

# **THE FOURTH MALAYSIA PLAN (FMP)**

**(RANCANGAN MALAYSIA KE-4, RME)**

**1981-1985**

# Table of Contents

<b>TABLE OF CONTENTS .....</b>	<b>2</b>
<b>CHAPTER 01 : POLICY OBJECTIVES AND FRAMEWORK.....</b>	<b>6</b>
<i>I : INTRODUCTION .....</i>	<i>6</i>
<i>II : BACKGROUND TO THE NEP .....</i>	<i>6</i>
<i>III : ECONOMIC POLICIES AND STRATEGIES.....</i>	<i>7</i>
<b>CHAPTER 02 : THE GROWTH AND STRUCTURE OF THE MALAYSIAN ECONOMY.....</b>	<b>13</b>
<i>I : INTRODUCTION .....</i>	<i>13</i>
<i>II : STATE OF THE ECONOMY IN 1970.....</i>	<i>13</i>
<i>III : STRUCTURE OF PRODUCTION, 1971-80.....</i>	<i>14</i>
<i>IV : SOURCES OF GROWTH.....</i>	<i>20</i>
<i>V : TERMS OF TRADE AND CHANGES IN REAL INCOMES.....</i>	<i>25</i>
<i>VI : SAVINGS AND INVESTMENT.....</i>	<i>26</i>
<i>VII : BALANCE OF PAYMENTS .....</i>	<i>27</i>
<i>VIII : PRICE DEVELOPMENT.....</i>	<i>28</i>
<i>IX : CONCLUSION.....</i>	<i>29</i>
<b>CHAPTER 03 : PROGRESS OF THE NEW ECONOMIC POLICY .....</b>	<b>30</b>
<i>I : INTRODUCTION .....</i>	<i>30</i>
<i>II : ERADICATION OF POVERTY.....</i>	<i>30</i>
<i>III : RESTRUCTURING OF SOCIETY.....</i>	<i>40</i>
<i>IV : CONCLUSION.....</i>	<i>48</i>
<b>CHAPTER 04 : THE DEVELOPMENT OF HUMAN RESOURCES.....</b>	<b>50</b>
<i>I : INTRODUCTION .....</i>	<i>50</i>
<i>II : GROWTH OF POPULATION AND LABOUR FORCE.....</i>	<i>50</i>
<i>III : POPULATION DISTRIBUTION AND URBANIZATION.....</i>	<i>52</i>
<i>IV : THE EMPLOYMENT SITUATION, 1970 .....</i>	<i>53</i>
<i>V : EMPLOYMENT GROWTH .....</i>	<i>54</i>
<i>VI : LABOUR UTILIZATION.....</i>	<i>56</i>
<i>VII : OCCUPATIONAL STRUCTURE OF EMPLOYMENT .....</i>	<i>58</i>
<i>VIII : SUPPLY OF TRAINED MANPOWER .....</i>	<i>60</i>
<i>IX : CONCLUSION.....</i>	<i>62</i>
<b>CHAPTER 05 : REGIONAL DEVELOPMENT .....</b>	<b>63</b>
<i>I : INTRODUCTION .....</i>	<i>63</i>
<i>II : REGIONAL ECONOMIC GROWTH.....</i>	<i>63</i>
<i>III : CONCLUSION.....</i>	<i>70</i>
<b>CHAPTER 06 : PUBLIC SECTOR PROGRAMME AND ITS FINANCING.....</b>	<b>71</b>
<i>I : INTRODUCTION .....</i>	<i>71</i>
<i>II : DEVELOPMENT EXPENDITURE.....</i>	<i>71</i>
<i>III : PATTERN OF DEVELOPMENT EXPENDITURE .....</i>	<i>72</i>
<i>IV : FINANCING OF THE PUBLIC SECTOR PROGRAMME .....</i>	<i>74</i>
<b>CHAPTER 07 : THE PRIVATE SECTOR: ITS ROLE IN NATIONAL DEVELOPMENT .....</b>	<b>77</b>
<i>I : INTRODUCTION .....</i>	<i>77</i>
<i>II : OVERALL GROWTH IN PRIVATE INVESTMENT.....</i>	<i>77</i>
<i>III : SECTORAL COMPOSITION OF PRIVATE INVESTMENT.....</i>	<i>78</i>
<i>IV : PRIVATE SECTOR CONTRIBUTION TO NEP.....</i>	<i>80</i>
<i>V : PRIVATE INVESTMENT AND ITS FINANCING.....</i>	<i>82</i>

VI : POLICIES FOR PRIVATE SECTOR DEVELOPMENT .....	83
VII : ADMINISTRATIVE AND LEGISLATIVE MEASURES .....	86
VIII : PUBLIC-PRIVATE SECTOR COOPERATION.....	86
<b>CHAPTER 08 : NATION BUILDING AND NATIONAL UNITY .....</b>	<b>87</b>
I : INTRODUCTION .....	87
II : POLITICAL AND ADMINISTRATIVE FRAMEWORK.....	87
III : ECONOMIC FRAMEWORK.....	88
IV : SOCIO-CULTURAL FRAMEWORK.....	90
V : INTERNATIONAL RELATIONS AND NATION BUILDING .....	92
VI : SECURITY FRAMEWORK .....	93
VII : CONCLUSION.....	94
<b>CHAPTER 09 : PROSPECTS AND STRATEGIES FOR THE EIGHTIES .....</b>	<b>95</b>
II : OUTLOOK FOR WORLD ECONOMIC SITUATION.....	95
III : MACRO ECONOMIC STRATEGIES .....	96
IV : PROSPECTS FOR GROWTH.....	97
V : SECTORAL STRATEGIES.....	99
VI : PRICES AND WAGES.....	104
VII : TOWARDS FULL EMPLOYMENT.....	105
VIII : STRATEGIES FOR ERADICATION OF POVERTY.....	106
IX : STRATEGIES FOR RESTRUCTURING OF SOCIETY .....	108
X : REGIONAL DEVELOPMENT.....	110
XI : NATIONAL SECURITY.....	114
<b>CHAPTER 10 : ORGANIZING FOR DEVELOPMENT .....</b>	<b>116</b>
I : INTRODUCTION .....	116
II : BETTER PLANNING AND IMPLEMENTATION CAPACITY.....	116
III : PRODUCTIVITY AND TRAINING .....	117
IV : ORGANIZING FOR EXPORTS.....	119
V : APPLICATION OF SCIENCE AND TECHNOLOGY.....	120
VI : PARTICIPATION BY THE PEOPLE.....	121
<b>CHAPTER 11 : MACRO-ECONOMIC FRAMEWORK .....</b>	<b>123</b>
I : INTRODUCTION .....	123
II : PROSPECTS OF GROWTH.....	123
III : GROWTH OF AGGREGATE OUTPUT AND INCOME .....	124
IV : PRODUCTION BY MAJOR SECTORS .....	125
V : SOURCES OF GROWTH.....	129
VI : SAVINGS AND INVESTMENT.....	132
VII : BALANCE OF PAYMENTS .....	132
VIII : PRICE DEVELOPMENT.....	133
<b>CHAPTER 12 : POPULATION, EMPLOYMENT AND MANPOWER DEVELOPMENT.....</b>	<b>137</b>
I : INTRODUCTION .....	137
II : GROWTH OF POPULATION AND LABOUR FORCE.....	137
III : POPULATION DISTRIBUTION AND URBANIZATION.....	139
IV : EMPLOYMENT AND LABOUR SITUATION.....	140
V : EMPLOYMENT GROWTH .....	141
VI : OCCUPATIONAL STRUCTURE OF EMPLOYMENT.....	142
VII : SUPPLY OF TRAINED MANPOWER.....	144
VIII : CONCLUSION.....	146
<b>CHAPTER 13 : PUBLIC SECTOR PROGRAMME AND ITS FINANCING .....</b>	<b>147</b>
I : INTRODUCTION .....	147

II : SIZE AND PATTERN OF PUBLIC SECTOR DEVELOPMENT PROGRAMME .....	147
III : FINANCING OF PUBLIC SECTOR PROGRAMME .....	149
<b>CHAPTER 14 : ROLE OF THE PRIVATE SECTOR.....</b>	<b>152</b>
I : INTRODUCTION .....	152
II : PROSPECTS FOR PRIVATE INVESTMENT.....	152
III : FINANCING OF PRIVATE INVESTMENT .....	155
IV : PRIVATE SECTOR INITIATIVES IN KEY AREAS.....	156
V : THE PRIVATE SECTOR AND THE NEP .....	158
VI : POLICIES AND MEASURES.....	159
VII : CONCLUSION.....	161
<b>CHAPTER 15 : AGRICULTURE, LIVESTOCK, FISHERIES AND FORESTRY .....</b>	<b>162</b>
I : INTRODUCTION .....	162
II : PROGRESS, 1971-80.....	162
III : OBJECTIVES AND TARGETS OF AGRICULTURAL DEVELOPMENT, 1981-85.....	176
IV : PROGRAMMES, 1981-85.....	178
V : ALLOCATION FOR AGRICULTURAL DEVELOPMENT .....	186
<b>CHAPTER 16 : MANUFACTURING.....</b>	<b>187</b>
I : INTRODUCTION .....	187
II : PROGRESS, 1971-80.....	187
III : PROSPECTS, POLICIES AND PROGRAMMES, 1981-85 .....	190
IV : ALLOCATION FOR THE MANUFACTURING, COMMERCE, FINANCE, REAL ESTATE, TOURISM AND MINING SECTORS.....	193
<b>CHAPTER 17 : COMMERCE, FINANCE, REAL ESTATE AND TOURISM.....</b>	<b>194</b>
I : INTRODUCTION .....	194
II : PROGRESS, 1971-80.....	194
III : PROSPECTS AND PROGRAMMES, 1981-85.....	199
IV : ALLOCATION FOR COMMERCE, FINANCE, REAL ESTATE AND TOURISM .....	201
<b>CHAPTER 18 : MINING .....</b>	<b>202</b>
I : INTRODUCTION .....	202
II : PROGRESS, 1971-80.....	202
III : PROGRAMMES, 1981-85.....	205
<b>CHAPTER 19 : TRANSPORT AND COMMUNICATIONS .....</b>	<b>207</b>
I : INTRODUCTION .....	207
II : PROGRESS, 1971-80.....	207
III : PROGRAMMES, 1981-85.....	213
IV : ALLOCATIONS FOR TRANSPORT AND COMMUNICATIONS SECTOR .....	222
<b>CHAPTER 20 : ENERGY AND UTILITIES .....</b>	<b>223</b>
I : INTRODUCTION .....	223
II : PROGRESS, 1971-80.....	223
III : PROGRAMMES, 1981-85.....	226
IV : ALLOCATION FOR ENERGY AND UTILITIES PROGRAMMES.....	229
<b>CHAPTER 21 : EDUCATION AND TRAINING .....</b>	<b>230</b>
I : INTRODUCTION .....	230
II : PROGRESS, 1971-80.....	230
III : PROGRAMMES, 1981-85.....	236
IV : ALLOCATION FOR EDUCATION AND TRAINING.....	240
<b>CHAPTER 22 : HOUSING.....</b>	<b>241</b>

<i>I : INTRODUCTION</i> .....	241
<i>II : PROGRESS, 1971-80</i> .....	241
<i>III : PROGRAMMES, 1981-85</i> .....	245
<i>IV : ALLOCATION FOR HOUSING DEVELOPMENT</i> .....	247
<b>CHAPTER 23 : HEALTH AND SOCIAL WELFARE</b> .....	<b>248</b>
<i>I : INTRODUCTION</i> .....	248
<i>II : PROGRESS, 1971-80</i> .....	248
<i>III : PROGRAMMES, 1981-85</i> .....	253
<i>IV : ALLOCATION FOR HEALTH, FAMILY HEALTH AND WELFARE PROGRAMMES</i> .....	258
<b>CHAPTER 24 : CULTURE, COMMUNITY DEVELOPMENT, SECURITY &amp; GENERAL ADMINISTRATION</b> .....	<b>259</b>
<i>I : PROGRESS, 1971-80</i> .....	259
<i>II : PROGRAMME, 1981-85</i> .....	264
<i>III : ALLOCATION FOR CULTURE, COMMUNITY DEVELOPMENT, SECURITY AND GENERAL ADMINISTRATION</i> .....	267

# **CHAPTER 01 : POLICY OBJECTIVES AND FRAMEWORK**

## **I : INTRODUCTION**

The period 1971-80 represents the first decade of the Outline Perspective Plan (OPP), 1971-90, within which the objectives of the New Economic Policy (NEP) are to be realised. It was a period of rapid economic growth and structural change in Malaysia. It was also a period during which the global economic environment underwent substantial transformation. At the start of the decade, the international economy was marked by relative price stability, rapid growth in trade and incomes, and cheap and plentiful energy supplies. By the end of the decade, the world economy was characterised by inflation and slow growth, increasing protectionism and rising costs of energy. Despite the emergence of these adverse trends in the world economic situation, Malaysia recorded a strong economic performance and the resilience of the economy sets the stage for continued rapid growth and a substantial improvement in the welfare of the people.

The Fourth Malaysia Plan (FMP), 1981-85, inaugurates the second decade of the OPP. It further elaborates and refines policy measures and programmes embodied in the Second and Third Malaysia Plan (SMP and TMP) to ensure that the socio- economic objectives of eradicating poverty irrespective of race and of restructuring society to eliminate the identification of race with economic functions, are achieved. As the country embarks upon the second decade of development under the OPP, a broad review of the progress that has already been achieved is necessary to provide a base from which to plan for the future.

