).* They are therefore, unable to offer immediate benefits or to offer better prospects in the future in terms of promotions to attract new recruits or even to retain those they already have. Some SEDCs have therefore, to depend on staff who are seconded from the federal government to work in SEDCs for a period of time.

(ii) Weak Management Boards

The management boards of all SEDCs follow a similar pattern. The chairman of the board is the *mentri besar* of the state. There are three ex-officio members from the state government – the state secretary,the state legal adviser, and the state financial officer. There are three or four state executive councillors and two or three representatives from federal ministries and agencies, such as the Treasury, the Ministry of Public Enterprises or FIDA. Occasionally, there may be a person appointed from the private sector. The only full-time member of the board is the general manager.

From this list one can see that there are very few members of the board who have special knowledge or experience in the business world. Besides they hold full-time posts in other organizations, and therefore do not have sufficient time to spend on SEDC matters. The lack of expertise of the board prevents it from analyzing and scrutinizing the recommendations and reports that are put up by the general manager and his staff. Decisions to enter into this or that investment are therefore made without careful study and often with very little information. But once the decision is made and SEDC has put up some money, it is very difficult for the SEDC to pull out even when it becomes clear that the decision to participate in the investment was a mistake. Thus mistakes are perpetuated because of the inflexibility of SEDCs which prevents them from abandoning unsuccessful projects and cutting their losses.

SEDCs with inadequate managerial and technical staff have found the joint-venture system a convenient way of tapping managerial and technical know-how in the private sector. Very often SEDCs are content to leave the internal management of the joint venture to private enterprise as long as they have some control over policy matters through representation on the management board. When SEDCs enter into joint ventures with the private sector, however, they must accept the same objectives as the private sector, that is, profit maximization. In some cases there may be some conflict of interests particularly where the private enterprise may prefer to build houses of a more expensive type in the established urban areas whereas the SEDC may wish to build low-cost houses in the smaller towns. It may be better therefore, for a SEDC to manage the project on its own, so that it is able to meet its social obligations while at the same time make reasonable profits.

**Editorial note:* This has been superseded since by the *Report* of the Cabinet Committee, headed by Dr. Mahathir Mohamed, the Deputy Prime Minister, which also governs the salaries and conditions of service of all statutory boards.

### (iii) Finance

If SEDCs are to own and operate their undertakings on their own, they will need adequate funds. Generally, the source of funds of SEDCs at present is as shown in Table 2.

The SEDCs in the less developed states have less income generated from their own operations and therefore have to depend to a large extent on loans. As the states in which they operate are in no position to assist them, they have to depend on federal loans to a greater extent than the relatively more developed states. This is recognized in the TMP. About one-half of the total allocation of $423.8 million is allocated to the less developed states of Perlis, Kedah, Kelantan, Trengganu and Pahang.[15]

Amendments to the Constitution have also been made to relax restrictions on the powers of state governments to borrow from commercial banks. Instead of the maximum period of one year, state governments may now borrow from commercial banks and other financial institutions, with the approval of the federal government, for a maximum period of five years.[16] This would enable state governments to borrow on behalf of their SEDCs from commercial banks.

It will not be possible, however, for SEDCs to undertake projects which are not profit-making. Loans, whether from government sources or from commercial banks, have to be repaid. Interest charges are also payable. Thus, if it is felt that SEDCs should undertake certain activities such as supplying construction materials to *bumiputra* at prices below cost, or providing houses to *bumiputra* at rents below cost, the federal government or the state government concerned will have to bear this cost in the form of subsidies or other forms of financial assistance to SEDCs.

### (iv) Corruption

Judging from the recent remarks by the Prime Minister at the opening of the Seminar on SEDCs in April 1976,[17] there is some evidence of corruption is SEDCs

TABLE 2

SOURCE OF FUNDS OF SEDCs

*(In percentages)*

| | |
|---|---|
| Grants and loans from the state government | 35% |
| Loans from the federal government | 35% |
| Loans from commercial banks | 18% |
| Self-generated income | 12% |
| | 100% |

*Source:* Derived from annual reports and interviews with officers in SEDCs.

[15] See Appendix I to the *TMP*.

[16] *New Straits Times*, 13 July 1976.

[17] *New Straits Times*, 23 April 1976.

although the extent of it is not known. This is a problem facing all public enterprises, especially those which spend vast sums of money. The system of public accountability and control which applies to the normal government departments is not applied to most public enterprises. Public enterprises are given a substantial degree of freedom to decide how money is to be spent and there is little control to see that the money is spent wisely, or even that the money is in fact spent on the activities for which it was allocated. In the case of SEDCs there is supposed to be some accountability to the state legislatures but often this is a mere formality as there is very little information available to members of the state assemblies to make useful comments on the undertakings of SEDCs or even to ask meaningful questions. Annual reports on the activities of SEDCs are required to be submitted to the state legislatures but this is seldom done and even when reports are submitted they are usually submitted three to four years after the date in which they are due, thus failing to have any real impact.

Added to this is the fact that SEDCs have powers to create companies which are subject to even less control by the legislature as they are 'second-generation' organizations. It is therefore possible for SEDCs to use their subsidiary companies to undertake activities which will not stand up to close scrutiny. It may even be possible for most of the assets of the SEDC to be transferred to a subsidiary company, which is itself a holding company for numerous companies with interests in a wide range of activities. The SEDC is nominally in control but 'control as such is remote'.[18]

Besides being subject to less controls, the company form of public enterprise has greater flexibility than statutory corporations in determining its own salaries and conditions of service. There is a tendency therefore for officers of SEDCs to be transferred to subsidiary companies or to perform functions in subsidiary companies for extra remuneration. For example, several companies give allowances to their directors as well as other perks like high *per diem* allowances when travelling on official business. There is therefore a rush for these posts among the senior staff of SEDCs. One general manager was director of as many as ten subsidiary companies.

Controls to prevent staff of SEDCs and other public enterprises from engaging in outside activities which may conflict with the interests of the SEDCs appear to be absent or weak. The Prime Minister referred to this matter in his speech, when he said that a small group of SEDC officers and managers of subsidiaries were involved in their own business.[19]

Corruption is not only evident among the full-time staff of SEDCs but also among the part-time members of the management board. The appointment of the *mentri besar* as chairman of the board was seen as desirable to give SEDCs the necessary political support at the highest state level. Unfortunately, however, it has also given the *mentri besar* powers to use the SEDC to accumulate personal wealth. Not all *mentris besar* have, of course, abused their powers and there are SEDCs who owe their success to the personal interest and dedication of the *mentri besar* of the state concerned.

[18] 'PKNS to mobilise private capital', *op. cit.*

[19] *New Straits Times*, 23 April 1976.

I have heard of a case of a senior officer in the SEDC who opened his own repair shop and supplied spare parts to a transport company owned by the SEDC and of which he himself was a director!

Unfortunately, however, political leadership of this kind is seldom found at the state levels. There is therefore, a tendency for a high degree of political intervention of the wrong type – politicians interfere in matters in which they should not and do not intervene in matters in which they should. It is because of these problems that many states in India do not, as a matter of principle, appoint a minister as chairman of a public enterprise:

> The problem with making Ministers as Chairman of the state enterprise boards is that in the presence of the Minister, other members of the board become almost passive, or otherwise act the way the Minister wishes them to do. Moreover, when a Minister himself becomes a party to a certain policy or a decision, it is almost inconceivable that he would be able to exercise adequate 'ministerial' control in the true sense of the term. Thus with Ministers remaining on the boards, twin dangers of over-control as well as under-control are likely to occur in a queer way.[20]

## CONTROLS TO ENSURE SUCCESS

When there is evidence that all is not well in a particular organization, the tendency is to impose more administrative controls at the top. The system, therefore, becomes more centralized. Administrative controls usually take the form of more elaborate procedures for obtaining funds and more frequent references to higher authorities before action is taken. The whole system reverts back to the normal delays and bureaucratic red tape which government had attempted to avoid by creating public enterprises in the first place.

However, administrative controls tend to give more powers to the central controlling agencies without necessarily improving the level of efficiency in the public enterprises. In fact it may have the reverse effect of creating further delays and bottlenecks. There is also little evidence to show that a more highly centralized system reduced the level of corruption at the lower levels, especially when there is a physical separation between the controlling agencies and the operating agencies.

The responsibility for achieving efficiency and integration in an organization must be given to the organization itself with adequate safeguards to ensure a high level of performance. Firstly, in order to ensure that public enterprises actually carry out their objectives in the most efficient manner it is necessary to define clearly what these objectives are. If the objectives are vague and diffused it will not be possible to be sure whether public enterprises are fulfilling their objectives or not.

Secondly, the criteria for measuring performance must be stated in precise quantifiable terms. This does not mean that public enterprises such as the SEDCs do not have social objectives. This means that in performing their social obligations they must be guided by certain criteria which will ensure that there is a reasonable rate of return on investments. For example, it may be laid down that investments should bring in a net rate of return of 8%. This means that SEDCs may choose a particular project which has an expected rate of return of 8% to that which has a higher rate of return because the first project achieves certain social objectives. It may not, however, invest in a project which has a net rate of return of less than 8%.

[20] C.D. Sharma 'Governing boards of public enterprises in Rajasthan', in Ziauddin Khan and Ramesh K. Arora, *Public Enterprise in India – a Study of the State Government Undertakings*, New Delhi, Associated Publishing House, 1975, pp. 182–3.

The single criterion of profitability measured in terms of expected rate of return has a great advantage over the qualitative forms of measurement. It is relatively easy to calculate and to use as a general standard of control for all public enterprises involved in government undertakings in the commercial and industrial sector. The public enterprises and the controlling agencies both know exactly what criterion is used as a measurement of performance. It would mean that public enterprises would not need to be controlled on their day-to-day operations and could be given a large degree of freedom and autonomy, provided, of course, they follow the criterion laid down. It would be possible then to bring about greater decentralization, as all levels will fully understand what is expected of them. One writer put the matter clearly when he said:

> Where there is a single criterion by which to judge the performance of an organization, such as profitability, it is possible to lay down profitability targets for those in the next echelon, allow them a large discretion in achieving them, and depend on reports for checking the extent to which responsibilities have been fulfilled and the reasons for discrepancies between achievements and targets. Even this will require some advance planning, programming and budgetting to determinate the appropriate targets. Where the objectives of an organization are many, or are diffused or uncertain, the delegation of responsibility becomes more difficult.[21]

Perhaps even more significantly, when there is a clear and precise criterion laid down for measuring performance, it may not be necessary to have politicians and representatives of the controlling agencies on the management boards. The management of the SEDCs would be undertaken by a board consisting of men and women chosen because of their knowledge and experience in such fields as economics, business administration, financial management and engineering. The *mentri besar* would continue to give directions affecting the general policy of the SEDC but he will do so from the outside, similar to the ministerial control exercised over public enterprises. In this way the SEDC will be able to enjoy its freedom from political intervention and at the same time benefit from its close association with the highest government authority in the state.

It would also not be necessary to have representatives of the controlling agencies on the boards as the control function would be more effectively performed outside the SEDCs. Civil servants who have certain relevant expertise would be seconded as full-time staff members of SEDCs or appointed as part-time directors of the boards. If the latter, they would be directors in their personal capacities and not as representatives of the government agencies in which they work.

Problems of shortage of qualified professional and technical staff cannot be solved overnight, and SEDCs will continue to face this problem for a few years to come. One way in which this problem can be temporarily solved is to reduce the activities undertaken by SEDCs so that they develop their own expertise. Some SEDCs have already developed some expertise in the construction of residential houses and shopping complexes. Others may find entering into joint ventures with other public agencies a useful way of sharing scarce resources. Several SEDCs have already undertaken joint

[21] Carey Jones, *op. cit.*, pp. 62–63.

ventures with PERNAS, UDA and MAJUIKAN. SEDCs which have concentrated on industrialization as the main thrust of their programme have found it necessary to work closely with FIDA. In this way federal and state agencies are able to work out a *modus operandi* so that there is full cooperation instead of conflict.

Problems of corruption are also not easy to solve immediately. The only way corruption can be reduced is by finding ways to detect it and then punish severely those guilty of corrupt practices as a deterrent to others. One way to detect corruption is by scrutinizing the accounts of public enterprises. This means that public enterprises such as SEDCs would have to maintain proper records of all their financial transactions. The powers of the Audit Department should be extended to include all public enterprises[22] including those formed as government companies. The Audit Department should expand its activities to provide a management consultancy service to assist SEDCs and other public enterprises in maintaining proper records. It should also conduct surprise spot checks on public enterprises. The Audit Department should not only be concerned with the legality of financial transactions but with waste and the economical use of money for which it was allocated, that is with the broader aspects of financial management.

The legislature should also play its role as a watchdog for public funds. All public enterprises including government companies should be required to submit annual reports to state legislatures on their activities. These reports should be submitted not later than six months after the year in which the report is due. The reports should contain basic information that is required for measuring overall performance of the public enterprise. The Ministry of Public Enterprise should assist SEDCs in preparing annual reports by providing guidelines and advice. The Public Accounts Committee of Parliament should also be reactivated and a similar committee be created at the state level so that there is greater public accountability exercised over public enterprises.

In general there is a need for a greater degree of 'openness' in the public sector. The government should not be afraid to let the public know what is happening. There should be a greater willingness to furnish information on the activities of public enterprises and to open oneself to new ideas. There should be more forums for public discussions and more informal groups made up of interested people from both the private and public sectors. There should be less secrecy on matters that need not be kept secret. Corruption thrives on secrecy as it makes it that much more difficult to detect.

Whether we like it or not, public enterprises as an instrument of government policy in this country have come to stay. SEDCs, in particular, have a vital role to play in the TMP. There is however, an urgent need for complete new thinking on the problems of SEDCs. There must be a willingness on the part of government to experiment with new ideas if SEDCs are not to bungle along as they have done in the past.

[22] *New Straits Times*, 13 July 1976. The present Amendment to the Constitution gives powers to the Auditor-General to audit the accounts of 'statutory bodies and agencies'. It is not clear whether or not government companies are included.

# VI. AGRICULTURAL POLICY AND RURAL DEVELOPMENT

# AGRICULTURAL DEVELOPMENT STRATEGIES RE-EXAMINED

Radzuan Abdul Rahman

The objective of this study is to briefly review the achievements and weaknesses of the Second Malaysia Plan on those issues pertaining to agriculture; and to suggest possible modifications in the development strategies commensurate with national development priorities.

## A Review of Past Agricultural Development

A brief recapitulation of the scenario with respect to agriculture at the time the Second Malaysia Plan was formulated, will help to set the stage for a fuller understanding of the problems confronting the country and the efforts made by the government to overcome these problems.

Agriculture is the backbone of the Malaysian economy. In 1974, it generated not less than 32% of the GDP,[1] provided employment for over 50% of the economically-active population and accounted for about 60% of Malaysia's foreign exchange earnings.[2] With rapid expansion in agriculture (augmented by equally impressive growth in other sectors), Malaysia enjoys a high and growing level of per capita income.

Unfortunately, however, despite the tremendous achievements made, there remains the glaring problem of income inequality – especially between the urban and the rural sectors of the economy. In Malaysia, moreover, where spatial distribution of the population is identifiable along racial lines, income inequality inevitably carries with it not only social but political overtones.

Virtually the entire rural sector of the economy is professionally linked, directly or otherwise, to agriculture, whereas the urban sector is engaged in relatively high-paying

[1] Malaysia, *Treasury Economic Report, 1974/75*, Kuala Lumpur, 1975.

[2] IBRD, *Malaysia: Appraisal of Western Johore Agricultural Development Project*, Washington, D.C., February 1974

professions usually associated with the modern sector. It has been documented that, on the average, the rural sector earnings are about 38% of the average urban income.[3] Without over-simplification, it can be said that rural poverty was the main issue confronting the country.

Against this background, and believing too that promoting economic growth can only be achieved in an environment of social and political stability, the Second Malaysia Plan was formulated. The main objectives of the plan: to eradicate poverty; and to eliminate the identification of race by economic function; were not new. There was, however, one fundamental difference. The strategy of development shifted away from the conventional macro objectives of economic growth, economic stability and allocative efficiency to a more pragmatic strategy of correcting the sectoral economic imbalance and the attainment of economic justice – 'undoubtedly the most potent force alive to-day in many, if not all of the third-world countries'.[4] In simple language, the shift was toward rural development.

**Agricultural Development Strategy**

The strategy of restructuring the economy to achieve sectoral economic balance was to be achieved via the following measures:

(i) Modernization of the rural sector by transforming it into a dynamic force for agricultural and economic development through the application of science and technology. More land would be opened up for agriculture to be managed under modern techniques. More rural institutions were to be set up.

(ii) Setting up of agro-based industries wherever possible to act as new growth centres.

(iii) Elimination of regional imbalances by taking into cognizance regional inequality in the attack on rural development.

The government backed up the above measures by devoting a sizeable proportion of public development expenditure on agriculture which amounted to 26.5% of the total budget.[5] Numerous projects were undertaken during the period which could be classified into the following categories: (a) land development schemes; (b) crop rehabilitation programmes (c) replanting schemes.

Without doubt, the first category could be singled out as the most important programme – a programme which was seen as a panacea for the problems of landlessness, underemployment, unemployment and uneconomic farm holdings. The target was to open up about 1.08 million acres for the five-year-period, out of which 0.4 million acres were to be managed by FELDA, the rest by such agencies as FELCRA, RISDA, and the private sector.

The crop rehabilitation programme was implemented essentially for the purpose of raising farm incomes through improvement in productivity. In this programme, the approaches undertaken by the government included provision of high-yielding varieties/clones to the farmers, provision of better drainage and irrigation facilities and

[3] *MTR of the SMP.*

[4] C.R. Wharton Jr., 'Rural Development: Problem, Policies and Programmes', Paper presented at RIDA Seminar, Fraser's Hill, 1961.

[5] See the *MTR to the SMP.*

other forms of incentives aimed at transforming subsistance agriculture into commercial ventures. The project covered such crops as padi, rubber, coconut, oil palm and fruits. The emphasis was, however, on padi. Although rubber replanting programmes could and should have been categorized under crop rehabilitation, it nevertheless was given separate treatment by virtue of the fact that it involved many smallholders and called for huge government expenditure. Presently, 2.7 million acres are under smallholdings, owned by approximately half a million farmers. Three million people depend directly or indirectly on the smallholder rubber industry for their livelihood. The target acreage for replanting during the SMP period was 600,000 acres.

### The Achievements

Land development as a strategy in the attack on rural poverty and also as a means to accelerate agricultural development has achieved much. FELDA has resettled around 29,000 families (approximately 174,000 persons) in over 100 land schemes over the period 1956-73. The majority of the schemes is under oil palm. Assuming that the rate of progress during the second half of the plan equals that attained during the first half, FELDA would have resettled 37,500 families (approximately 225,000 persons) by the end of 1975. Viewed from the objective of releasing pressure from the hitherto over-populated and uneconomic farming environments, land development especially through the FELDA and the youth schemes, has been able to absorb the underemployed and the unemployed manpower that used to characterize the rural sector. In many other respects, the overall economic situation justifies a continuation of such a strategy in the future. The land schemes, especially the oil palm schemes, are highly profitable.[6] In fact these schemes are viable even if the price of palm oil were to fall to MS300 per ton, suggesting that land development is an effective way to increase rural incomes. Instances of settlers receiving incomes as high as MS1,000 per month are not uncommon in some of these schemes.

By the same token, the crop rehabilitation programme also recorded considerable success. The Muda irrigation project for instance has resulted in a significant increase in cropping intensity, up by 97%. Rice production went up, in the project area, by 153% from 268,000 tons in 1965 to 678,000 tons in 1974.[7] Translated into value terms, this increment amounted to $339 millions. Farm incomes, too, recorded a substantial improvement. It went up by 13.5%.

In the same vein, the rubber replanting programme which is designed to ensure a continuous and sufficient income to smallholders, also performed well. This was manifested in higher incomes to farmers as well as a bigger and more stabilized foreign exchange earnings to the country.

In summary, it can be said that the agricultural development programme undertaken during the SMP has been fairly successful in modernizing and commercializing agriculture and in reducing rural poverty.

[6]See Tan Bock Thiam, 'Returns to investment in land development from settler and government viewpoints', in Stephen Chee & S.M. Khoo (eds.), *Malaysian Economic Development and Policies*, Kuala Lumpur, Malaysian Economic Association, 1975.

[7]See Malaysia, IBRD, Washington, D.C., 'MUDA Irrigation Project Completion Report', 1975.

**The Weaknesses**

While the country can be proud of these achievements, several weaknesses must also be noted. With respect to the land development programme, the success story mentioned above was confined principally to FELDA schemes. Land development projects administered by the other agencies such as state-controlled schemes and the Fringe Alienation schemes did not perform as well. The majority failed because they lacked financial support, supervision and technical know-how. Whereas participants in the federally controlled schemes such as FELDA felt to their advantage the 'visible' hand of the government, participants in the state and the Fringe Alienation schemes relied solely upon their own ingenuity and resourcefulness to make the projects successful. As a matter of fact, the generally poor performance of state schemes prompted the creation of yet another agency – the Federal Land Consolidation and Rehabilitation Authority (FELCRA), charged with the responsibility of rehabilitating these schemes and undertaking Fringe Alienation schemes.

There was also concern about land development costs. Suggestions have been made that FELDA find ways and means of utilizing the land resources at its disposal more efficiently. For instance, its rapid land development programme might have caused considerable backlash effects on the timber industry, rendering it economically inefficient.[8] With regard to rubber replanting, instances of smallholders not participating in the programme were numerous. The performance of those fell short of expectations.

The major weakness of past development efforts has been its failure in eliminating the problem of poverty. There are indications that the problem has in fact deteriorated over the years.[9]

In the final analysis, the performance of the SMP can be summarized as follows. The implementation of the agricultural projects and the establishment of supporting institutions were instrumental in modernizing the sector. Virtually all crops recorded commendable growth rates, averaging 7.5% p.a. Agro-based industries also registered considerable progress, although the highly capital-intensive industries established on borrowed technology, such as the sugar industry, performed poorly. Unfortunately, the spread effects of these achievements were limited. It was confined mainly to the export-oriented agricultural sector. The majority of agriculturists either failed to maximize the opportunities given, for reasons mentioned earlier, or simply missed the opportunities totally.

EQUITY ISSUES

Having reviewed the achievements and the weaknesses of the past development strategies, let us now examine the agricultural strategies of the TMP. These are essentially the same as those of the last plan. The SMP strategies are sound and have been effective in combatting rural underdevelopment and in accelerating agricultural

[8]See Radzuan Rahman, 'The Economics of Timber Industry in West Malaysia: a Case Study', Ph.D Thesis, Cornell University, 1974.

[9]See *Report on Socio-Economic Survey of Sri Gading Constituency*, Faculty of Resource Economics and Agribusiness, UPM, 1975; and Economic Planning Unit, 'Pendekatan Baru Terhadap Kemiskinan Luarbandar', Kuala Lumpur, 1975. (Mimeo).

development. However to avoid a repetition of the earlier mistakes, these strategies must be modified so as to incorporate some distributional considerations.

With respect to land development, there is a pressing need to ensure that the programme is successfully implemented irrespective of whether it is federally controlled or otherwise. Every effort must be made to guarantee that all schemes are economically viable. One possible modification is to standardize the programme whereby distinctions between the federal, state and the Fringe Alienation schemes are removed. This implies that all schemes must be subsidized by the government at the same rate. It is worthwhile to mention here that certain state schemes such as those of Kelantan have performed extremely well[10] and there is no reason why with increased financial support from the federal government, schemes of this nature cannot do better. Equally important, more land must be opened up, thus simultaneously accelerating agricultural development as well as speeding up the attack on rural underdevelopment. Also the country can no longer afford to nurture every project until it takes off the ground before handing it over to a small group of beneficiaries. That era is gone. What is needed now is for the government to provide the springboards and to leave the rest to the participants themselves. Perhaps, as a means of ensuring the success of the project, advisory services can be made available to them. Admittedly this may affect the efficiency of the system but is likely to be compensated by the increased number of beneficiaries and a better distribution of income.

In the same vein, modifications are also needed with respect to the rubber replanting and the crop rehabilitation programmes. The replanting programme is marred by certain 'hard-core' problems. Essentially this involves the lack of or unsatisfactory participation of the worst-off smallholders. Instances of smallholders selling their fertilizers to middlemen have also been widely acknowledged. The issue is fairly simple, being one of insufficient income. RISDA has attempted to overcome this problem by introducing cash crop credit schemes but the scheme has not been very successful. One possible modification is with respect to the replanting grants. As it stands to-day, the scheme is very regressive as the grant is given at a flat rate of $950 per acre irrespective of whether a smallholder owns a 99-acre holding or a 2-acre holding. A progressive scheme is more desirable where replanting grants are given on a graduated scale, with the smaller farmers receiving a higher grant on a per acre basis. There is a chance that implementation of such a scheme may eliminate the hardcore problem of smallholders and consequently spread the benefits of development to more people. Implementation of such a scheme does not necessarily mean that the budget has to be increased as often the same results can be achieved using the same amount of funds.

## INTERNAL TERMS OF TRADE

In international economics, one talks about the terms of trade as an indication of whether a particular country's trading position improves or deteriorates over time relative to that of another country's. The same concept can be utilized to describe trading opportunities between subsistence agriculture, as its computation is based upon what farmers or smallholders receive for their produce in relation to what they

[10] Syed Hussein Wafa, 'Land Development Strategies in West Malaysia: an Empirical Study', Ph.D. dissertation, Food Research Institute, Stanford University, 1972.

pay for consumer goods from the urban or the modern sector of the economy. The concept of development will be more meaningful if one considers this issue together with other growth indicators such as growth rates and better income distribution, as the benefits of higher income per capita may be reduced to nothing in the event that the terms of trade deteriorates faster than the increase in income.

What can we say about the internal terms of trade in Malaysia over the last few years? I believe that among other reasons, deteriorating internal terms of trade was one of the reasons responsible for the persistence of poverty in the country. Over the past few years, the consumer price index registered a steep increase and the overall commodity price index declined.[11] It was this combination of circumstances that prompted Ungku Aziz to characterize the situation as 'crossflation.'[12] As a remedial measure, the TMP should contain an appropriate price policy to guard against downward movements in the terms of trade. One possibility is by indexing farm prices to consumer goods prices, so that upward or downward movements in the latter will bring about similar movements in the former thus maintaining or stabilizing the terms of trade. For this system to function at all times, government subsidy is needed. In addition to price indexation, it will be timely for the government to introduce and to popularize crop insurance schemes as a buffer against possible catastrophes such as crop failures. Simultaneously, the TMP should continue to strengthen supporting agricultural institutions such as the LPN, FOA, RISDA, FIMA, FAMA, etc., particularly the market-oriented institutions, so as to ensure marketing outlets and fair prices to farmers. With these changes, I am confident that progress can be achieved in line with objectives of the new plan.

## NATIONAL AGRICULTURAL POLICY

In evaluating the achievements and the weaknesses of the last development plan I cannot but feel that the problems are more deeply rooted than what have been discussed this far. I think it can all be reduced to one of misplaced priorities. Let me illustrate this point by recapitulating the main objective of the SMP and comparing it with the strategies that were designed to fulfill it. We will see that there was a mismatch here. The objective was elimination of poverty. In simple terms, the aim was to effect income distribution so that sectoral income imbalance, either between or within sectors, could be minimized. Yet, the emphasis in agriculture was to transform it into a modern sector. Unquestionably, the target in agriculture was for economic growth. Some may argue that by zeroing in on economic growth, income distribution can be achieved simultaneously. This is highly erroneous. It can be valid only on condition that the economy has a built-in and an efficient redistribution system. This is presently non-existent. Without this, only the elites in subsistence agriculture will benefit from a strategy of maximizing growth and the majority will continue to be immersed in the sea of poverty. What is needed is a consistency between policy objectives and the strategies designed to attain them.

Extending the argument a bit further, I am of the opinion that the authorities must attempt to spell out the objective of development in respect of agriculture as clearly as

[11] Bank Negara Malaysia, *Quarterly Economic Bulletin*, Vol. 8 No. 4 (December 1975).

[12] Ungku A. Aziz, *New Straits Times*, 2 February 1976.

possible. If past experience is of any indication, income redistribution and economic growth seem to be the targets. That by itself is not sufficient. We have to know what the priority is.