## **II : BACKGROUND TO THE NEP**

Prior to 1971, economic development was concentrated mainly in accelerating the growth of the economy through investment in infrastructure, agriculture and rural development. While this strategy did serve to strengthen considerably the economy of the country, it did not deal adequately with the main social and economic imbalances characterising the Malaysian society. The May 13 incident showed clearly that economic policies and programmes geared mainly to increasing the growth of the economy would not meet the needs of the nation. It demonstrated that any development effort that did not deal sufficiently with the needs of the poor and the imbalances among racial groups would lead to growth without equity and result in a nation divided between those who share in the benefits of growth and those who do not; in short a nation divided and compartmentalised. The trauma of the incident, therefore, led to a critical evaluation of past policies and approaches, out of which the Rukunegara -the National Ideology - was formulated as a basis for national unity.

One of the many faceted approaches towards achieving national unity in the context of the Rukunegara, was the development of a socio-economic foundation that would provide for a viable and equitable participation of all races in the development process. Such a framework was enunciated in the NEP which committed the nation to reduce and eventually eradicate poverty by raising income levels and increasing employment opportunities for all Malaysians, irrespective of race; and to accelerate the process of restructuring society so as to reduce and eventually eliminate the identification of race with economic functions. It was recognised that such a process of transformation of the Malaysian society has to be achieved within the context of an expanding economy so that no particular group would experience any loss or feel any sense of deprivation. Such a process of growth with equity called for considerable focus of policies and programmes on the structure and content of growth that would benefit the poor and the disadvantaged racial groups.

### **III : ECONOMIC POLICIES AND STRATEGIES**

The economic policies of the past decade have led to considerable growth of the economy. Not only did per capita income, in current prices, increase by nearly 12% per annum or 4.9% in real terms, but the quality of life also improved. More of the rural population today have access to potable water and electricity, and live in houses with adequate sanitary facilities than in 1970. School facilities were expanded to guarantee each and every child at least nine years of universal education and to increase enrolments at secondary levels. Health facilities were also expanded resulting in the general improvement of health care and in the decline of infant mortality rate.

The basic economic policies followed during the past decade harnessed a dynamic private sector with a growing public sector. This pragmatic policy of relying on both public and private sectors led to an annual growth of Gross Domestic Product (GDP) of 7.8% per annum during the period 1971-80. The investment base of the economy was diversified and strengthened, reaching a level in 1980 which holds promise of future sustained increases in output. The share of public sector investment also increased rapidly in order to achieve the NEP objectives of poverty eradication and restructuring society.

A prime objective of growth is to increase the consumption possibilities offered to the people. While by no means a perfect indicator of welfare, the real per capita consumption increased from \$856 in 1970 to \$1,445 in 1980, a rate of increase of 5.4% per annum. The share of public consumption also rose substantially, reflecting deliberate Government efforts to ensure that such public goods as education and health services are widely available.

The increase in GDP enabled the Government to ensure that redistribution took place in an environment where all would benefit. Without such growth, efforts at

redistribution would require some to forego their absolute levels of welfare in order to allow those who were initially less well-off to make real gains. In addition, rapid economic growth would enable the mobilization of the substantial resources required for the attainment of the NEP objectives.

Rapid growth, moreover, carries with it the promise of structural change, the creation of a modern economy, and the generation of employment opportunities in productive activities. During the past decade, the share of the agricultural sector in total GDP declined while the share of the modern sector activities, such as manufacturing and construction, increased rapidly. As a consequence, not only did unemployment decline to 5.3% in 1980, a considerable drop from the level of 7.8% experienced in 1970, but the share of employment in the modern sectors also increased. Despite the fact that unemployment and underemployment continue to exist, there is a growing evidence of a tightening in the supply of labour for certain industries. The provision of gainful employment has been the most powerful poverty eradication tool. Those who are unemployed or underemployed are not only likely to be poor but also ill-equipped to participate in the economic life of the nation. The rapid progress which was achieved in ameliorating the problem of unemployment reflected the success of a major thrust of the national development effort.

The NEP objective of poverty eradication called for a pattern of development which would permit increased participation and involvement of the disadvantaged in the economic activity. A major poverty eradication strategy has been in land development and in situ agriculture apart from the absorption of the rapidly growing rural labour force into higher income jobs in the industrial and services sector. In addition, programmes were implemented to help specific target groups: rubber smallholders, padi farmers, coconut smallholders, estate workers, fishermen, mixed farmers and residents of New Villages. The availability of replanting grants, the provision of increased and subsidised inputs to various agricultural activities, and the use of special agencies to assist in the marketing of produce and in obtaining access to inputs, together with measures to stimulate growth in the poorer states have all helped the rural poor. The urban poor also benefitted from the provision of public facilities and amenities which contributed to an improvement in the quality of life in urban areas. Low-cost housing projects and programmes to assist urban petty traders in the acquisition of stalls and equipment were also undertaken. The combined effect of the deliberate poverty eradication policies and programmes, the rapid growth of the economy and the favourable world prices for Malaysia's major export commodities led to a decline in the incidence of poverty from 49.3% in 1970 to 29.2% in 1980. Despite the substantial progress made, poverty remains a problem. This is because of the high incidence of poverty that existed at the start of the decade. The rapid progress that was made during the decade strengthens the confidence of the Government in achieving the poverty eradication targets enunciated in the OPP.



The presence of poverty, the inability to find meaningful employment and imbalances in the ownership of assets were reflected in the distribution of income. In 1970, not only were the lowest income groups getting disproportionately less of the total income than the upper income groups, but that the average income of the Malays and other indigenous people was also substantially below that of the Chinese and the Indians. Poverty existed in all racial groups, but the largest proportion of the poor was concentrated among the Malays and other indigenous people. During the first decade of the NEP period, the mean incomes of all racial groups increased. All income groups also benefitted from the policies pursued during the past decade.

In terms of income distribution among the ethnic groups, the Malay mean income continued to be below the national average. However, the Malay mean income grew at the highest rate compared with those of other ethnic groups during 1971-79, reducing the gap between the Malay mean income and the national average from 34.8% in 1970 to 32.7% in 1979. Both the Chinese and Indian mean incomes were above the national average, but the proportion of their mean incomes to the national average declined during the period. Despite improvement in the level of absolute income for the various ethnic groups, much remains to be done to remove the large income disparities between them.

An important second dimension of the NEP objective is the restructuring of the Malaysian society so as to reduce and eventually eliminate the identification of race with economic functions. The initial distribution of assets, in terms of human, physical and financial, made it difficult for the Malays and other indigenous people to gain access to modern sector jobs, to own and manage business enterprises and to acquire a fair share of the increments in wealth generated through an expanding economy.

In the process of restructuring employment, Government policy emphasised the need to increase the representation of Malays and other indigenous people in the modern sector in line with the racial composition of population at all levels, especially at the upper levels of the job hierarchy where they were seriously under-represented. The policy measures to bring about this restructuring process included the development of appropriate education and training programmes to increase the supply of trained manpower and direct incentives as well as administrative measures to increase their participation in the modern sector. As a result of these policies, the participation of the Malays and other indigenous people at both the managerial and technical levels has increased.

The Government policy to reduce imbalances in the ownership of assets and wealth has focussed on financial as well as physical assets in all sectors. Institutions such as Majlis Amanah Rakyat (MARA), Urban Development Authority (UDA) and Bank Pembangunan Malaysia Berhad (BPMB) as well as private commercial banks, served

as channels of credit to potential Bumiputera entrepreneurs. In addition, advisory and consultancy services as well as administrative support were provided to help Malays and other indigenous people to establish their businesses. The progress so far has been modest.

The key to the ownership and control of wealth is through the ownership of the equity capital and effective management of various enterprises. Companies enjoying various fiscal incentives provided by the Government were required to set aside at least 30% of their share capital for the Malays and other indigenous people. Similarly, shares have been reserved for them under the merger and take-over guidelines implemented by the Foreign Investment Committee. The Government through institutions such as the Kompleks Kewangan Malaysia Berhad (KKMB), Pelaburan Nasional Berhad (PNB), Perbadanan Nasional Berhad (PERNAS), and BPMB holds in trust equity capital for the Malays and indigenous people with the ultimate objective of divesting the shares to them. The progress with respect to restructuring ownership of capital in the corporate sector was substantially below the OPP target. The income levels among the Malays and other indigenous people are still low and they do not generate sufficient savings to purchase shares set aside for them. Their capacity to participate and effectively manage business enterprises also requires rapid development of entrepreneurial and business skills. In addition, the lead time required to establish industrial projects that have been approved also led to a slowdown in the acquisition of shares in these ventures. The achievement of the long-term ownership target necessitates considerable acceleration of efforts during the coming decade and calls for the removal of existing constraints.

The NEP recognised the interdependence between economic development and the need to achieve a more egalitarian society. Only if major economic imbalances, especially those that accentuate ethnic differences, were reduced and eventually eliminated, would a strong and united nation emerge.

The development effort in this regard relied on five main elements. First, the Government devoted an increasing proportion of its resources to development. In current prices, some 8% of GDP was devoted to development expenditure during the period 1971-75 and this rose to over 10% during the period 1976-80. About 14.2% of development expenditure was spent on social services - education, health and housing - which benefitted mainly the poor in both rural and urban areas. The large and growing share of the resources devoted to development was evident of the commitment by the nation to its goal of improving the economic welfare of all Malaysians.

Second, the economy increasingly used its own resources to finance its development efforts. The ratio of taxes to GDP rose from less than 18% during the period 1971-75 to more than 21% during the 1976-80 period. This represented a substantial effort at

domestic resource mobilization. Moreover, the share of direct taxes, both personal and corporate, increased significantly, a development generally

Third, industrial development strategy shifted from import substitution to export promotion. At the start of the decade, the growth of the economy had benefitted from investment in import substitution industries which created domestic productive capacity and increased employment opportunities. However, as the more obvious and efficient import substitution opportunities had been exploited, the emphasis shifted to export promotion. The reliance on export promotion as a major force in the economy allowed for an efficient use of resources and an increased diversification of the export structure, thereby enabling the Government to increase the role of the modern sector in the economy.

Fourth, regional development was given increasing importance in order to bring about a more balanced distribution of economic activities and a closer integration among the States of Malaysia. Significant aspects of this policy were the establishment of new growth centres supported in some cases by large land development schemes, the provision of infrastructural facilities and the establishment of agro-based industrial activities. While important progress has been made, further regional development requires, among others, the resolution of problems related to inter-state migration of population and a greater effort to induce industries to locate in less-developed states. While the first calls for greater efforts to encourage inter-state migration, the latter requires a review of the current locational incentives and strengthening of infrastructural facilities in less-developed areas.

Fifth, policies and programmes were implemented to control inflation and to minimise its impact on the poor. Inflation is not only destructive of savings and growth, but places a burden on the poor which they can ill-afford. During the 1971-75 period, the consumer price index (CPI) rose by 7.3% per annum mainly due to international inflation brought about by increases in energy prices and the shortfall in global food production. Prudent fiscal and monetary measures combined with industrial harmony were successful in reducing the rate of inflation to 4.6% per annum during the period 1976-80. Even more important were the specific measures taken to ameliorate the impact of inflation on the poor. The provision of subsidies by the Government and the reduction in import duties on items which accounted for a major share in the budget of the poor, and price control of essential commodities as well as improvements in the distribution system protected the poor from the worst effects of rising prices. The success of the anti-inflation policies with respect to food prices, led to the decline in their prices from 10% per annum during the 1971-75 period to only 3.8% per annum during the 1976-80 period.

The interdependence of socio-economic development and national security cannot be over-emphasised. Without security, socio-economic progress will be affected.

Likewise, the maintenance and expansion of security capability will become difficult without socio-economic progress. Therefore, economic development and the goals set forth in the NEP aim not only at creating a society in which all enjoy higher incomes but also at making the nation stronger and more secure. To withstand external and internal threats, the nation must not only create a just society but also strengthen its security forces to meet any potential dangers to the country. During the past decade, considerable attention was given to improve the capability of the security forces. The recent changes in the geo-political situation, particularly in Southeast Asia, make it imperative that the nation's security be further strengthened to safeguard the nation against any threat.

The development path has been full of challenges, and considerable progress has been made. However, much remains to be done if the NEP targets are to be attained. What is called for is a thorough analysis of the social and economic forces, domestic and international, that will define the parameters of development. The Government response to these forces will, as in the past, remain pragmatic, with the consistent objective of attaining the nation's long-term social and economic goals. Efforts will be made to remove the economic, social and administrative constraints that prevent greater participation of the poor and the disadvantaged groups. With the progress already achieved, and the lessons learned from the experiences of the past in carrying out the unique task of building a united Malaysian nation, the Government will continue to implement those policies, programmes and projects that will assure security and social justice.

## **CHAPTER 02 : THE GROWTH AND STRUCTURE OF THE MALAYSIAN ECONOMY**

### **I : INTRODUCTION**

The decade of the seventies witnessed rapid growth and structural transformation of the Malaysian economy. The Gross Domestic Product (GDP), after having grown at 6% per annum during the 1960's, recorded a rate of growth of 7.8% per annum during 1971-80, resulting in a rising per capita income and major structural shifts in the economy. The implementation of the twin objectives of the New Economic Policy (NEP) coupled with major efforts to expand modern sector activities, particularly in manufacturing, has been a major factor accounting for the rapid structural change. During the decade, the structure of the economy moved towards a better balance in terms of the composition of output and its distribution among the sectors. This process of rapid growth and changes in the structure of output was also accompanied by changes in employment structure and skills and in the rate of urbanization. In addition, it also raised problems of adjustment which required urgent consideration and resolution by the Government.

### **II : STATE OF THE ECONOMY IN 1970**

Past development efforts in the economy enabled Malaysia to reach a level of per capita income of \$1,142 in 1970 which was among the highest in the Asian region. Notwithstanding this relatively high level of per capita income, the structure of output and income was conspicuously unbalanced, characterised by excessive reliance on a few primary commodities in the agricultural sector. The share of value added of the agricultural sector in GDP was 30.8% while the share of the manufacturing sector was only 13.4%. Mining and construction accounted for 6.3% and 3.9%, respectively. The services sector, comprising among others, wholesale and retail trade, finance and government services, contributed 41.9% of GDP.

The above sectoral composition of output was also reflected in the distribution of employment by sectors. Nearly half of the total employed were found in the agricultural sector, mostly in the low income agricultural activities. The manufacturing sector employed only 11.4% of the total, while the services sector accounted for 31.5% of the employed. Within the services sector, a major proportion of the employed was found in the informal sector activities such as petty trading activities characterized by low income levels.

Exports which accounted for 43.8% of GDP were the main stimulus for domestic production and were mainly concentrated on rubber, tin and to a lesser extent on palm oil. The minimal linkages of the primary sector to other sectors in the economy in terms of processing and manufacturing of finished goods resulted in export growth having a moderate impact on private investment and consumption and consequently on domestic production. The share of imports in GDP was 39.6% reflecting a significant dependence on foreign sources for domestic needs. The import of consumption goods accounted for 25.2% of total imports of goods and services while intermediate and investment goods imports accounted for 28.5% and 22.9%, respectively. The rest of the imports amounting to 23.4% was accounted for by petroleum, imports for re-exports and services. A significant aspect of the import structure was the extent of import substitution that prevailed. The relatively low share of 16.8% of consumption goods imports in total private consumption and 21.3% of intermediate goods imports in total intermediate inputs used in domestic production indicated that considerable progress had already been made in the import substitution of these goods. The share of investment goods imports in total investment was about 51% and this high ratio reflected the low level of import substitution in investment goods.

Public sector demand, comprising public consumption and investment expenditure, accounted for 21.3% of GDP. The relatively high share of public sector expenditure was mainly directed to infrastructure development and land improvements.

### **III : STRUCTURE OF PRODUCTION, 1971-80**

During the period, substantial structural changes occurred in the economy. At the same time, the range of activities and products and sources of growth became more diversified and correspondingly sectoral composition of employment changed significantly. Other structural changes included improved regional distribution of development and changes in composition of revenue and other sources of financing for development. There has been an increasing degree of sectoral independence and major expansion in both the forward and backward linkages brought about by technological progress, expansion of the capital market, development of communication and infrastructural facilities as well as improvements in the machinery of the Government in the management of the economy. The strengthening of linkages in the economy led to increases in the multiplier effects of various sources of growth. Table 2-1 shows GDP by sector of origin and changes in the shares of the various sectors, indicating structural changes in production which occurred during the decade.

The Malaysian economy expanded at a rate of 7.8% per annum during the decade, slightly lower than the rate of 8% targeted for the period. The shortfall was due mainly to the slow growth of 4.3% per annum recorded in the agricultural sector. The

other sector, notably manufacturing, construction and services performed exceptionally well, recording rates of growth of 12.5%, 9.6% and 8.6% per annum, respectively. The relatively faster rate of growth of non-agricultural sectors, led to a decline in the share of agriculture in GDP from 30.8% in 1970 to 22.2% in 1980, while that of the manufacturing sector increased sharply from 3.9% to 4.5%. Value added share of the services sector also increased significantly from 41.9% to 45.1% in 1980 and this was brought about largely by the increase in value added of the government services.

Significant structural changes in the composition of output also occurred within the sectors, especially in agriculture, mining and manufacturing. Value added for agriculture, forestry and fishing sector expanded by 4.8% per annum during 1971-75 and 3.9% per annum during 1976-80. For the decade as a whole, the sector grew by 4.3% per annum. However, annual fluctuations in output were recorded during the period, resulting from price fluctuations and adverse weather conditions as well as supply policies. Notable features in the growth of the sector during the period were the rapid expansion of palm oil output which contributed about 40% of the increase in the sector's output, and the decline in the dominant role of rubber in output expansion. Agriculture crops for domestic consumption such as padi, fruits and vegetables, were given increasing importance and their output grew at 2.9% and 5.8% per annum, respectively during 1971-80. Livestock output was adversely affected by the outbreaks of foot and mouth disease during the latter half of the decade and, as a result, registered a rate of increase of only 2.2% per annum.

The compositional changes in output in this sector were a direct consequence of vigorous pursuence of diversification policy. A number of factors dictated this diversification effort. There was a need to improve the balance in the share of local market for agriculture products. This arose because of the existence of the significant potential for increasing the value added of commodities either in the form finished goods or intermediate goods in support of import substitution and export promotion. There was also a need to broaden the base of agricultural production to minimise the adverse effect of fluctuation in the external demand on the economy and to improve income levels among the poor. In addition, there was a conscientious effort to exploit the world market demand for a variety of commodities, such as palm oil, cocoa and pepper, which yielded relatively higher rate of return per unit of investment.

Rubber production expanded by 2.3% per annum while the acreage under rubber cultivation increased by 0.2% per annum during the decade. This period witnessed a marked decline in estate acreage of about 14,100 hectares, due to continuing conversion into oil palm and other crops. Consequently, estate acreage declined from 647,200 hectares in 1970 to an estimated 507,100 hectares by 1980. Despite the decline in the acreage, output from the estate sector remained almost at the same

level largely to increases in yield at an average rate of 2.6% per annum during the period.

Smallholders' production expanded by 4.4% per annum during the period as a result of the Government efforts at a large-scale new planting schemes. A total of 76,180 hectares and 115,870 hectares were newly planted during 1971-75 and 1976-80, respectively, in addition to replanting of 172,500 hectares during 1971-75 and 106,500 hectares during 1976-80. These efforts, coupled with improvement in yield, resulted in smallholder sector contributing 60% of national rubber output in 1980 compared with 48% in 1970 and 58% in 1975. Taking into account the output from the estate and smallholder sectors, the share of rubber in total agriculture output declined from 34.3% in 1970 to 24.9% in 1980.

The agricultural diversification policies of the Government in the sixties to reduce overdependence on rubber led to rapid growth of the oil palm industry. Total acreage under oil palm cultivation increased rapidly from 308,800 hectares in 1970 to 890,000 hectares in 1980. In the estate sector, the increase in cultivated acreage was partly due to conversion of large areas from rubber to oil palm. In the smallholder sector, acreage under oil palm rose from about 83,700 hectares in 1970 to 461,060 hectares in 1980 due to extensive replanting and new planting programmes by Government agencies such as the Federal Land Development Authority (FELDA) and the Rubber Industry Smallholders Development Authority (RISDA). Correspondingly to this increase in cultivated acreage, palm oil output expanded by 19.6% per annum from 431,000 tonnes in 1970 to 2,590,000 tonnes in 1980, resulting in the share of palm oil in total agricultural output to increase from 9.6% in 1970 to 25% in 1980. This rapid expansion in palm oil production enabled Malaysia to become the world's largest producer and exporter of the commodity.

Output of sawlogs expanded at 1.6% per annum during 1971-75 and 5.2% per annum during 1976-80, giving an annual average growth of 3.4% per annum for the decade. The rate of forest exploitation during the decade in Peninsular Malaysia, which accounted for 34% of national log output, was 373,410 hectares per year, substantially higher than the 147,420 hectares per year, considered as the optimum rate for forest exploitation for the Peninsular. As a result of such rapid rate of exploitation and export of sawlogs, the wood products industry began to experience shortages of logs and this led to a gradual restriction on export of logs commencing in 1972 and the adoption of a National Forest Policy in 1978 for the orderly and effective management and utilization of forest resources. In Sabah and Sarawak, efforts at forest conservation were also undertaken in recent years. To encourage reforestation, the Government introduced various tax incentives in 1980.

Padi production expanded by 3.7% per annum during 1971-75 but recorded a lower rate of growth of 2.2% per annum during 1976-80 due to adverse weather conditions. Overall, during the decade, padi production increased at an average rate of 2.9% per



annum. During the decade, the Government continued its efforts to achieve self-sufficiency in rice and improvement in the productivity of padi farmers through increase in double-cropping areas, and the provision of drainage and irrigation facilities, subsidised inputs, price support and extension services. Acreage under padi increased by 3.1% from 462,900 hectares in 1970 to 477,500 hectares in 1980, of which 56% was under double-cropping. The sizeable investments by the Government in the Muda and Kemubu schemes, facilitated double-cropping and enabled increases in padi yields from 1,448 gantangs per hectare in 1970 to 1,909 gantangs per hectare in 1980 and from 1,071 gantangs per hectare to 1,624 gantangs per hectare in the two schemes, respectively.

Output from the mining sector expanded at 4.6% per annum during the decade. It rose substantially by 8.9% per annum during 1976-80 compared with less than 1% per annum during 1971-75, reflecting the underlying structural change that took place in this sector. The strong expansion in petroleum output during 1976-80 increased the share of crude petroleum in the sector's output from 29% in 1970 to about 63% in 1980, while the depletion of tin reserves and the high cost of operating marginal mines led to a decline in the share of tin in the sector's output from 53% in 1970 to 33% in 1980. The emergence of petroleum as a major activity led to the enactment of the Petroleum Development Act in July 1974, and subsequently to the formation of the Petroleum Nasional Berhad (PETRONAS) in October 1974, charged with formulating policies for the effective control and orderly development of the petroleum and related industries in the country. In 1976, PETRONAS and the major oil companies operating in Malaysia signed Production Sharing Agreement outlining the distribution of oil production between the two parties.

Crude petroleum production rose by 31.6% per annum during the decade from 17,969 barrels per day in 1970 to 97,838 barrels per day in 1975 and 280,000 barrels per day in 1980. Output in the earlier years came mainly from the four off-shore oil fields in Sarawak, but the prospects for expansion became more favourable with the discoveries of new oilfields during 1971-75 in Peninsular Malaysia and Sabah. Consistent with the increase in domestic demand for petroleum products, domestic refining capacity was expanded substantially. The three refineries in the country now have the capacity to refine 155,000 barrels per day of crude oil in 1980 compared with 102,000 barrels per day in 1970.

During the decade, tin output declined by 1.8% per annum. After reaching a peak in 1972 at 76,800 tonnes, it declined in the next five consecutive years to a level of 58,700 tonnes in 1977 and improved marginally, reaching 61,500 tonnes in 1980, reflecting the output response to higher world prices. Further prospecting for potential tin bearing areas during the period was constrained largely by the limited availability of known tin bearing areas.

The manufacturing sector, which grew at a rate of 12.5% per annum during the decade, accounted for 26.8% of the increase in GDP. By 1980, its share in GDP reached 20.5%, only slightly lower than that attributed to agriculture. A significant aspect underlying the remarkable rate of growth was the structural change within the sector. Resource-based industries which enjoyed sustained increase in external demand grew rapidly during the decade. These industries included wood products comprising sawn timber, plywood, veneer, blockboard and planing mill products; and rubber products comprising largely tyre, tubes and footwear. They together, expanded at a rate of about 9% per annum and accounted for 16.5% of total manufacturing sector value added by 1980. Wood products which were mostly exported increased by more than 10% per annum but rubber products recorded a lower rate of increase of 5.6% per annum due to its dependence on the domestic market which expanded slowly during the period. During the last few years, however, there was a significant expansion in capacity within the rubber products industry, especially for new products which have potential for export such as surgical and household gloves.

Labour-intensive industries which were provided with considerable incentives also expanded rapidly. Striking examples were textiles and electrical machinery including electronics which recorded rates of increase of 15.7% per annum and 13.3% per annum, respectively during the decade. The share of textiles in total manufacturing output increased from 2.1% in 1970 to 3% in 1980 while that of electrical machinery increased from 2.9% in 1970 to 3.4% in 1980. Textiles benefitted from rising demand from both domestic and export markets but during the recent years, the industry began to face difficulty, especially in the external market, as a result of increasing quotas and other trade restrictions. The export of electronics depended almost entirely on the demand by parent companies in Japan and U.S.A.

Food industry, however, expanded at a slower rate. Food processing was an established and mature industry in the early seventies and accounted for a large share of 15.3% of manufacturing production in 1970. This industry expanded at a slow rate of 4% per annum and its share declined to 9.3% in 1980. With regard to capital goods industry, the range of products remained small, largely confined to light capital goods such as agricultural implements, non-electrical machinery and transport equipment. It expanded at a rate of 9.7% per annum during the decade.

A number of intermediate goods industries expanded at very rapid rates especially those which did not face competition from imports. These included oils and fats which increased at a rate of 22.6% per annum, construction materials at more than 10%, petroleum products at 8.3%, and chemical products at about 8%. The share of these industries in total manufacturing output increased from 25.2% in 1970 to 29.2% in 1980. The rapid increase in the production of intermediate goods was due to increasing demand for domestically produced consumption goods and the rapid expansion of the construction industry.

Along with changes in output composition were changes in factor intensities of production. Although the capital-labour ratios varied between different industries, the rapidly increasing rate of investment in machinery and equipment in the manufacturing sector, especially in industries employing sophisticated technology, had an overall effect of increasing capital intensity. While manufacturing employment continued to increase, the high rate of capital accumulation and skill development led to increases in labour productivity.

The construction sector recorded a rapid increase of 9.6% per annum during the decade, raising its share in total GDP from 3.9% in 1970 to 4.5% in 1980. This rapid increase was largely due to the construction boom during the second half of the decade in response to demand for housing which rose rapidly, aided by improved conditions in the mortgage and real estate markets. Non-residential construction also increased significantly resulting from the implementation of major public sector infrastructural projects and construction investment associates with private sector manufacturing activities.