Basically, it would appear that the dual objectives can be met without too much difficulty. As a first step, the authorities need to appreciate the co-existence of export agriculture with subsistence agriculture in the country. The policy objectives of economic growth and income distribution can then be appropriately assigned to these two sub-agricultural sectors. The emphasis in export agriculture should be economic growth and that in subsistence agriculture, income distribution. The latter can be achieved by reinforcing past strategies with the attendant modifications as suggested earlier. There is also an urgent need to revamp our system of management, if our effort at modernizing the sector is to be amply rewarded. We have to view agriculture as an integrated system and must not treat the components of agricultural economies – supply; production; processing; manufacturing; marketing; distribution; export credits and the non-business aspects of agriculture such as government policy and research – as separate and independent entities. This is because changes in any one sub-system will cause a chain of reactions throughout the system.

Lastly, the government should also spell out as clearly as possible its policy on agro-based industrial development as guidelines to potential investors. There is no doubt at all that the country should encourage this development as it is an integral part of agricultural modernization. But if past experience is of any indication at all, a new policy is definitely needed to steer the potential investors away from such huge and capital-intensive agro-based investment as in the sugar industry. Of late, several integrated sugar projects were established in the country. Except for the one in Perlis, the rest have failed. It is really not difficult to guess why such investments do not perform well under Malaysian conditions. Firstly, one has to admit that we do not have the experience and the technology to venture into such projects unlike the plantation industries where we have the expertise and the technology. As a result of this, the sugar projects were launched solely on borrowed technology. This, coupled with the hugeness of the projects, led to the inevitable disaster.

Against this background, the government should adopt an industrialization policy that will support and sustain whatever technological breakthroughs have been achieved thus far in the country. We have made significant breakthroughs in the rubber, oil palm and rice industries and it is crucial that these breakthroughs be maintained. The government should therefore encourage the establishment of such activities as fertilizer manufacturing so that agricultural inputs can be made available to these industries readily and cheaply. In addition, industrial planning must be thorough to avoid the problem of excess capacity which exists in certain sectors.[13] Simultaneously, encouragement should also be given to investors who show interest in industries that deal with consumer goods consumed by the rural populace. This will not only have the advantage of providing the rural sector with consumer goods cheaply but more importantly, it will generate a lot of demand, thus providing further stimulus to the economy.

[13] See Radzuan Rahman, *op. cit.*

## CONCLUSION

An attempt has been made in this study to review the achievements and the weaknesses of the SMP in respect of agriculture and to consider their implications for the TMP. In the course of this discussion, it was seen that the emphasis on land development, crop rehabilitation and rubber replanting was technically sound, and in fact has produced commendable results. Nevertheless, evaluated in relation to the objective of eliminating poverty, the achievements were trivial. The main weakness of the strategy was that the spread effects were limited and therefore, the problem of poverty still persists. A plea for a more equitable distribution of the economic pie is stressed, this to be achieved via certain modifications of the existing strategies. The study also suggests a possible policy stand with respect to agro-based industrial development, in the hope that such a policy will help sustain the technological breakthroughs that have been achieved thus far.

## FELDA LAND SCHEMES

Amir Baharuddin

### INTRODUCTION

FELDA, established under the Land Development Ordinance No. 20 of 1956, is the largest 'government estate' in Southeast Asia, and perhaps the largest single agency landholding in the world.

In the early years, FELDA helped to finance land development efforts of various states in the country. Later the agency was entrusted with the role of developing, financing and administering large-scale land development. Among the first schemes established was the Bilut Valley in Pahang. After years of intermittent failure and success FELDA today has enough experience and hence can be considered as the most successful agricultural land developer in the country.

Under the Federal Constitution, land is under the jurisdiction of the state governments. When an area has been alienated to FELDA, it is then developed in phases following a specific work schedule. Under existing arrangements the cost of developing the 'estate' and the settler's house is treated as a loan to the settlers from the authority, while the cost of administration and infrastructure is provided by the federal government through grants. The monies loaned to the settlers come from various sources.

By the end of 1974, FELDA had developed a total of 628,000 acres under various crops (excluding 42,000 acres of village areas). The distribution of land area by crop is as follows:[1]

| Crop | Acreage |
|---|---|
| Oil Palm | 385,000 |
| Rubber | 233,000 |
| Sugarcane | 9,000 |
| Cacao | 1,000 |
| Total | 628,000 |

The distribution of land area by states is shown in Table 1.

[1] FELDA, *Laporan Tahunan 1974*, p. 3.

The total number of families settled from 1956 to 1974 was 30,100. The administration of this vast land area and settlers is undertaken by 'FELDA Officers' numbering 4,473 (1974), 13% of whom were at the head office and 67.34% at the scheme level.[2]

The administration of FELDA is 'somewhat decentralized' with the Headquarters in Kuala Lumpur administering the entire complex of planting, processing, marketing, finance, training and even research. The *regional office* administers certain basic functions for a group of schemes. Each scheme is administered by the manager, an assistant manager, field supervisors, and field assistants. (See Table 2.)

PRODUCTION ACTIVITIES

By the end of 1974, a total of 108,000 acres of rubber were in production producing a total of 49,293 tons of rubber. A total of 174,000 acres of oil palm were being harvested, producing 779,263 tons of fresh fruit bunches (FFB) for processing. Of this FELDA processed 743,000 tons FFB using eleven FELDA mills. A total of 138,569 tons of palm oil and 25,025 tons of kernel oil were produced in 1974.[3]

FINANCE AND LOANS

The Federal Treasury is FELDA's major financier. As of 1974, a total of $206,499,212 has been spent on administration alone. This sum is the cumulative *federal grants* spent to date. Another $585,977,889 constitute the cumulative sum of federal government loan to FELDA (to be paid with an interest of 6.5%). Other sources of funds expended include loans from the World Bank, the ADB and new planting grants.

The total sum of monies expended by FELDA from all sources was $1,075,920,864 as at the end of 1974 (see Table 3). In 1974, the cost of administering 30,100 settlers amounted to $40,355,874. This is equivalent to $1,340.75 per settler family per year or $168 per person per year. If other agencies incur the same cost in administering their programmes, we obtain some startling results. RISDA, which has been targetted to rehabilitate 400,000 smallholder families, will incur about $536,300,000 per year on administration alone.[4] MADA, with a population of 300,000 people in its scheme area, will require a sum of $50,280,000 per year.

With 628,000 acres under crop and a total development expenditure of $869,421,652, the average cost per acre developed is $1,384.42. Hence, for an 8-acre lot the approximate cost will be $11,075. If the FELDA estimate of $16,000 is to be accepted the cost per settler house should be $4,925. This appears to be on the high side.

[2] *Ibid.*

[3] Palm oil prices (FOB) 1973 was $580 per metric ton. Price of rubber was $2.67 per kilo for RSS 1 (Dec. 1973).

[4] The per capita figure is calculated on the assumption that the size of an average settler family is eight. The figures given here do not include the cost of infrastructure such as roads, bridges and health clinics, which are undertaken by other government departments through separate allocations.

TABLE 1
FELDA LAND DEVELOPMENT AS AT END OF 1974

| State | No. of Schemes | Crop (*Acres*) | | | | Total | No. of Settler Families |
|---|---|---|---|---|---|---|---|
| | | *Rubber* | *Oil Palm* | *Sugarcane* | *Cacao* | | |
| Perlis | 1 | – | – | 8,621 | – | 8,621 | – |
| Kedah | 6 | 13,158 | – | – | – | 13,158 | 1,557 |
| Perak | 7 | 16,082 | 11,864 | – | – | 27,946 | 2,294 |
| Selangor | 4 | 7,761 | 13,745 | – | – | 21,056 | 1,843 |
| N. Sembilan | 17 | 57,943 | 17,961 | – | – | 75,904 | 2,995 |
| Malacca | 5 | 11,727 | – | – | – | 11,727 | 973 |
| Johore | 37 | 57,334 | 93,043 | – | – | 150,377 | 6,874 |
| Pahang | 62 | 57,440 | 218,053 | – | 1,170 | 276,663 | 11,421 |
| Trengganu | 9 | 11,517 | 21,872 | – | – | 33,389 | 2,143 |
| Kelantan | 1 | – | 8,359 | – | – | 8,359 | –* |
| Total | 149 | 232,962 | 384,897 | 8,621 | 1,170 | 627,650 | 30,100 |

* Youths have been settled.

TABLE 2
FEDERAL LAND DEVELOPMENT AUTHORITY,
NUMBER OF PERSONNEL BY LOCATION, 1974

| Location | Number | Percentage |
|---|---|---|
| Head office | 590 | 13.19 |
| Regional office | 228 | 5.10 |
| Schemes | 3,012 | 67.34 |
| Sugarcane project | 74 | 1.65 |
| Research centre | 97 | 2.17 |
| Mills/Factories/Bulking Installations | 409 | 9.14 |
| Training centres/Schools | 63 | 1.41 |

The progress on loan repayment is shown in Table 4. Of the total sum of $855,021,600 loaned to FELDA settlers, only $12,283,053 haye been recovered as at 1974. Of this, interest payments amount to $5,936,022. The slow rate of repayment is quite alarming. Of the total sum of $585,977,888 loaned by the federal government, only $6,347,030 have been repaid. In addition a total of $234,846,035 must be repaid to the World Bank and another $34,197,677 to other lenders. The cost of administration will continue to increase, and so will the need for federal grants.

Having studied some of the overall financial aspects of the FELDA Development programme, we shall now (i) examine the typical cost flow characteristics of an 8-acre rubber scheme, (ii) evaluate the usefulness of the 'Felda method' of providing rural employment and eradicating poverty, (iii) identify the long-run impact of inflation and family size on per capita income of settler-participants.

## THE CASH FLOW

The typical income flow characteristics of an 8-acre rubber holding is shown in Table 5. These figures are given by FELDA in its 1966 *Annual Report*. The Table shows the monthly cash income and subsistence expenditure of a settler family. From the difference, denoted as residual cash income, must be deducted the instalment payments. It is apparent that during the loan repayment period the cash income available for expenditure on non-subsistence items is rather small.

## EFFECTS OF FAMILY SIZE

An important phenomenon that could trouble FELDA settlers, at least in the rubber schemes, is the growing number of 'dependants' per family. Given the limited supply of land and the lack of further expansion possibilities in each schemes, this phenomenon can cause the incidence of unemployment to rise among settlers and hence limit the anti-poverty effectiveness of FELDA schemes.

The effects of growing family size on per capita income in FELDA schemes is shown in Tables 6 & 7. Included in the projections of family income are some estimates

TABLE 3
FINANCIAL RESOURCES OF FELDA, 1973/74
*(Financing received in 1973)*

| | Cumulative Total as at 1.1.1973[a] ($) | 1973 ($) | Cumulative Total as at 31.12.1973 ($) | 1974[b] ($) | Cumulative Total as at 31.12.1974 ($) |
|---|---|---|---|---|---|
| Federal government | | | | | |
| *Administration grant* | 138,241,338 | 27,902,000 | 166,143,338 | 40,355,874 | 206,499,212 |
| *Loan* | 374,989,574 | 83,500,000 | 458,489,574 | 127,488,314 | 585,977,888 |
| World Bank loan | 34,907,414 | 9,938,621 | 44,846,035 | 190,000,000 | 234,846,035 |
| Asian Development Bank loan | 4,599,625 | 1,785,702 | 6,358,327 | – | – |
| OECF Loan-Japan | 21,250,328 | 6,589,022 | 27,839,350 | – | – |
| New planting grants | 14,400,052 | – | 14,400,052 | – | – |
| Total | 588,388,331 | 129,688,345 | 718,076,676 | 357,844,188 | 1,075,920,864 |

[a] From FELDA *Annual Report, 1973.*

[b] From FELDA *Annual Report, 1974.*

TABLE 4
LOAN REPAYMENTS TO FEDERAL GOVERNMENT

| Year | Principal ($) | Interest ($) | Total ($) |
|---|---|---|---|
| 1967 | 60,224.97 | 65,000.00 | 125,244.97 |
| 1968 | 123,502.19 | 126,987.75 | 250,489.94 |
| 1969 | 189,922.27 | 185,812.64 | 375,734.91 |
| 1970 | 435,819.68 | 431,376.52 | 867,196.20 |
| 1971 | 698,590.58 | 669,585.53 | 1,368,176.10 |
| 1972 | 860,671.58 | 771,843.31 | 1,632,514.89 |
| 1973 | 1,558,582.62 | 1,459,172.83 | 3,017,755.45 |
| 1974 | 2,419,696.46 | 2,226,243.69 | 4,645,940.15 |
| Total | 6,347,030.34 | 5,936,022.27 | 12,283,052.61 |

TABLE 5
YIELD, TOTAL CASH INCOME, SUBSISTENCE REQUIREMENT, RESIDUAL CASH INCOME AND LOAN REPAYMENT

| Yield | Monthly Total Cash Income | Monthly Subsistence | Monthly Residual Cash Income | Loan Repayment | | Balance on an Initial Loan of $16,000 at 5% int. | Year of Tapping |
|---|---|---|---|---|---|---|---|
| | | | | *Monthly* | *Annually* | | |
| *(lbs)* | *($)* | *($)* | *($)* | *($)* | *($)* | | |
| 4,400 | 140.42 | 100.00 | 40.42 | 30 | 360 | 16,440 | 1 |
| 6,400 | 216.67 | 120.00 | 96.67 | 70 | 840 | 16,422 | 2 |
| 8,000 | 277.67 | 140.00 | 137.67 | 90 | 1,080 | 16,163 | 3 |
| 9,600 | 338.67 | 150.00 | 188.67 | 130 | 1,560 | 15,411 | 4 |
| 10,400 | 369.17 | 150.00 | 219.17 | 150 | 1,800 | 14,382 | 5 |
| 10,800 | 384.42 | 150.00 | 234.42 | 160 | 1,920 | 13,181 | 6 |
| 11,200 | 399.67 | 150.00 | 249.67 | 170 | 2,040 | 11,181 | 7 |
| 11,200 | 399.67 | 150.00 | 249.67 | 170 | 2,040 | 10,350 | 8 |
| 11,200 | 399.67 | 150.00 | 249.67 | 170 | 2,040 | 8,827 | 9 |
| 11,200 | 399.67 | 150.00 | 249.67 | 170 | 2,040 | 7,228 | 10 |
| 11,200 | 399.67 | 160.00 | 239.67 | 160 | 1,920 | 5,669 | 11 |
| 11,200 | 399.67 | 160.00 | 239.67 | 160 | 1,920 | 4,032 | 12 |
| 11,200 | 399.67 | 160.00 | 239.67 | 160 | 1,920 | 2,314 | 13 |
| 11,200 | 399.67 | 160.00 | 239.67 | 160 | 1,920 | 510 | 14 |
| 11,000 | 392.04 | 160.00 | 232.04 | 150 | 1,800 | ---------- | 15 |
| 10,800 | 383.33 | 160.00 | 223.33 | 150 | 1,800 | ---------- | 16 |
| 10,600 | 376.79 | 160.00 | 216.79 | 140 | 1,680 | ---------- | 17 |
| 10,400 | 369.17 | 175.00 | 194.77 | 130 | 1,560 | ---------- | 18 |
| 10,200 | 311.54 | 175.00 | 186.54 | 120 | 1,440 | ---------- | 19 |
| 10,000 | 353.92 | 175.00 | 178.92 | 120 | 1,440 | ---------- | 20 |
| 9,600 | 338.67 | 175.00 | 163.67 | 110 | 1,320 | ---------- | 21 |
| 9,200 | 323.42 | 175.00 | 148.42 | 100 | 1,200 | ---------- | 22 |
| 8,800 | 308.17 | 175.00 | 133.17 | 90 | 1,000 | ---------- | 23 |
| 8,400 | 292.92 | 175.00 | 117.92 | 80 | 960 | ---------- | 24 |
| 8,000 | 277.67 | 175.00 | 102.67 | 70 | 840 | ---------- | 25 |

*Source*: FELDA, *Annual Report 1966*.

*Notes*: Crop: Rubber
Acreage: 8
Market Price: 60 cents per lb.
Net: 52½ cents per lb.

TABLE 6
MONTHLY SUBSISTENCE ALLOWANCE AND ESTIMATES OF CHILDREN

| Year of Production | Assumed Monthly Subsistence Allowance | Alternative Estimates of Subsistence Allowance | | | Child per Family[d] |
|---|---|---|---|---|---|
| | | *Low*[a] | *High*[b] | *Cash Income*[c] | |
| 1 | 100 | 95.00 | 105.00 | 10.42 | 4 |
| 2 | 120 | 114.00 | 126.00 | 26.67 | 4 |
| 3 | 140 | 133.00 | 147.00 | 47.07 | 5 |
| 4 | 150 | 142.50 | 157.50 | 58.67 | 5 |
| 5 | 150 | 142.50 | 157.50 | 69.17 | 6 |
| 6 | 150 | 142.50 | 157.50 | 74.42 | 6 |
| 7 | 150 | 142.50 | 157.50 | 79.67 | 7 |
| 8 | 150 | 142.50 | 157.50 | 79.67 | 7 |
| 9 | 150 | 142.50 | 157.50 | 79.67 | 8 |
| 10 | 150 | 142.50 | 157.50 | 79.67 | 8 |
| 11 | 160 | 152.00 | 168.00 | 79.67 | 9 |
| 12 | 160 | 152.00 | 168.00 | 79.67 | 9 |
| 13 | 160 | 152.00 | 168.00 | 79.67 | 9 |
| 14 | 160 | 152.00 | 168.00 | 79.67 | 9 |
| 15 | 160 | 152.00 | 168.00 | 82.04 | 9 |
| 16 | 160 | 152.00 | 168.00 | 73.33 | 9 |
| 17 | 160 | 152.00 | 168.00 | 76.79 | 9 |
| 18 | 175 | 166.25 | 183.75 | 64.77 | 9 |
| 19 | 175 | 166.25 | 183.75 | 66.54 | 9 |
| 20 | 175 | 166.25 | 183.75 | 58.92 | 9 |
| 21 | 175 | 166.25 | 183.75 | 53.67 | 9 |
| 22 | 175 | 166.25 | 183.75 | 48.42 | 9 |
| 23 | 175 | 166.25 | 183.75 | 43.17 | 9 |
| 24 | 175 | 166.25 | 183.75 | 37.92 | 9 |
| 25 | 175 | 166.25 | 183.75 | 32.67 | 9 |

[a] This estimate is 5% below the normal subsistence allowance to provide for possible shortfall in yields.

[b] This estimate is 5% above the normal subsistence allowance to provide for yields higher than expected.

[c] Cash income = Total income–subsistence–loan repayment.

[d] Based on an average of 4 children on transfer to the scheme, plus a projected increase of *one child* once every two years up to a maximum (arbitrary) of 9 children per family. This can be adjusted on the basis of actual data.

TABLE 7
FAMILY INCOME AND PER CAPITA INCOME PER MONTH

| Year | Family Income (M$) | | | | Per Capital Income Per Month[a] | | Below/Above[a] Desired M$35.00 |
|---|---|---|---|---|---|---|---|
| | Low | | High | | Low | High | |
| | (Monthly) | (Annual) | (Monthly) | (Annual) | ($) | ($) | |
| 1 | 105.42 | 1265.04 | 115.42 | 1385.04 | 26.35 | 28.85 | − 6.15 |
| 2 | 140.67 | 1688.04 | 152.67 | 1832.04 | 35.16 | 38.16 | + 3.16 |
| 3 | 180.07 | 2160.84 | 194.07 | 2328.84 | 36.01 | 38.81 | + 3.81 |
| 4 | 201.17 | 2414.04 | 216.17 | 2594.04 | 40.23 | 43.23 | + 8.23 |
| 5 | 211.67 | 2540.04 | 226.67 | 2720.04 | 35.27 | 37.77 | + 2.77 |
| 6 | 216.92 | 2603.04 | 231.92 | 2783.04 | 36.15 | 38.65 | + 3.65 |
| 7 | 222.17 | 2666.04 | 237.17 | 2846.04 | 31.73 | 33.88 | − 1.12 |
| 8 | 222.17 | 2666.04 | 237.17 | 2846.04 | 31.73 | 33.88 | − 1.12 |
| 9 | 222.17 | 2666.04 | 237.17 | 2846.04 | 27.77 | 29.64 | − 5.36 |
| 10 | 222.17 | 2666.04 | 237.17 | 2846.04 | 27.77 | 29.64 | − 5.36 |
| 11 | 231.67 | 2780.04 | 247.67 | 2972.04 | 25.74 | 27.51 | − 7.49 |
| 12 | 231.67 | 2780.04 | 247.67 | 2972.04 | 25.74 | 27.51 | − 7.49 |
| 13 | 231.67 | 2780.04 | 247.67 | 2972.04 | 25.74 | 27.51 | − 7.49 |
| 14 | 231.67 | 2780 04 | 247.67 | 2972.04 | 25.74 | 27.51 | − 7.49 |
| 15 | 234.04 | 2808.48 | 250.04 | 3000.48 | 26.00 | 27.78 | − 7.22 |
| 16 | 225.33 | 2703.96 | 241.33 | 2895.96 | 25.04 | 26.81 | − 8.19 |
| 17 | 228.79 | 2745.48 | 244.79 | 2937.48 | 25.42 | 27.19 | − 7.79 |
| 18 | 231.02 | 2772.24 | 248.52 | 2982.24 | 25.66 | 27.61 | − 7.39 |
| 19 | 232.79 | 2793.48 | 250.26 | 3002.12 | 25.86 | 27.80 | − 7.20 |
| 20 | 225.17 | 2702.04 | 242.67 | 2912.04 | 25.01 | 26.96 | − 8.04 |
| 21 | 219.92 | 2639.04 | 237.42 | 2849.04 | 24.43 | 26.38 | − 8.62 |
| 22 | 214.67 | 2576.04 | 232.17 | 2786.04 | 23.85 | 25.79 | − 9.21 |
| 23 | 209.42 | 2513.04 | 226.92 | 2723.04 | 23.26 | 25.21 | − 9.79 |
| 24 | 204.17 | 1450.04 | 221.67 | 2660.04 | 22.68 | 24.83 | − 10.17 |
| 25 | 198.92 | 2387.04 | 216.42 | 2597.04 | 22.10 | 24.04 | − 10.96 |

Notes:

[a] This is a family income divided by the size of family. Earnings of wives have been estimated at $70 p.m. and this has been included in family income to derive estimates of per capita income. The assumption was that the husband could be supported on his wife's income.

[b] Based on $35.00 per head per month average poverty line, or roughly M$420 per year per capita.

Rate: M$ 2.40 = US $ 1.00

on the earnings of wives. Upper and lower estimates of incomes are projected to take into account fluctuations in yields. It is assumed that a family had four children on entry into the scheme and that the size of the family increases at the rate of one child once every two years. The maximum number of children assumed is nine per family. The per capita income of settler families have been computed under different sets of assumptions and these are given in Table 7. If yields are 5% below expectations, then monthly income per capita in the twenty-fifth year will only be $22. If the poverty line income is taken as $35 p.m. then it is apparent that settlers in a typical FELDA rubber scheme will experience an income above the poverty line only during the first five years of tapping.

Finally, if adjustments are made for inflation, the severity of the problem will be even more acute. As an example, if an annual rate inflation of 5% is assumed, the real per capita monthly income can be as low as $10.92 which is $24.08 below what is required if the poverty line is maintained at a 'constant' $35.00. If the rate of inflation is 10% the monthly per capita income can fall to as low as $7.07 per month. Such a situation will offset the anti-poverty targets of FELDA schemes.

# VII. POPULATION POLICY IN NATIONAL DEVELOPMENT

# POPULATION PLANNING IN MALAYSIA – SOME LONGTERM CONSIDERATIONS*

Fong Kwok Yuen

## INTRODUCTION

Traditional considerations of population policy and population planning have been set in the framework of the medium term. The pioneering work of Coale and Hoover,[1] elaborated by Enke[2] among others, deals with the socio-economic consequences of alternative patterns of population growth within a couple of decades. Population is often treated as exogenous to the macroeconomic framework. As has been pointed out by Arthur[3] the results derived from such projections are the direct consequence of the specification of the behavioural equations of the model, particularly the production function. In a neoclassical treatment, a lower rate of population growth almost inevitably results in a higher rate of per capita income growth. Although this has been recognized by Solow[4] in his pioneering work, subsequent exponents have been much less scrupulous in interpreting the results. While the models themselves are fairly useful, especially in the planning of social infrastructure, their indiscriminate use leaves much to be desired from the point of view of intellectual honesty.

*The views expressed do not necessarily represent those of the Economic Planning Unit or the Government of Malaysia.

[1] A.J. Coale and E.M. Hoover, *Population Growth and Economic Development in Low-Income Countries*, Princeton, N.J., 1958.

[2] TEMPO, *Description of Economic Demographic Model* 68-TMP-120, Santa Barbara, 1968.

[3] SEADAG, *Population Panel Seminar on the Role of Economic-Demographic Models in Development Planning*, New York, 1975.

[4] R.M. Solow, 'A contribution to the theory of economic growth', *Quarterly Journal of Economics*, Vol. 70 (1956), pp. 65–94.

Recent efforts in 'demometric' modelling have attempted to make population-related variables endogenous in the model. Bachue[5] and Encarnacion[6] among others have yielded more provocative and certainly more useful results from the point of view of policy. Owing to the paucity of both theory and data, the elasticities of population-related variables with respect to conventional socio-economic aggregates become somewhat suspect. Nonetheless, the research efforts in this direction are certainly worth their while.

It is perhaps because of the paucity of theory and data, alluded to earlier, that there has been considerable interest in approaching population policy on the level of the microeconomics of the household. Following the pioneering work of Becker[7] an extensive literature has evolved. A number of models have been tested using cross-sectional data obtained from socioeconomic sample surveys. Some have yielded new insights, while others have tended to confirm the findings of other desciplines, particularly sociology[8] that have been interested in population for a long time.

While the microeconomics of the household is relevant to policy-making in the short run, it cannot address itself to issues of the very long term. It is to these that I shall now turn.

## POPULATION GROWTH AND STABILIZATION

The recognition of the finite resources of this earth is the basic premise of the long-term consideration of population growth. Given finite resources, it becomes apparent that infinite population growth is not tenable, certainly not without a consequential reduction in material and non-material welfare. This indeed has been the approach of various studies, most prominent of which is the exercise undertaken by the Meadows[9] team. Needless to say, the very general nature of the type of projections undertaken by Meadows invites an inevitable barrage of criticism, not the least of which is the role of the price system in promoting resource substitution. Furthermore, technological forecasting, even in its present form, is unlikely to yield dependable results for projection periods of fifteen years, to say nothing of a hundred and fifty years.

Nonetheless, given the imponderables, it is still useful to have some bench-mark figures to which the 'carrying capacity' of a national or global system may be related. They will at least provoke responses towards answering questions such as: 'Can we live with 34 million people in Peninsular Malaysia by the middle of the 22nd century?' This study will attempt to sketch out a preliminary demographic framework that may provide the numbers for the consideration of others working in the field.

[5] R. Wery, G.B. Rodgers & M.P. Hopkins, *Bachue-2: Version 1: a Population and Employment Model for the Philippines*, Geneva, 1974.

[6] J. Encarnacion, *et al.*, 'An economic–demographic model of the Philippines' in A. Kintanar, *et al.*, *Studies in Philippine Economic Demographic Relationships*, 1974.

[7] G.S. Becker, 'An economic analysis of fertility', in National Bureau of Economic Research, *Demographic and Economic Changes in Developed Countries*, Princeton, 1960.

[8] N.H. Lowenthal, & A.S. David, *Social and Economic Correlates of Family Fertility: an Updated Survey of the Evidence*, Research Triangle Institute, 1972.

[9] D.H. Meadows, *et al.*, *The Limits to Growth: a Report for the Club of Rome's Project on the Predicament of Mankind*, New York, Universe Books, 1972.

FERTILITY REDUCTION

A look at the demographic time series for Peninsular Malaysia will show a declining trend in fertility over the past fifteen years or so. It is estimated that the total fertility rate (TFR) dropped from 6.28 in 1958 to 4.8 in 1970. International experience shows that once fertility begins to decline, the momentum of change is likely to continue at least to the level at which the developed countries find themselves in today. The decline in fertility need not take place in a monotonic fashion; indeed, demographers in the United States have been twice baffled by the upturn of fertility in the '30s, and the downturn of the '50s.