The services sector consists of wholesale and retail trade; government services; utilities; transport, storage and communications; finance; and other services. The growth in value added in the wholesale and retail trade was mainly due to trading activities related to the agriculture, mining and manufacturing sectors. Value added in government services sector consists largely of remuneration of public employees and increased at 9.5% per annum corresponding to the growth of public consumption at 10.7% per annum.

The expansion in the utilities sector by 10% per annum was mainly influenced by the performance of the manufacturing sector as well as the increase in household consumption services such as electricity and water. The transport, storage and communication sector grew by 11.3% per annum. The high level of production in the economy, coupled with rising income levels, generated rapid expansion in the demand for transport, storage and communication facilities. The remaining services sectors grew at about similar rates as the growth in the overall GDP reflecting the close link between these sectors with the overall performance of the economy.

#### **IV : SOURCES OF GROWTH**

Both domestic and external demand provided the thrust for the expansion of overall output during the decade. During 1971-75, public sector development expenditure constituted the main source of growth and provided counter-cyclical impact on the economy during years of low exports and private investment. However, the external sector demand accelerated during 1976-80 and induced a significant increase in domestic production activity. Domestic demand also increase considerably providing additional stimulus to accelerated growth. The final demand expenditure during the decade is shown in Table 2-2.

Total exports of goods and non-factor services in real terms increased by 7.6% per annum during the decade. Growth in export was more rapid during the 1976-80 period when it expanded by 9.4% per annum compared with the rate of growth 5.9% per annum during 1971-75. the stronger growth during 1976-80 was brought about generally by higher export volume of all commodities except tin. As shown in Table 2-3, commodity export benefitted from higher world prices so that export in current prices grew at the rate of 18.6% per annum during 1971-80.

Agriculture exports continued to account for a large share of total commodity exports during the decade, although its share declined from 52.1% in 1970 to 35.8% in 1980. Exports of agricultural commodities grew by 19.7% per annum during 1976-80, mounting to an average annual growth rate of 14.3% for the decade. Rubber exports accounted for 41.8% of this growth, while sawlogs accounted for 23.9% and palm oil 30.8%.

With the emphasis on diversification, the structure of agricultural exports changed considerably. the share of rubber exports which accounted for 33.4% of total commodity exports in 1970 declined to 17.1% by 1980. In term of volume however, exports of rubber increased by 1.9% per annum during 1971-80, from 1,345,000 tonnes in 1970 to 1,620,000 tonnes by 1980. The export prices for rubber showed considerable yearly fluctuations as a result of changes in world demand and inelastic supply. The Government policy has been to undertake short term measures to stabilise the price of rubber and ameliorate any adverse effect of large price fluctuations on the economy. In view of the long term need to minimise the fluctuation in the price of rubber, Malaysia, in consultation with other natural rubber producing and consuming countries, initiated the development of a more permanent scheme aimed at establishing a more equitable price to both producers and consumers. This led to the formulation of an International Rubber Agreement.

Exports of palm oil rose substantially by 38% per annum during 1976-80, thus increasing its share in agriculture export from 9.8% in 1970 to 25.3% in 1980. Although the price of palm oil fluctuated during the period, the expansion in exports resulting

from increases in both volume and prices, made it an important source of foreign exchange earnings.

The export of sawlogs declined by 0.2% per annum during 1971-75 compared with an increase of 5.2% per annum achieved during 1976-80. The decline in the export of sawlogs was mainly the result of Government policy to ban such export from Peninsular Malaysia. This measure was timed to meet strong domestic demand for sawlogs for processing by wood-based industries. The increase in export of sawlogs during 1976-80 was mainly from Sabah and Sarawak which was not subject to the ban.

The export volume of sawn timber grew by 4% per annum during 1971-75 and by 14.1% per annum during 1976-80. The export earnings from sawn timber rose substantially by 19.9% per annum during the decade reflecting both increased export volume and price. Peninsular Malaysia, where the bulk of the wood processing industries are located, accounted for 90% of the total timber exports.

Mineral exports expanded by 23.6% per annum during the decade. The increase during 1976-80 was 38.3% per annum, greater than the increase of 10.5% per annum during 1971-75. Crude petroleum accounted for 81.4% of the increase during 1971-80 period. In terms of share, mineral exports rose from 22.8% in 1970 to 34.5% by 1980. Within the mining sector, the share of export earnings from tin declined from 86.1% in 1970 to 25.5% in 1980, while that of petroleum, increased from 13.9% to 73.3%.

The export volume of tin fell by 3.2% per annum during 1971-75 and by 2.6% per annum during 1976-80, resulting in the decline of the tin industry as the major export earner. The main factor that contributed to the decline in the export volume, particularly during 1971-75, was the lower import of tin ore from Indonesia for smelting and re-export. During the 1976-80 period, lower export volume was chiefly the result of declining output from the existing mines. However, the lower volume was offset by the sharp increase in the price of tin due to strong demand and tight supply position. The export price for tin rose by 12.7% per annum during the decade to reach \$35,717 per tonne compared with \$10,777 in 1970.

The volume of crude petroleum exports expanded rapidly during the decade by 12.5% per annum. The expansion was especially significant during 1976-80 when crude petroleum exports grew by 29.5% per annum compared with the decline of 2.3% per annum during 1971-75. The decline in the early part of the decade was due to stoppage in petroleum re-export previously imported from Brunei. The rapid expansion in export volume as well as the increase in the price of crude petroleum during 1976-80 resulted in an increase in its share of total commodity exports from 3.2% in 1970 to 25.3% in 1980.

A major development during the decade was the increase in petroleum prices for exceeding those of other export commodities. The increase during the decade for

Malaysian crude was 29.8% per annum. The major upward revision first occurred in 1973 when the export price of Malaysian crude rose by 30.2%, followed by further price increases in 1974 (201.4%), 1979 (42.5%) and 1980 (79.1%). These latter increases were related to supply uncertainties and continued strong world demand as well as conservation of existing reserves.

Total public investment continued to increase rapidly during the decade at 12.6% per annum in real terms, having grown at 16% per annum during 1971-75, and 9.3% per annum during 1976-80. The increase during the decade raised the share of public investment in total investment to 33.2% in 1980 compared with 32.1% in 1970. The share of public investment in GDP also increased from 5.7% in 1970 to 8.8% in 1980. While during 1971-75, a major proportion of public development expenditure was devoted to investment in construction related activities, the major thrust of the public sector effort during 1976-80 was on projects directly connected with the NEP. The counter-cyclical role of public investment during 1976-80 period assumed secondary importance. This became possible because the expansion in external and other sources of demand provided the necessary stimulus to growth and reduced the need to use public investment for counter-cyclical measures.

Private investment including oil, expanded at 12% per annum in real terms during the decade. During 1971-75, the growth of private investment of 10.5% per annum was lower than the 13.6% per annum recorded during 1976-80 but was creditable in that it took place despite the slower growth in external demand. However, the slackening of external demand was counter-acted by the Government fiscal and monetary measures to induce a rapid increase in private investment.

During 1976-80, private investment grew at 13.6% per annum providing the impetus to the expansion of domestic activities. The relatively higher rate of growth of private investment led to an increase in its share of GDP from 14.1% in 1975 to 17.7% in 1980. The growth in private investment was largely stimulated by the expansion of external demand and facilitated by appropriate fiscal and monetary measures, as well as through the availability of investible resources generated by a high rate of savings and foreign capital inflows. The investment incentive package was made more attractive with the introduction of new measures, such as export incentives for increase in export sales, accelerated depreciation allowance on plant expenditure for modernizing production techniques, and increased capital allowance for projects not qualifying for pioneer status. Subsequent amendments to the Industrial Coordination Act, and the Petroleum Development Act, 1974, alleviated the fears of the private sector and generated an atmosphere of mutual trust and confidence.

The construction and machinery equipment components of private investment increased at rapid rates of 11% and 13%, respectively, during 1976-80. This impressive rate of increase in construction investment was mainly attributable to the booming residential construction activities in the urban sector. During 1976-79, total loans and

advances for building and construction amounted to \$593.8 million, representing an increase of 20.3% per annum. The significant increase in machinery and equipment investment was largely generated by the expansion in production capacity in the manufacturing sector.

Public consumption increased in real terms at a rate of 10.2% per annum and 11.1% per annum, respectively during 1971-75 and 1976-80 increasing its share of GDP from 15.6% in 1970 to 20.2% in 1980. Apart from the need to cater for the larger public sector role to implement the NEP, especially with respect to programmes relating to poverty eradication and social services such as education and health, a major reason for the high rate of growth of public consumption was the wages and salary revisions which took place during the decade. Wages and salaries grew at about 16% per annum, a rate higher than the growth in overall public consumption, reflecting both the increase in public sector employment and pay revisions.

Private consumption, as a share of GDP, accounted for 59.4% in 1970, 55.5% in 1975 and 58.5% in 1980. In terms of growth, private consumption grew by 8.6% per annum during 1971-75. The relatively slow rate of growth in private consumption during 1971-75, was associated with the slow growth of exports, particularly of primary commodities.

During 1976-80, private consumption grew at 9.7% per annum, a rate in excess of the 8.6% per annum recorded for national income. This substantial increase was largely the result of a rapid growth in private disposable income brought about by buoyant export performance and growth in employment as well as Government fiscal policy which increased real disposable income of the lower income group. During both the periods, 1971-75 and 1976-80, private consumption grew more rapidly than the population resulting in increases in real per capita consumption level.

The decade also witnessed rapid changes in the pattern of private consumption. A number of factors accounted for these changes. As income per capita increased, the share of consumer budget devoted to food fell, reflecting the income inelasticity of food expenditure. Within the food items, there was a shift towards processed food. Private consumption expenditure on clothing and on consumer durables such as televisions, refrigerators and other electrical goods, automobiles and furniture increased rapidly. The rapid urbanization and expansion of transport and communication facilities and the ready availability of consumption goods had considerable demonstration effect in changing and moulding the consumption pattern of Malaysians.

The performance of imports during the decade was influenced by domestic demand for consumption, intermediate and investment goods. During the decade, imports increased in real terms at a rate of 9.8% per annum. The increase was sluggish during

1971-75 at a rate of 5.1% per annum but accelerated to 14.8% per annum during 1976-80.

The relatively slow growth during 1971-75 was attributable to the weakening trends in domestic production activities which affected the demand for imports. Imports of consumption goods, mainly food and consumer durables, declined by 2.9% per annum as a result of slow growth in private disposable incomes. However, the imports for machinery and equipment grew at 8.9% per annum consistent with the growth in private investment of 10.5% per annum during this period. Intermediate goods imports declined at a rate of 3.2% per annum. The demand by the manufacturing sector, which accounted for 57.3% of the imported intermediate goods in 1970, declined by 3.2% per annum due in part to the increase in domestic production of intermediate goods in response to the import substitution policies and to a significant drawdown of accumulated stocks. The imports of construction materials increased by 3.3% per annum on account of the growth of construction sector value added of 6.6% per annum.

During 1976-80, the high growth in private consumption of 9.7% resulted in consumption goods imports increasing at 14.7% per annum. Imports for machinery and equipment for investment increased at a slower rate of 13% while the demand for intermediate goods imports increased at a rate of 20.3% per annum as a result of rapid expansion in the manufacturing and construction sectors.

During the decade, the share of the various categories of imports in total imports of goods and services changed. Consumption goods imports recorded a fall from 25.2% in 1970 to 17.3% in 1980. The share of intermediate goods imports also declined from 28.5% in 1970 to 24.4% in 1980 while that of investment goods imports increased from 22.9% in 1970 to 25.9% in 1980. The share of other imports, comprising petroleum, imports for re-exports and services, also increased largely due to the rising share of services imports during the decade. These changes in the various categories of imports were related to import substitution which took place. While consumption imports increased at a rate of only 5.5% per annum during the decade, total private consumption increased at a much faster rate of 7.7% per annum resulting in the share of consumption goods imports to total private consumption to decline from 16.8% in 1970 to 13.7% in 1980, implying a significant increase in the level of import substitution for these goods. There was also an improvement in the level of import substitution for investment goods reflected by the fall in share of investment goods imports to total investment from 50.7% in 1970 to 45.4% in 1980. For intermediate goods, however, the level of imports substitution was inadequate to meet the demand for these goods resulting in an increase in the share of intermediate goods imports to total intermediate goods requirements from 21.3% in 1970 to 22.9% in 1980.



## **V : TERMS OF TRADE AND CHANGES IN REAL INCOMES**

Changes in the price for exports and imports lead to gains and losses from terms of trade, and therefore, affect the real purchasing power of income. Table 2-4 shows that during the decade export prices increased at 10.6% per annum, while prices of imports increased by 9.2% per annum, resulting in a favourable change in the terms of trade of 1.3% per annum. Overall, while GDP in 1970 prices increased at 7.8% per annum, the gains from the terms of trade amounting to \$6,459 million enabled the real national income, which measures the real purchasing power of GDP, to increase by 8.5% per annum.

The substantial gain in the terms of trade took place during 1976-80. During 1971-75, export prices grew at 7.2% per annum, while import prices grew at a higher rate of 10.1% per annum, resulting in a decline in the terms of trade by 2.6% per annum, or a cumulative terms of trade loss of \$1,089 million. Consequently, the real national income increased at a rate of 6% per annum, lower than the rate of GDP growth of 7.1% per annum in 1970 prices. However, during 1976-80, there was a sharp reversal in the trend of export and import prices. Export prices rose at a high rate of 14.1% per annum, while import prices rose at 8.3% per annum, leading to an improvement in the terms of trade by 5.4% per annum, or a cumulative gain in the terms of trade of \$7,548 million. The real national income correspondingly increased at a much faster rate of 11% per annum compared with the increase in GDP, in 1970 prices, of 8.6% per annum.