If it is then accepted as a premise that fertility will decline to replacement level, three issues remain to be answered:

(i) What will be the pace of fertility decline?
(ii) When will population growth stabilize?
(iii) At what level will it stabilize?

Evidence concerning the pace of fertility decline is by no means definitive. Kirk[10] suggests that an accelerating rate of fertility decline is likely. On the other hand, the comparative statics analysis of Retherford and Cho[11] of Malaysian data suggests that the most important demographic factor accounting for the decline in fertility between 1957 and 1967 has been postponement of marriage. The already high average age of marriage at present suggests that further declines in fertility will most likely involve changes in norms relating to ideal family size. In line with the pioneering work of Fredjka,[12] therefore, the parameters of the pace of fertility decline will be given in the following manner; to establish what the consequences are, given the present net reproduction rate (NRR).

a) Projection 1: attaining NRR = 1 by 1975
b) Projection 2: attaining NRR = 1 by 1990
c) Projection 3: attaining NRR = 1 by 2005
d) Projection 4: attaining NRR = 1 by 2020

The projections are made using the traditional two-sex component method. The base population is obtained from the Census of 1970, adjusted by the Post Enumeration Survey. Mortality, pivoted on life expectancy at birth ($\mathring{e}_o$), is projected on the basis of regression results of $\mathring{e}_1$ and $\mathring{e}_o$ for both sexes against time for the period 1958 to 1972. Arbitrarily, a limit on $\mathring{e}_o$ is placed at 75.0 years for females and 70.5 years for males. The Model West Life Tables were used.[13] The age schedule of fertility is fixed at the 1970 level, with a mean age of 29.46 years. The sex ratio at birth is also set at 105.0. Net migration of zero is also maintained.

[10] D. Kirk, 'A new demographic transition?' in National Academy of Sciences, *Rapid Population Growth: Consequences and Policy Implications*, Baltimore, 1971.

[11] R.D. Retherford & Lee-Jay Cho, 'Comparative Analysis of Recent Fertility Trends in East Asia', Paper presented at the International Population Conference, Liege, 1973.

[12] T. Fredjka, *The Future of Population Growth: Alternative Paths to Equilibrium*, New York, 1972.

[13] A.J. Coale & P. Demeny, *Regional Model Life Tables and Stable Populations*, Princeton, N.J., The University Press, 1966.

ALTERNATIVE PATHS TO STABILITY

The paths towards stability as indicated by the four projections may be monitored in a number of ways. We look first at the implied total fertility rates as shown in Table 1.

In general, as the projected life expectancy levels off after 1990 and the sex ratio at birth remains constant, the level of TFR corresponding to replacement-level population growth is 2.109 after 1990. Projection 1 attains replacement by 1975. Thus, the 2.157 TFR which corresponds to the 1980 replacement TFR reflects the higher mortality of 1980 as compared to 1990.

Looking next at the crude birth rates (Table 2), we notice that even after fertility has declined to replacement levels, crude birth rates are nowhere near their approximate replacement levels. Taking Projection 2 as an example, although NRR reaches unity by 1990, it is not until about 2040 that the crude birth rate begins to oscillate

TABLE 1

TOTAL FERTILITY RATE

| | 1970 | 1980 | 1990 | 2000 | 2010 | 2020 |
|---|---|---|---|---|---|---|
| Projection 1 | 4.856 | 2.157 | 2.109 | 2.109 | 2.109 | 2.109 |
| Projection 2 | 4.856 | 2.759 | 2.109 | 2.109 | 2.109 | 2.109 |
| Projection 3 | 4.856 | 3.767 | 2.908 | 2.328 | 2.109 | 2.109 |
| Projection 4 | 4.856 | 4.028 | 3.368 | 2.881 | 2.463 | 2.109 |

TABLE 2

CRUDE BIRTH RATES (‰)

| Year | Projection | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| 1970 | 33.6 | 33.6 | 33.6 | 33.6 |
| 1980 | 19.0 | 22.8 | 30.3 | 31.8 |
| 1990 | 20.2 | 19.2 | 23.8 | 26.7 |
| 2000 | 16.6 | 18.1 | 19.2 | 22.7 |
| 2010 | 14.4 | 15.4 | 17.1 | 21.0 |
| 2020 | 14.5 | 14.4 | 15.9 | 16.2 |
| 2030 | 13.9 | 14.2 | 14.8 | 16.0 |
| 2040 | 13.5 | 13.7 | 14.2 | 15.3 |
| 2050 | 13.8 | 13.7 | 13.9 | 14.2 |
| 2060 | 13.8 | 13.8 | 13.8 | 13.9 |
| 2070 | 13.7 | 13.7 | 13.8 | 13.9 |
| 2080 | 13.8 | 13.7 | 13.7 | 13.7 |

TABLE 3
RATE OF NATURAL INCREASE (‰)

| Year | Projection | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| 1970 | 26.7 | 26.7 | 26.7 | 26.7 |
| 1980 | 13.4 | 17.3 | 24.4 | 26.1 |
| 1990 | 14.9 | 14.2 | 19.2 | 22.1 |
| 2000 | 10.5 | 12.3 | 14.0 | 17.8 |
| 2010 | 8.3 | 8.4 | 11.0 | 15.4 |
| 2020 | 5.8 | 5.5 | 8.3 | 9.4 |
| 2030 | 3.3 | 2.8 | 5.2 | 7.6 |
| 2040 | 0.2 | 0.5 | 3.0 | 5.5 |
| 2050 | −0.6 | −0.3 | 1.5 | 3.3 |
| 2060 | −0.4 | 0.2 | 0.3 | 1.7 |
| 2070 | 0.4 | 0.1 | 0.0 | 0.8 |
| 2080 | −0.3 | −0.1 | 0.0 | 0.1 |

TABLE 4
TIME LAGS IN STABILIZATION

| | Replacement Level Reached | Stabilization Initiated |
|---|---|---|
| Projection 1 | 1975 | 2040 |
| Projection 2 | 1990 | 2050 |
| Projection 3 | 2005 | 2060 |
| Projection 4 | 2020 | 2080 |

TABLE 5
STABLE POPULATION SIZE
*(In millions)*

| | 1970 | 2000 | 2050 | 2100 | 2150 |
|---|---|---|---|---|---|
| Projection 1 | 9,145.9 | 14,620.2 | 17,868,7 | 17,899.2 | 17,888.6 |
| Projection 2 | 9,145.9 | 15,622.8 | 20,265.4 | 20.161.1 | 20,259.2 |
| Projection 3 | 9,145.9 | 17,908.3 | 26,419.1 | 26,784.1 | 26,783.4 |
| Projection 4 | 9,145.9 | 18,949.5 | 32,147.3 | 33,732.1 | 33,768.6 |

TABLE 6

AGE STRUCTURE

*(Percentages)*

| | 1970 | 1980 | 1990 | 2000 | 2010 | 2020 | 2030 | 2040 | 2050 | 2060 | 2070 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Projection 1 | | | | | | | | | | | |
| 0–14 | 44.11 | 34.30 | 24.46 | 26.94 | 22.85 | 20.43 | 20.44 | 20.21 | 20.00 | 20.20 | 20.17 |
| 15–64 | 52.49 | 61.59 | 70.68 | 68.32 | 69.98 | 69.25 | 64.74 | 61.94 | 64.85 | 64.14 | 63.51 |
| 65+ | 3.40 | 4.12 | 4.86 | 5.74 | 7.17 | 10.33 | 14.82 | 17.85 | 15.15 | 15.66 | 16.32 |
| Projection 2 | | | | | | | | | | | |
| 0–14 | 44.11 | 37.66 | 29.36 | 25.08 | 24.11 | 21.55 | 20.40 | 20.36 | 20.15 | 20.12 | 20.19 |
| 15–64 | 52.49 | 58.44 | 66.10 | 69.55 | 69.32 | 69.09 | 68.27 | 63.77 | 63.54 | 64.56 | 63.88 |
| 65+ | 3.40 | 3.90 | 4.54 | 5.37 | 6.58 | 9.36 | 13.34 | 15.87 | 16.32 | 15.32 | 15.94 |
| Projection 3 | | | | | | | | | | | |
| 0–14 | 44.11 | 38.90 | 35.93 | 30.64 | 26.22 | 23.83 | 22.02 | 20.96 | 20.42 | 20.22 | 20.17 |
| 15–64 | 52.49 | 57.28 | 59.95 | 64.68 | 68.18 | 68.42 | 67.24 | 66.57 | 65.10 | 64.05 | 64.17 |
| 65+ | 3.40 | 3.83 | 4.12 | 4.68 | 5.60 | 7.75 | 10.74 | 12.47 | 14.48 | 15.73 | 15.66 |
| Projection 4 | | | | | | | | | | | |
| 0–14 | 44.11 | 39.19 | 37.52 | 33.49 | 29.97 | 27.61 | 23.36 | 22.15 | 21.50 | 20.44 | 20.21 |
| 15–64 | 51.49 | 57.00 | 58.46 | 62.09 | 64.94 | 65.60 | 67.37 | 67.36 | 66.18 | 65.57 | 64.94 |
| 65+ | 3.40 | 3.81 | 4.02 | 4.43 | 5.09 | 6.78 | 9.27 | 10.49 | 12.31 | 13.98 | 14.85 |

about its replacement level. This illustrates the potential of the population for growth, due largely to the young cohorts who will continue to move into the reproductive ages. Thus, one could say that the fifty years between 1990 and 2040 is the time required for the population to work off its latent growth potential due to its young age composition.

This leads us to an important conclusion concerning the momentum of population increase even after replacement. Even if fertility is at replacement level, population continues to grow, albeit at a decelerated pace. Taking the case of Projection 2 again, it is not till 2040 that the rate of population growth begins to oscillate about zero. This is due entirely to the phenomenon discussed earlier.

The question may also be asked as to why the rate of natural increase oscillates in a damped manner (Table 3). The stable population model is only converged upon asymptotically so that a zero rate of natural increase is likewise approached only asymptotically (see Coale).[14] It is also instructive to look at the approximate time-lags involved in approaching stabilization. Table 4 summarizes the results of the projections in this respect. By and large, the lag between the onset of replacement level fertility and stabilization varies between sixty and sixty-five years.

Finally, we can consider the implications of the alternative projections from the point of view of stable population size and age structure (Table 5).

It may be seen that Projection 1 stabilizes at around 17.9 million, or some 96% higher than the 1970 population. Projection 2, on the other hand, is roughly 122% higher at 20.3 million. Projection 3 stabilizes at around 26.8 million or some 193% higher than the 1970 population while Projection 4, with approximately 33.7 million upon stabilization is 268% higher than in 1970.

Three points become apparent in the examination of the transition of the age structures of the four projections. Firstly, in the process of attaining stabilization, the population will experience an aging effect through larger representation by the older age groups. The base of the population pyramid becomes less wide in relation to the rest of the pyramid and a more rectangular distribution of population is attained. Secondly, the faster the pace of fertility decline, the greater will be the process of aging. This is evident in a comparison of the projections for any one year. Initially, this indicates a reduction in the dependency problem but afer a while, the aging reaches the 65+ age group so that the dependency ratio will rise a little. These changes, though gradual, will have far-reaching consequences upon the structure of the labour force and upon the provision of social infrastructure. Lastly, it is seen that all the projections tend to couverge upon a similar age structure in the long run. This is but a practical demonstration of, and a tribute to, Lotka's work on stable populations, undertaken some seventy years ago today.

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[14] A.J. Coale, *The Growth and Structure of Human Populations: a Mathematical Investigation*, Princeton, N.J., The University Press, 1972.

# THE NATIONAL FAMILY PLANNING PROGRAMME AND ITS ROLE IN SOCIOECONOMIC DEVELOPMENT

Nor Laily bte Datuk Abu Bakar

## THE NATIONAL FAMILY PLANNING PROGRAMME

Family planning in Malaysia became a national policy by an Act of Parliament passed in 1966, with the establishment of the National Family Planning Board, a government agency under the Prime Minister's Department with statutory and autonomous powers. Making family planning a national programme seemed to be a natural and logical step in the face of extensive social and economic development which could be seriously threatened by an equally rapid increase in population. The activities of the voluntary family planning organization in the states (which started in 1953 but which were confined mainly to the cities and larger townships) paved the way for a national family planning programme. The need for such a programme was further highlighted in a report on 'Population Development and Welfare in Malaysia' prepared by an expert funded by Ford Foundation in 1964. A Cabinet Sub-Committee was formed to study the report and in August 1965 the Cabinet accepted the Cabinet Sub-Committee Paper which called for the adoption of a positive social policy on family planning. The Family Planning Act No. 42 was passed by Parliament in June 1966. A Knowledge, Attitude and Practice Survey (KAP) carried out in 1966–7[1] gave further support to the government's decision as it reflected the readiness of Peninsular Malaysia's population for such a programme. The survey, which was carried out on a sample of 5,457 married women in Peninsular Malaysia between the ages of 15 to 44, indicated that 70% approved of family planning; 66% wanted to learn more about it; and 16.6% intended to practise family planning; while another 26.0% wanted to do so after one or more births. The survey also indicated that 36% of the women interviewed did not want to have any more children.

[1] Malaysia, NFPB, *West Malaysian Family Survey, 1966/77*, Kuala Lumpur, 1977.

## Implementation of the National Family Planning Programme

### *The Longterm Objective*

The implementation of the national family planning programme was regarded as an integral part of the social and economic development plan of the country. This was reflected in the FMP which called for a reduction in the rate of population growth from about 3% in 1966 to 2% by 1985. This may be achieved by maintaining a birth rate of about 26 per thousand and a death rate of about 6 per thousand population by 1985.

### *Organizational Structure of the NFPB*

The NFPB is composed of twenty-one members with ten members representing government ministeries and departments and another eleven members drawn from the public. The Executive Committee of the Board consists of the Chairman, the Director-General and three other Board Members. The Director-General is the Chief Executive and is assisted by a Deputy Director-General and five Divisional Directors, namely Administrative, Finance and Supply; Service; Information, Education and Communication; Training and Medical Research; and Research Evaluation & Management Information System.

### *The Functions of the Board*

This is as stipulated in the Family Planning Act of 1966:

(i) Formulation of policies and methods for the promotion and spread of family planning on health grounds and welfare of mothers and children and welfare of the family;

(ii) Programming, directing, administering and coordinating of family planning activities in the country;

(iii) Training of all personnel involved in the family planning extension work;

(iv) Conducting of research on medical and biological methods relating to family planning;

(v) Promotion of studies and research of interrelationships between social, cultural, economic and population changes and also research concerning fertility and maternity patterns in the country; and

(vi) Setting up and operating a system of evaluation by means of which it will be possible from time to time to assess the effectiveness of the programme and the progress made towards the attainment of the national objectives.

### *Programme Implementation*

The plan developed by the NFPB called for the phased introduction of information, education and contraceptive service activities. Further, because family planning is a new concept, it was envisaged that the towns which were natural centres for development could serve as foci for flow of information and services to rural areas. The plan emphasized the use of proven effective contraceptive methods such as the pill and IUCD and the clinic therefore determined the utilization of medical and/or paramedical personnel in the provision of services. In order to speed up the implementation of the programme in a coordinated manner, the other distribution channels such as the Family Planning Association, Ministry of Health, private practitioners, estates authority, etc. were included in the overall national programme. A planned training

programme and an intensive information, education and communication programme were developed and implemented according to the needs of the service programme. At the same time, a system of evaluation and research was introduced to assess the programme from time to time so that adjustments in policies and programmes could be made accordingly.

The Board planned to implement the national operational service programme in four main phases beginning with Phase I in the metropolitan areas and extending gradually to the rural areas in Phase IV. Phase I covered eight large municipalities with maternity hospitals and certain rural health centres as pilot study areas. Phase II was implemented for smaller towns and the adjoining rural health centre areas and Phase IV was aimed at rural areas to be serviced by a combination of mobile units and *kampung bidan* (village midwives). Under the national programme, static clinics of the Board were established in general and district hospitals, maternity hospitals, main health centres, health sub-centres, and FELDA midwife clinic-cum-quarters apart from many other service points operated by mobile units.

When plans were underway to implement the third and fourth phases, some constraints in terms of lack of trained personnel, facilities and resources were encountered which adversely affected the expansion programme of the Board. Subsequently, a plan was carried out to functionally integrate family planning services into the rural health services of the Ministry of Health so that family planning can be provided as part of the total package for family health to the rural populace. The Integration Programme was further strengthened later by the Population Project.

The Population Project was drawn up in an agreement between the government of Malaysia and the World Bank together with the UNFPA. The World Bank agreed to a US$5 million loan to the government (repayable within twenty-five years) while the UNFPA gave a grant of US$4.285 million with the government contributing not less than the amount received from each of the above organizations.

The Population Project was aimed specifically at strengthening the national family planning programme carried out by the NFPB, the Ministry of Health and the FPA. The Population Project was also aimed at the integration of population education in the school curriculum as well as the establishment of population studies and research programmes in the University of Malaya. For this purpose, a consolidated plan of action was prepared in coordination with implementing agencies concerned with the Project, namely, the NFPB, the Ministry of Health, the Ministry of Education and the University of Malaya.

A further impetus was seen with the advent of the SMP when the National Family Planning Programme incorporated multi-disciplinary approaches into the expansion programme. Also various other agencies such as the MTUC and Ministry of Labour began participating more vigorously in its implementation of the programme in the industrial sectors in Kuala Lumpur and Petaling Jaya.

**Achievements**

Under the SMP, the programme aimed at reducing the birth rate from about 35 per thousand at the beginning of the plan period to about 30 per thousand by the end of 1975. To achieve this, the programme planned to recruit 535,000 new acceptors of family planning from both programme and non-programme sources during the period 1971–5.

The actual achievement in terms of new acceptors in the plan period was 81% of which 25% was from non-programme sources (i.e. obtaining services/supplies from private practitioners, pharmacies, etc.) that do not send statistical returns to the NFPB for evaluation.[2] The achieved birth rate is estimated to be 31 per thousand in 1975 while the targetted birth rate was 30 per thousand.

*Knowledge, Attitude and Practice Trends*

The Malaysia birth rate decline after 1967 (the establishment of National Family Planning Board service programme) could be attributed to increased use of contraception rather than to changes in age-marital structure. This is supported by the findings of the First Malaysia Family (Baseline) Survey, 1966/67, the Census Post Enumeration-cum-Family Survey, 1970 and Malaysian Fertility and Family Survey (MFFS) 1974/75 which provided a measure of changes in knowledge, attitudes and practices of contraception during the first eight to nine years of the national programme (Table 1).

The major contribution of the National Family Planning Programme to fertility decline is through its impact in rural areas which is evident in Table 2.[3] Since the percentage of rural acceptors is higher than that of rural clinics (e.g. 82% as against 61% in 1975), a number of rural couples must be coming to urban clinics, perhaps

TABLE 1

KNOWLEDGE, ATTITUDE AND PRACTICE OF FAMILY PLANNING, 1966/67, 1970 AND 1974/75

| | Currently Married Women | | |
|---|---|---|---|
| | West Malaysian Family Survey 1966/67 | PES–KAP 1970 | NFFS 1974/75 (estimated) |
| Percent who approved of family planning | 70 | 78 | – |
| Percent. who had knowledge of family planning | 44 | 85 | 90 |
| Percent. who had ever used contraception | 14 | 27 | 48 |
| Percent. who were currently using contraception | 8 | 16 | 30 |

[2] Malaysia, Department of Statistics/National Family Planning Board, *Malaysian Fertility and Family Survey 1974/75,* Kuala Lumpur, 1975.

[3] Shamsuddin Abdul Rahman, 'The Role of National Family Planning Programme in the Reduction of Fertility in Malaysia', paper presented at the National Seminar on Fertility Planning Towards Achieving Greater Social and Economic Progress, Kuala Lumpur, June 1976.

TABLE 2

PERCENTAGE DISTRIBUTION OF ACCEPTORS BY LOCATION OF CLINIC AND RESIDENCE OF ACCEPTORS

| Year | Clinic Location | | Residence of Acceptors | |
|---|---|---|---|---|
| | Urban | Rural | Urban | Rural |
| 1968 | 70.0 | 30.0 | No Reported | |
| 1974 | 43.5 | 58.5 | 19.7 | 80.3 |
| 1975 | 39.4 | 60.6 | 17.9 | 82.1 |

because of lack of facilities in their own localities. Again, since an estimated 71% of the married women at child-bearing ages live in rural areas, whereas 82% of the acceptors are from the same areas, the programme must have a relatively greater rural than urban impact. The programme has lower urban impact because of the wide-range of alternative non-programme sources of contraception that are available to urban couples. Over 40% of urban couples were currently practising contraception as against 25% of rural couples.

**The Third Malaysia Plan**

Under the TMP, the demographic objective of the family planning programme is to bring down the birth rate from 31 to 28 per thousand by 1980. It is planned to have a more extensive and intensive programme by using a multi-disciplinary approach to population problem and a better coordinating mechanism to exploit potential resources from as many governmental and private agencies as possible. The process of strengthening will include identification of potential resources in concerned agencies/bodies, review of current efforts in coordination at central and peripheral levels, development of alternative service strategies, planning and organizing extensive and intensive training, information, and evaluation programmes for rapid programme implementation.

To implement a more intensive and extensive programme, it is planned to have close coordination and involvement of the following ministries and agencies/bodies:

(a) **Ministry of Health.** Through intensive and extensive integration with the rural health programme.

(b) **Ministry of Welfare Services.** Through existing personnel to be trained to motivate, refer and follow up acceptors and adopt community-based approach.

(c) **Other involved ministries.** This includes ministries in extension education and extension services (e.g. agriculture, labour, education, etc.). Making use of existing resources to provide additional motivational, educational and informational support and services to be extended to enhance the overall development of family health.

(d) **Private sector.** Through organized industrial sectors and firms as well as estates. To enlist their cooperation to participate in the programme and bring benefits to both the management and workers.

(e) **Kampung bidan.** Through their community leaders to influence and motivate, resupply and reassure family planning clientele.

(f) **Other statutory agencies** such as the National Unity Board, and the Rukun Tetangga (good neighbour) Scheme.

The IEC programme will exploit all available media for the diffusion of information and education for population and family planning. The objective is for all IEC activities in family planning and population activities to be effectively coordinated by the Board. The Training and Medical Research activities will be developed into the National Centre for Family Planning Training in Malaysia, which will also advise, approve and coordinate the activities of other training agencies. Since there is a lack of trained family planning personnel, the strengthened training centre in Malaysia can, in collaboration with other Asean training centres, provided adequate trained staff to implement the programme effectively.

The personnel to be trained are of diverse backgrounds and are drawn from various governmental ministries and agencies as well as influential private bodies and individuals.

Apart from conducting family planning courses, the Board feels that appropriate serving officers should be given higher academic or professional training locally or in Asean countries so that the quality of the Board officers will be enhanced and their career opportunities increased. This will in turn provide the Board with a pool of resource persons for the Board's programmes.

Research activities aim at assessment of long-term programme goals as well as identification of means by which the programme can have a better impact on the national population growth rate. Programme evaluation is undertaken through a service statistics system which will be strengthened in the TMP period. Research has usually been done in the past in collaboration with other agencies, national and international. The plan is for the Board to effectively coordinate all research activities so that such research can be geared along to the need of the programme.

Apart from research activities such as matching of acceptors' identity card numbers with that of mothers in birth records to find the differential fertility of acceptors and non-acceptors, cost-effectiveness analysis and assessment of intensive inputs demonstration areas (IIDA) programme, a number of large-scale sample surveys (sample size of more than 3,000) are also planned to be undertaken during 1976–81. An additional survey, geared towards providing basic information for the NFPB intensive service programme for the urban poor, may also be carried out jointly by the University of Malaya and the NFPB.

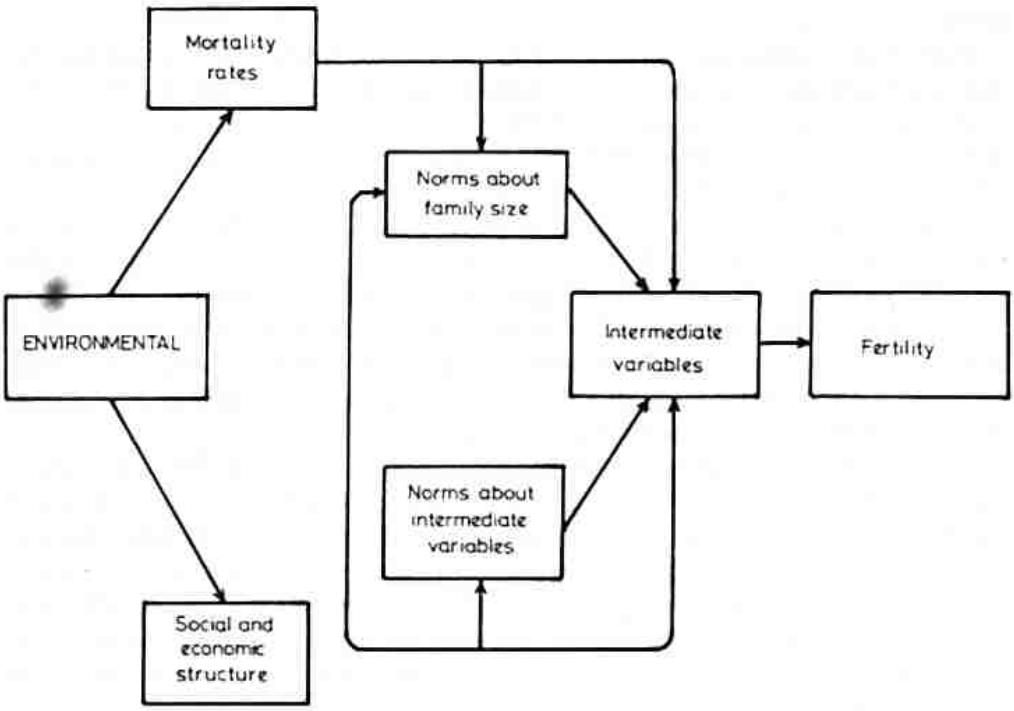
| Title of Survey | Date of Initiation of Fieldwork |
|---|---|
| 1. Baseline Survey of IIDA | April 1976 |
| 2. Second National Acceptor Follow-up Survey | 1977 |
| 3. Study of Socio-Cultural Factors Affecting Fertility | 1978 |
| 4. Second IIDA Survey | 1979 |
| 5. Third Malaysian Family Survey | 1980/81 |

THE ROLE OF THE NATIONAL FAMILY PLANNING PROGRAMME IN SOCIAL AND ECONOMIC DEVELOPMENT

**Factors Affecting Fertility**

Family planning exerts its effects on population growth by affecting fertility through voluntary contraceptive use. Fertility in itself, however, can be affected by other social and economic factors acting at various levels and often interacting closely with each other. Freedman's[4] Schematic presentation of these factors has given us some idea of the factors involved and how they relate to each other (see Figure I). The intermediate variables first described by Davis and Blake[5] are the Intercourse, Con-

FIGURE I




[4] R. Freedman, 'The sociology of human fertility: a trend report and bibliography', *Current Sociology*, Vols. 10–11 No. 2 (1961–2), pp. 35–121.

[5] K. Davis, and D.J. Blake, 'Social structure and fertility: an analytic framework', *Education, Development and Cultural Change*, Vol. 4 No. 3 (April 1956), pp. 211–35.

ception, Gestation and Parturition variables which should form the ultimate sequence of events leading to fertility change. The other factors act on fertility indirectly by acting on these variables.

Very simply we can say that the number of offsprings born will depend on:

(i) The length of period of 'potential' child-bearing and fertility during this exposed period.

(ii) Social and economic structures and norms of family formation.

(iii) Mortality rate and other environmental factors.

The role of the NFP Programme is the provision of services to people who cannot afford to obtain such services from non-governmental sources and to people who cannot get access to such services. Further, the approach is essentially a contraceptive approach and thus the effect of family planning practice on the number of births prevented and in turn the savings which are the results of such prevention, in relation to the cost of running a nation-wide programme (including the effects on actual birth rates), are important points to be considered.

**How Effective is the Contraceptive Approach?**

Past experiences in Europe have indicated the importance of ensuring effective motivation. Acceptance of any method of family planning will depend on factors such as education, social status, literacy and political and economic participation of the women. However in the presence of a good information education system coupled with a well distributed service programme, data seem to contradict these earlier beliefs. From such data it has been estimated that 58% of the acceptors during the period 1967–70 had no schooling or only a primary school level of education, and this proportion had increased to 76% in 1971, and fluctuated at 75% in 1972, and 74% in 1973, 1974 and 1975. This trend indicated that the less educated are coming forward when service is made available at their door steps. The better-educated who are mostly located in urban towns or cities can seek such services at various and numerous outlets available to them. Similarly the national programme seems to reach the lower-income groups. Over the period 1971–5 the annual proportion of acceptors reporting their husband's income being less than $300 per month varied between 56% to 70%.

A further interesting and important point is the fact that the programme is recruiting women in comparatively young age groups, indicating that women are using the programme to space out births (Table 3). The acceptors are also generally those with fewer children (Table 4). Thus the percentage of acceptors with four or fewer children increased from 55% to 75% between 1968–75.

The question of whether a family planning programme affects the birth rate is a pertinent one. It is, however, a reasonable assumption that any increase in the number of contraceptive users in a society after the initiation of a national programme could be substantially due to the efforts of the programme, especially when the practice level was low before the programme. Thus, before the initiation of the programme in 1966, the total number of acceptors were 20,728 and in 1966, two years after the programme the number had increased to 74,935 and in 1975 the number was 69,348. In terms of cumulative users, the figures are 95,661, and 521,744 in 1968 and 1975 respectively. The effect of the increasing number of acceptors enrolled into the programme in preventing birth must be high as more than 90% of acceptors are using the most effective method, that is, the Pill.

TABLE 3

PERCENTAGE DISTRIBUTION OF FAMILY PLANNING PROGRAMME ACCEPTORS BY AGE, BY SELECTED YEARS OF ACCEPTANCE

| Age | Year of Acceptance | | | | All Married Women, Peninsular Malaysia, 1970 |
|---|---|---|---|---|---|
| | 1968 | 1970 | 1973 | 1975 | |
| 15–24 | 26.6 | 32.6 | 39.2 | 42.7 | 22.9 |
| 25–29 | 29.4 | 26.7 | 27.2 | 28.6 | 18.6 |
| 30–34 | 24.5 | 22.5 | 18.3 | 14.8 | 19.6 |
| 35–39 | 19.5 | 18.2 | 15.3 | 13.9 | 38.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 4

PERCENTAGE DISTRIBUTION OF ACCEPTORS BY NUMBER OF LIVING CHILDREN, BY SELECTED YEARS OF ACCEPTANCE

| Number of Living Children | Year of Acceptance | | | |
|---|---|---|---|---|
| | 1968 | 1970 | 1973 | 1974 |
| 0–2 | 27.2 | 34.1 | 43.8 | 50.5 |
| 3–4 | 27.7 | 27.1 | 26.1 | 24.8 |
| 5–6 | 22.4 | 19.9 | 16.5 | 14.1 |
| 7+ | 22.7 | 18.9 | 13.6 | 10.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

**Family Planning Impact on Fertility**

In 1968 when family planning service was first implemented, the birth rate had already declined to 35.4 per 1,000 population, a reduction of 33.6% from 1957. Could it be argued that the birth rate fell faster after 1968 than before, and that this faster decline occurred with the presence of the family planning programme? In order to substantiate this, the following facts are pertinent.

(i) In the eleven years between 1957 and 1966, the birth rate fell 23.4% at an average of 2.1% per year, while in the following five years between 1968 and 1973, the decline was 13.3%, at an average annual rate of 2.7%.

(ii) It has been estimated that 40%–60% of the birth decline between 1957 and 1967 was due to changes in marital fertility,[6] while the other major factor in this decline was due to rising age at marriage for females and decline in the percentage married in the youngest age groups of women.

[6]J.A. Palmore, R. Chander & D. Fernandez, 'Demographic situation in Malaysia', F. John Kantner and Lee McCaffrey (eds.), in *Population and Development in Southeast Asia*, Lexington,

(iii) Between 1967 and 1974, the percentage of women currently married in different age groups did not decline as much as it did between 1957 and 1967. Secondly, the change in the age distribution of the population in 1967–73 was favourable towards an increase rather than a decrease in the crude birth rate. Specifically, the percentage of females aged 15–44 out of the total population, which varied between 19.5 and 19.8 during 1958–67 increased to 20.5 in 1970 and 21.4 in 1973.[7]

(iv) There was little change in the proportion of urban population between 1957 and 1970 (26.5% and 27.8% respectively). Cho[8] has estimated that while total fertility rate in rural areas declined only 10% between 1958 and 1967, the corresponding decline in urban areas was as high as 31%. The higher decline in fertility between 1967 and 1970 and perhaps between 1970 and 1973 could not therefore be associated with a higher degree of urbanization. This means that there must have been a higher amount of fertility decline in rural areas after 1967 than before 1967, which could be mainly through the programme considering the lack of private sources of contraceptives available for the rural population.

An analysis of age specific and total fertility rates in Malaysia between 1960 and 1973 also indicates a higher rate of fertility decline between 1967 and 1973 than between 1960 and 1967 (Table 5). In the seven years between 1960 and 1967, the

TABLE 5

AGE SPECIFIC AND TOTAL FERTILITY RATES PER 1000 WOMEN IN PENINSULAR MALAYSIA FOR SELECTED YEARS

| Year | Total Fertility Rate | Age Specific Fertility Rates for Ages | | | | | |
|---|---|---|---|---|---|---|---|
| | | 15–19 | 20–24 | 25–29 | 30–34 | 35–39 | 40–44 |
| 1960* | 6,110 | 125 | 278 | 323 | 257 | 154 | 85 |
| 1962* | 5,860 | 103 | 277 | 333 | 237 | 154 | 68 |
| 1967* | 5,230 | 71 | 231 | 289 | 221 | 166 | 68 |
| 1970* | 4,866 | 54 | 226 | 265 | 210 | 140 | 56 |
| 1973** | 4,395 | 46 | 196 | 243 | 204 | 134 | 47 |
| Percentage decline 1960–67 | 14.4 | 43.2 | 16.9 | 10.5 | 14;0 | 7.8 | 22.4 |
| Percentage decline 1967–73 | 16.0 | 35.2 | 15.2 | 15.9 | 7.7 | 19.3 | 30.9 |

Source: *Malaysia, *Monthly Statistical Bulletin of West Malaysia,* Kuala Lumpur, Department of Statistics, various years.

**Calculated from official vital statistics and population estimates adjusted according to the Malaysian 1970 Census Post Enumeration Survey findings.

1975. The difference was due to the differences in 'percent female married' obtained from the two sources of data for 1967, the 1967/68 socio-economic survey and the 1966–67 Family Survey.

The figures for 1971–3 have been taken from *Vital Statistics, 1973,* published by the Malaysian Department of Statistics.

[7] Calculated from C. Hirschman, *Estimates of Intercensal Population by Sex, Community and Age Group, Peninsular Malaysia: 1957–1970,* Kuala Lumpur, Department of Statistics, Malaysia, 1974, and *Vital Statistics, op. cit.*

[8] Lee Jay Cho, *Estimates of Fertility in West Malaysia 1957–67,* Malaysia, Department of Statistics, Research Paper No. 3, June 1969.

total fertility rate declined 14.4% at an average rate of 2.1% per year while in the following six years (after the family planning programme began) the decline was 16% at an average rate of 2.7% per year. Chander[9] has shown that a substantial part of the fertility decline between 1957 and 1967 was due to the reduction in the proportion of married females in ages 15–19 and 20–24 during this period. There was a higher decline in fertility rates in ages 25 and above (except for the age-group 30–34) during 1967–73 than during 1960–7; these are the ages where fertility is least likely to be affected by marital status distribution of the female population. Thus, it appears that the decline in total fertility rates during 1967–73 was due more to a real decline in marital fertility as compared to the immediate pre-programme period. It is easily seen that post-acceptance fertility of acceptance dropped drastically in the years following acceptance, while during the year of acceptance and the immediate preceding years fertility was at a very high level. A longer period of follow-up is necessary to determine the period that elapses before the fertility of a specific cohort of acceptors returns to the pre-acceptance level. Such a study is currently being undertaken.

**Family Planning and Mortality and Morbidity**

In almost every schedule of mortality, death rate is highest at birth and during the formative years (up to age 5) and then reaches a minimum around 10–15 years and subsequently increases slowly and then rises markedly from 45–50 onwards. The infant mortality rate is a very sensitive indicator of socio-economic development and the decline in infant mortality rate accounts to a large extent for the decline in the crude death rate. Further, childhood mortality (1–4 years) is also a sensitive indicator of the nutritional status of the community.

Several studies have been carried out to show the relationship between infant mortality and birth intervals. For instance, a study by T.E. Smith on the Cocos Keeling Islands showed that birth interval was shortened according to age at death of the infant (see Table 7). The explanation here is that the early death affects the couple's desire to have another child and thus shortens the birth interval. Another explanation is the shorter period of *post partum* infertility in the absence of lactation.

The reverse is also true, namely that fertility itself can have a substantial effect on infant mortality. The Morrison and Associates' Study on the effects of birth interval shows that in all maternal age-groups and in all social classes, the post neonatal mortality rates were higher in the closely spaced group (i.e. second and third children born after less than two and three years of marriage respectively) than the less closed groups (i.e. second and third children born after more than two and three years of marriage respectively). It is also evident that these rates were also higher in younger mothers (age 16–24) and a third closely-spaced child was borne at greater risk than a second such child.

Studies had shown that the mortality rate for the first pregnancy is slightly greater than for the second and third births. It then rises gradually with subsequent pregnancies until the fifth, after which a sharp increase is observed. In developing countries where mothers commonly have more than five children, the maternal mortality rate is relatively high. Further, repeated pregnancies followed by a prolonged

[9] R. Chander, 'Family planning and fertility trends in Malaysia', in *Proceedings of the Combined Conference on Evaluation of Malaysia National Family Planning Programme and East Asia Population Programme*, 18–25 March 1970.

TABLE 6

LIVE BIRTH RATES FOR 1000 ACCEPTORS TO 1967, 1968 ACCEPTORS IN MALAYSIAN FAMILY PLANNING PROGRAMME

| Year | Live Births for 1000 Acceptors in | | |
|---|---|---|---|
| | 1967 | 1968 | 1969 |
| 1967 | 453 | 80 | 133 |
| 1968 | 371 | 399 | 102 |
| 1969 | 344 | 417 | 411 |

*Source:* J.T. Johnson, B.A. Tan and L. Corsa, 'Assessment of family planning programme effects on births; preliminary results obtained through direct matching of births and programme acceptor records', *Population Studies,* Vol. XXVII No. 1 (March 1973).

TABLE 7

BIRTH INTERVAL BY AGE AT DEATH

| Age at Death *(Years)* | Number of Cases | Birth Interval *(Years)* |
|---|---|---|
| 0 | 40 | 1.43 |
| 0.1 | 134 | 1.70 |
| 0.1–0.2 | 67 | 1.57 |
| 0.2–0.3 | 43 | 1.77 |
| 0.3–0.4 | 42 | 1.76 |
| 0.4–1.0 | 52 | 2.14 |
| 1.0–2.0 | 54 | 2.28 |
| 2.0 | 1,692 | 2.45 |

lactation period which are common in rural areas in most developing countries including Malaysia, would, among other things, produce sustained needs for high quality protein in the diet. These needs are often poorly met, resulting in the 'maternal depletion syndrome'. This process may contribute to low birth weight of their infants, to poor lactation, and ultimately to premature aging and early death of mothers.

It is difficult to determine clearly in Malaysia whether the high child mortality is due to underlying social and economic factors, or due to family factors such as family size, birth order or birth interval, or genetic factors. However, Yerushalmy *et al.*[10]

[10] J. Yerushalmy, *et al.*, 'Longitudinal studies of pregnancy on the Island of Kanai, Territory of Hawaii: analysis of previous reproductive history', *Amor. J. Obstet, Gynec,* Vol. 71 (1956).

showed that at all stages (early and late gestation periods and from birth through 4 years) death rates were highest with higher order pregnancies. Furthermore, when childhood mortality rates were calculated (deaths in age group 1–4 per 1,000 children who survived to age 1), the correlation with pregnancy order was almost linear. This indicates the high childhood mortality rates for the high order of pregnancy may have an environmental origin. It is also observed that in developing countries where food consumption is not only inadequate but also of poor quality, the addition of extra members to the family would mean further rationing of food which is available.

Since the toddler mortality rate (TMR) is high for high order of pregnancy, reduction of family size will have a substantial impact on the toddler mortality rate. The trend on toddler mortality shows a slow decline from 10.6 to 3.1 over the period from 1957 to 1974. Though health services have improved and expanded for quite sometime, the TMR is still quite high when compared with the developed countries. Thus the decline of TMR to a low level of 3 to 4 in the period 1970–4 can be attributed not only to improved health services but also to family planning services which help to space births or limit the family size.

**Status and Development of Women**

Women comprise about half of Malaysia's total population and are estimated to constitute about one-third of the total labour force in the country. About half of the employed women in Malaysia were in the agricultural sector. However, with rapid industrialization, there has been a shift of employed women from the agricultural sector to the commercial and industrial sectors of the economy.

The percentage of women engaged in the professional and managerial occupations has increased from 3.6% in 1957 to 5.3% in 1970. In the clerical, sales, service and production occupations, it has increased from 0.9%, 3.4%, 7.3% and 8.5% in 1957 to 3.9%, 4.9%, 8.6% and 11.0% respectively in 1970. This reflects the trend that women are increasingly seeking employment in the main urban centres. A particular feature of this trend has been the increasing opportunities given to women seeking employment with the public sector.

Women in voluntary organizations, which are affiliates of the National Council of Women's Organizations, have contributed much towards the improvement of the status of women and have also played an active role not only in the promotion of equal opportunities for women but also in helping to increase the knowledge among women, especially in the rural areas, on specific fields such as home economics and home science which includes tailoring and nutrition as well as family planning.

In politics however, out of every 25 members elected to Parliament, only one is a woman. Out of 58 senators, 5 are women, while only one out of the 22 members in the Cabinet is a woman. Women have nevertheless played and continue to play influential roles in political parties. This will help to generate political support for family planning practice, since there are some male politicians who are ambivalent in their attitudes towards family planning.

The median age for first marriage among Malaysian women has increased from 19.0 years to 1957 to 21.6 years in 1970. This could indicate that women now spend more time improving themselves academically and professionally before marriage. In this respect, the 10% tax relief on earned income (accorded to women in 1974) and separate income tax assessment for working wives (accorded in 1975) will provide the incentive for a greater participation of women in the development of the country.

The increased participation of women in all sectors of employment, especially in areas which have been traditionally occupied by men, shows the advances made by women in increasing their role as partners in the nation's economic and social development. If this trend continues, the impact on future fertility would indeed be very considerable.

## CONCLUSION

From the discussions put forward, it is clear that the major constraint in analysis in this study has been the absence of appropriate data related to Malaysia. Although we are able to project future demographic trends, it is extremely difficult to determine the correct path for these trends since past experiences may not be repeated. Mortality and fertility are bound up with the present economic and social development, the inputs of health and family planning programmes as well as the technological and political developments. In addition, the effect of social, cultural and economic factors on family formation and thus family planning is not easy to measure. Therefore economists and social scientists can play a vital role in carrying out coordinated research studies to answer the needs for relevant information.

With the improved medical, health, and intensive nutrition programmes, the morbidity and mortality rates will be further lessened but fertility will increase if family planning practices are not prevalent. Without proper planned parenthood, redistribution of socio-economic services and benefits among the 'have-nots' will be quite impossible. Eradication of poverty and correction of economic disparities will be extremely difficult to achieve, since the poor tend to have more children.

Since women comprise about half of the total population and constitute about one-third of the total labour force in Malaysia, they can play an increasing role as partners in the nation's economic and social development. The additional tax relief on earned income for women and separate income tax assessment of working wives will provide incentives for greater participation of women in the development of the country. We can safely say for the wives who practise family planning that the burden of frequent child-bearing and child-caring which compete for their time and attention, would be lessened.

In the presence of a positive decline in fertility and further social and economic development, the activities of the national programme will need to be strengthened in order to satisfy the increasing need for family planning services. Services alone are not enough. What is needed most is an effectively organized, coordinated and supervised programme utilizing all available resources, facilities and manpower as well as obtaining community and political support for the programme. The quality of services must include services of the medical specialists or consultants to deal with problematic side-effects and complications and a good follow-up programme. It must be emphasized here that all bodies or agencies providing or propagating family planning/population education services should be coordinated by the Board so that in terms of a national family planning policy, the same message is always given to the people, i.e. family planning aims at improving the health and welfare of the family. Further, a great deal more of research studies on population and family planning is needed.

Last but not least, with a comprehensive national population policy carefully formulated, the national family planning programme can play an important role in not only improving family well-being but also in fulfilling the national objectives of eradication of poverty and restructuring of society as well as regulating and redistributing population for greater socio-economic progress.

# POPULATION PLANNING IN MALAYSIA: SOME POLICY CONSIDERATIONS

Donald Lee

## THE TARGET

Population planning was only very briefly referred to in the FMP. The target then was the reduction of the rate of net increase of population to a rate of 2% per annum by the year 1985. The argument put forward in support of this target was that a lowering of the rate of increase of population would allow the economy to expand faster and consequently contribute to a higher per capita income by the year 1985.[1]

This view is the famous Coale-Hoover argument.[2] If an economy reduces its population growth rate through a reduction of its fertility, the reduction in fertility would reduce the level of child dependency and would mean that the per capita costs in such things as housing, education and infrastructure would become relatively lower in the short run. This lowering of per capita costs would imply that there would be higher levels of potential investment and more productive uses for this investment. In the long run, the slower growth of the labour force would contribute to a faster growth in capital investment per worker which should lead to increases in productivity per worker. The end result of this process is that income per worker would be increased. Income per capita can be higher in a population with reduced fertility because a larger proportion of the population is in the labour force and there is at the same time an increase in the amount of capital per worker.[3]

In the SMP, the economic-demographic relationships that were alluded to in the FMP were not brought up again. The target growth was just mentioned in the chapter on

[1] *FMP*, p. 15.

[2] A.J. Coale, & Edgar M. Hoover, *Population Growth and Economic Development in Low-Income Countries*, Princeton, Princeton University Press, 1958.

[3] The Coale-Hoover approach has received sharp criticism from many quarters. See: Gunnar Myrdal, *Asian Drama: an Inquiry into the Poverty of Nations*, New York, Random House, 1968. Paul Demeny, 'Investment allocation and population', *Demography* (1965).

'Health and Family Planning'.[4] The TMP, however, gives a more comprehensive analysis and we find, for instance, a discussion of the effects of changing age patterns upon the demand for education, housing and employment. The target once again is a reiteration of the original objective set out in the FMP, that is the achievement of a 2% rate of growth of population by 1985. The reasons for the choice of this particular rate of growth is not given in any of the Malaysia Plans apart from the First where a brief mention was made of the drag high population growth rates would impose upon the growth of per capita income.

The establishment of the National Family Planning Board (NFPB) during the FMP to spearhead the campaign demonstrated the belief on the part of planners that fertility was the primary component of any future decline in the growth rate. It is obvious that manipulation of the mortality rate by any government in any direction but downwards would be unthinkable. The precedent of falling mortality rates all over the world that were achieved through efficient public health measures and disease control has made the ideal of low mortality rates not only necessary upon humanitarian grounds, but also sought after for its own sake as an indicator of modernization. Thus, once fairly low mortality rates are achieved the likelihood is that they will remain so.

The evidence in Malaysia also indicates that mortality rates will, in the forseeable future, decline more gradually if it declines at all, and would tend to stabilize. But the low mortality rates that have been recorded in developing countries should be read with care since the age-distribution of the population will directly affect the measure. A high fertility population would tend to record fairly low mortality rates, rather similar to that experienced in developed nations, for the simple reason that the bulk of the population would be in the younger ages. By contrast, a developed country with low fertility rates would have a population comprised of a larger proportion of people in the older age-groups and in such a situation it would be difficult for mortality rates to fall any further even with the best health measures. What one needs to examine then is a standardized rate since the high fertility situation would tend to underestimate the 'true' level.

The rate of growth that was selected as the target was probably thought to be one that was attainable yet sufficiently high enough to contribute to a substantial increase in per capita income. However, there are two points that emerge from the selection of the particular target rate. First, there is the question of the eventual size of the population and the speed at which we are proceeding towards the ultimate level. The two are interrelated. The speed of decline chosen was a one-third decline in the net rate of increase over twenty years. The slower the speed of decline of the net rate of increase, the longer will be the time period taken for the population to stabilize (if that is the aim) and the larger will be the eventual population. This is very clearly demonstrated by the results of projections of future population levels employing different time horizons and fertility assumptions.[5] Therefore, the rate that

[4] *SMP*, p. 246.

[5] Tomas Fredjka, *The Future of Population Growth: Alternative Paths to Equilibrium*, New York, 1972. See also his work on the future growth of population in Malaysia: *West Malaysia: Country Prospects*, New York, Population Council, 1974.

we choose as the immediate goal determines directly the future absolute level of population and the length of time, the lower limit at least, required to attain eventual 'stability'.

Second, the selection of the rate involves a strong value judgment on the part of planners. Implicit in the choice of that particular rate is the belief that the population size we are headed for at the end of the planning period is desirable. Population response by its nature is extremely slow and it is not possible for planners to see the result of their planning within the normal five-year planning period. Therefore the choice of a particular rate to satisfy a short-term goal would appear unjustified if it would mean an unnecessary burden upon future generations of Malaysians. Population planning cannot and should not be viewed as a once-off operation. The short-run problem may be solved by what we may term 'applying the brakes'. However, this is too narrow a view to adopt. In the long run we would want to manipulate demographic variables in the same way that we now try to manipulate economic variables.

## FERTILITY REDUCTION AND THE DEMOGRAPHIC TRANSITION

The term demographic transition is used to describe the transition of a society from an inefficient to an efficient reproductive system. Before the transition both birth rates and death rates are high. With economic development, death rates fall in advance of fertility. At the end of the transition period we have a relatively stable situation restored with both birth rates and death rates low. In the intervening period when death rates fall in advance of fertility there is an upsurge in the size of the population. Developing nations are said to be at the 'halfway point' of their transition, with one difference: while the fall in mortality in developed economies normally accompanied economic development, the drop in mortality in developing nations has been largely independent of the state of economic development. The introduction of public health and disease control measures, for instance, generally preceded the modernization of these societies.

As a description of demographic events it did not perform as well as the demographers of the 1930's would have liked to believe. France was a notable exception. Fertility in France started falling well before much economic development occurred. The recent visible reduction of fertility in Malaysia is usually taken to represent the starting point of the final stage of the 'demographic transition' and the expectation is that this trend will be reinforced over time. However, until we do obtain further confirmation of the trend in the years ahead it is difficult to see how we can reach a definite conclusion employing such meagre evidence.

Nevertheless, the possibility that a 'demographic transition' could take place does raise interesting questions. Suppose we view the transition as an endogenous process of change that occurs within all societies at some time in their history. Then we need to ask ourselves whether the process has started and, if not, what can trigger it off. Kirk tried to examine these questions with data from Latin America, East and South-East Asia and several Islamic countries.[6] He defined the 'transition' stage as the period when birth rates are between 35 and 25 per 1,000 population. His study found

[6] Dudley Kirk, 'A new demographic transition?', in *Rapid Population Growth*, National Academy of Sciences, Baltimore and London, The Johns Hopkins Press, 1971.

evidence of fertility decline in all the regions he covered and the interesting conclusion he arrived at was that the length of time required for the transition had been almost halved. By relating birth rates to a number of development indices he tried to establish the threshold levels of those variables which trigger off the transition. For most of the Asian countries he examined, the income threshold appeared to be a per capita GNP of US$200. Once this level was attained, the nations were observed to be either experiencing or had experienced a rapid decline in birth rates. In Malaysia, the crude birth rate was about 33.9 in 1970 putting us well in the 'transition' stage that Kirk defined. It would also appear that we have crossed the income 'threshold'.

If the hypothesis is correct this means that Malaysia will advance through the 'transition' with a rapid rate of fertility decline. It was observed, moreover, that fertility rates started falling before the establishment of the NFPB. It could well be possible that the spontaneous 'transition' could lower fertility sufficiently and cause the target rate of 2% to be achieved even without the intervention of the National Family Planning Programme. If this can be believed then the family planning programme and others like it all over the world could be deemed unnecessary expenditure and effort. However, if the object of policy is to further accelerate the rate of fertility decline, then introducing family planning programmes can only make sense if family planning can be shown to be making sufficient impact. The NFPB will agree that it is no easy matter trying to demonstrate the extent to which family planning has contributed to fertility decline in Malaysia. The programme impact is likely to be overstated unless the substitution between programme and non-programme mechanisms of fertility control is considered. This is to say that if programme acceptance by individuals is merely a substitute for other contraceptive methods already being practised, then the number of programme acceptors would not indicate the true influence of the family planning programme.

It is not possible, however, to base a plan of action upon mere conjecture. What we do need are effective measures to enable us to achieve our targets with a fair degree of certainty.

## GOVERNMENT MEASURES

The measures the government chose to adopt in pursuance of its population goals set in 1966 reflected to a great extent the thinking of most developing countries at that time. The path that was chosen was the encouragement of family planning through the dissemination of birth control techniques and the distribution of contraceptives. Motivation was no doubt considered necessary for a family planning programme but its role was not emphasized. There were to be four phases in the implementation of the programme starting with Phase I in the metropolitan areas and extending by Phase IV into the rural areas. Phases III and IV were never realized, and were subsumed into the rural health services of the Ministry of Health. This could well be viewed as a retrogressive step since the welding of roles within the one Ministry would tend to reduce rather than expand the impact of the programme. There could well be other non-economic factors influencing this decision.

The measures adopted emphasized a 'soft-sell' approach. This is evidenced by the stress on family planning and maternity and child health rather than population control. It is not known if the naive application of Say's Law to family planning was intentional but a basically supply-oriented programme is inadequate and inappropriate as a policy.

Becker's seminal contribution to the economics of fertility does afford us an insight.[7] His basic premise was that the availability of contraceptive technology provided the means through which households could implement their family-size decisions. The control of conception afforded by their contraceptive knowledge and usage allowed households to reconcile the difference between their desired and actual family-sizes. The economic framewrok that Becker sets out only really works when this control of conception becomes universal, or nearly so.

Therefore, in this light, what the family planning programme has largely achieved is to provide Malaysian women with the means to realize their desired family sizes. V.B. Paqueo,[8] for instance, has observed that in the Philippines changes in attitudes towards the larger family sizes is the only way to influence changes in the size of families which is so important for demographic transition. Motivational work directed towards altering family size attitudes becomes more important if desired family sizes are large. Table 1 gives some idea of family size preferences in Malaysia.

More than 70% of the currently married women surveyed during 1966/67 indicated a preference for families composed of three or more children. A fairly similar proportion of currently married women wanting three or more children was again observed during 1970 but the distribution had moved slightly in favour of smaller family sizes.

## IMPROVING FAMILY PLANNING

The current family planning programme is rather narrow in its approach. There are further steps that can be taken within the broad purview of family planning. These additional measures could help to make the effects of family planning programmes more certain and more rapid. The full potential of the media, for instance, has not

TABLE 1:
DESIRED FAMILY SIZE.

| Desired Number of Children | Currently Married Women (%) | |
|---|---|---|
| | *1966/67* | *1970* |
| 0–2 | 5.0 | 8.7 |
| 3–4 | 31.0 | 44.7 |
| 5–6 | 27.0 | 29.4 |
| 7 and above | 16.0 | 8.3 |
| Don't know | 19.0 | 7.6 |

*Source:* Malaysia, ***Interim Report on Family Survey: a Knowledge Attitude and Practice Study on Family Planning,*** Kuala Lumpur, NFPB, 1970.

[7] G.S., Becker, 'An economic analysis of fertility', in National Bureau of Economic Research, *Demographic and Economic Changes in Developed Countries,* Princeton, 1960.

[8] V.B. Paqueo, 'The family planning program', in A. Kintanar *et al., Studies in Philippine Economic-Demographic Relationships,* Manila, Institute of Economic Development and Research, University of Philippines, 1974.

been exploited and it might be possible to introduce, for example, more extensive and intensive information programmes pertaining to family planning, birth control and the cost of children. We could use the media not only to supply information but also to stimulate discussion and help to reshape public and official opinion.