While the real per capita income, unadjusted in the terms of trade, increased by 4.9% per annum from \$1,142 in 1970 to \$1,836 by 1980, the effect of the gains in the terms of trade was to increase the real per capita income by a high rate of 5.5% per annum from \$1,142 in 1970 to \$1,947 by 1980. Such rapid increase in per capita income enabled Malaysians to enjoy a higher standard of living.

## **VI : SAVINGS AND INVESTMENT**

Gross national savings increased at 24.7% per annum during 1976-80 compared with 10% per annum during 1971-75, resulting in nearly threefold increase in gross national savings from \$18,682 million during 1971-75 to \$53,284 million during 1976-80. The share of savings to Gross National Product (GNP) increased from an average level of 21.3% during 1971-75 to 28.8% during 1976-80 as a result in rapid increase in domestic income of about 18% per annum which was greater than the rate of increase in consumption of 15.6% per annum.

Gross investment during 1976-80 also increased at a rapid rate of 22.4% per annum, a rate higher than the 15.4% per annum attained during 1971-75. As shown in Table 2-5, gross investment more than doubled from \$21,679 million during 1971-75 to \$48,449 million during 1976-80, leading to an increase in the share of gross investment in GNP from an average of 24.7% to 26.2%, respectively. Despite the increase in gross investment, there was an excess in domestic savings over investment amounting to \$4,835 million during 1976-80 compared with a savings-investment gap of \$2,997 million during 1971-75. The existence of excess investment funds during 1976-80, was due to higher export earnings generated by favourable prices for exports and the slower rate of growth for imports.

## VII : BALANCE OF PAYMENTS

During the decade, Malaysia's international payments position continued to be favourable, despite marked fluctuation in the world economic situation and continued slackening of economic activities of Malaysia's trading partners in recent years. The payments position strengthened considerably during the 1976-80 period. The details are shown in Table 2-6. The trade balance in merchandise account recorded a substantial surplus of \$21,954 million during 1976-80 compared with a surplus of \$4,088 million during 1971-75. The strong growth in trade surplus reflected the higher earnings from merchandise exports resulting from both higher volumes and prices, in particular the increase in export value of crude petroleum and manufactured goods.

The traditional deficit in the services account more than double from \$6,457 million during 1971-75 to \$16,632 million during 1976-80. The higher net payments abroad was largely on account of investment income accruing to direct foreign investment as well as increasing freight and insurance charges brought by growth in merchandise trade and rising freight charges. The substantial deficit reduced significantly the large surplus in the merchandise account, thus resulting in a current account surplus of \$4,835 million during 1976-80. Despite this, the current account position improved compared with that of the 1971-75 period when it was continuously in deficit.

The capital account continued to register substantial net inflow of long-term capital as a result of increased foreign borrowing and a sustained inflow of corporate investment. The inflow of net official long-term capital, comprising both market and project loans, amounted to \$2,786 million during 1976-80 compared with \$2,327 million during 1971-75. The higher inflow was to finance the substantial increase in public development expenditure during 1976-80. The period 1976-80 was also characterized by a higher net inflow of corporate investment which contributed to a favourable balance in the capital account and the balance of payments. This higher net inflow continued to reflect the favourable opportunities for investment in the productive sectors of the economy, particularly in the development of new petroleum production facilities.

The favourable trade balance and the substantial inflow of public and private capital enabled the country to accumulate about \$6,702 million during 1976-80 compared with an accumulation of \$1,912 million during 1971-75. Thus, the external reserves of Bank Negara Malaysia reached an estimated \$10,304 million at the end of 1980. This level of external reserves was able to finance 5.5 months of retained imports at the 1980 level.

## VIII : PRICE DEVELOPMENT

The beginning of the decade of 1970's saw the emergence of increasing inflationary pressures in the economy. The rate of domestic price increase, as measured by the consumer price index (CPI), averaged 5.8% per annum, during 1971-79, compared with a rate of increase of less than 1% per annum in the 1960's. The increase in consumer price was more pronounced during the first half of the decade, 1971-75, when the CPI rose at an average rate of 7.3% per annum as against 4% per annum during 1976-79.

The rapid increase in the price level during 1971-75 period was due to the large increases registered in 1973 and 1974 of 10.5% and 17.4%, respectively. These price increases were generated by a number of factors. In the world economy, especially in the industrialised countries, the industrial boom of 1973 increased aggregate demand well beyond the supply capacity leading to pressure on prices. The oil price increase of 1973 and the shortage of food supplies following crop failures in a number of major food producing countries aggravated the situation. This world economic condition led to a sharp build-up of inflationary pressures which consequently led to sharp increases in the price of imports. This, together with domestic supply constraints aggravated by hoarding and profiteering brought about an unprecedented increase in domestic prices in 1973 and 1974. As shown in Table 2-7, apart from food prices, other items that recorded large increases in prices during 1973 and 1974 were clothing and footwear, furniture, furnishing and household equipment. The price of residential and commercial buildings and industrial structures also increased substantially due to shortages of building materials and skilled labour as well as speculative activities.

The rate of domestic inflation slowed down considerably in 1975 when the CPI rose by only 4.5%. This was the result of an improvement in the international inflationary situation as well as a response to the Government anti-inflationary measures implemented in the previous years. These measures included a tightening of credit and mopping up of excess liquidity to dampen effective demand. However, provisions were made to ensure that sufficient credit was available for an orderly expansion of the economy and for those projects that would improve the nation's productive capacity or that would directly help to achieve the NEP targets. The Government itself took the lead in moderating the budgetary impact of its operations on private sector liquidity and raised its reliance on non-inflationary sources of financing, including borrowing from the Employee's Provident Fund (EPF) whose contributory rates were also raised. The Government took steps to improve the availability of goods throughout the economy by introducing a nation-wide anti-hoarding campaign, improve the distributive network and establishing a Standing Committee on Anti-Inflation to monitor price developments.

In addition, the Government allowed the ringgit to float with respect to other currencies. The resultant upward revaluation of the ringgit the currencies of its major trading partners, served to reduce the price of imports and dampened the effect of imported inflationary pressures. At the same time, excess profits earned in exporting various commodities, where international prices have risen dramatically, were siphoned off through the introduction of an export surcharge on palm oil and tin exports, and increasing the progressivity of the rubber export surcharge. Various import tariffs were also reduced or eliminated in order to reduce the cost of imported goods, including foodstuff and other materials of critical importance to the economy and to the budget of the poorer sections of the population.

During 1976-79, the CPI rose at an average annual rate of 4%, marked however by considerable year-to-year variations. While the CPI as a whole did not increase much, some sub-groups of the index continued to exhibit rapid rates of increase. The cost of medical care and health related expenses rose by 6.1% per annum; rent, fuel and power by 5.8%; clothing and footwear by 4.1%; while transport and communications cost rose by 4.5%. Food prices, however, increased by only 3.7% per annum, in marked contrast to the rapid rate of increase of 9.7% per annum recorded in the first half of the decade. This result was due in large part to the Government's price control of essential food items such as rice, sugar and milk.

As a consequence of these measures, Malaysia enjoyed relative price stability and its rate of inflation was considerably lower than that experienced by most other countries. In all its efforts, the Government was conscious of the debilitating impact which inflation has on the economy's ability to mobilise savings and encourage investment, and particular efforts were made to protect the poor from the burden of inflation.

## **IX : CONCLUSION**

The growth and structural changes in the economy during the past decade with relative price stability and a strong external reserves position reflected the impact of sound Government policies and programmes and the important role played by the private sector in responding to them. The strong and diversified structure of the economy during the Fourth Malaysia Plan (FMP) despite the uncertainties forecast for the world economy.

## **CHAPTER 03 : PROGRESS OF THE NEW ECONOMIC POLICY**

### **I : INTRODUCTION**

The New Economic Policy (NEP) was formulated with the long term objective of achieving national unity through two-pronged development strategies. The first prong is to reduce and eventually eradicate poverty by raising income levels and raising employment opportunities for all Malaysians irrespective of race. The second prong aims at accelerating the process of restructuring Malaysian society to correct economic imbalance so as to reduce and eventually eliminate the identification of race with economic functions. The strategies are to be implemented in the context of rapid economic growth, thereby ensuring that no particular group will experience any loss or feel any sense of deprivation.

During 1971-80, the socio-economic position of the poor improved as a result of the implementation of various programmes for increasing the productivity and employment and improving the quality of life. These efforts were aided by strong commodity prices, especially of rubber and palm oil, particularly during the second half of the decade, directly benefitting the rural households involved in their production. Progress was also made in the restructuring of society during the same period. This was reflected in the increased modernization in the rural sector, expanded opportunities in higher education in the sciences and other disciplines essential for effective participation in modern activities, continued urbanization, the development of regional growth centres and specific programmes designed for the creation and development of an entrepreneurial community among Bumiputera.

### **II : ERADICATION OF POVERTY**

The Outline Perspective Plan (OPP), 1971-80, envisaged a substantial reduction in the poverty level in the country. In Peninsular Malaysia, the incidence of poverty was targeted to decline from 49.3% in 1970 to 16.7% in 1990, to be attained through a rapid socio-economic development with significant participation of the poor. The incidence of poverty for 1980 is presently estimated at 29.2%, an improvement on the targeted 34% under the OPP. The decline in the incidence of poverty was 41.7 percentage points during the period 1976-80 compared with the decline of 5.4 percentage points during 1971-75.

Although there were no specific targets set for the reduction of poverty in Sabah and Sarawak, measures were implemented to improve the socio-economic status of the poor in the two states during the decade. These measures included the

implementation of programmes for productivity improvements such as land development and input subsidies for crop replanting and intercropping, and purchase of farm equipment as well as for improvements in the quality of life. The effects of these measures were also assisted by rapid employment growth in Sabah and Sarawak, estimated at 4.3% per annum, during the period. Prior to the NEP, much of the focus of development policies and programmes was centered on growth, especially of plantation, mining and trade and commerce, leading to an inequitable share of development. Under the NEP, the strategy of poverty eradication called for a pattern of development which provides opportunity for the poor to participate effectively in the growth process and share in the benefits of development.

The programmes implemented for expediting the process of poverty eradication during 1971-80 included the provision of improved inputs and facilities in existing agricultural areas, the absorption of poor households into modern agriculture and other sectors through accelerated creation of productive employment opportunities, and the provision of social services and amenities such as education, health, housing, water and electricity. With these programmes, the poor were able to increase their productivity and income through fuller utilization of their productive assets and skills as well as enjoy an improvement in their quality of life.

The improvements made in respect to poverty eradication in Peninsular Malaysia are shown in Table 3-1. The overall incidence declined from 49.3% in 1970 to 29.2% in 1980. The estimated number of households in poverty declined from 791,800 in 1970 to 666,100 in 1980. In the agricultural sector, the incidence of poverty which stood at 68.3% in 1970 was estimated to have declined to 46.1% in 1980. The decline was relatively faster in the non-agricultural sector where it declined from 27.8% in 1970 to 16.8% in 1980.

In terms of rural and urban strata, the incidence of rural poverty declined from 58.7% in 1970 to 37.7% in 1980 while that of urban areas from 21.3% to 12.6% as shown in Table 3-2. The decline of 8.7 percentage points in the urban poverty incidence is significant in view of its small base. The opening of new land for resettlement represented one of the programmes which contributed in the reduction of poverty. About 72,200 households have been absorbed into land schemes, the majority of whom were either landless or with uneconomic holdings, contributing to the decline in the incidence of poverty during the period in Peninsular Malaysia. A total of 32,000 hectares and 19,700 hectares of land had been developed during 1971-80 in Sabah and Sarawak, respectively, especially with oil palm, rubber and cocoa. About 4,650 settlers were resettled in land schemes in the two states during 1971-80.

The decline in the incidence of rural poverty was also accounted for by in situ development efforts, such as crop replanting and rehabilitation, intercropping and the provision of drainage and irrigation facilities. Average yield per hectare of rubber smallholdings was estimated to be 1,100 kilos in 1980 compared with 730 kilos

in the early 1970s. Among padi farmers, the average yield per hectare for the main season increased from 1,055 gantang in 1970 to 1,260 gantang in 1980, while the yield increase in the off-season crop was from 1,249 gantang to 1,350 gantang. Yield of coconut smallholdings increased by 25% on farms which have been rehabilitated and by about 200% on holdings replanted with the MAWA variety.

The implementation of programmes for intercropping and diversification covering 25,600 hectares contribute towards increasing income and greater utilization of farm labour. Apart from diversifying farm incomes the programmes enabled the beneficiaries to partially overcome the constraint of farm size. Farmers in single crop padi areas were able to obtain additional income from tobacco planting during off-season. Similarly, the intercropping of coconut smallholdings with cocoa, coffee or fruit trees generated extra income to the smallholders. These efforts led to the decline in unemployment in rural areas from 6.9% in 1974 to 6.1% in 1978.

In Sabah and Sarawak, land rehabilitation had also been pursued especially in areas where customary rights on land were in practice. During 1976-80, Sarawak Land Consolidation and Rehabilitation Authority (SALCRA) had rehabilitated about 4,500 hectares involving 500 households. The cash income per resettled family increased from about \$600 to about \$1,800 per year. Programmes for in situ development were also implemented involving over 9,200 hectares of rubber smallholdings which were replanted with high-yielding clones while about 11,100 hectares of padi were provided with irrigation facilities, of which 3,400 hectares were for double-cropping. A total of 4,600 hectares of rubber smallholdings were replanted while assistance for double-cropping and intercropping covered about 4,900 hectares. In Sabah, Koperasi Pembangunan Desa had been active in promoting commercialization of smallholder agriculture through joint enterprises with the farmers for the production of maize, coffee, ginger, soya bean, pepper and vegetables. The various programmes contributed to the creation of rural employment opportunities and improvements in income.