Next, the use of oral contraceptives as the main contraceptive device in the Malaysian family planning programme appears too narrow a strategy. Greater attention could be given to more conventional contraceptive methods which despite being less efficient could satisfy the need for a method that is safe, cheap, easily obtainable and requiring little or no medical supervision. Both sterilization and abortion are effective techniques for reducing fertility but have not been exploited. No doubt there are strong social reasons, for instance, against the use of these two methods but it needs to be stressed that the use of sterilization for completed families and the use of abortion as a back-up against contraceptive failure could contribute considerably to the fertility reduction effort.

## BEYOND FAMILY PLANNING

The family planning programme is characterized by its voluntary nature. There is an absence of any form of coercion though there are definite attempts to persuade. This demonstrates the belief that enough couples will choose to adopt birth control for there to be an effect upon fertility.[9] But this idea of 'reproductive freedom' is merely an illusion since social pressures and legal restrictions influence reproductive behaviour as well. Tax laws in Malaysia, for instance, are essentially pronatalist since they tend to reward the married and penalize the single person. Marriage, of course, encourages fertility. An effort could be made to identify those laws which favour those married in order to assess their possible influence upon marriage and through marriage upon fertility.

By the use of appropriate incentives and disincentives, the government can control the costs of having children. Measures that could be employed include the control of maternity leave and benefits, tax benefits or penalties, social security arrangements, family and child allowances, child labour legislation and monetary rewards for periods of non-birth. Singapore, for example, has adopted such measures with success.[10]

The use of coercion to limit fertility must surely be thought the most objectionable measure of all. However, we observe that coercion is accepted quite readily when it is applied to the two other components of population growth: mortality and migration. The government compels individuals to observe health and sanitation practices or to comply with migration restrictions for the common good. It was the satisfaction of this common good which induced the sharp decline in mortality in most developing countries and contributed to the current situation of excessive population growth. Coercion may seem a drastic measure but it is no different conceptually from, say, the practice of monogamy we find in nearly all societies.

[9] Knowledge, attitude and practice studies appear to strengthen this belief as it is commonly found that people feel they have more children than they want.

[10] The measures in Singapore include: allocation of public housing regardless of family size, restricted paid maternity leave, high hospitalization fees after the second confinement, and reduction of income tax relief.

Some or all of the incentive or disincentive measures could be readily added to an existing family planning programme, but coercive measures must generally prove to be morally repugnant and politically unacceptable. In the final analysis, the extent to which the more extreme measures will be employed will depend upon the gravity of the circumstance and the commitment of the government in pursuing its policies.

## STABILITY CONSIDERATIONS

All the measures examined could be used to speed up fertility reduction, but intervening in the system and hastening fertility decline, however, has implications for stability. When we examined the demographic transition and fertility reduction we considered the possibility of accelerating the process of fertility decline in Malaysia. However, there is a very real problem that is associated with this attempt to rush the population through the demographic transition by consciously setting a population target that requires fertility rates to fall at a faster pace than that experienced by countries during the nineteenth century. If our current family planning programme does succeed in pushing down birth rates by as much as a third over the next five to ten years, it will create a series of waves in the movement of population size over time. The mechanism that causes this series of waves did not appear to operate for the simple reason that the drop in fertility in the countries of Europe and Northern American were spread over half a century or more.

A rapid drop in fertility would lead to the following train of events through the operation of the generation effect. The rapid fall in the number of births induced by the family planning programme will be followed by a gradual rise in the number of births if the period following the rapid decline is characterized by fixed low rates of birth. The gradual rise comes about since the children who were born before the fall in birth rates will slowly enter the reproductive ages. The increase in births would continue until the new small cohorts start to enter the reproductive ages. At this time there will be a secondary drop in the number of births. The process continues until a steady growth of the population results with the new birth rates. In the absence of further disturbance to the system, the oscillations that take place are damped.

A further question of stability relates to the 'demographic transition'. I suggested that we could view the 'transition' as an endogenous process of change. If the government should decide to rush through the 'transition' stage through the use of repressive measures then we need to ask if this new 'equilibrium' is stable. By stable, is meant a self-sustaining situation where there is no necessity to continue the repressive measures or maintain very high levels of input into the system in the form of active birth-limitation programmes. A stable outcome would require, for instance, the establishment of conditions conducive to a change in attitudes.[11] If the transition has been achieved without affecting attitudes is it possible for that position to be sustained with ease?

Another source of demographic disturbance arises from the fall and recovery of the economic cycle. The practice of contraception increases the sensitivity of countries to

[11] Age at marriage and the incidence of marriage are two other important determinants of fertility.

fluctuations in income. The drop in births that could occur during a period of depression need not be a permanent loss of population. The shorter the time period between trough and subsequent peak of the economic cycle the more likely it is that total births will be unaffected. But if the time period is sufficiently long then a permanent loss could result as couples pass through their reproductive ages.

Related to this problem is what is known as the Easterlin effect. During the 1950's in the United States the high fertility that was observed could not be explained by the positive relation of births to income. Easterlin noted that the sharp decline in fertility during the 1930's produced a cohort that found itself at an advantage in the labour market because of their fewer numbers. They would frequently find themselves in situations in which their numbers were too few to do the work. As a result, their services would be more appreciated. This would tend to make them more well off and they would tend to translate their advantage into childbearing. If this effect is strong enough, as it presumably was in the 1950's, it could produce not waves of a generation in length, but instead waves with a length of two generations in free response to the disturbance.

The implications of such wave-forms in population growth upon parts of the economy serving specific age groups are obvious. The provision of education, social security and job opportunities for instance could become problematic as the numbers to be serviced fluctuate.

## PLANNING BEYOND 1985

Where do we head after 1985? I have seen projections wherein it is assumed the population attains a net reproductive rate of one by such and such a year and on this basis examine what they term the 'stable population'. These exercises fail in one very fundamental aspect: they utilize the dynamics of population growth without consideration of the dynamics of the economic system. This implies that the way the economy performs over time has no bearing upon the size of population that planners wish to see. This mere utilization of the dynamics of population underscores the belief that the finite world that we live in will eventually impose constraints upon the size of a population and therefore the need for zero growth as exhibited by a 'stable' population.[12]

Let us suppose for the moment that we wish to see a stable population at some point of time. How then do we determine the level of population that we need? How do we arrive at the length of time the population should take to achieve stability and is this stable level the 'optimum' size? If the objective is not a stable population but an optimal rate of growth of population over time the question becomes more complicated.[13]

I have posed questions to which at this stage I can offer no easy answers. Current literature suggests that population planning together with economic planning be cast in

[12] The existence of limits to population growth does not necessarily imply zero growth rates. A finite world with depleting resources could, in the event of the non-discovery of substitutes, necessitate the decreasing of population levels.

[13] Of course, the possibility of a stable population is not excluded since the optimal rate of growth could be zero.

the form of a control problem where a utility functional is maximized subject to a set of constraints.[14] This approach is not easily put to practical application but it does suggest the 'right' way to look at the problem. The choice of the welfare function is problematic but it may be possible to devise some means of communicating the preferences of the community to planners.

The criteria upon which future population growth is to be planned must necessarily be selected with care. Considerations of environmental quality and intertemporal equity may conflict with the criterion of present per capita income while measurement of society's welfare largely by the performance of a sole variable such as per capita income may lead to undesirable and distorted results.

## CONCLUSION

The population target that we have set for ourselves has serious implications for the economy in terms of stability, future growth and overall welfare. Population planning is fundamentally a long-term undertaking and it is difficult for policy-makers to take account of the dynamic changes in population within the rather short-term horizon of five years. Planning a specific growth rate at one particular point of time burdens future generations with that absolute level of population. It is not over-population alone that concerns us. It is also quite conceivable that the rate of growth we select at one point of time may lead to a deficiency in numbers at some time in the future. Some of the arguments that have been put forward in support of drastic reductions in the fertility rates, and consequently the rate of natural increase, have been erroneously based upon the idea that dividing a fixed cake between smaller numbers must always give larger shares to individuals and therefore greater welfare. It is within the realms of plausibility that a reduction in population size may result in a net loss in the 'standard of living' since the 'fixed' cake may, in fact, shrink with a fall in population that is too rapid.

Different measures can be adopted to transform our targets into reality. These measures can either be improvements within the family planning programme itself or go beyond mere family planning. The adoption of any or all of these further measures would largely be dependent on how rapidly we wish to see fertility decline.

[14] See P. Dasgupta, 'On the concept of optimum population', *Review of Economic Studies*, (1968); and J. Pitchford, *Population in Economic Growth*, Amsterdam, North-Holland, 1974.

# VIII. UNEMPLOYMENT AND MANPOWER PLANNING

# PROVIDING FULLER EMPLOYMENT FOR THE MALAYSIAN LABOUR FORCE

K. Pathmanaban

In Malaysia, the labour force is growing at a relatively high rate and there are already significant numbers of underutilized labour particularly in the services and in agriculture. The absorption of these large additions to the labour force every year into productive employment and the fuller utilization of the presently underemployed become key aspects in the strategy of the NEP to eradicate poverty among all Malaysians.

This study briefly reviews the supply and demand positions for labour as projected in the TMP and then discusses particular aspects of supply-demand balance in the labour over this period.

## LABOUR SUPPLY

Labour force growth is anticipated to be around 3.3% p.a. for the TMP period. This represents a net increase of some 748,000 workers between 1975 and 1980. The highest rate of growth is expected for the 25–39 age-group, with a slightly smaller rate of growth for the 15–24; thus the growth of the labour force is largely in the prime working years. Turnover in the labour force is also likely to increase. At the same time work life expectancy is anticipated to increase by 0.4 years over the five years of the Plan.

## LABOUR DEMAND

A net increase of 742,700 new jobs is projected during the TMP period. The services sector is expected to supply over a quarter (27.9%) of the new jobs, and manufacturing somewhat less than a quarter (22.9%). Agricultural employment, which is expected to come largely from modern agricultural employment in public sector land development schemes, will show a smaller increase (17.0%) but higher productivity growth.

Poverty eradication in the agricultural sector can only be brought about through productivity increases *via:*

(i) New land development and new agricultural activities such as livestock rearing wherein surplus labour from the rural areas can be siphoned off into more remunerative employment;

(ii) Complementary inputs e.g. drainage, irrigation, fertilizers, and pesticides as well as new strains of livestock, modern fishing gear and larger boats, etc. As the incidence of poverty is highest in the agricultural sector, priority is given to this sector in the TMP, as reflected in the larger allocations of public development expenditure to agriculture.

On the other hand, the manufacturing sector will have to provide the bulk of the productive new job opportunities. Inspite of the increase in employment, manufacturing will still have one of the highest levels of productivity and income (Table 1).

The growing importance of the services sector in numbers employed has to be viewed from the angle of productivity. Although productivity in services will remain higher than in, say, agriculture, productivity increase will be more than a percentage point below the national average. By 1980, some 18.3% of total employment will come from services.

## THE IMPLICATIONS OF THE SUPPLY-DEMAND IMBALANCE

Overall, it can be seen that while there was a backlog in unemployment of 297,000 persons at the end of the SMP period, an additional 748,000 new entrants will reach the labour market during 1976–80. The TMP targets job-creation during this period at 743,000, reducing the overt unemployment rate from 7.1% of the labour force to 6.1% in 1980. The number unemployed at the end of the period, however, is expected to rise to 302,000.

Besides this, the task of the employment strategy of the TMP is also to reduce the number of households in poverty – which means essentially that underemployment and low incomes in both urban and rural areas will also have to be reduced. This is reflected in the programmes to alleviate low productivity in agriculture and the effort to boost new and more productive employment in industry and the like.[1] The TMP projects that the incidence of poverty can be reduced from 63% of agricultural households in 1975 to 49.3% by 1980 and from 38.5% in urban households to 31.9% during the same period.[2]

Another problem that will begin to face planners will be the need to match the supply of and demand for skills especially at the higher levels of the occupational hierarchy. In addition, manpower policies need to be guided by the restructuring objectives of the NEP. Although the proportion of Malays and other indigenous people in professional employment amounts to some 49%, most of them are in teaching and the less-skilled occupations.

Already, the Plan projects a surplus in the output of graduates at the degree level for the Arts and Humanities of some 41% by 1980. Shortages are likely to persist for almost every other category of skilled personnel, especially those in technical areas.

[1] *TMP*, pp. 74–76.

[2] *TMP*, p. 73, Table 4–13.

TABLE 1

EMPLOYMENT AND PRODUCTIVITY GROWTH UNDER THE TMP

| Sector | 1975 | | | 1980 | | |
|---|---|---|---|---|---|---|
| | GDP *(SM)* | Employment *('000)* | Average Productivity | GDP *(SM)* | Employment *('000)* | Average Productivity |
| Agriculture | 4,563 | 1,936.8 | 2.36 | 6,106 | 2,062.7 | 2.96 |
| Manufacturing | 2,197 | 398.2 | 5.52 | 3,972 | 568.1 | 6.82 |
| Trade | 2,086 | 495.9 | 4.21 | 3,122 | 648.6 | 4.81 |
| Services | 2,436 | 161.1 | 3.68 | 3,843 | 869.1 | 4.42 |

While there is likely to be an overall surplus of 3% of the demand for degree-holding graduates, there is a projected 37% shortfall in the supply of diploma-holding graduates. The implications are clear if this trend were to continue. The market mechanism, at least in the private sector, is likely to put a higher premium on diploma-holders. While this may not be as high as the wage of a degree-holder, it is apparent that some downward adjustment of expectations will have to occur among degree-holders, if they are to avoid prolonged unemployment.

It is clear that in the effort to ensure a greater number of Malays and other indigenous students are absorbed into higher education by imposing large quotas in enrolment, and in order to avoid the closing of the doors of higher education to non-Malays, universities have been expanded at a rapid pace to cater for large enrolments. It is also clear that substantial Malay enrolments have been achieved in a number of courses at university level and that if excessive educated unemployment is to be avoided, care will have to be taken to bring the enrolment of all racial groups into greater alignment with the realities of the labour market. High quotas in enrolment for any one racial group and non-denial of opportunities for other racial groups will necessarily have to mean high total enrolments and high graduate unemployment.

Another aspect of the skill imbalance discussed above is the obvious need to look more closely at the admissions policy in the diploma-level institutions in the country. In the implementation of the restructuring objective of the NEP, effort needs also to be made to secure for Chinese and Indians much greater participation in this sub-professional education. Tables 22.7 and 22.8 of the *TMP* indicate the gross imbalances that have existed for some time at this level of education – a mere 15% of total enrolment here is Chinese, Indian and others, even less than in 1975.

The problem here has been that the institutions at which such diploma levels of education have been offered are mainly orientated towards Malays, particularly the Institiut Teknologi MARA (ITM) which has the bulk of the enrolments at this level. Kolej Tunku Abdul Rahman (TAR), which has a predominantly Chinese enrolment, is the only exception which has helped keep some opportunities open, while Ungku Omar Politeknik has had a somewhat more balanced enrolment. The implications for the future are that if the UPM and UTM, which in concept are open to all, do not enrol more of the other racial groups, the pressures will mount for more colleges such as TAR College to be established or for more non-Malay students to proceed overseas for higher education.



## UNDEREMPLOYMENT

The increasing number of new jobs provided under the Plan is not apparently at the expense of greater underemployment, especially in the rural areas. Successive rounds of the Labour Force Survey has indicated an improvement in the degree of under-employment as measured by the proportion of the labour force working less that 25 hours per week. Bewteen October 1971 and October 1974, the percentage fell from 14.1% to 9.6%, the largest reductions being in the rural areas. This reflects the higher agricultural productivity attained under the SMP. On the other hand, owing to the lower level of urban underemployment, changes in the urban areas were less significant or apparent.

Given the essentially 'soft' nature of the urban services sector, and its tendency to grow both as a result of rural-urban migration and through natural increase, a better understanding of it should be sought under the proposed study on urban poverty in

the TMP. The urban poverty study should study the linkages involved between the growth of the national economy and the welfare of the service sector in order that more efficient policy instruments may be fashioned.

## OCCUPATIONAL MOBILITY

Much of the success of the restructuring objective of the NEP depends upon flexibility of occupational, and to a lesser extent, geographical mobility, e.g.

(a) Resettlement of fishermen on the East Coast on land schemes.
(b) Greater participation of the Malays and other indigenous people in commerce and industry.
(c) Greater participation of other Malaysians in sectors in which they are under-represented.

Mobility may be inter-generational or intra-generational. Given the high turnover, the importance of the former must not be understated, government policy to extend the reach of formal education to the rural areas (including estates and New Villages) would be significant in this regard. As regards the latter, the following would be important:

(a) Greater opportunities for on-the-job training – so as to upgrade the present workforce. A government subsidy here might be an incentive.
(b) Greater intake of Chinese and Indians into public services and public land schemes.
(c) More persuasion on the private sector to assist in facilitating the migration process, through housing of workers, assistance for the transport and education of their children, etc.

## CONCLUSION

The TMP is significant for its constructive attention to the problems of unemployment and underutilization of labour and the racial balance aspects of the overall growth of opportunities. The degree of success that can be achieved in the adjustments that are contained in the TMP will, however, depend critically on the full appreciation of these issues by officials involved in its implementation.

# LABOUR UNDERUTILIZATION IN AN URBAN SETTING: A CASE STUDY OF METROPOLITAN KUALA LUMPUR*

Cheong Kee-Cheok & Kok Kim-Lian

## INTRODUCTION

The emphasis currently placed upon the measurement of employment and unemployment in less developed countries (LDCs) is a legacy of the history of labour force research in advanced countries.[1] However, it is becoming increasingly recognized that this emphasis may be largely misplaced, and that the problem of underutilization of labour resources is probably of greater significance, especially in view of its implications for income distribution and poverty eradication.[2] This hypothesis is supported by preliminary investigations in a number of Asian countries.[3]

For many years, however, the study of labour underutilization has been hampered by semantic confusions of the worst kind.[4] For this reason, the framework of analysis proposed by the International Labour Office [1966], and elaborated upon by Hauser [1973] has considerable appeal. The essence of this framework is the identification of four dimensions of underutilization – unemployment, insufficient hours of work, inadequate income, and mismatch between educational attainment and occupation.[5]

*We wish to express our sincere gratitude to the Department of Statistics, Kuala Lumpur, and especially to Mr. R. Chander, Mr. V. Palan and Miss N.K. Ang for their invaluable help in the survey on labour utilization.

[1] See Chapter I of Kok, Cheong, *et al.* [1976] and the references cited therein.

[2] This shift in emphasis is of very recent extraction. See, for instance, ILO [1971], p. 7 and Marsden [1969], p. 390.

[3] See Turnham [1971].

[4] An interesting example is cited in ILO [1971], where the term 'disguised unemployed' was used to mean 'discouraged workers' in one study (ILO [1970]) but referred to low productivity workers in another (Turnham [1971]).

[5] This is the so-called 'new approach' of Hauser [1973]. The ILO [1966] classifies under-

In West Malaysia, efforts to measure the magnitude and composition of labour underutilization are of relatively recent extraction. Consequently, data on this subject are at best discontinuous, and often are seriously deficient. The major sources of data are the two recent censuses (1957 and 1970) and the four surveys of labour utilization.[6]

Differences in definitions and concepts adopted, as well as coverage and scope,[7] impeded attempts to compare statistics from these surveys over time, although Snodgrass [1971] achieved considerable success in this respect. However the Socio-economic Survey of Households of 1967/68 showed the extent of underestimation of labour underutilization by reporting that 24% of all those unemployed or 2% of the total labour force were passive unemployed.[8] The results of the 1974 Labour Utilization Survey are reported in Khoo and Kwok [1976]. Unfortunately, the cut-off points for income and hours of work used in this study are considerably lower than those used by Khoo and Palan [1974] for the Socio-economic Survey of Households, 1967/68.[9]

A preliminary reclassification of the 1967/68 Survey data in terms of the above dimensions of underutilization is however possible. Table 1 compares this reclassification with similar experiments in three other countries.

The most important dimension for Malaysia and Singapore is underutilization by income level while from a tenth to a third of the labour force could be so classified in the four countries studied. Except for the Philippines, the mismatch dimension is usually unimportant, but this dimension is also least well defined.

The present study attempts to update these results as well as to evaluate them in the light of new information. The data is obtained from a field survey of metropolitan Kuala Lumpur undertaken over two weeks beginning in March 1975. A total of 762 households were covered by the survey, and a breakdown into the various categories of the labour force is shown below.[10] We discuss further the findings relating to under-

employment into visible (inadequate hours of work) and invisible (insufficient income, mismatch between education and occupation).

[6] See Federation of Malaya [1958], Federation of Malaya [1963], Malaysia [1965], Malaysia [1971] and Malaysia [1972]. The results from the 1974 Labour Utilization Survey are reported in Khoo and Kwok [1976].

[7] For instance the 1957 Census defined unemployment as 'persons in employment for less than 4 months of the year preceding the enumeration', while for the 1962 and 1965 surveys, 'a person is ... unemployed if he has not been gainfully at work on any day during the week previous to the survey, but is actively seeking employment and capable of taking a job if offered one'.

[8] In the 1962 and 1965 surveys, the exclusion of 'discouraged workers' as well as the adoption of a 25 hour a week cut-off contribute to this underestimation, whereas for the 1957 Census of Population, there was considerable underenumeration of female labour force participants and in the age group '0–19'.

[9] Twenty-five hours a week was used as the cut-off for hours of work, while for income, the cut-off was 13.08 per month. The latter cut-off was derived from the cut-off for the lowest decile of net per capita household incomes of the population. The rationale for adopting such low cut-offs, it would appear, was that the resultant group below the cut-offs would be relatively homogeneous.

[10] See the Addendum to this study for the definitions used in the survey.

TABLE 1

PRELIMINARY ESTIMATES OF THE DIMENSIONS OF UNDERUTILIZATION: SELECTED COUNTRIES

| Nature of Utilization | West Malaysia 1968 *(40 hrs. $100)* | Singapore 1966 *(35 hrs. $150)* | Philippines 1968 *(40 hrs. 1599 Pesos)* | Hong Kong 1971 *(40 hrs. 1st Decile)* |
|---|---|---|---|---|
| **Adequate** | 45.4 | 53.8 | 46.8 | 73.2 |
| **Inadequate:** | 54.6 | 46.2 | 53.2 | 26.8 |
| By unemployment | 10.8 | 9.2 | 7.6 | 4.6 |
| By hours of work | 7.2 | 3.2 | 2.6 | 7.3 |
| By income level | 36.0 | 32.8 | 22.7 | 7.3 |
| By mismatch | 0.6 | 1.0 | 20.3 | 7.5 |

*Sources:* Hauser [1973], Khoo and Palan [1974]

*Notes:* The cut-offs are in hours per week, and monetary units per month. For Hong Kong, the latter is the first decile of the income distribution. Data for the Philippines referred to urban male wage earners who were heads of households. The data for West Malaysia also referred to urban areas, while the Hong Kong data were obtained from a 1% sample.

utilization among those who are in employment. The 'unemployment' dimension is therefore omitted.

## SOME CHARACTERISTICS OF THE UNDERUTILIZED WORKFORCE

Among the underutilized workforce, income and hours of work represent the two dimensions of underutilization which are quantitatively significant. Persons underutilized under these two dimensions fall into three groups:[11]

(i) those underutilized measured by income only;
(ii) those underutilized measured by hours of work only; and
(iii) those underutilized measured by both income and hours of work.

The proportions of the underutilized employed workforce falling into each of these three categories are shown, by ethnic group and by sex, in Table 3.

TABLE 2

COMPOSITION OF THOSE SURVEYED, KUALA LUMPUR 1975

| Category | Percentage Composition | No. of Persons |
|---|---|---|
| **Employed** | | |
| Outside households | 45.0 | 1,413 |
| Inside households | 4.6 | 144 |
| **Unemployed** | | |
| Active | 5.7 | 178 |
| Passive | 3.8 | 120 |
| **Outside labour force** | 40.9 | 1,285 |
| **Total** | 100.0 | 3,140 |

TABLE 3

THE EMPLOYED WORKFORCE: DIMENSIONS OF UNDERUTILIZATION BY ETHNIC GROUP AND BY SEX

| Nature of Utilization | All Groups | Ethnic Group | | | Sex | |
|---|---|---|---|---|---|---|
| | | Malays | Chinese | Indians | Males | Females |
| **Adequate** | 67.2 | 58.8 | 72.5 | 73.4 | 74.4 | 50.9 |
| **Inadequate** | 32.8 | 41.2 | 27.5 | 26.6 | 25.6 | 49.1 |
| By income only | 10.1 | 5.8 | 15.0 | 8.7 | 6.4 | 18.6 |
| By hours of work only | 19.6 | 30.7 | 10.3 | 16.0 | 17.8 | 23.5 |
| By both | 3.1 | 4.7 | 2.2 | 1.9 | 1.4 | 7.0 |

Note: The cut-offs are $100 per month for income, and 40 hours a week for hours of work.

[11] The present classification adopted is in recognition of the fact that persons may be underutilized by both criteria simultaneously. The Hauser [1973] framework assumes that either the functional categories are mutually exclusive, or a priority system exists for each person, so that the category which is most important to him is chosen.

Using as cut-offs $100[12] a month for income and 40 hours a week for hours of work, it is found that roughly a third of those employed are in fact inadequately utilized.[13] Almost a third of these are underutilized by income only, while just under two-thirds are underutilized by hours of work only. Those underutilized by both criteria simultaneously account for around 3% of the employed workforce.

The composition of those inadequately utilized varies significantly among ethnic groups. Among the Malays, only 5.8% of those employed are underutilized by income, but almost a third (30.7%) are underutilized by hours of work. Nearly 5% are underutilized by both. These combine to give the Malays the highest proportion among the employed who are underutilized. Among the Chinese, underutilization by income is more important, being, in numbers, about one and a half times that of underutilization by hours of work. The overall percentage of inadequately utilized is however much lower than that among the Malays. Among the Indians, 8.7% of those employed are below the income cut-off while 16.0% are below the hours of work cut-off.

The most important feature in Table 3 is however the markedly unfavourable position of females. It is also seen that 74.4% of the males and 50.9% of the females who are employed fall into the category of 'adequately utilized'. Underutilization by hours of work is almost three times as important as underutilization by income among the males, but only a quarter more so among the females. A good 7% of the female employed workforce are classified as underutilized by both criteria, while the corresponding percentage for males is only 1.4. The difference between males' and females' extent of underutilization is therefore not only one of magnitude, but also one of composition.[14]

In terms of the relationship between income and hours of work, the expected positive correlation can be easily observed from the data (not shown). But this relationship is not monotonic, since it is found that those in the higher income groups actually work fewer hours on average.

## UNDERUTILIZATION BY INCOME

One feature of the labour utilization situation in Kuala Lumpur that emerges from an examination of Table 3 is that the dimensions of income and number of hours worked are largely mutually exclusive in their incidence. We would therefore be justified in looking at one dimension at a time. In this section, the question of underutilization by income is examined.[15]

[12] In this study all currency is in Malaysian dollars.

[13] The cut-offs used here are based on those that had been adopted before. See Pang [1972] and Khoo and Palan [1974].

[14] While the same differential was found in the study of Khoo and Kwok [1976], the composition, in terms of dimensions, of underutilization was found to be similar between males and females in that study.

[15] Since income is used here as an indicator of welfare, the relevant measure is total income, which includes salaries, business incomes, incomes from property, transfer receipts, as well as the imputed values of non-monetary income. In an urban context, however, the last item was found to be relatively unimportant.

Table 4 summarizes the profile of those working outside households who are underutilized by this criterion. The Chinese are the most underutilized according to income, while the Malays and Indians are roughly equal in this respect. The proportions of persons of each of the above ethnic groups,earning below $100 a month are 17.2%, 10.5% and 10.7% respectively. Differences between ethnic groups are much reduced if the cut-off is raised to M$150 a month. This is indicated by the non-significant $\chi^2$ test of proportions under this cut-off.[16]

TABLE 4

PROFILE OF THE EMPLOYED WORKFORCE OUTSIDE HOUSEHOLD UNDERUTILIZED BY INCOME

| Classification | Proportion Earning Monthly Income (%) | | $\chi^2$ Test of Proportions | |
|---|---|---|---|---|
| | $100 or less | $150 or less | $100 or less | $150 or less |
| **Ethnic Groups** | | | | |
| Malays | 10.5 | 25.3 | | |
| Chinese | 17.2 | 31.0 | | |
| Indians | 10.7 | 29.6 | 12.89** | 4.83 |
| **Sex** | | | | |
| Males | 7.8 | 20.4 | | |
| Females | 25.6 | 45.6 | 80.18** | 92.32** |
| **Age Groups** | | | | |
| 15–19 | 43.7 | 69.4 | | |
| 20–24 | 12.0 | 34.3 | | |
| 25–29 | 8.3 | 20.3 | | |
| 30–39 | 4.0 | 13.8 | | |
| 40–49 | 4.6 | 11.4 | | |
| 50–54 | 6.1 | 14.3 | | |
| 55 and above | 21.5 | 36.9 | 230.22**[a] | 245.61**[a] |
| **Occupation Groups** | | | | |
| Professional, etc. | 3.7 | 6.9 | | |
| Clerical | 4.2 | 13.4 | | |
| Sales | 29.8 | 46.8 | | |
| Service | 16.8 | 34.2 | | |
| All others | 15.4 | 37.3 | 87.79**[b] | 137.69**[b] |
| **All Groups** | 13.3 | 28.2 | | |

*Notes*: For test of hypothesis

*denotes significance at 5% level;

**denotes significance at 1% level

[a] For purposes of testing, the age groups '10–14' and '15–19' have been amalgamated to form one group '10–19'

[b] The groups 'professional and technical' and 'administrative and managerial' have been amalgamated for purposes of testing.

[16] The test for equality of k proportions is the $\chi^2$ test of the 2 k contingency table with (k–1) degrees of freedom.

A much larger proportion of the females is below the income cut-off. While 7.8% of the males earn less than $100 a month, more than three times that proportion of the females are in the same predicament; while 33.8% of the males earn $301 or more a month, only 22.1% of the females enjoy thjs level of income. If we subdivide the sexes according to ethnic group, it is found that at least half of those females below the cut-off are Chinese, while for the males, about 60% of the underutilized males are Chinese. The picture is not significantly altered if the higher cut-off of $150 is adopted.

As is not unexpected, the proportion of those employed who receive low incomes declines with advancing age. In Table 4, those earning $100 or less a month constitute 43.7% of those between ages 15 and 19, but only 4.6% of those between ages 40 and 49. In terms of the distribution of income for specific age groups, the income curves become progressively skewed to the left as age increases.[17] This trend is only arrested at high age groups (i.e., 50 years of age and above). In the age group '55 and above' about one-fifth of the persons are earning $100 or less a month.[18]

The final part of Table 4 gives the proportions of persons below the income cut-offs in major occupational groups. As is to be expected, those in professional, technical, administrative and managerial occupations are the most well-off with 3.7% of the group below the $100 cut-off. Similarly, only 4.2% of those in clerical occupations are below this cut-off, but the proportion more than triples if the $150 cut-off is adopted. Sales workers are by far the worst off, with almost a third underutilized by income, while about half earn $150 a month or less. The group 'All others' consists of agricultural as well as production and related workers. Of the 1,393 persons employed outside the household whose incomes are known, only 26 are agricultural workers. About 40% of this number earn below $150 a month.

## UNDERUTILIZATION BY HOURS OF WORK

A second dimension of labour underutilization that has been shown to be significant is the inadequacy of the number of hours of work.[19] Table 5 gives the profile of those employed persons who are considered underutilized according to this criterion.

The proportions of those working 35 hours or less a week are quite small for the three ethnic groups. Using 40 hours a week as the cut-off however, quite substantial differences are encountered. The Malays have the largest proportion of employed workers underutilized by hours of work, with approximately 35% below the 40 hour

[17] The income curve is fitted to the solid histogram of rectangles whose areas represent the proportion of the total income which accrues to the persons whose incomes fall within the ranges indicated by the bases of the rectangles.

[18] The 1971 Socio-economic Survey of Households revealed that in the case of individuals, inadequacy of utilization by income declined as age increased, though there were 'extreme variations'.

[19] 'Hours of work' in the present context is taken to mean 'the number of hours a person spends on the job'. It can well be that not all these hours are productively employed. A case in point in that of a taxi-driver, who, although being on the job for, say, 50 hours a week, may spend a substantial part of that time waiting to pick up passengers.

TABLE 5

PROFILE OF THE EMPLOYED WORKFORCE OUTSIDE HOUSEHOLD UNDERUTILIZED BY HOURS OF WORK

| Classification | Percentage with Weekly Hours of Work | | $\chi^2$ Test of Proportions | |
|---|---|---|---|---|
| | 35 or less | 40 or less | 35 or less | 40 or less |
| **Ethnic Groups** | | | | |
| Malays | 6.6 | 35.4 | | |
| Chinese | 3.6 | 12.6 | | |
| Indians | 6.3 | 17.9 | 6.07* | 91.23** |
| **Sex** | | | | |
| Males | 3.1 | 19.2 | | |
| Females | 10.0 | 30.0 | 28.09** | 20.42** |
| **Age Groups** | | | | |
| 15–19 | 3.6 | 19.0 | | |
| 20–24 | 4.2 | 26.9 | | |
| 25–29 | 5.9 | 24.8 | | |
| 30–39 | 7.5 | 22.3 | | |
| 40–49 | 4.5 | 20.9 | | |
| 50–54 | 8.1 | 22.4 | | |
| 55 and over | 6.2 | 12.4 | 4.95[a] | 8.60[a] |
| **Marital Status** | | | | |
| Single | 3.3 | 22.3 | | |
| Married | 6.7 | 22.8 | | |
| Widowed | 12.5 | 30.8 | | |
| Divorced | 0 | 22.2 | 7.85*[c] | 0.02[c] |
| **Educational Attainment** | | | | |
| *(No. of years of education)* | | | | |
| 6 or less | 5.0 | 19.3 | | |
| 7–12 | 4.0 | 23.7 | | |
| 13 or more | 8.9 | 25.1 | 9.22** | 3.84 |
| **Occupation Groups** | | | | |
| Professional, etc. | 15.9 | 36.4 | | |
| Clerical | 1.9 | 31.2 | | |
| Sales | 7.2 | 14.4 | | |
| Service | 5.1 | 20.3 | | |
| All others | 1.8 | 15.0 | 69.87**[b] | 60.82**[b] |
| **Industry Groups** | | | | |
| Manufacturing | 1.6 | 12.7 | | |
| Electricity, gas, water | 4.0 | 28.0 | | |
| Construction | 2.7 | 15.0 | | |
| Wholesale, retail | 5.8 | 16.2 | | |
| Transport | 2.4 | 22.1 | | |
| Finance | 2.1 | 18.9 | | |
| Community services | 8.4 | 32.6 | | |
| Others | 3.8 | 11.5 | | |
| **All Groups** | 5.2 | 17.3 | 22.53** | 57.17** |

*Notes:* a & b: See notes to Table 4

c: for purposes of testing, the groups 'widows' and 'divorced' have been amalgamated.

cut-off. The Chinese are least underutilized by this criterion; only 13% work less than 40 hours a week. The Indians are intermediate between these two ethnic groups, with 18% below the 40 hour cut-off.

As in the case of underutilization by income, the position of females is distinctly unfavourable relative to that of the males. Thirty per cent. of the females employed work for 40 hours or less a week, with about a third of these actually working less than 35 hours a week. This observed differential between the sexes is also apparent among the Malays and Indians, but negligible among the Chinese, 88.3% of whose males and 85.6% of whose females work 41 hours or more a week. Corresponding figures for the Malays and Indians are 70.4%, 51.1% and 86.6%, 69.7%.

The relationship between age and hours of work is at best a weak one. An interesting feature is that despite the low incomes received by the younger age groups (*cf.* Table 4), those in these groups in fact work relatively long hours. In fact, more than 90% of those aged 10–14 years, and more than 80% of those aged 15–19 years, work more than 40 hours a week, while only 77.7% of those aged 30–39 years do so. As expected, however, the proportion of those underutilized by hours of work increases with advancing age. The age group '55 and over' is however out of line; 87.7% of the total in this age group work 41 hours a week or more.

If the relationship between age and hours of work is weak, that between marital status and hours of work is practically non-existent. For all four categories of marital status, between 77% and 79% of the persons in these categories work more than 40 hours a week. There is some variation of the proportions working below the two cut-offs, especially among those widowed and divorced. Numerically, however they represent only 2.3% of the employed workforce. The $\chi^2$ test for differences between proportions of those never married and all others is non-significant if the 40 hour cut-off is used.

Similarly, a general relationship between years of education and number of hours worked cannot be established, although there appears to be a slight reduction in the proportion of persons working more than 40 hours a week as the number of years of education increases. Among those who have received more than twelve years of formal education, almost 10% are working 35 hours or less a week. The corresponding figures are 6.4% for males and 19.2% for females.

Classification of the employed workforce into occupational groups reveals major differences in the number of hours worked. The proportion working more than 40 hours a week ranges from 63.6% for professional, technical, administrative and managerial workers to 85.0% for 'All others' and 85.6% for sales workers. With the exception of the professionals, very few workers work less than 36 hours a week, so that the use of 35 hours as a cut-off will severely understate this dimension of underutilization. The substantial differences in number of hours worked suggest that there may be some danger in imposing a uniform hours of work cut-off for all occupations.[20] Certainly, the average number of hours worked in each major

[20] Certainly very few occupations have average number of hours of work per week below 40. In the Socio-economic Survey of Households (Malaysia [1971], Statement 5, p. 150), all occupations except agriculture have more than 70%–80% of their workforce working 48 hours a week or more.

occupational group must have some bearing on the selection of an appropriate cut-off for that group.[21]

The industrial group in which labour utilization is most adequate is 'manufacturing', with 87.3% of those in this group working more than 40 hours a week. (The group 'others' actually has 88.5%, but the number of persons in that group is small.) The groups 'construction', 'wholesale, retail' and 'finance' has also more than 80% of those persons in these groups working more than 40 hours a week. Workers in the industry group 'community, social and personal services' are most underutilized by hours of work.

THOSE EMPLOYED WITHIN HOUSEHOLDS

Apart from the 1,408 persons reported as employed outside households, another 144 persons, 45 males and 99 females, are reported as being employed within households.

As is to be expected, labour underutilization is more severe among these workers than among those employed outside the household. From Table 6, it can be seen that only 45% of these 144 persons are adequately utilized, while the remainder are divided into 35.2% underutilized by income, 10.6% by hours of work, and 9.2% by both. The predominance of the income dimension implies that household workers labour for long hours at relatively low rates of remuneration.

Labour underutilization among Malays is the highest of all, being 70%, while the Chinese are 45.8% and the Indians are 42.9% underutilized. Also worthy of note is that a substantial percentage is underutilized by both income and hours of work. In fact this group is larger than that underutilized by hours of work alone.

As in the case of those employed outside households, there is a considerable gap between males and females. While the proportion of males adequately utilized inside households is identical to that of their counterparts working outside households

TABLE 6

THE EMPLOYED WORKFORCE INSIDE HOUSEHOLDS: DIMENSIONS OF UNDERUTILIZATION, BY ETHNIC GROUP AND BY SEX

| Nature of Utilization | All Groups | By Ethnic Group | | | By Sex | |
|---|---|---|---|---|---|---|
| | | Malays | Chinese | Indians | Males | Females |
| **Adequate** | 45.0 | 30.0 | 54.2 | 57.1 | 70.4 | 39.8 |
| **Inadequate** | 55.0 | 70.0 | 45.8 | 42.9 | 29.6 | 60.2 |
| By income only | 35.2 | 43.3 | 34.4 | 28.6 | 20.4 | 41.8 |
| By hours of work only | 10.6 | 10.0 | 5.2 | 7.1 | 2.3 | 8.2 |
| By both | 9.2 | 16.7 | 6.2 | 7.1 | 6.8 | 10.3 |

[21] The case of teachers, with a norm of 35 hours or less, is often cited in support of this. In the present study, of the 55 teachers, 31 reported that they were working more than 40 hours a week.

(70%), the proportion for females in a similar position is little more than half that for females working outside households.

Table 7 gives the profile of those employed inside households in relation to the dimensions of income and hours of work. Apart from the uniformly higher percentages of those underutilized for all classifications, compared with those employed outside households, the picture is broadly similar. Both in terms of income and hours of work, the position of the Malays is least favourable, but the tests of significance for differences between proportions are all non-significant, principally because of the relatively small numbers involved. The differential between males and females is marginally significant for income, but not for hours worked. As before, a positive relationship between age and income can be observed, but no similar pattern can be established between age and hours of work. Finally, although it would appear that the proportion of those underutilized by hours of work declines as years of education increases, the relevant test indicates non-significance.

TABLE 7

PROFILE OF THE EMPLOYED WORKFORCE INSIDE HOUSEHOLDS: UNDERUTILIZATION BY INCOME AND BY HOURS OF WORK

| Classification | Proportions of Those (%) | | $\chi^2$ Test of Proportions | |
|---|---|---|---|---|
| | Earning $100 or less a month | Working 40 hrs. or less a week | Earning $100 or less a month | Working 40 hrs. or less a week |
| **Ethnic Groups** | | | | |
| Malays | 60.0 | 27.7 | | |
| Chinese | 40.7 | 11.4 | | |
| Indians | 35.7 | 14.3 | 3.94 | 3.90 |
| **Sex** | | | | |
| Males | 27.3 | 9.1 | | |
| Females | 52.0 | 18.4 | 6.58* | 1.41 |
| **Age Groups** | | | | |
| 15–19 | 65.6 | 15.2 | | |
| 20–24 | 42.8 | 28.6 | | |
| 25–29 | 53.3 | 26.7 | | |
| 30–39 | 36.0 | 8.0 | | |
| 40–49 | 20.0 | 14.3 | | |
| 50 and over | 30.4 | 8.7 | 16.74** | 5.91 |
| **Years of Education** | | | | |
| 6 or less | – | 17.6 | | |
| 7–12 | – | 10.7 | | |
| 13 or more | – | 6.5 | – | 4.52 |
| **All Groups** | 44.4 | 15.5 | | |

*Notes:* *Significance at 5% level.

**Significance at 1% level.

## THE 'MISMATCH' HYPOTHESIS: FACT OR FANTASY?

The last dimension of labour underutilization proposed by Hauser [1973] is the mismatch between education and occupation of the employed workforce. Implicit in this is the assumption that certain occupations require certain levels of educational attainment on the part of the workforce. Khoo and Palan [1974] and Pang [1972] constructed an education-occupation compatibility matrix in which the rows represented the occupational groups and the columns the number of years of formal education of the employed workforce.[22] Certain cells are circled where it is believed there is a mismatch. The employed workforce in these cells are then said to be underutilized by mismatch of education and occupation.

Table 1 gives the magnitude of labour underutilization by mismatch for West Malaysia, Singapore, the Philippines and Hong Kong. The figures are 0.6%, 1.0%, 20.3% and 7.5%, respectively. The mismatch is negligible in the case of West Malaysia.

The concept of mismatch of education and occupation is the least well-defined of the four dimensions of labour underutilization. It has the inherent weakness that it lends itself very much to subjective judgment as to what constitutes a mismatch. In addition, it is too aggregative in that other factors which might have an influence on the occupation of a person are confounded in this mismatch matrix. For example, no account is taken of the age of the employed workforce. An employed person with upper secondary education is said to be fully utilized if employed in the clerical occupations. While this may be reasonably assumed in the case of young employed persons in the age-group, say, 15–24, the older employed persons in the age-group, say, 40 and above, should properly be regarded as underutilized.

A further weakness of the 'mismatch' matrix is that it is constructed for all employed workforce regardless of employment status. The educational requirement of an employer in a certain occupation is quite different from that of an employee in the same occupation.

This study plans to examine the concept of mismatch, if it exists, in a different manner. An education-salary matrix is constructed instead for the category 'employee' in the employed workforce outside household. This approach lends itself to a more quantitative analysis of the mismatch. Education here refers to the number of years of formal education. Salary rather than income is used because it is more directly related to education. Only employees are considered since an employer's salary or income is much less related to his educational attainment. The rows of this matrix refer to the number of years of formal education while the columns refer to the salary groups. The education-salary matrix obtained from the labour utilization study of metropolitan Kuala Lumpur by Kok, Cheong, *et al.* [1976] is given in Table 8. If there is no mismatch we would expect the employees outside households to fall roughly along the main diagonal of the matrix. The correlation coefficient calculated is 0.535. This figure gives a measure of the 'match' between the education of the employees outside household and their salary. The relatively low figure could be attributed to the aggregation of the years of formal education into several groups and the aggregation of the salary

[22] Khoo and Kwok [1976] used 'highest certificates obtained' by the employed workforce as columns of the 'mismatch' matrix because it is felt that employers looked for the required paper qualifications needed for a job rather than the number of years of formal education.

TABLE 8

EDUCATION-SALARY 'MISMATCH' MATRIX OF THE EMPLOYEES WORKING OUTSIDE HOUSEHOLD

| Years of Formal Education | Salary ($) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1–50 | 51–100 | 101–150 | 151–200 | 201–300 | 301–500 | 501–900 | >900 |
| 0 | 0 | 4 | 7 | 11 | 17 | 5 | 2 | 1 | 0 |
| 1–3 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 4–6 | 1 | 3 | 6 | 8 | 12 | 6 | 4 | 0 | 0 |
| 7–9 | 3 | 15 | 51 | 71 | 73 | 81 | 40 | 4 | 1 |
| 10–12 | 2 | 10 | 49 | 75 | 73 | 63 | 25 | 11 | 5 |
| 13–15 | 2 | 3 | 7 | 25 | 65 | 88 | 87 | 49 | 20 |
| 16–18 | 1 | 0 | 0 | 0 | 0 | 13 | 11 | 20 | 20 |
| 19–21 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 12 | 29 |
| 22–24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |

into several salary groups. In addition, it does not take into account the age of the employees. Employees with the same number of years of formal education but of different ages are naturally expected to have different salaries. In fact, the correlation coefficient between age and salary is 0.282 which is significantly different from 0. A more appropriate and detailed analysis, therefore, is to consider the education-salary matrix for each age-group. The pattern, in fact, varies from one age-group to another.

The education-salary 'mismatch' matrix for the age-group 15–19 is given in Table 9. The correlation coefficient between education and salary is found to be 0.387. The low figure for this age-group can be explained by the fact that those with up to twelve years of formal education have non-specific skills and therefore fit into a wide range of occupations with substantial differences in salary. Furthermore the LCE holder in, say, the construction industry, with some years of experience may earn as much as or more than a new employee with an HSC. This second point of view is strengthened by the fact that the correlation coefficient, r, increases with advancing age-groups as given below:-

| Age-groups as given below: | 15–19 | 20–24 | 25–29 | 30–34 | 35–39 | 40–49 | ≥50 |
|---|---|---|---|---|---|---|---|
| Correlation Coefficient, r | 0.387 | 0.460 | 0.611 | 0.689 | 0.679 | 0.704 | 0.766 |

The r value reaches a maximum of 0.766 for the age-group '50 and above'. Thus the problem of mismatch between education and salary, if any, diminishes with advancing age-groups.

We have highlighted the importance of age as a factor influencing 'mismatch'. Other factors, less obvious but equally important, may also be present, and it would be unfortunate if the operation of these factors are mistaken for the existence of a genuine incompatibility between education and income.

## SOME POLICY IMPLICATIONS

From the brief review above, the underutilization problem among those employed in an urban context would appear to be equally distributed among the major ethnic groups, with the female workforce being more adversely affected in each case. The former uniformity however masks major differences in the dimensional composition of the underutilized workforce. The Chinese are most underutilized according to income, but the Malays are most underutilized by hours of work. With respect to the former dimension, a positive relationship between age and income earned can clearly be discerned.

An examination of those persons working inside households reveals similar features, except that the proportions of those underutilized are everywhere higher, while at the same time, income deficiency assumes paramount importance.

The survey findings also throw some light on the validity of the 'mismatch hypothesis', claimed to represent one dimension of underutilization. By removing the effects of age on the mismatch matrix, it is found that save in the lowest age groups, there is in fact a very close correlation between educational attainment and income earned. And since the lowest age groups must contain persons with secondary or

TABLE 9

EDUCATION-SALARY 'MISMATCH' MATRIX OF EMPLOYEES OUTSIDE HOUSEHOLD IN THE AGE-GROUP 15–19

| Years of Formal Education | Salary ($) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1–50 | 51–100 | 101–150 | 151–200 | 201–300 | 301–500 | 501–900 | >900 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1–3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4–6 | 0 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
| 7–9 | 0 | 6 | 15 | 17 | 4 | 1 | 0 | 0 | 0 |
| 10–12 | 0 | 7 | 30 | 23 | 13 | 7 | 0 | 1 | 0 |
| 13–15 | 0 | 1 | 1 | 3 | 11 | 5 | 2 | 0 | 1 |

sub-secondary education, and since this level of education is compatible with a wide range of occupations, it would seem somewhat absurd to make too much of the hypothesis that mal-allocation of educated manpower exists to any significant extent.

Despite this, there is little doubt that the picture of underutilization is a rather depressing one. As the following figures show, a good 45% of the labour force surveyed are underutilized or unemployed by the criteria used in this study:[23]

| Percentage of labour force underutilized | | |
|---|---|---|
| Unemployed | Outside households | 24.9 |
| | Inside households | 4.4 |
| | Actively | 9.6 |
| | Passively | 6.4 |
| Total | | 45.3 |

In terms of numbers, twice as many persons are underutilized as are unemployed, the respective percentages being 29.3 and 16.0. In addition, on the basis of data collection from the Post Enumeration Survey of 1970, the situation may be even more adverse in the rural areas, where it is reported that underemployment is the 'main problem' (Malaysia [1976], p. 166).[24] While the *TMP* claims that underemployment has declined between 1970 to 1975, it is clear that this fall has taken place in rural areas. In urban areas, the opposite might occur for two reasons. In the first place, the labour force is expected to increase over time, and this will exert pressures upon employment opportunities. In the second place, if, as is stated in the *TMP*, rural-urban migration is expected to increase between 1975 and 1980, underutilization of labour, especially in the service sector, may be expected to rise.[25] The experience of 1970–5, during which little in-migration occurred, was one of relatively constant proportions of persons underutilized.

This relative constancy of the rate of underutilization over time has an important implication and that is, that while unemployment may be expected to fluctuate with the vicissitudes of the business cycle, 'underutilization' of those employed is not subject to similar movements.[26] Indeed, it should not, since underutilization is a

[23] The actual proportion of persons underutilized may be higher than this, since it is common for those who have been unemployed for long periods to drop out of the labour force altogether. Our findings on the duration of unemployment point to this as a real possibility. See Kok, Cheong, *et al.* [1976], Chapters 7 and 8.

[24] *TMP*, p. 161, reports that 24.6% of urban households in 1970 are poor, whereas 49.3% of rural households fall into this category.

[25] This rural-urban drift will be brought about by the government policy of encouraging new growth centres in various less developed regions of the country.

[26] This appears to be also the experience of the US. (See Levitan and Taggart [1974]).

continuing structural problem for which the solution lies not in the upliftment of effective demand but in a long-term commitment towards eliminating inequities and distortions in the labour market and towards eradicating poverty in general. Whether the measures proposed in the TMP will successfully reduce underutilization of labour remains to be seen.[27] The lesson from the survey findings is however clear; it will be tragic if policy-makers continue to feel that unemployment is the main cause of poverty in urban areas (Malaysia [1976], p. 166).

To the extent that labour underutilization represents the generalization of unemployment, an index of labour underutilization as an extension of the rate of unemployment is potentially useful and indeed feasible. Since, for each dimension, unemployment is the limiting case of underutilization, the construction of such an index presents no real difficulties. A simple expedient for, say, underutilization by income only, is to use the formula

$$U_y = \left( N_1 \bullet \frac{Y_2 - \bar{Y}_1}{Y_2} + N_2 \right) / L$$

where $N_1$ and $N_2$ are respectively the number of persons underutilized by income (i.e. below the income cut-off $Y_2$) and the number of persons actively or passively unemployed, $\bar{Y}_1$ is the mean of incomes of the underutilized group and L is the labour force. While the above formula represents only a rough approximation, it is theoretically more satisfactory than merely counting heads, i.e., $(N_1 + N_2)/L$. A similar formula can be applied to underutilization by hours of work only:

$$U_h = \left( N_3 \bullet \frac{H_2 - \bar{H}_1}{H_2} + N_2 \right) / L$$

where $N_3$ is the number of persons whose hours of work fall below the cut-off $H_2$, and $H_1$ is the mean number of hours worked for these $N_3$ persons. There is some over-lapping of persons in the $N_1$ and $N_3$ groups. These are the persons underutilized by both income and hours of work. Some difficulty may arise when it is desired to combine these indices into an overall index. Formally, let the weights for combining these indices be W and $(1 - W)$, i.e.,

$$\text{Overall index} = U = W \frac{N_1 \dfrac{Y_2 - \bar{Y}_1}{Y_2} + N_2}{L} + (1 - W) \frac{N_3 \dfrac{H_2 - \bar{H}_1}{H_2} + N_2}{L}$$

$$= \left[ \frac{WN_1}{Y_2} (Y_2 - \bar{Y}_1) + \frac{(1 - W)N_3}{H_2} (H_2 - \bar{H}_1) + N_2 \right] / L$$

[27] These include the encouragement of labour-intensive and small-scale industries, the provision of health, transport and social amenities, the imposition of tariff protection and fiscal incentives, as well as the extension of credit to petty trades.

To illustrate from our data, we have $N_1 = 185$, $N_2 = 298$, $N_3 = 316$, $L = 1855$, $Y_2 = \$100$, $\bar{Y}_1^* = \$54.23$, $H_2 = 40$, $\bar{H}_1^* = 33.75$, we have the indices

$U_y = 20.63\%$ $U_h = 18.73\%$

If $W = 2/3$ $U = 20.0\%$

Concommitant with the development of an underutilization index, the development of more rigid criteria for underutilization is clearly required, so that a target group can be more easily identified. As a first approximation, the following categories of persons should be included:

(i) those unemployed, whether actively or passively;
(ii) household heads and other primary workers whose earnings fall below a specified cut-off;
(iii) primary workers whose number of hours of work fall below a specified cut-off, or various specified cut-offs;[28]
(iv) dropouts from the labour force of primary workers caused by prolonged underutilization, but who would be willing to work full-time if opportunities were available.

But we should exclude the following:

(i) those whose incomes are above a specified level, regardless of whether full-time or part-time;
(ii) secondary workers in families with adequate income;
(iii) those above, say, 65 years old.

Finally, whether or not governmental measures will be able to effectively cope with the serious problem of underutilization, the identification of poverty groups in the Plan gives considerable cause for optimism. It needs hardly be stressed that research in this area, however tentative or rudimentary, will be useful guides for policy.

## ADDENDUM

### SOME DEFINITIONS

1. **The labour force** comprises the employed, the active unemployed and the passive unemployed aged 10 and above.
2. The **active unemployed** comprises all those unemployed and seeking work.
3. The **passive unemployed** comprises all those unemployed and not seeking work but would accept a job if offered one.
4. To **seek work** is to take steps to obtain a job either through the Labour Exchange, advertisements, letters, friends or any other means.
5. To be **employed** is either
   (a) to be at work at least one day during the reference week, for pay or profit or family gain, or
   (b) if not at work during reference week, to have an employment, work on farm, enterprise or other family enterprise to return to.

[28] It may be pertinent to consider various cut-offs for different locations (e.g. rural and urban) or in the case of hours of work, for different occupations.

6. A **household** is one
   (a) where all the members are staying together, pooling a part or all of their financial resources and 'eating from the same cooking pot', and
   (b) where each member spent at least 4 out of the 7 days of the reference week at those living quarters.
7. Classification of industry and occupation is based on Malaysia, Department of Statistics, *Malaysian Industrial Classification,* Kuala Lumpur, 1972, and *Dictionary of Occupational Classification,* Kuala Lumpur, Ministry of Labour, revised in 1971 for use in the Census.
8. To work within a household is to work anywhere within the living quarters of that household.

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# UNEMPLOYMENT, EDUCATIONAL PLANNING AND STRATEGIES FOR EMPLOYMENT IN MALAYSIA

Anuwar Ali, Toh Kin Woon and Zulkifly Hj. Mustapha

## UNEMPLOYMENT IN MALAYSIA

Growing attention is being paid by the government to the problem of the increasing open unemployment and underemployment in the rural and urban sectors of the economy.

The unemployed are defined in the 1967/68 Socio-Economic Survey (SES) as 'those persons who, having no jobs or enterprise of their own, did not work at all any time during the reference week and were looking for a job or work'. These affected persons are further sub-classified into:

(a) those actively looking for a job or work for pay or profit; and
(b) those who were not actively looking for a job or work but will accept a job if given one.[1]

The above definition refers to 'open unemployment'.