The prices of commodities remained favourable during 1975-80, particularly rubber, oil palm and cocoa, thereby helping to raise farm income levels. The average export price of rubber increased by about 134% from 128 cents per kilo in 1970 to 300 cents per kilo in 1980. This raised farm gate price for rubber from 77 cents per kilo to 183 cents per kilo. The price of palm oil also increased from \$657 per tonne to \$1,140 per tonne during the period. The price of cocoa increased from \$3.00 to \$8.00 per kilo between 1975 and 1980. The increase in commodity prices had not only benefitted traditional farm households but also those households working in rubber and oil palm estates whose total earnings were largely influenced by commodity prices. Mean monthly household income increased by about 78% from about \$200 in 1970 to \$355 in 1979 for the rural areas. For the urban areas, the increase was about 58% from \$428 to \$675 during the same period. It was estimated that the average earning per worker for all industries improved by 68.4% from \$190 per month in 1973



to \$320 in 1979, while the total increase in consumer prices during the period was 44%.

The bulk of the non-agricultural poor was made up primarily of unskilled workers in manufacturing, construction, trade and services. The incidence of poverty among them declined from 27.8% in 1970 to 16.8% in 1980. In absolute terms, however, the total non-agricultural poor households increased from 209,400 in 1970 to about 222,400 in 1980, reflecting the problems associated with rural-urban migration. While immigration posed challenges to poverty eradication efforts in urban areas, it helped to reduce the number of poor in rural areas.

The income levels of the lowest four deciles of the population in Peninsular Malaysia, which formed the bulk of the poor, had improved. As shown in Table 3-3, the mean monthly household income for these groups increased from \$76 in 1970 to \$142 in 1976. By 1979, it had increased to \$186, about 145% about the level in 1970 signifying improvements in the income position of various target groups. The mean monthly income for rubber smallholders increased from \$228 in 1973 to \$450 in 1979. For the fishermen, the mean monthly income increased from about \$90 in 1972 to about \$200 in 1979. In the case of padi farmers, the mean monthly income increased from \$110 in 1970 to about \$154 in 1979. However, the purchase price of padi under the Guaranteed Minimum Price scheme was increased by eight dollars per pikul in 1980, reducing the number of poor among padi farmers by about 14,500 households.

Income improvements among settlers in land development schemes were more substantial. The average monthly income of settlers on Federal Land Development Authority (FELDA) schemes ranged from \$490-\$810 in 1979 compared with incomes of only about \$80-\$120 from their previous occupations. However, their income levels varied during the period depending on the prices, the crops grown and size of holdings. In Peninsular Malaysia, the target groups which had been identified for the purpose of poverty eradication comprised rubber smallholders, padi farmers, fishermen, coconut smallholders, estate workers, New Village residents, agricultural labourers, the Orang Asli and the urban poor.

In Sabah, the programmes of poverty eradication were directed to the principal poverty groups, which included, inter alia, fishermen, rubber smallholders, padi farmers, shifting cultivators and the urban poor. In Sarawak, the poverty groups included those who were wholly or mainly dependent on shifting cultivation, subsistence wet padi farmers, rubber and coconut smallholders with low-yielding stock, sago producers among the Melanaus and indigenous fishermen.

As shown in Table 3-1, the incidence of poverty among the rubber smallholders in Peninsular Malaysia declined from 64.7% in 1970 to 41.3% in 1980, consequent among productive improvements in the sector and the prevalence of high rubber prices in the second half of the review period. In 1980, the estimated yield per hectare was

1,105 kilos compared with 750 kilos and 1,069 kilos in 1970 and 1975, respectively. This was largely due to the replanting of smallholdings with high-yielding clones. Over 135,100 holdings covering 279,000 hectares were involved in the replanting scheme over the period. The average rubber price in 1980 was 300 cents per kilo compared with 128 cents per kilo in 1970.

Replanting efforts undertaken prior to 1970 also influenced productivity among the rubber smallholders during 1971-80. About 77,900 holdings covering 172,500 hectares which were replanted during 1971-75 began to mature during 1976-80. However, during 1976-80, only 57,200 holdings covering 106,500 hectares were replanted. This decline in the total number of smallholdings replanted was due partly to the high price level of rubber after 1975 making it unattractive for smallholders to replant.

Access to better processing facilities improved throughout 1971-80 with the provision of about 1,903 smallholders development centres implemented by the Rubber Industries Smallholders Development Authority (RISDA). In addition, purchases of smallholder rubber by the Malaysian Rubber Development Corporation (MARDEC) also expanded from 35,400 tonnes in 1976 to 55,000 tonnes in 1980, an increase of 55%. The combined effects of these measures coupled with good rubber prices was to raise the monthly income of rubber smallholders from about \$228 in 1973 to about \$450 in 1979.

In Sabah, the Sabah Rubber Fund Board had continued with its programmes to improve the income levels of rubber smallholders by raising their productivity. Over the period 1971-80, about 10,500 hectares were newplanted and 8,200 hectares replanted with high-yielding clones. It was estimated that the programmes benefitted 5,200 to 4,200 families, respectively. In Sarawak, under the rubber smallholding planting scheme, a total of 7,700 hectares were replanted and 9,200 hectares newplanted during 1971-80.

The incidence of poverty among padi farmers declined from 88.1% in 1970 to 55.1% in 1980. The decline was substantial in that it exceeded the target 73% for 1980 and was attained in a period characterised by unfavourable weather condition, increased consumer prices and rising input costs. The cumulative effect of public measures through irrigation, extension, subsidies and price support contributed towards this decline in poverty. However the incidence of poverty among padi farmers continued to be high primarily due to large number of uneconomic holdings, exacerbated by low yields in areas outside the major irrigation schemes.

New irrigation facilities for both single and double-cropping of padi were expanded covering about 68,00 hectares during 1971-80. In addition, yield of padi during main season improved from 1,055 gantang per hectare to 1,260 gantang during 1971-80. The yield improvements were expected not only in high productivity areas, such as Muda and Tanjung Karang, but also in areas noted for low productivity, such as

Kemubu and Besut. Total production increased from 1,434,600 tonnes in 1970 to 1,913,200 tonnes in 1979. These assisted in raising farm employment and income levels of padi farmers.

Measures were also instituted to increase net incomes of padi farmers especially through input subsidies and price support schemes. The purchase price of padi under the Guaranteed Minimum Price scheme was increased from \$16 per pikul in 1970 to about \$28-\$32 per pikul in 1979. It was further increased by \$8 per pikul in 1980, giving a better return to the farmers. It is estimated that the incidence of poverty among the padi farmers was reduced by 9.6 percentage points as a result of the increase in 1980.

Since not all padi areas could be provided with double-cropping facilities, the planting of other crops during the off-season was also encouraged. Among single-crop padi farmers, the planting of tobacco brought about some improvement in their income levels in the range of \$500 to \$750 during the off-season. Over 13,000 hectares had been planted with tobacco involving the participation of 60,000 farmers in 1980. This contributed to a decline of 3.3 percentage points in the incidence of poverty among padi farmers during 1976-80.

In addition, the single-crop padi farmers also undertook off-farm jobs to supplement their income during the off-season. In a study covering 2,700 single-crop padi farmers in Peninsular Malaysia, it was found that the off-farm income accounted for 50% of total household income. However, in spite of the availability of this income, about 80% of the households surveyed were still drawing incomes below the poverty line. This indicated the need to provide them with off-farm high income job opportunities.

During the decade, a total of 25,00 families cultivating 30,400 hectares of padi in Sabah were assisted with drainage and irrigation facilities and services. A total of 5,000 hectares were double-cropped. In Sarawak, out of a total of 135,200 hectares of padi, about 68,400 hectares were planted with wet padi of which about 20,700 hectares were equipped with irrigation and drainage facilities involving 7,500 families. The yield of padi in the state increased from about 510 gantang per hectare in 1970 to about 980-1,215 gantang per hectare in 1980.

The incidence of poverty among the fishermen declined from 73.2% in 1970 to 45.3% in 1980. The majority of the poor fishermen were in the east coast, though substantial pockets of poverty existed along the west coast of Peninsular Malaysia especially in Kedah, Selangor and Johor. The improvement in their situation was achieved through measures aimed at productive employment creation and out-migration as well as by way of subsidies for purchases of boats and gears. Over 2,200 jobs were created during 1976-80, resulting from the implementation by Fisheries Development Authority (MAJUIKAN) of fishery projects, such as trawling and multi-purpose boats. Out of those absorbed in these schemes, about 48% were able to earn incomes above

the poverty line while the others experienced improvements in their income although at a lower rate. Out-migration into other sectors, such as into land settlement and aquaculture projects, also helped to reduce poverty within the group. The provision of subsidies by the Department of Fisheries for the acquisition of boats and gears benefitted about 15,500 fishermen. Altogether about 2,700 in-board and 5,200 out-board engines and 13,300 fishing gears were provided. It was estimated that the beneficiaries of the subsidy programmes experienced about 70% increases in income from an average of \$175 per month to an average of \$279 per month during the normal season. In Sabah, a total of 1,200 fishermen were given assistance in the form of subsidies, boats and gears during 1971-80, while in Sarawak a total of 4,600 fishermen obtained such assistance. In addition, fresh-water fishery projects were implemented in the two states helping to create rural job opportunities.

Out of a total of 34,200 specialised coconut smallholders, 38.9% were considered poor in 1980 compared with 52.8% in 1970. The major part of this improvement was accounted for by replanting and rehabilitation schemes as well as by intercropping with cocoa, coffee and fruit trees. During 1971-75, over 4,500 hectares were replanted, some of which began to mature during 1976-80. The replanting scheme covering 3,500 hectares during 1976-80 was largely undertaken with MAWA hybrids which gave a twofold increase in yield per hectare and, therefore, had a favourable impact on the income of the smallholders.

Coconut replanting and rehabilitation were undertaken with inter-cropping of either cocoa or coffee covering a total of 8,400 hectares during 1971-80. This scheme enabled a further utilization of farm labour and increased income levels among the smallholders. Based on 1980 prices, it was estimated that a replanted and intercropped holding could generate an additional income per hectare of \$740 to \$1,200 per year.

The socio-economic position of estate workers, particular those in larger estates, has improved as a result of higher income level and increased social amenities provided by the estate management. Apart from higher basic wage rates, they also benefitted from greater bonus and incentive payments based on commodity prices. As a result, the poverty incidence declined from 40% in 1970 to 35.1% in 1980. The average earning per month in 1979 was about \$246 and \$276 for rubber and palm oil estate workers, respectively, about 61% and 93% higher than the average for 1973. In addition, they also obtained housing assistance in the form of either cash of \$70-\$80 per month, giving average total household income of about \$302 for rubber estates and \$368 for oil palm estates.

There were also some improvements in the coverage of social amenities and facilities, such as tap water, electricity and health, provided in the estates. However, the estate households in small estates where the degree of unionization was low, did not improve much during 1971-80. There was indication that the management of

these estates provided inadequate housing and social facilities and amenities and paid salaries below the rates available in the bigger estates.

The New Village residents are involved in a variety of occupations both rural and urban. The socio-economic improvement of this group depended on a number of factors including their occupations and locations. The residents of villages close to urban centres benefitted from growth of urban-based industries, such as construction, trading, services and small-scale industries such as furniture making, foundry-works and motor repairs. Those in rural areas and working as smallholders or estate workers benefitted from improvements in wages and commodity prices as well as from in situ development. A study covering 300 New Village households in Selangor indicated that the average monthly income in 1979 was estimated at about \$620 per household.

In addition, they benefitted from the provision of facilities and amenities, such as health services, potable water and electricity supplies as well as roads and community halls. The provision of facilities such as libraries and other recreation centres also served to improve the quality of life of the residents. By the end of 1980, about 92% of the New Village households were served with electricity while 83% of them were supplied with tap water facilities.

The existence of various productivity-oriented programmes which demanded greater utilization of land and farm labour had increased the employment of agricultural labour. Land development scheme undertaken by FELDA, Federal Land Consolidation and Rehabilitation Authority (FELCRA) and other state agencies during 1971-80 had created a total of about 128,000 job opportunities in the rural areas, especially in jungle felling, clearing and burning excluding those undertaken by the settlers themselves.

In addition, there was also improvement in the wage levels of agricultural labour due partly to the growing tightness in the rural labour market. In padi cultivation, the cost of hired labour per hectare during 1972-78 had increased in the range of 70-240%: in Perak, the cost increased from \$173 to \$432 per hectare; in Kelantan, it increased from \$183 to \$415; and in Pulau Pinang, from \$267 to \$489. Data from a socio-economic survey of coconut smallholders indicated that the cost of hired labour also increased during 1971-80.

The programmes to assist Orang Asli were designed to improve their socio-economic conditions by encouraging them to go into permanent agriculture. These include small-scale land development and minor agricultural schemes, such as livestock husbandry and fresh-water fisheries. About 1,270 families had been assisted through the various minor agriculture schemes. During the period, about 10,100 hectares of land were converted into permanent agriculture and about 2,000 heads of cattle were distributed to the Orang Asli.

In addition, facilities for their social improvement in the field of education health and housing were also expanded during 1971-80. In the field of health, 85,000 cases were given treatment and, in the field of housing, about 2,000 houses were built for the community.