**Open unemployment** in Malaysia has been consistently high since the early 'sixties. This type of unemployment appears to have increased from about 6% of the labour force in 1962 to 6.8% in the 1967/68 period; and up to 7.3% in 1973. This 7.3% does not include the *underemployment* in almost all sectors of the economy. The high rate of open unemployment is generally attributed to the very rapid increase in population and hence the labour force – which ultimately creates serious structural imbalances within the economy. Unemployment was further expected to remain 'one of the most serious long-term economic problems of the economy', as plan targets for job-creation have continuously failed to be met.[2] Consequently, output growth under plan periods

[1] Malaysia, *Socio-Economic Sample Survey of Households, 1967/68,* Kuala Lumpur, Department of Statistics, p. 9. Henceforth abbreviated to *SES, 1967/68.*

[2] Malaysia, *Economic Report 1972/73,* Kuala Lumpur, Treasury, 1974, p. 32.

have come to be more associated with enhanced productivity rather than with increased employment in sectors like rubber, manufacturing and transport.[3]

The fact that a substantial part of the working population are self-employed persons and unpaid family workers (40% of the labour force) complicates the measurement of unemployment and underemployment.[4] The open nature of the Malaysian economy too places severe constraints on the ability of the government to plan for job creation. Following the severe recession in the industrialized countries after 1972, 'unemployment increased in 1975 with the decline in economic activity and featured strongly in the retrenchment of workers in badly affected industries, particularly the labour-intensive export industries such as electronics and wood products'.[5]

**By Rural-Urban Distribution**

The labour force in the rural and urban areas reflects a distinct occupational and racial distribution. The preponderence of Malay employment in the rural sector and a Chinese concentration in the urban sector is clearly perceived (Table 1).

Malay employment is largely in the agricultural sector while Chinese employment is concentrated in the faster-growing activities associated with the urban areas (See Table 2). This racial distribution in terms of sectoral employment has not changed significantly since 1967/68. Despite substantial government expenditure on rural development, structural weaknesses of the traditional agricultural sector remain, so that during the 1971–5 period 'net absorption of labour is expected to be low in agriculture even though sizeable production increases are projected for rubber, rice, palm oil and other major agricultural products'.[6]

In 1962 the urban rate of unemployment was 8.9% while the corresponding rate for rural areas was estimated at 5%. Similarly the figures during the 1967/68 survey reflected a similar trend as they stood at 9.9% as compared to 5.4% for the rural areas. Corresponding estimates for 1972 were 10.2% and 6% respectively.

TABLE 1

PERCENTAGE DISTRIBUTION OF LABOUR FORCE BY RACE IN RURAL AND URBAN AREAS, 1967/68

| Labour Force | Malay | Chinese | Indian | Others | All Groups |
|---|---|---|---|---|---|
| Total | 50 | 36 | 13 | 1 | 100 |
| Rural | 61 | 25 | 13 | 1 | 100 |
| Urban | 25 | 59 | 13 | 3 | 100 |

*Source: SES 1967/68.*

[3] *MTR of the FMP*, p. 16.

[4] D.J. Blake, 'Unemployment: the West Malaysian example', *UMBC Economic Review*, Vol. IX No. 1 (1973).

[5] Malaysia, *Economic Report 1975/76*, Kuala Lumpur, Treasury, 1977, p. 14.

[6] *MTR of the SMP*, p. 29.

TABLE 2

PENINSULAR MALAYSIA: PERCENTAGE DISTRIBUTION OF EMPLOYMENT BY RACE AND SECTOR 1970 & 1975

| Sector | 1970 | | | | 1975 | | | |
|---|---|---|---|---|---|---|---|---|
| | Malays | Chinese | Indians | Others | Malays | Chinese | Indians | Others |
| Total | 51.4 | 37.0 | 10.7 | 0.9 | 52.6 | 36.3 | 10.3 | 0.8 |
| Primary[a] | 67.6 | 21.4 | 10.1 | 0.9 | 67.3 | 20.7 | 11.1 | 0.9 |
| Secondary[b] | 30.8 | 59.5 | 9.2 | 0.5 | 36.5 | 53.3 | 9.8 | 0.4 |
| Tertiary[c] | 37.9 | 48.3 | 12.6 | 1.2 | 42.3 | 47.3 | 9.5 | 0.9 |

*Source:* *TMP*, p. 78.

*Notes:* [a]Agriculture.

[b]Mining, manufacturing, construction, utilities and transport.

[c]Wholesale and retail trade, banking, public administration, education, health and defence.

Open unemployment as such is characteristically an urban phenomenon. This phenomenon has been associated with the process of rural-urban migration, which has significantly increased in the last few years with the rapid development in Malaysia's major towns; the ineffectiveness of government policies to disperse industries; and the inability of the agricultural sector to absorb all the rural manpower. Between 1957–70 this migrational drift has contributed to an annual population growth of 3.3% in the urban areas compared with a corresponding figure of 2.4% for the rural areas. Since the rate of open unemployment in the urban areas is substantially higher than that in the rural areas, this strongly suggests that the process of rural-urban migration is merely a transfer of underemployment in agriculture to open unemployment in urban centres.

### By Sex Distribution

In 1962, the overall rate of unemployment was moderately high – 5.2% of all males and 7.9% of all females in the labour force. The 1967/68 SES figures showed an increase to 6.1% and 8.1% respectively. The fact that unemployment among females has not increased to the same extent as amongst males is indeed significant: '. . . even though there has been an increase in the female labour force arising from female emancipation which is related to education and attitudes towards employment, there has been no corresponding pressure in the employment market'.[7] This finding should however be interpreted with caution. It may be that female members of the working age groups may not actually present themselves in the labour market as *actively* looking for work, but they might very well be willing to accept remunerative employment should the opportunity arise.

[7] *SES, 1967/68*, pp. 108–9.

### By Duration of Unemployment

A symptom of the chronic nature of the unemployment problem is found in the relatively long duration of unemployment for a significant proportion of the unemployed.[8] For instance, 43.88% of the unemployed had been out of work for a year or more in 1967/68; 20.43% for a period of six months to a year; and 35.68% for less than six months (Table 3).

### By Age Group

A most striking feature of unemployment is that it is concentrated among the young. The unemployment in the 15–19 age groups accounted for nearly half of the total unemployed in 1967/68. If this age group is extended to include those below 24 years, then it would account for 75% of the total unemployed. Associated with the predominance of youthful unemployment is the fact that first-time job seekers made up the majority of the jobless. Of the total number out of work, nearly two-thirds had never been employed.

This phenomenon illustrates the need to emphasize the structural nature of unemployment that exists in Malaysia. One can also relate this phenomenon with unrealistic expectations of first-time job seekers. Job preferences expressed by them in response to the 1967/68 SES Survey revealed a disproportionately large number seeking employment in clerical and administrative occupations. There is a very pronounced non-agricultural bias in the expectations of the unemployed. While agricultural occupations account for nearly half the total current employed, only 6.2% of the first-time job seekers and 13.8% of the unemployed who had a previous job were looking for agricultural work. Perhaps a reorientation of education is necessary so that expectations can be matched with reality. It is towards this aspect of educational reorientation via educational planning that we now turn.

## EDUCATIONAL PLANNING IN MALAYSIA

### Structure of the Present Educational System

The present educational system[9] in Malaysia was largely inherited from the British although many changes have occurred since Independence, particularly with the

TABLE 3

DISTRIBUTION OF THE UNEMPLOYED BY PERIOD OF UNEMPLOYMENT 1967/68

| Period of Unemployment | 1962 | 1967 |
|---|---|---|
| More than 1 year | 29.70 | 43.88 |
| 6 months – 1 year | 22.31 | 20.43 |
| 3 months – 6 months | 12.25 | 14.29 |
| Less than 3 months | 33.52 | 21.39 |
| Total | 97.78 | 99.99 |

*Source:* *SES 1967/68.*

[8] *SES 1967/68*, p. 146.

[9] The educational system referred to here is the formal school system.

TABLE 4

PERCENTAGE DISTRIBUTION OF EMPLOYED BY NUMBER OF HOURS WORKED PER WEEK AND INDUSTRY

| | Industry | Total Number (Thousands) | Persons Employed Working | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 48 hours and above | 25–48 hours | Less than 25 hours | 48 hours and above | 25–48 hours | Less than 25 hours |
| | (1) | (2) | (3) | (3) | (5) | (6) | (7) | (8) |
| | | | As a percentage to Col. (2) | | | As a percentage of total | | |
| 0. | Agriculture, forestry, hunting and fishing | 500.7 | 46.8 | 30.4 | 20.7 | 15.0 | 30.3 | 38.9 |
| 1. | Agricultural products requiring substantial processing | 718.8 | 52.4 | 33.7 | 14.0 | 24.1 | 45.2 | 37.6 |
| 2. | Mining & Quarrying | 72.0 | 79.3 | 16.5 | 4.2 | 3.7 | 2.2 | 1.1 |
| 3 & 4. | Manufacturing | 214.8 | 70.4 | 18.9 | 10.7 | 9.7 | 7.6 | 8.6 |
| 5. | Construction | 78.9 | 80.6 | 13.5 | 5.9 | 4.1 | 2.0 | 1.7 |
| 6. | Electricity, gas, water & sanitary services | 22.3 | 97.9 | 1.5 | 0.6 | 1.4 | 0.1 | 0.1 |
| 7. | Commerce | 255.2 | 80.3 | 14.9 | 4.7 | 13.1 | 7.1 | 4.5 |
| 8. | Transport, Storage & Communication | 86.2 | 91.1 | 6.1 | 2.8 | 5.0 | 1.0 | 0.9 |
| 9. | Services | 413.0 | 90.0 | 5.7 | 4.3 | 23.8 | 4.4 | 6.6 |
| 10. | Industry not specified | 3.5 | 76.4 | 16.2 | 7.4 | 0.2 | 0.1 | 0.1 |
| | Total | 2,365.4 | 66.1 | 22.6 | 11.3 | 100.0 | 100.0 | 100.0 |

*Source:* *SES 1967/68*, p. 149.

TABLE 5

MALAYSIA: MANPOWER SURVEY RESULTS[a] 1973 AND ESTIMATED REQUIREMENTS 1976–80

| Category | Total Employed | Manpower Survey 1973 | | | | | Vacancies (%) | Estimated[b] Requirements 1976–80 |
|---|---|---|---|---|---|---|---|---|
| | | Racial Distribution (%) | | | | Total | | |
| | | Malay & other indigenous people | Chinese | Indian | Others | | | |
| **Professional & Technical** | 147,517 | 48.9 | 39.3 | 10.5 | 1.3 | 100.0 | 1[illegible].4 | 65,309 |
| Chemists & Physical scientists | 354 | 11.6 | 76.8 | 11.3 | 0.3 | 100.0 | 20.6 | 327 |
| Laboratory & science technicans | 3,824 | 48.2 | 37.3 | 13.9 | 0.6 | 100.0 | 27.8 | 2,137 |
| Architects & town planners | 353 | 21.0 | 71.4 | 2.5 | 5.1 | 100.0 | 22.4 | 180 |
| Engineers | 2,244 | 13.5 | 69.9 | 12.8 | 3.8 | 100.0 | 22.4 | 2,764 |
| Engineering asst. & technicians | 11,824 | 46.1 | 34.9 | 16.4 | 2.6 | 100.0 | 24.0 | 5,538 |
| Surveyors | 168 | 19.1 | 58.0 | 13.7 | 9.2 | 100.0 | 19.6 | 346 |
| Draughtsmen | 2,979 | 39.0 | 53.4 | 6.6 | 1.0 | 100.0 | 9.1 | 2,041 |
| Agronomists | 652 | 39.1 | 49.7 | 8.7 | 2.5 | 100.0 | 38.0 | 540 |
| Life science technicians | 2,070 | 76.9 | 20.6 | 2.0 | 0.5 | 100.0 | 29.1 | 1,396 |
| Veterinarians | 162 | 30.8 | 24.1 | 42.6 | 2.5 | 100.0 | 19.8 | 95 |
| Veterinary asst. | 352 | 62.7 | 27.6 | 8.8 | 0.9 | 100.0 | 15.6 | 127 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Medical doctors | 1,915 | 7.6 | 49.5 | 36.7 | 6.2 | 100.0 | 24.0 | 728 |
| Medical asst. | 2,323 | 35.3 | 34.6 | 28.1 | 2.0 | 100.0 | 16.4 | 2,414 |
| Professional nurses | 5,623 | 33.7 | 55.1 | 9.0 | 2.2 | 100.0 | 19.4 | 5,297 |
| Dentists | 379 | 8.4 | 66.8 | 16.1 | 8.7 | 100.0 | 20.1 | 205 |
| Dental asst. | 1,030 | 24.4 | 72.1 | 3.0 | 0.5 | 100.0 | 10.1 | 578 |
| Accountants | 1,774 | 17.9 | 70.3 | 11.0 | 0.8 | 100.0 | 19.1 | 1,971 |
| Lawyers | 809 | 20.3 | 46.8 | 29.9 | 3.0 | 100.0 | 5.2 | 284 |
| Higher education teachers | 1,844 | 37.5 | 34.8 | 16.2 | 11.5 | 100.0 | 50.9 | 286 |
| Primary & secondary teachers | 79,527 | 49.5 | 40.4 | 9.4 | 0.7 | 100.0 | 3.1 | 19,872 |
| Other professional & technical | 20,353 | 68.0 | 24.6 | 6.4 | 1.0 | 100.0 | 16.7 | 18,183 |
| **Administrative and Managerial** | 22,605 | 35.4 | 55.5 | 7.3 | 1.8 | 100.0 | 8.6 | 12,264 |
| Managers | 12,535 | 13.0 | 81.5 | 3.7 | 1.8 | 100.0 | 3.3 | 10,472 |
| **Clerical** | 129,374 | 39.9 | 48.6 | 10.4 | 1.1 | 100.0 | 7.1 | 58,755 |
| **Sales** | 54,041 | 10.5 | 82.9 | 5.9 | 0.7 | 100.0 | 1.7 | 31,776 |
| **Service** | 64,917 | 70.4 | 20.2 | 8.0 | 1.4 | 100.0 | 6.3 | 145,300 |
| **Agricultural** | 105,742 | 37.9 | 18.0 | 43.5 | 0.6 | 100.0 | 3.1 | 142,309 |
| Farm managers & supervisors | 7,238 | 30.4 | 29.2 | 38.8 | 1.6 | 100.0 | 3.2 | 13,701 |
| **Production** | 210,331 | 39.2 | 47.7 | 12.4 | 0.7 | 100.0 | 4.4 | 190,123 |

*Notes:* [a]Data refer to Survey results and therefore are not adjusted for undercoverage and exclusions.

[b]Estimated from output and employment targets of the Plan and adjusted for undercoverage and exclusions.

implementation of the Razak and Rahman Talib reports and the National Educational Policy since 1970. Broadly, this system may be divided into three levels, *viz.* primary, secondary and tertiary.

Primary education though basically free, has yet to be made compulsory although there is a call for such a move. About 40% of teaching time per week is allocated to the teaching of the languages (Bahasa Malaysia, English, Chinese and Tamil); 32% to the teaching of civics, history, geography, science and mathematics; 20% for physical and health education, art and handwork, and 8% for the teaching of religious subjects.

At the upper secondary level, pupils are channelled into one of the following streams: Arts, Science, Technical or Vocational, and the curriculum followed is therefore dependent upon which one of the above streams a pupil has been channelled into (Appendix I).

A major objective of the comprehensive curriculum at the lower secondary level is the provision of opportunities to pupils to follow various types of pre-vocational subjects apart from the basic or core subjects. To achieve the above objective, three optional subjects are offered for three years i.e. Industrial Arts, Agricultural Science and Commerce, which are to be introduced (Appendix II).

There are two major streams at the Sixth Form or upper secondary level, *viz.* the Arts and Science. The curriculum has been designed to prepare students for the universities or for employment either in the government or private sector. The subjects followed in the two streams are:

*Arts.* General Paper, Geography, History, English, Malay and Economics.

*Science.* General Paper, Physics, Chemistry, Biology and Mathematics.

At the tertiary level, the courses offered cover a wide area. The curricula are designed by the individual university, college or polytechnic according to the objective of the institution concerned. The general objective is the training of skilled manpower as is required by the development needs of the country. Appendix III shows in detail the various types of courses offered by the various institutions of higher learning at the certificate, diploma and degree levels.

### Manpower Demand and Supply[10]

Although the overall vacancy rate was low, Table 5 shows that vacancies for specific occupations are still high, particularly at the professional and technical levels. The vacancy rate was highest (50.9%) for higher education teachers followed by that of 38.0% for agronomists. The Table also shows the unbalanced racial distribution for certain occupations particularly those of chemists and physical scientists, engineers, medical doctors and dentists where the percentages of Malay and other indigenous people involved in these professions average less than 15%.

Table 6 shows the demand and supply of diploma and degree graduates by type of education for the period 1976–80. This calls for increased output of scientific, technical, and agricultural manpower, particularly at the middle and tertiary level where a balance between the expansion of science and technical subjects at the tertiary level on the one hand and liberal arts on the other should be struck. Table 5 illustrates several points quite clearly:

[10] This section draws heavily from the section on 'Manpower demand and supply, 1976–80' of the *TMP*, pp. 154–5.

(i) For the degree level, requirements are expected to exceed output for both the science and technical fields. In the Arts and Humanities including Business, however, output is expected to exceed demand by some 41%.

(ii) For the science and technical fields, shortages are likely to be acute in agriculture, engineering, surveying and other technical fields.

(iii) Although supply is likely to exceed demand for the degree holders in the Arts and Humanities, a shortage of diploma holders particularly in business management is likely to arise with the rising tempo of economic activity. The shortage of diploma holders is likely to be felt in both the science and technical fields except for Architecture and Town Planning where there is a forecast of a likely surplus of 39% for the plan period.

Table 7 shows the manpower supply and demand of formal schooling according to educational qualification for the period 1974–80. The Table shows that for the period 1974–80, there will be an excess of supply of manpower for all levels of secondary education except the HSC level where it is estimated there will be a shortfall of 24,736.

TABLE 6

MALAYSIA: DEMAND AND SUPPLY OF DIPLOMA AND DEGREE GRADUATES BY TYPE OF EDUCATION, 1976–80

| Course | Demand, 1976–80 | | Supply, 1976–80 | | Excess (+) or Shortage (–) | |
|---|---|---|---|---|---|---|
| | Diploma | Degree | Diploma | Degree | Diploma (%) | Degree (%) |
| **Arts and Humanities** (including Business) | 11,205 | 7,518 | 6,383 | 10,575 | –43 | +41 |
| **Science** | 9,474 | 8,330 | 6,337 | 7,565 | –33 | – 9 |
| Medicine and Dentistry | – | 1,050 | – | 800 | – | –24 |
| Agriculture and related sciences | 3,200 | 1,150 | 2,421 | 674 | –24 | –41 |
| Other sciences | 6,274 | 6,130 | 3,916 | 6,091 | –38 | – 1 |
| **Technical** | 8,177 | 3,432 | 5,316 | 1,793 | –35 | –48 |
| Engineering | 4,965 | 2,122 | 3,909 | 1,296 | –21 | –39 |
| Architecture & Town planning | 635 | 250 | 881 | 208 | +39 | –17 |
| Surveying | 252 | 150 | 233 | 37 | – 8 | –75 |
| Other technical | 2,325 | 910 | 293 | 252 | –87 | –72 |
| Total | 28,856 | 19,280 | 18,036 | 19,933 | –37 | + 3 |

TABLE 7

MANPOWER SUPPLY AND DEMAND OF FORMAL SCHOOL SYSTEM ACCORDING TO EDUCATIONAL QUALIFICATION, 1974–80

| Educational Qualification | Actual Stock in 1973 | Demand by 1980 | Nett Increase 1974–80 | Supply (Output) 1974–80 | Excess (+) or Shortage (–) 1974–80 |
|---|---|---|---|---|---|
| Lower than LCE | 2,511,190 | 2,822,334 | 311,144 | 660,253 | +349,109 |
| LCE | 294,150 | 495,484 | 201,334 | 424,167 | +222,833 |
| SC | 271,301 | 472,380 | 201,079 | 338,973 | +137,894 |
| HSC | 36,381 | 83,344 | 46,963 | 22,227 | –24,736 |

*Source:* The Educational Planning & Research Department of the Ministry of Education.

*Notes:* Manpower demand: from the Malaysian Economic Planning Unit, Prime Ministers' Department.
Supply (output): From the formal school system only.

## Policy Implications

It has been amply demonstrated that pre-employment training of skills in secondary vocational schools is a poor investment in most countries.[11] It is far more advantageous to provide potential workers for the manufacturing sector with general secondary education and then develop their skills on the job. In other words, formal pre-employment education should aim at forming trainable people, while the task of developing specific skills should be the responsibility of employers, both public and private.

In some Latin American countries, an interesting arrangement has been worked out. Colombia, for example, has a system of training related to employment in industry which is financed by a payroll tax on employers. Malaysia could perhaps explore this possibility, particularly with respect to financing, which is in fact in line with the intended establishment of a National Industrial Training Council, with representation from both the private and public sectors, under the Ministry of Labour and Manpower.[12]

Another essential component of educational planning in Malaysia concerns the balance, more particularly in higher education, between science and technology, on the one hand, and the liberal arts, on the other. The obvious policy option to follow is to cut down on the intake of students into the Arts and Humanities faculties while increasing the intake into the Medical, Dentistry, Agriculture, Science, and Engineering faculties. For example, the TMP recommends that the output of graduates in the Arts and Humanities shall decline from 54.5% in 1975 to 45.6% in 1980, while the share in science and technical courses will increase from 45.5% to 54.5%.

The above suggestion, however, has several practical problems. One concerns the question of finance. Education in science and engineering costs roughly four times more per student than education in the arts, humanities and law so that financial constraints may compel any expansion in the intake into the science, engineering and medical fields to be at the expense of a substantial reduction in the intake into the Arts and Humanities faculties. This leads us to the second problem which is essentially social and political in nature. The continuing expansion of sixth form education in the arts will lead to increasing numbers aspiring for places in the universities so that any drastic cut-back in their intake may be met with considerable resistance and if implemented, may lead to widespread frustrations.[13]

Educational planning in Malaysia has next to concentrate its attention on the curriculum, and its impact on attitudes towards work, particularly towards the

[11] F. Harbison, *Educational Planning and Human Resource Development*, Unesco, International Institute for Educational Planning, p. 14.

[12] *TMP*, p. 157.

[13] The continued aspirations of sixth-formers in the Arts for places in the universities even in the face of declining demand for Arts and Humanities graduates, is related to the existing structure of incentives and wages in the Malaysian economy. This has important implications for educational planning, especially the aspect of choice of incentives. Unless these are manipulated effectively to correct shortages in certain occupations and surpluses in others, the objective of only increasing required skilled manpower that is in short supply (i.e. and simultaneously curbing those in excess), will be difficult to achieve.

technical (blue-collar) and agricultural jobs. Unless values, inculcated in our school-leavers towards jobs of a technical and agricultural nature, are correct, there may arise the problem of a divergence between the need, and actual demand for, these two categories of workers. As much emphasis should therefore be placed on changing the curricula particularly at the secondary level, from being too academic oriented towards being more vocational and agricultural biased. For example, the TMP estimates that Malaysia needs agricultural manpower to the tune of 190,000 for the entire plan period. This, coupled with the fact that Malaysia is predominantly an agricultural country,[14] implies that she requires educational reform that emphasizes agricultural as well as vocational training.

Once the curriculum has been reformed, attention will have to be paid towards what levels of education should be expanded. It would seem that the TMP is lacking in this essential choice. What is done in the Plan is the projection of enrolment demands at the various levels of education up to the upper secondary level and to make recommendation for their required expansion.[15] Related to this is the compromise between quantity and quality. This compromise is made no easier by the clamour for higher education currently experienced; the political pressures associated with this demand; and the limits on educational expenditure which (at least as a proportion of the government budget) has been reached, with 12% of federal government expenditure being allotted to education.

Finally, educational planning in the context of multi-racial Malaysia should pay due attention towards the promotion of national unity. In fact, the TMP stated that

> ... the educational system shall be strengthened for the promotion of national integration and unity through:
>
> (a) the continued implementation, in stages, of Bahasa Malaysia as the main medium of instruction at all levels;
>
> (b) the development of personality, character and good citizenship and the promotion of moral discipline through curricular and extra-curricular activities
>
> (c) narrowing the gap in educational opportunities between the rich and poor, and among the various regions and races in the country, through a more equitable distribution of resources and facilities; and
>
> (d) the eventual integration of the educational systems in Sabah and Sarawak into the national system.[16]

A related question is that of encouraging more Malays and other indigenous students to pursue studies in the professional, technical, and managerial fields in line with the NEP. As Table 5 shows, the shortage of *bumiputra* chemists and physical scientists, architects and town planners, engineers, medical doctors, dental surgeons, accountants and managers is rather acute. In the light of the above, steps have been

[14] For example, value added in the agricultural sector accounted for about 30% of GDP in 1975 (see *TMP*, Table 2–1 p. 12).

[15] *TMP*, ch. 22.

[16] *TMP*, p. 391.

taken and must be taken to increase the output of *bumiputra* in the professional, technical and managerial fields. These include increasing the intake of *bumiputra* students into the science, engineering, medical and dentistry faculties at the University of Malaya besides expanding the intake into these other related fields at the UKM, UPM, USM and UTM.

A major problem faced here is the lack of a sufficient number of *bumiputra* students with the minimum admission qualifications applying for places into the science and technical faculties at the various universities. Attempts are now being made to rectify this. In addition, governmental and semi-governmental bodies are also willing to finance *bumiputra* students to pursue further studies in the science and technical fields either at home or abroad.

## EMPLOYMENT STRATEGY IN WEST MALAYSIA

Unemployment patterns reflect not only the disproportionate numbers of young persons within the whole population, but also the rapid expansion of education which each year produces and encourages larger numbers of school-leavers to aspire for wage earning jobs far in excess of the number of employment opportunities and openings available. This has been further aggravated by the mobility of rural youth who drift to the urban areas as a result of accelerated social change, process of urbanization, and their response to urban-rural differences in expected earnings.

The growing seriousness of unemployment and the range of causes underlying it have fostered the need for major changes in the country's development planning to combat the significantly increasing levels of unemployment. The strategy for employment has been transmitted through the objectives of the country's Five-Year Development Plans, i.e., the First to the Third Malaysia Plans, and in the recently introduced NEP.

### First Malaysia Plan 1966–70

Under the FMP, the government aimed at generating employment opportunities at a rate sufficient to absorb new entrants to the labour force as well as the prevailing unemployed. The Plan was projected to create an additional 377,000 jobs to represent an average annual rate of increase of 2.7%.

Under the FMP, the agricultural sector, being the mainstay, was expected to provide the largest absolute increase in employment. The creation of 165,000 jobs over the plan period was to be facilitated by investments in land development programmes, drainage and irrigation for new areas and double-cropping. The manufacturing sector was also expected to provide for a large absolute increase of 36,000 jobs. This concided with the government's adoption of policies to foster the growth of the private sector, particularly the modern industrial sector including small-scale industries. Other sectors such as commerce, construction, transport, services and utilities were projected to cater for an increase of 42,000 jobs at an average annual rate of 3.7%.

Complementary to these strategies was education planning and training, which were to play an important role in the development planning and the strategy for employment. Thus under the FMP, education and training were accorded very high priority with an allocation amounting to nearly 10% of total public development expenditure.

Observations on the various strategies for employment under the FMP have found them quite unsatisfactory. The total number of jobs created over the FMP period was 350,000, i.e. 27,000 short of the projected target of 377,000. Consequently the incidence of unemployment went up from 6% at the start of the Plan to about 8% in 1970.

For agricultural employment, the target of the annual growth rate of 2.3% over the Plan period was considered ambitious when compared to the annual growth of only 1.7% obtained over the period of ten years from 1956–65. This suspicion was borne out. The expected performance from land development programmes was far from satisfactory: the number of jobs actually created was only 104,000 as against a target of 165,000 jobs.[17]

Although the manufacturing and service sectors of the economy contributed more to job creation than their share in the total employment at the start of the Plan,[18] there was not much impact as they were relatively small sectors of the economy.