The growth of the informal sector through its linkages with modern construction, manufacturing and service industries assisted in improving the income position of the poor. They also benefitted from the employment opportunities directly generated by the growth of these modern activities. A total of 1.3 million jobs were created in secondary & tertiary sector industries during 1971-80. Urban unemployment declined from 7.7% in 1974 to 6.7% in 1978. The average wage level in the industrial sector increased by about 68% from \$190 in 1973 to \$320 in 1979, thus benefitting the urban poor, a significant number of whom were workers in production, sales and services. The urban poor also benefitted from low-cost housing programmes implemented in urban areas as well as from the implementation of assistance provided for the acquisition of stalls, premises and trading equipment among the petty traders. A total of 5,900 petty traders were assisted under this programme. In addition, poor households in some squatter settlements in the Federal Territory benefitted from the squatters upgrading programme implemented in the area.

Programmes for improving health, education, housing and utilities which have direct relevance to the immediate needs of the society, especially the poor, were further expanded during 1971-80. In the field of health and medical services, the number of rural health centres and sub-centres, mid-wife clinics and Klinik Desa increased by 55% during 1971-80 in Peninsular Malaysia. Similarly, the facilities for dental and polyclinics had also been expanded in urban centres giving immediate and valuable services to the urban poor. In the field of nutrition, the Applied Nutrition Programme which was initially implemented in Peninsular Malaysia in 1976 had been expanded to cover Sabah and Sarawak. By 1980, over 450 villages were covered by this programme. All these contributed to the decline in the overall infant mortality rate from 40.8 per thousand in 1970 to 28.1 per thousand in 1980 in Peninsular Malaysia. The maternal mortality rate for Peninsular Malaysia decreased from 1.48 per thousand in 1970 to 0.84 per thousand in 1978.

During 1971-80, the low-income population had greater access to educational facilities with the expansion of primary and secondary schools and of the junior science colleges. In addition, they benefitted from assistance programmes, such as scholarships, textbook loans and supplementary feeding. The Government continued to implement low-cost housing programmes for the benefit of low-income population in both rural and urban areas. It had also assisted in the rehabilitation of rural houses. In addition, the provision of treated water and electricity was expanded especially in the rural areas. The coverage of treated water supply in the rural areas was estimated to be 47.2% in 1980 compared with 39% in 1970 in Peninsular Malaysia. In

the case of electricity, the coverage increased from 28.7% in 1970 to 52.3% in 1980. Similarly, such facilities were expanded in Sabah and Sarawak. Further, the expansion in transport and communication facilities, including the construction of rural roads, also helped to improve the overall living condition of the poor.

The Agriculture Census 1977, provides a direct estimate of poverty in Peninsular Malaysia, Sabah and Sarawak in 1976. As shown in Table 3-4, it was estimated that 37.7% of the total households were in poverty in 1976, the incidence for Peninsular Malaysia, Sabah and Sarawak being 35.1%, 51.2% and 51.7% respectively. In absolute terms, about 879,300 households were in poverty, of which 78.3% or 688,300 were in Peninsular Malaysia, 9.5% or 83,900 in Sabah and 12.2% or 107,100 in Sarawak. In terms of rural-urban strata, 89.7% of the poor households were in the rural areas. The incidence of rural poverty was 45.7% while that of the urban 15.4%. The States of Kelantan, Kedah, Trengganu, Sabah, Sarawak and Perlis registered high incidence of poverty ranging from 48.7% to 59.2%, together accounting for 478,900 or 54% of total households in poverty. The number of poor households in Sabah and Sarawak totalled 191,000 representing 21.7% of the total poor households. Although Perak had fairly moderate incidence of poverty (38.7%), in absolute terms, it accounted for about 133,100 households or 15.1% of the total poor households, making it the state with the largest number of poor households in the country.

As shown in Table 3-5 in terms of ethnic distribution, the Malays accounted for 75.5% of total poor households in Peninsular Malaysia, compared with 15.9% and 7.8% for Chinese and Indians respectively. The incidence of poverty for Malays, Chinese and Indians were 46.4%, 17.4% and 27.3%, respectively. The bulk of the Malay poor were located in the rural areas which accounted for 93% of the total Malay poor households. In Sabah and Sarawak, as shown in Table 3-5A and Table 3-5B, Bumiputera accounted for 82% and 86% of the total poor, respectively, a large majority of whom were found in rural areas. In Sabah, the Kadazan and Bajau made up 51.7% of the total poor, while in Sarawak, the Ibans, Malays and Land Dayaks accounted for 74.8% of the total poor.

The majority of the poor were employed in agriculture, forestry, hunting and fishing, as indicated in Table 3-6. This sector accounted for 68.8% of the total poor in Peninsular Malaysia, 77.9% in Sabah and 84.9% in Sarawak. In rural-urban terms, the sector accounted for 77.9% of total rural poor and 14.6% of total urban poor. The significant urban sectors where the incidence of poverty was high were services, trade and manufacturing. Table 3-7 indicates that the level of poverty varied according to status of employment. Of the poor, 51.2% had their family heads working as self-employed workers, especially in the rural areas. The second largest category of activity status was the wage earners which accounted for 36.5% of heads of poor households. The proportion of self-employed was higher in Sarawak (78%) and Sabah (65.7%) compared with that in Peninsular Malaysia (45.2%). In rural-urban terms, the

majority of the rural poor were self-employed (54.4%) while the wage earners (54.1%) formed the majority of the poor in urban areas.

Table 3-8 shows that 42.4% of the heads of poor households had no formal education while 53.3% had some primary education. A bigger number of poor households in rural areas had no formal education compared with that in urban areas. Those with no formal education together accounted for 95.7% of the total poor in 1976. The table also indicates that there was variation in the level of education achieved among heads of poor households between the Peninsular Malaysia, Sabah and Sarawak. While the category without formal education accounted for 35.4% of the total poor in Peninsular Malaysia, it was 66.4% in Sabah and 68.3% in Sarawak.

### **III : RESTRUCTURING OF SOCIETY**

Policies and programmes for restructuring society within the OPP period were designed to, inter alia:

(i) increase the productivity and enhance the quality of life of the rural poor through rural modernization;

(ii) reduce the progressive steps and through overall economic growth, current imbalances in employment so that employment in the various sectors of the economy and by occupational level will reflect the racial composition of the population;

(iii) increase progressively and through overall growth of the economy, the share of Malaysians in the ownership of productive capital in the economy including corporate stock and in particular that of Bumiputera who currently account for a share which is particularly low in comparison with their representation in the population; and

(iv) ensure the creation of a commercial and industrial community among Bumiputera in order that, within one generation, they will own and manage at least 30% of the total commercial and industrial activities of the country in all categories and scales of operation and become full partners in the economic life of the nation.

Rural modernization and restructuring the racial composition of employment will assist in increasing the income of Bumiputera and at the same time help reduce existing differentials in average wages and salaries among the races. However, reductions in total income differentials between the races will require, in addition, that existing differentials in income arising from the ownership of assets are also narrowed. Considering that Bumiputera now own an insignificant part of total asset of the economy, the existing overall income differential between them and other



Malaysians is even wider than wage and salary differences alone would suggest. Therefore, the attainment of the NEP objectives would also require progressive reduction of existing imbalances in the ownership of assets and wealth.

Restructuring ownership of assets includes all financial as well as physical assets, including land, in all sectors of the economy. However, as the economy develops and modernises, the role of the corporate sector will increase, and as the country's financial structure becomes increasingly sophisticated, the key to ownership and control of wealth will be through ownership of equity capital. In this regard, the target is that by 1990, Malaysians would account for about 70% of the total share capital of limited companies with Bumiputera holding at least 30% and other Malaysians 40%. The remainder will be held by foreign interests. The creation of entrepreneurs among Bumiputera requires the accumulation of savings which is possible only through rapid increase in their income as well as the acquisition of skills and experience.

During 1971-80 period, various policies and programmes were implemented in line with the NEP objectives and targets. Although each of these programmes was formulated to further the attainment of a particular target of the NEP, its implementation often produced impact on other targets and objectives. Programmes for manpower development, restructuring of employment and asset ownership as well as the development of Bumiputera entrepreneurs would have the effect of increasing their earnings, consistent with the objective of reducing income disparities between the races. These would also reduce poverty because of the fact that at the beginning of the OPP period, the bulk of the Bumiputera were poor (about 65% in 1970) and the bulk of the poor were Bumiputera (about 74% in 1970).

Programmes for employment restructuring included training and manpower development in specific areas where racial imbalances existed. Under these programmes, facilities for professional and sub-professional, and skill training were expanded in order to increase the number of trained and qualified Bumiputera. Facilities for professional and sub-professional courses at Institut Teknologi MARA (ITM) were expanded. Additional skill training facilities were also provided at the Institut Kemahiran MARA (IKM) and the Youth Training Centres. To reinforce these programmes, the private sector was encouraged to restructure its workforce at all levels of occupation through job placement and sponsorship schemes and regular consultation between the Department of Labour and Manpower and private sector employers. At the secondary school level, MARA Junior Science Colleges were constructed in order to prepare Bumiputera for higher education in science and technology.

Programmes for the creation of a commercial and industrial community among Bumiputera included provision of financial assistance to acquire equity capital of companies reserved for them and the promotion of entrepreneurial development

through programmes of credit assistance, advisory and extension services, technical assistance, administrative support and direct Government participation in the private sector.

Public programmes and policy measures together with the private sector efforts, including those of individual Bumiputera, had produced significant results since 1971 from the point of the restructuring targets of the NEP which are income imbalance, employment restructuring, the ownership of assets and the development of a commercial and industrial community among Bumiputera.

Table 3-9 shows the changes in mean and median income by race from 1970 to 1979 in Peninsular Malaysia. Over the first nine years of the NEP period, both the mean and median incomes of all racial groups increased significantly in both real and current terms. In terms of income distribution among the races, the Malay mean income as a proportion of the national average increased from 65.2% in 1970 to 67.3% in 1979. The Chinese mean income was still above the national average but decreased from 149% in 1970 to 144% in 1979. Similarly, the Indian mean income as a proportion of the national average declined from 115% in 1970 to 102% in 1979. Income differential between rural and urban areas decreased during the period. Income inequality was higher in the rural than the urban areas, but in both cases, inequality was decreasing over the last decade.

The Agriculture Census in 1977 data showed the mean monthly household income in Sabah in 1976 was \$513 while that in Sarawak was \$426 compared with the average of \$514 for Peninsular Malaysia. Urban incomes for Sabah and Sarawak based on the Agriculture Census 1977 and the Labour Force Survey 1980 showed a clear improvement in current as well as constant prices. Urban incomes in Sabah which stood at \$1,060 in 1976 had increased to \$1,221 in current prices in 1979. Similarly, urban mean incomes in Sarawak increased from \$871 to \$1,055.

The period 1971-80 saw a rapid growth in employment for all communities. Employment for the whole of Malaysia increased at an average annual rate of 4.1% between 1970 and 1980. The breakdown by racial groups, available only for Peninsular Malaysia, showed that unemployment of the Bumiputera decreased from 8.1% in 1970 to 5.1% in 1980, that of the Chinese from 7% to 5.3% and the Indians from 11% to 7.5%. As shown in Table 3-10, there has been significant improvement in the distribution of employment in line with the restructuring objective that employment in all sectors and at all levels reflect the racial composition of the country. In the secondary sector where the participation of the Bumiputera had been low, their share of employment showed an increase from 32.1% in 1970 to 39.8% in 1980. Similarly, in the tertiary sector, their share of employment increased from 42.6% to 47%. At the same time, the share of other Malaysians in the primary sector had also increased from 32.4% to 33.8%.

In terms of occupational classification, progress was observed during the period. As shown in Table 3-11, in the professional and technical job category, Bumiputera increased their share from 47% in 1970 to 50% in 1980. In the administrative and the Managerial category, the increase was from 24.1% to 31.6%, still far below the 1990 target. The share of other Malaysians in the agricultural workers category increased from 28% in 1970 to 32.3% in 1980.

This standard occupational classification, however, does not reflect hierarchy in terms of levels of salaries or wages. The professional and technical category includes all professionals, from nurses and schoolteachers to doctors, engineers and accountants. As indicated in Table 3-12, a survey of professional bodies in 1979 showed that despite overall performance, Bumiputera still accounted for a very small proportion of the higher-earning professionals. In 1979, Bumiputera accounted for only 11% of the architects, 7.6% of accountants, 11.6% of engineers and 8.6% of doctors in both the private and public sectors. Nevertheless, these percentages were significantly higher than they were in 1970. The other Malaysians continued their dominance in the higher-earning occupations, with their proportion in some of the categories exceeding their share in population.

In terms of salaries and wages, a survey of limited companies in Peninsular Malaysia, showed that Bumiputera held only 6.4% of the top-paying jobs (over \$4,000 per month) in 1976, compared with 30.1% for the Chinese, 3.6% for the Indians, 3.5% for Others and 56.4% for foreigners, as shown in Table 3-13. Significant measures were taken during the decade to correct Bumiputera under-participation in scientific, technical and managerial occupations. Creation of these types of manpower among Bumiputera was accelerated through the expansion of facilities and enrolment of local institutions of higher learning. The introduction of preparatory, pre-university and matriculation courses in science by the universities had helped greatly the efforts to produce more qualified Bumiputera professionals and sub-professionals in the fields of science and technology.

Progress in the restructuring of ownership in the corporate sector is indicated in Table 3-14. Total equity of Malaysian companies and assets of branches of foreign companies grew at an annual rate of 16.7% from \$6.6 billion in 1970 to \$26.3 billion in 1980. During this period, the share of Malaysian residents increased from 38.3% to 52.5% and there was a corresponding decline of the foreign share from 61.7% to 47.5%. Among the Malaysian residents, Bumiputera trust agencies and individuals showed the highest rate of growth of 31.4% per annum. Their share of the total equity relative to other groups increased from 4.3% in 1971 to 12.4% in 1980. However, this is below the target of 16% by 1980 as set out in the OPP.