### Second Malaysia Plan 1971–75

With an 8% level of unemployment prevailing at the end of the FMP period, the Second Malaysia Plan had the formidable task of reducing this level of unemployment, which was aggravated by a population growth rate of 2.8%.

The employment target was 596,000 new jobs or 119,000 jobs per year, or an average of 30,000 more jobs per year than under the FMP. Again, as in the FMP, emphasis was laid in the agricultural sector whereas other sectors were expected to contribute about three-quarters of the total employment growth during the period. The biggest absolute increase was projected for the service sector (about 230,000 jobs) followed by industrial and manufacturing sectors with 138,000 and 108,000 jobs respectively.

The strategy for employment under the SMP was almost similar to that formulated under the FMP, except for the incorporation of the NEP. The employment strategy formulated for the period 1971–75 consists of six elements, namely:

(i) Promotion of rapid economic growth through the expansion of the public sector and the growth of the private sector;
(ii) The opening up of new areas for land settlement;
(iii) Increased use of labour as a factor of production;
(iv) Establishment of education and training programmes that are in line with the development requirement of the country;
(v) Increasing the mobility of labour and improving placement services; and
(vi) The provision of special youth employment programmes.

The strategy over the period 1971–75 involved greater participation of government in the industrial programme, with greater investment in relatively labour-intensive

[17] David Lim, *Economic Growth and Development in West Malaysia 1947–70*, Kuala Lumpur, Oxford University Press, 1973, p. 164.

[18] According to David Lim *(ibid)* the figures of employment creation in manufacturing, service and construction, transport and utilities sectors have to be interpreted with caution as there exist large discrepancies between the data given for 1965 in the FMP and that given in the SMP.

TABLE 8
MALAYSIA: ENROLMENT INCREASES IN TERTIARY EDUCATION 1970–5

| | 1970 | 1975 | Increase (%) 1971–5 |
|---|---|---|---|
| **College Level** | | | |
| Politeknik Ungku Omar | 493 | 1,136 | 130.4 |
| Institut Teknologi Mara | 2,142 | 7,872 | 267.5 |
| Kolej Tunku Abdul Rahman | 1,195 | 4,133 | 245.9 |
| **University Level** | | | |
| University of Malaya | 7,777 | 8,056 | 3.6 |
| Universiti Sains Malaysia | 271 | 2,851 | 952.0 |
| Universiti Kebangsaan Malaysia | 169 | 2,562 | 1,416.0 |
| Universiti Pertanian Malaysia | 585 | 2,656 | 354.0 |
| Universiti Teknologi Malaysia | 692 | 2,263 | 227.0 |
| Total | 13,324 | 31,529 | 136.6 |

activities. In addition were programmes to employ the young jobless persons in minor capital projects such as land clearance, maintenance, construction of roads, and irrigation works.

The SMP period saw some improvement in the provision for employment opportunities. Employment growth in accordance with the NEP has also improved. General employment grew at the rate of 3.3% per annum. There was also an absolute increase in employment by race.[19]

The four sectors of the economy – agriculture, manufacturing, services and wholesale and retail trade – accounted for some 90% of the increase in new jobs: 24% from employment in the services sector; 26% from agriculture; 18% from manufacturing and 20% from wholesale and retail trade. There had been an increase in Malay employment in manufacturing and commerce from 28.9% to 33.1% and from 23.5% to 31.6% respectively; with substantial increases in mining, construction, utilities and transport. As for the Chinese, employment in agriculture and utilities has not grown in line with the long-term target of increasing their share in these sectors,

[19] Employment among Malays and other indigenous people grew by 4.0% per annum from 1.4 million in 1970 to 1.7 million in 1975; that of the Chinese grew by 3.1% per annum from 1.0 million in 1970 to 1.2 million in 1975, and among the Indians by 2.8% per annum from 297,600 in 1970 to 341,700 in 1975 (*TMP*, p. 141).

TABLE 9

ACTUAL AND PLANNED ANNUAL RATE OF GROWTH IN EMPLOYMENT BY SECTOR 1960–70

| Sector | 1960 (Actual) *(1000)* | 1965 (Actual) *(1000)* | Increase (Actual) *(1000)* | Annual Growth Rate *(%)* | 1965 Actual) *(1000)* | 1970 (Planned) *(1000)* | Increase (Planned) *(1000)* | Annual Growth Rate *(%)* |
|---|---|---|---|---|---|---|---|---|
| Agriculture | 1,277 | 1,388 | 111 | 1.7 | 1,388 | 1,533 | 165 | 2.3 |
| Mining | 47 | 61 | 14 | 6.0 | 61 | 0 | 0 | 0 |
| Manufacturing | 149 | 173 | 24 | 3.2 | 173 | 209 | 36 | 3.8 |
| Construction, transport and utilities | 150 | 210 | 60 | 7.0 | 210 | 252 | 42 | 3.7 |
| Government services | 200 | 257 | 57 | 5.1 | 257 | 312 | 55 | 4.0 |
| Other services | 351 | 429 | 78 | 4.1 | 429 | 508 | 79 | 3.4 |
| Total | 2,174 | 2,518 | 344 | 3.0 | 2,518 | 2,895 | 377 | 2.8 |

*Source: FMP.*

whereas for the Indians there was, in fact, a rapid fall in their employment in the commercial and services sectors.[20]

The period of the SMP saw unemployment decline from 8% in 1970 to 7.0% in 1975. Much of the success in reducing unemployment can be explained by the rapid expansion of public and private sectors, facilitated by incentives such as pioneer status, investment tax credits, tax incentives to the modern industrial sector. In addition, there was greater active participation by the government in planning employment programmes thus generating sufficient employment opportunities. However, there was some discrepancy in the figure for unemployment between the SMP and TMP documents. The SMP gave the data for unemployment at 1970 as 8% whereas the TMP gave a figure of 7.4%.

### Third Malaysia Plan 1976–80

The previous two Plans have not successfully reduced the incidence of unemployment in the country. Table 13 shows the projections of sectoral employment growth over the period 1976–80. The target is to create 743,000 jobs during the Plan period to reduce the unemployment rate from 7.0% of the labour force in 1975 to 6.1% in 1980. The new provisions for employment opportunities is to be absorbed by four sectors: Manufacturing (23%) Agriculture (17%), Wholesale and retail trade and

TABLE 10

ACTUAL ACREAGE DEVELOPED, 1961–5 AND 1966–70 AND ACREAGE PLANNED 1971–5 BY TYPE OF PROGRAMME
*(1000 acres)*

| Programme | Acreage Developed 1961–5 | Acreage Developed 1966–70 | Acreage Planned 1971–5 |
|---|---|---|---|
| FLDA | 119.3 | 179.0 | 275.0 |
| Fringe and controlled alienation schemes | 223.8 | 53.7 | 25.0 – 40.0 |
| Youth schemes | – | 5.3 | 75.0 |
| SEDC | 21.8 | 30.3 | 50.0 |
| Block planting and state schemes | 34.8 | 15.3 | 150.0 |
| Private estates | 140.1 | 46.0 | 112.5 |
| Joint ventures (Private sector and public bodies) | – | – | 50.0 |
| Total | 539.8 | 329.6 | 737.5 – 752.5 |

*Source: SMP*, pp. 125–34.

[20] *TMP*, p. 143.

TABLE 11

LAND DEVELOPED AS A PERCENTAGE OF LAND ALIENATED FOR AGRICULTURE BY TYPE OF PROGRAMME 1961–5 AND 1966–70

| Programme | Alienated *(1000 acres)* | | Developed *(1000 acres)** | | Land developed / Land alienated *(%)* | |
|---|---|---|---|---|---|---|
| | 1961–5 | 1966–70 | 1961–65 | 1966–70 | *1961–65* | *1966–70* |
| FLDA | 176.1 | 132.1 | 119.3 | 179.0 | 67.7 | 135.5 |
| Fringe alienation schemes | 128.5 | 11.3 | 115.6 | 11.7 | 90.0 | 103.5 |
| Youth schemes | – | 9.8 | – | 5.3 | – | 54.1 |
| Controlled alienation | 187.7 | 106.3 | 108.2 | 42.0 | 57.8 | 39.5 |
| SEDC | 121.8 | 101.0 | 21.8 | 30.3 | 17.1 | 30.0 |
| Private estates | 139.0 | 225.8 | 140.1 | 46.0 | 100.8 | 20.4 |
| Block planting and state schemes | 135.0 | 28.2 | 34.8 | 15.3 | 25.8 | 54.3 |
| Total | 888.1 | 614.5 | 539.8 | 329.6 | 60.7 | 53.6 |

*Source:* *SMP*, pp. 125–6.

*Note:* The acreage of land developed could indicate the volume of employment creation and availability of opportunities for agricultural employment. The bigger the acreage, the more would be the provision for employment opportunities.

TABLE 12

PENINSULAR MALAYSIA: EMPLOYMENT BY RACE AND SECTOR, 1970 AND 1975

| Sector | Malay | Percentage of Total Sector total | Chinese *(1000)* | Percentage of Total Sector | Indian *(1000)* | Percentage of Total Sector | Others *(1000)* | Percentage of Total Sector | Total *(1000)* | Percentage of Total Employment |
|---|---|---|---|---|---|---|---|---|---|---|
| Agriculture, forestry and fishing | 951.1 | 67.6 | 300.9 | 21.4 | 142.0 | 10.1 | 12.0 | 0.9 | 1,406.0 | 50.3 |
| Mining and quarrying | 21.1 | 24.8 | 56.3 | 66.0 | 7.2 | 8.4 | 0.7 | 0.8 | 85.3 | 3.0 |
| Manufacturing | 76.3 | 28.9 | 172.6 | 65.4 | 14.0 | 5.3 | 1.0 | 0.4 | 263.9 | 9.4 |
| Construction | 16.8 | 21.6 | 55.9 | 72.0 | 4.7 | 6.1 | 0.2 | 0.3 | 77.6 | 2.8 |
| Utilities | 8.0 | 48.2 | 3.0 | 18.1 | 5.4 | 32.5 | 0.2 | 1.2 | 16.6 | 0.6 |
| Transport, Storage & Communications | 50.9 | 42.6 | 47.3 | 39.6 | 20.4 | 17.1 | 0.8 | 0.7 | 119.4 | 4.3 |
| Commerce | 82.5 | 23.5 | 229.1 | 65.3 | 37.5 | 10.7 | 1.8 | 0.5 | 350.9 | 12.6 |
| Services | 229.9 | 48.5 | 169.2 | 35.7 | 66.4 | 14.0 | 8.5 | 1.8 | 474.0 | 17.0 |
| **Total** | **1,436.6** | **51.4** | **1,034.3** | **37.0** | **297.6** | **10.7** | **25.2** | **0.9** | **2,793.7** | **100.0** |
| Population | 4,822.0 | 52.7 | 3,274.0 | 35.8 | 978.0 | 10.7 | 73.0 | 0.8 | 9,147.0 | 100.0 |
| Labour Force | 1,563.0 | 51.5 | 1,111.6 | 36.6 | 334.4 | 11.1 | 26.0 | 0.8 | 3,035.0 | 100.0 |
| Unemployment | 126.4 | | 77.3 | | 36.8 | | 0.8 | | 241.3 | |
| Unemployment *(%)* | 8.1 | | 7.0 | | 11.0 | | 3.1 | | 8.0 | |
| 1975 | | | | | | | | | | |
| Agriculture, forestry and fishing | 1,032.6 | 67.3 | 317.6 | 20.7 | 170.3 | 11.1 | 13.8 | 0.9 | 1,534.3 | 46.2 |
| Mining and quarrying | 27.7 | 33.1 | 47.6 | 56.9 | 8.0 | 9.5 | 0.4 | 0.5 | 83.7 | 2.5 |
| Manufacturing | 120.1 | 33.1 | 217.3 | 59.9 | 24.3 | 6.7 | 1.1 | 0.3 | 362.8 | 10.9 |
| Construction | 28.1 | 28.8 | 58.6 | 60.2 | 10.2 | 10.5 | 0.5 | 0.5 | 97.4 | 2.9 |
| Utilities | 13.1 | 61.2 | 3.0 | 14.0 | 5.1 | 23.8 | 0.2 | 1.0 | 21.4 | 0.7 |
| Transport, Storage and Communications | 76.0 | 47.2 | 0.4 | 37.5 | 23.5 | 14.6 | 1.1 | 0.7 | 161.0 | 4.9 |
| Commerce | 145.2 | 31.6 | 281.8 | 61.3 | 32.3 | 7.0 | 0.5 | 0.1 | 459.8 | 13.9 |
| Services | 302.2 | 50.6 | 217.8 | 36.5 | 68.0 | 11.4 | 9.0 | 1.5 | 596.8 | 18.0 |
| **Total** | **1,745.0** | **52.6** | **1,204.1** | **36.3** | **341.7** | **10.3** | **26.6** | **0.8** | **3,317.2** | **100.0** |
| Population | 5,510.0 | 53.1 | 3,687.0 | 35.5 | 1,105.0 | 10.6 | 83.0 | 0.8 | 10,385.0 | 100.0 |
| Labour Force | 1,873.1 | 52.2 | 1,297.9 | 36.2 | 389.0 | 10.8 | 30.0 | 0.8 | 3,590.0 | 100.0 |
| Unemployment | 123.3 | | 93.8 | | 47.3 | | 3.4 | | 272.8 | |
| Unemployment *(%)* | 6.9 | | 7.2 | | 12.2 | | 11.3 | | 7.6 | |

*Source: TMP*, p. 142.

TABLE 13

MALAYSIA: EMPLOYMENT GROWTH, 1975–80

| Sector | 1980 | | | | | | Average Annual Growth Rate of Real Productivity 1976–80 (%) | Average Annual Growth Rate of Employment 1976–80 (%) |
|---|---|---|---|---|---|---|---|---|
| | Estimated Employment (1000) | Share of Total (%) | Estimated Employment (1000) | Share of Total (%) | Increase 1976–80 (1000) | Share in Job Creation (%) | | |
| Agriculture, forestry and fishing | 1,936.8 | 49.3 | 2,062.7 | 44.2 | 125.9 | 17.0 | 1.3 | 4.7 |
| Mining and quarrying | 86.6 | 2.2 | 88.5 | 1.9 | 1.9 | 0.3 | 0.4 | 5.2 |
| Manufacturing | 398.2 | 10.1 | 568.1 | 12.2 | 169.9 | 22.9 | 7.4 | 4.3 |
| Construction | 113.2 | 2.9 | 144.3 | 3.1 | 31.1 | 4.2 | 5.0 | 3.7 |
| Utilities | 23.9 | 0.6 | 29.8 | 0.6 | 5.9 | 0.8 | 4.5 | 4.5 |
| Transport, storage and communications | 179.4 | 4.6 | 216.6 | 4.6 | 37.2 | 5.0 | 3.8 | 4.3 |
| Wholesale and retail trade | 495.9 | 12.6 | 648.6 | 13.9 | 152.7 | 20.6 | 5.5 | 2.7 |
| Banking, insurance and real estate | 32.7 | 0.8 | 42.8 | 0.9 | 10.1 | 1.3 | 5.5 | 2.7 |
| Public administration, education, health and defence | 508.8 | 13.0 | 667.8 | 14.3 | 159.0 | 21.4 | 5.6 | 3.8 |
| Other services | 152.3 | 3.9 | 201.3 | 4.3 | 49.0 | 6.5 | 5.7 | 3.6 |
| **Total** | **3,927.8** | **100.0** | **4,670.5** | **100.0** | **742.7** | **100.0** | **3.5** | **4.8** |
| Population | 12,249.0 | | 13,976.0 | | | | | |
| Labour Force | 4,225.0 | | 4,972.8 | | | | | |
| Unemployment | 297.2 | | 302.3 | | | | | |
| Unemployment (%) | 7.0 | | 6.1 | | | | | |

*Source:* *TMP*, p. 151.

public administration including health, education and defence (42.0%) – which are expected to account for about 82% of the increase in new job opportunities.[21]

The employment strategy under the TMP aims not only at expanding job opportunities but also to reduce under-utilization of labour through provisions of productive employment opportunities. The strategy includes:

(i) The expansion of the economy with continuing emphasis on growth of industries and the overall pace of economic activity to generate productive employment opportunities and high labour absorptive capacity;

(ii) The expansion of land development schemes for direct and immediate impact in improving agricultural employment opportunities; and

(iii) The implementation of policies and programmes to expand the supply of skilled and trained manpower through education and training and to facilitate employment promotion through labour laws and industrial relations.

Overall emphasis has been given to both the rural and urban sectors. For the rural sector the government plans to expand employment opportunities through new land development, establishment of new growth centres and the absorption of excess labour in other sectors of the economy; whereas in the case of the urban sector the strategy focusses on expanding job opportunities in manufacturing and construction, including the promotion of small-scale industries.

The TMP has been very optimistic in its projections to reduce the intensity of unemployment. It has in fact envisaged the improvement in employment both in terms of the quantity and quality of employment sufficient to reduce progressively the rate of unemployment as well as underemployment, and create a balanced participation in racial structure and occupational composition of employment in the various sectors of the economy. However, the success of the strategies in achieving their objectives will depend upon the proper and successful implementation of the whole programme.

## CONCLUSION

From the above, it can be said that the government has been fully aware of the seriousness of the unemployment problem prevailing in the country. However, the crux of the problem lies in the 'economic imbalances' in the distribution and composition of the unemployed labour force.

The SMP was given a tremendous task of trimming down the 8% level of unemployment left over by the FMP. The stability of the rate of real growth of the economy over the SMP period helped in improving the labour market conditions and thus provide employment opportunities. The SMP achieved some improvement in the racial structure – composition and distribution of employment both by industry as well as by occupational groups. However, at the end of SMP period, there still existed significant differences in employment structure between the Malays and other Malaysians. This is hoped to be met through the second phase of the NEP under the TMP.

[21] Employment in the manufacturing sector is expected to grow at 7.4% per annum; wholesale and retail trade and public administration including health, education and defence are estimated to generate 312,000 jobs; and the agricultural sector is expected to contribute 126,000 jobs.

The key issue in the provision of employment opportunities under the SMP and TMP has been the rate at which the required objectives of NEP and the efficient implementation of the strategies can be brought about. The target has been towards the high rate of economic growth and rapid structural change in the economy to improve the employment position of all races.

Under the TMP a large part of the increase in total employment will still need to come from settlement on new public land development schemes and rapid growth of the manufacturing and services sectors. But economic growth alone will not be sufficient to bring about the desired objective of reducing unemployment. It has a tendency towards the use of modern technology and capital-intensive industries for increasing output and productivity which often result in conflicts between productivity growth and employment growth.

There is a need to consider labour-intensive investment, in view of labour being a relatively more abundant and cheaper factor of production. Complementary to the growth of labour-intensive investment is the appropriate choice of technology. This has to come from intermediate technology as it is likely to induce a balanced social and economic development with its existing opportunities for productive employment.

The employment strategy through the development of the agricultural sector particularly in the opening up and settlement of new land has also not been sufficient to meet the demand for employment opportunities. The creation of new employment opportunities through land development programmes was assumed to be successful. However the targets are yet to be realized.

Land development is not the only formula to eliminate unemployment and increase output in the agricultural sector. Most agricultural unemployment is seasonal and disguised. As such, land development schemes and the diversification of agriculture will by no means guarantee the absorption of seasonally employed or underemployed labour. Moreover, the expansion of the new land development schemes under specialized cultivation may not automatically create employment that will be complementary to the peak labour needs of the specialized crop area.

Another drawback of the strategy is presumably the very high cost of investment expenditure required by the land development programmes. The land development programmes in West Malaysia have been known to be the most costly compared with smallholder scheme efforts in South-east Asia and in some Latin American countries.[22]

As for employment strategy through industrial development and urban development, a lot remains to be done on the restructuring of employment. Sufficient productive employment should continue to be provided and promoted for the Malays and other indigenous people in urban-based industries while further action need to be

[22] A comparison made between the smallholding oil palm scheme in Ecuador and West Malaysia with regards to the cost of development showed that oil palm smallholder settlement scheme in the former was not burdened with costly infrastructure or management, buildings, roads, houses, and all the amenities that go with the traditional estate structure of developed or developing countries in Asia and in parts of Africa. (See C.W.S. Hartley, 'The oil palm in Latin America', *The Planter* (1968)). Comparative cost of development for other forms of smallholder schemes in the country and FELDA can be seen in Radin Soenarno Alhaj.'Land Development: Policy Aspect with Special Reference to Malaysia', Report presented to the 6th International Seminar on Development, held in Kuala Lumpur in July – August 1971, Kuala Lumpur, MCDS, 1972.

taken to encourage the employment of other Malaysians in sectors where they are now inadequately represented.

To this end, there is a need for more effective contributions from the private sector as well as continuing active government participation. The private sector has to be the main source of capital formation with its generated investment playing crucial roles in the development of manufacturing, construction and other sectors of the economy. There is a need for a favourable investment climate in the private sector to stimulate private investment growth.

The elimination of unemployment problems requires persistent long-term efforts. The strategy for employment should not only call for greater economic growth and stability but also, in relation to development, consider the utilization of unemployed or underemployed to the maximum, productivity of labour, and planning distribution of capital into new lines of activity using the factor endowments of the country. In addition, there should be provision of training facilities geared towards expected employment opportunities. It needs to be emphasized finally that the successful achievement of any strategy for employment requires the full cooperation of the private and public sectors.

APPENDIX I

TIME ALLOTTED FOR VARIOUS SUBJECTS AT UPPER SECONDARY SCHOOLS IN WEST MALAYSIA

| Curriculum Component | Arts Stream | | Science Stream | | Technical Stream | | Vocational Stream | |
|---|---|---|---|---|---|---|---|---|
| | Minutes per week | % | Minutes per week | % | Minutes per week | % | Minutes per week | % |
| 1. Language skills | | | | | | | | |
| *Malay language* | 200 | 12 | 200 | 12 | 200 | 12 | 80 | 4.0 |
| *English language* | 160 | 9 | 160 | 9 | 160 | 9 | 80 | 4.0 |
| 2. Religious studies | | | | | | | | |
| *Islamic knowledge only* | 120 | 7 | 120 | 7 | 120 | 7 | 80 | 4.0 |
| 3. Civics | 40 | 2 | 40 | 2 | 40 | 2 | 80 | 4.0 |
| 4. Adaptation to science (Environment & Technology) | | | | | | | | |
| *Mathematics* | 200 | 11 | 160 | 9 | 200 | 11 | 120 | 6.0 |
| *Applied mathematics* | – | – | 160 | 9 | 120 | 7 | – | – |
| *General science* | 200 | 11 | – | – | – | – | 120 | 6.0 |
| *Pure science* | – | – | 600 | 33 | 360 | 20 | – | – |
| *Geography* | 120 | 7 | – | – | – | – | – | – |
| *Technical subject* | – | – | – | – | 280 | 16 | – | – |
| 5. Healthy living | | | | | | | | |
| *Physical education* | 80 | 4 | 80 | 4 | 80 | 4 | – | – |
| *Art and handwork* | 80 | 4 | 80 | 4 | 80 | 4 | – | – |
| 6. Adaptation to society | | | | | | | | |
| *History* | 120 | 7 | 120 | 7 | 120 | 7 | – | – |
| *Literature* | 120 | 7 | – | – | 120 | 7 | – | – |
| 7. Co-curricular activities | 180 | 10 | 140 | 8 | 100 | 5 | – | – |
| 8. Practical/'Related drafting' theory | – | – | – | – | – | – | 1480 | 72.0 |
| 9. Upon the discretion of the Headmaster | 160 | 9 | – | – | – | – | – | – |
| Total | 1780 | 100 | 1780 | 100 | 1780 | 100 | 2040 | 100 |

*Source:* EPRD

APPENDIX II

TIME ALLOCATED FOR THE VARIOUS CURRICULA COMPONENTS FOR LOWER SECONDARY SCHOOLS IN WEST MALAYSIA

| Curriculum Component | Time Allotted Per Week *(%)* | Subject |
|---|---|---|
| 1. Language proficiency | 23% | Malay language (14%)<br>English language (9%) |
| 2. Religious studies | 7% | Islamic religion only |
| 3. Civic consciousness | 2% | Civics |
| 4. Technological & Science orientation | 24% | General science (12%) |
| 5. Social orientation | 10% | History<br>Geography |
| 6. Healthy living | 10% | Physical education<br>Hygiene, Art, Handwork, Music (optional) |
| 7 Pre-vocational exposure | 9% | One of the following:<br>Industrial art,<br>Home science,<br>Commerce, Agricultural science. |
| 8. Co-curricular activities | 11% | Games<br>Clubs and societies<br>Uniformed movements |
| 8. At the discretion of the Headmaster/ Headmistress | 4% | Allocation for any subject. |

*Source:* EPRD.

APPENDIX III

TYPES OF COURSES OFFERED BY INSTITUTIONS OF HIGHER LEARNING, WEST MALAYSIA, AT THE CERTIFICATE, DIPLOMA AND DEGREE LEVELS

| | | |
|---|---|---|
| (A) | **Certificate Level Institutions** | **Courses Offered** |
| | UM | Teaching of English as a second language |
| | ITM | Urban planning and regional programming |
| | KTAR | Construction technology<br>Automotive technology<br>Electronic technology |
| | UOP | Electrical engineering<br>Mechanical engineering<br>Civil engineering<br>Commercial studies |
| (B) | **Diploma Level Institutions** | |
| | UM | Accountancy<br>Education<br>Conference interpretation<br>Translation<br>Public administration<br>Computer science |
| | UTM | Civil engineering, Mechanical engineering, Electrical engineering (Communication), Electrical engineering (Power), Petroleum engineering, Architecture, Town & regional planning, Quantity surveying Science with education. |
| | UPM | Agriculture, Home technology, Fisheries, Veterinary science, Science with education. |
| | ITM | Accountancy, Commercial studies, Banking, Business administration, Credit management, Statistics, Public administration, Plastic and rubber technology, Wood technology, Textile technology, Industrial chemistry, Microbiology, Science, Town & regional planning, Architecture, Surveying, Estate management, Construction, Interior design, Landscape architecture, Transportation, Fine arts, Graphics, Textile design, Industrial design, Pottery ceramics, Fashion, Three-dimensional design, Teaching of art, |

| | |
|---|---|
| | Computer science, Actuarial science, Systems analysis, Civil engineering, Electrical engineering, Electrical engineering (Power), Mechanical engineering, Mining engineering, Petroleum engineering, Hotel management & catering, Institutional catering management, Chef de cuisine, Tourist administration, Home economics, Library science, Newspaper advertising, Mass communication, Stenography, Book-keeping. |
| KTAR | Commerce, Science, Automotive technology, Construction technology Electronic technology. |
| UOP | Accountancy |

(C) **Degree, Advanced Diploma and Professional Level Institutions**

| | |
|---|---|
| UM | Economics, Arts, Law, Science, Education, Dentistry, Engineering, Medicine. |
| UTM | Civil, Mechanical, Electrical and petroleum Engineering, Surveying, Architecture, Town & regional planning, Real estate management. |
| UPM | Agribusiness, Resource economics Agriculture, Food science & technology, Home technology, Forestry, Veterinary science, Science, Science with education, Environmental studies, Agricultural engineering. |
| USM | Humanities, Humanities with education, Housing, Building & planning, Social science, Science, Science with education, Applied science, Pharmaceutical science. |
| UKM | Social science, Humanities, Economics and management, Islamic studies, Malay language, literature and culture, Science, Medicine. |
| ITM | ICMA (UK), ACA (UK), ICSA (UK), LLB(UK), Business Administration (Ohio), Institute of Marketing (UK), Chartered Institute of Transport (UK), Chartered Institute of Insurance (UK), Institute of Statistics (UK), Executive Development Plan. |

| | |
|---|---|
| | **Advanced Diploma** |
| | Town & regional planning, Business administration, Civil, electrical and mechanical engineering, Library science |
| KTAR | Science (UK), ACA, ICSA |

*Source:* EPRD.

*Notes:*

| | | |
|---|---|---|
| ITM | = | MARA Institute of Technology |
| KTAR | = | Tunku Abdul Rahman College |
| UOP | = | Ungku Omar Polytechnic |
| UM | = | University of Malaya |
| UKM | = | Universiti Kebangsaan Malaysia |
| UPM | = | Universiti Pertanian Malaysia |
| USM | = | Universiti Sains Malaysia |
| UTM | = | Universiti Teknologi Malaysia |

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