Out of the total new equity of \$19.8 billion created between 1971 and 1980, only \$3 billion or 15.2% was taken up by Bumiputera individuals and trust agencies. This meant that a considerable amount of backlog had been accumulated. For Bumiputera

individuals their share grew marginally from 2.6% in 1971 to 4.3% in 1980 although their holding of corporate stock grew by more than six times. This slow progress of Bumiputera individuals was accounted for principally by factors such as low income and negligible savings.

The share of other Malaysian residents grew from 34% in 1971 to about 40% in 1980 as against their target of 40% by 1990. The progress of ownership and participation in industrial and commercial sectors is indicated in Table 3-15. In the industrial sector, total fixed assets increased from \$1,503.5 million in 1970 to \$4,317.5 million in 1975. The value of industrial fixed assets held by Bumiputera increased from \$15 million or 1% to \$150.3 million or 3.5%. Similarly, other Malaysians increased their industrial fixed assets from \$638.3 million or 42.5% to \$2,252.2 million or 52.2%. In the transport sector, the value of fixed assets held by Bumiputera increased from \$12.4 million or 18% in 1971 to \$54.9 million or 31.2% in 1975, while that of other Malaysians increased from \$50.8 million or 74% to \$119.5 million or 67.8%. The effective implementation of the licensing policy in respect of the transport sector had greatly assisted Bumiputera participation in this competitive activity.

In respect of urban land,, a survey of 15 towns in 1977 showed that over the years, Bumiputera sold 1,335.2 hectares against a purchase of 1,101.9 hectares, implying a net loss of 233.3 hectares. The Indians sold 651.1 hectares and purchased 514.2 hectares, incurring a net loss of 136.9 hectares. Others also experienced a net loss of 227.8 hectares. The Chinese experienced a net gain of 598 hectares. The net loss for Bumiputera was significant since their holdings in the towns surveyed were already small, and more important, such urban lands were highly valued especially for commercial and industrial purposes.

The increasing importance of the rapidly expanding modern commercial and industrial sector afforded a bigger opportunity to increase the number as well as the quality of Bumiputera entrepreneurs. Programmes towards these ends were formulated and in some cases upgraded so that a dynamic and successful Bumiputera commercial and industrial community, owning and managing at least 30% of the commercial and industrial activities, would become a reality. These programmes included training, credit assistance, advisory and extension services, technical assistance, administrative support and direct government participation in the private sector.

Two types of training programmes, namely, training with the immediate objective of augmenting the number of skilled and professional Bumiputera in order to facilitate employment restructuring, and training with objective of creating and developing a commercial and industrial community among them were carried out. Under the first type of programme, training was provided by the universities and the ITM for the development of Bumiputera professionals, including executives in business. The combined enrolment of the universities and the ITM increased from 7,392 in 1971 to

25,444 in 1980. Their output during the period was 34,727. Also included were programmes provided by IKM and Dusun Tua Youth Training Centre aimed at increasing the number of skilled and semi-skilled Bumiputera workers in various grades and professions. These institutions provided training to 4,207 Bumiputera in 1980 compared with 1,399 in 1971. Their total output during the period was 11,380.

The second type of programme, provided by Majlis Amanah Raayat (MARA), the National Productivity Centre and the Advisory Services Division of PERNAS Edar was aimed at developing the entrepreneurial potentials of Bumiputera. Courses ranged from elementary book-keeping and inventory management to cost control and basic management and marketing. These institutions trained 22,173 Bumiputera in 1980 as against 2,239 in 1973.

Credit assistance was given through institutions such as MARA, Malaysian Industrial Development Finance Berhad (MIDF), Urban Development Authority (UDA), Bank Pembangunan Malaysia Berhad (BPMB) and commercial banks administered within the framework of the Credit Guarantee Corporation (CGC). In addition, financial assistance was also given for the financing of fixed assets and equipment, renovation of premises as well as for working capital.

As shown in Table 3-16, during the first half of the NEP period, Bumiputera increased their share of loans and advances significantly from banks and finance companies from \$149.3 million or 5% in 1971 to \$4,780 million or 20.6% in 1980. Loans and advances to other Malaysians increased from \$2,851.4 million to \$18,440 million but their share of the total declined from 95% to 79.4% during the same period.

Technical and advisory services, including consultancies, were provided by MARA under its Entrepreneurial Development Programme, Malaysian Industrial Development Finance Industrial Consultants (MIDFIC) and BPMB. During the period under review, MARA served about 7,500 clients under this programme while MIDFIC provided consultancy services for 54 Bumiputera businesses out of a total of 81 consultancy jobs undertaken. BPMB began to provide advisory and consultancy services to entrepreneurs in 1974 and, up to the end of 1980, it had provided these services to 4,075 clients.

Administrative support embraces all measures to promote the development of Bumiputera entrepreneurs within the existing competitive environment and also to increase their participation in the ownership and control of modern economic sectors. The measures included quotas and price allowances in supplies and work contracts, issue of licences in local authority areas, allocation of shares when new companies were formed or when existing companies came forward to restructure their ownership and Bank Negara Malaysia guidelines on lending to Bumiputera. In addition, other administrative procedures were used to increase the awareness of the private sector with regard to national policies and objectives.

Under the impact of administrative support, the number of Bumiputera businesses in Peninsular Malaysia increased from 21,763 or 14.2% of the total in 1970 to 78,961 or 24.9% of the total in 1980. Participation by Bumiputera contractors also increased. The number of Bumiputera contractors registered with the Public Works Department in Peninsular Malaysia increased from 1,911 in 1970 to 7,834 by the end of 1980. More significantly, their number in the bigger contractor categories had also increase rapidly. The number of Bumiputera class A contractors increased from 9 in 1970 to 48 in 1980 increasing their share from 6.3% in 1970 to 21.2% by 1980. Among the bigger categories of class A, B, BX and C, the number of Bumiputera contractors increased from 37 in 1970 to 321 in 1980 or from 6.2% to 24.1% of contractors within the same period. Of a total value of \$4,426.7 million of contracts issued between 1973 and 1980, \$1,726.7 million or 39% was given to Bumiputera contractors. Similarly, the value of goods and services sold to the Government by Bumiputera suppliers under the central contract and purchase system increased from \$9.2 million or 35.9% of the total in 1972 to \$94.8 million or 57.3% in 1980.

Companies enjoying various fiscal incentives provided under the industrial development strategy were required to set aside at least 30% of their share capital for Bumiputera. Under this scheme a total of \$868.3 million of shares or 22.8% of the total were reserved for them during the period 1968-78, of which \$649.3 million or 74.8% were taken up.

During the 1971-80 period, a number of institutions were given the task of spearheading efforts of the Government in the creation of a commercial and industrial community among Bumiputera through direct participation in private sector activities. These institutions included MARA, Perbadanan Nasional Berhas (PERNAS), UDA, State Economic Development Corporations (SEDCs), Food Industries of Malaysia Sendirian Berhad (FIMA), Bank Bumiputra and BPMB. A new institution, Bumiputera Investment Fund, was created in 1978. The roles of these institutions ranged from creating and holding in trust equity capital for Bumiputera to the provision of in-service training for Bumiputera executives.

In the period between 1971-80, PERNAS created and acquired equity capital of over \$500 million through its subsidiaries and other interests in mining, construction, tarding and plantation industries. Up to the end of 1980, PERNAS provided direct employment to 8,741 Bumiputera out of a total employment of 16,593 at all job levels. Through its subsidiary PERNAS Edar, it also provided a source of steady supply of goods for Bumiputera retailers.

In addition to providing credit, training and consultancy services MARA through its companies, including Kompleks Kewangan Malaysia Berhad, provided jobs for 9,421 Bumiputera and held in trust equity shares totalling about \$182.9 million up to the

end of 1980. MARA also provided business premises in urban areas for Bumiputera petty traders.

In addition to promoting industrial development in their respective states through the provision of infrastructure, the SEDCs also undertook industrial and commercial ventures either on their own or in joint-ventures with the private sector. Through these ventures, they held a total of \$438 million in share capital as at the end of 1980. In addition, their activities had created direct employment for 43,456 people of whom 30,094 were Bumiputera. At the executive and professional level, these agencies employed 1,196 Bumiputera out of a total of 2,375 people.

UDA was established in 1972 to undertake urban renewal and modernization in line with the objectives of the NEP. Over the last eight years, UDA had either on its own or in joint-venture constructed business premises and commercial complexes in major towns in Peninsular Malaysia, developed housing estates, provided loan financing for fittings and renovations of business premises and finance Bumiputera entrepreneurs concerned to buy back UDA's share of the enterprise once continued viability was assured. Through these activities it provided 1,329 business premises and 2,110 houses to Bumiputera, assisted 381 Bumiputera businesses and allotted 1,998 houses to other Malaysians. In addition, UDA in joint-venture with the SEDCs, established PERUDAs in several states to undertake the development of commercial premises in urban areas outside the Federal Territory. Since the first PERUDA was established in 1975, these joint-venture had resulted in the construction of 212 shophouses and 965 housing units.

FIMA was set in 1972 to promote Bumiputera participation in food processing industries. Up to the end of 1980, FIMA's equity, including holdings in its fifteen subsidiaries and nine associated companies, stood at \$63.1 million. The group employed 2,092 people in 1980 of whom 86.2% were Bumiputera and 13.8% other Malaysians. In addition of their normal functions, Bank Bumiputra and BPMB also held equity investments in trust for Bumiputera. Bank Bumiputra group equity holding grew from \$10 million in 1974 to \$114.7 million in 1980 while that of BPMB grew from \$50,000 in 1974 when it was incorporated, to \$19.4 million in 1980. In terms of employment, the two institutions provided 3,373 jobs by 1980 of which 87.2% were for Bumiputera and 12.8% for other Malaysians. With this, the Bumiputera employment share in banking increased from 21.9% in 1971 to 40.9% in 1980.

#### **IV : CONCLUSION**

The provision of financial and other resources for the implementation of the NEP by the public sector institutions and agencies contributed towards an expanding range of facilities and services for the country's rapid industrial development. The resultant economic expansion has benefitted both Bumiputera and other Malaysians through their greater participation in the various economic activities made available. While the poverty eradication programmes benefitted all the poor, irrespective of race, the restructuring programmes also generated favourable spillover effects and opened up new avenues of opportunity to other Malaysians. Urban entrepreneurs such as contractors and suppliers of goods and services as well as construction workers enjoyed benefits from those Government projects meant to improve the condition of Bumiputera. Other Malaysians also shared from programmes of similar nature in the form of bank loans, training, education and other socio-economic development projects.

The period 1971-80 showed substantial decline in the incidence of poverty from 49.3% in 1970 to 29.2% in 1980. In large part, the decline was the result of the impact of major programmes such as irrigation schemes in Muda, Kemubu and Besut. Other programmes include new planting of rubber, replanting and rehabilitation of coconut and the provision of improved drainage. In addition, the new land development programmes benefitted over 72,200 settlers during the period, representing a substantial portion of those who moved out of poverty. The nation also benefitted from the prevailing strong commodity prices of rubber, palm oil and cocoa which helped accelerate the decline in the incidence of poverty during 1971-80.

The incidence of urban poverty also declined during the period. However, the total number of urban poor increased principally due to rural-urban drift. The expansion of employment and improvement in income and wage levels have helped the poor generally. In addition, the urban poor benefitted from the increased facilities provided by the Government to improve the quality of life.

In view of the multi-faceted nature of poverty, not all of which are quantifiable, the Government had expanded and strengthened social amenities and services for the benefit of the poor. These included education and health facilities, the supply of potable water and electricity and other services helping to contribute to the improvement in the quality of life.

Progress has also been made in certain areas of restructuring. The employment opportunities in all sectors and at all levels of occupation are being restructured favourably. Increasing number of Bumiputera have taken advantage of various programmes designed to benefit them through both public and private sector efforts. Bumiputera individuals and interests also recorded the highest rate of



growth in acquiring corporate assets during the period under review. However, because of their small base in 1970, the spectacular development prevented them from making a big headway in share capital ownership in 1980.

Several areas of imbalances remained critical despite the achievements made so far. Apart from the shortfall of equity ownership target set under the OPP for 1980, Bumiputera continued to be the minority in important professions as well as in higher paid occupations. While substantial amount of public funds has been expended to develop Bumiputera entrepreneurial community, the full impact of such expenditure in terms of visible presence as well as quality and permanency in productive ventures is being assessed.

The efforts to achieve the NEP objectives during the past decade were undertaken within the context of an expanding economy, thereby allowing other Malaysians to also benefit from the expanding range of facilities and services generated in the process. Along with increases in income, they also experienced rising employment and greater equity ownership. Development during the decade had, therefore, benefitted all Malaysians.

## **CHAPTER 04 : THE DEVELOPMENT OF HUMAN RESOURCES**

### **I : INTRODUCTION**

The development of human resources is recognised as a critical input in the economic and social development of the country. The rapid growth of population in the fifties and sixties resulted in substantial additions to the labour force during the first decade of the Outline Perspective Plan (OPP), 1971-90. This called for a rapid generation of employment opportunities in order to reduce unemployment as well as an acceleration in the supply of trained and skilled manpower at all levels. The success of the development programmes undertaken by both the public and the private sectors had led to a decline in the unemployment rate from 7.8% in 1970 to about 5.3% by 1980.

### **II : GROWTH OF POPULATION AND LABOUR FORCE**

The period 1971-80 witnessed an increase in population from 10.8 million in 1970 to an estimated 14.3 million in 1980 with an average annual rate of growth of 2.8%. The first half of the decade recorded a growth rate of 2.9%, compared with 2.8% recorded for the second half.

As shown in Table 4-1, the population of Peninsular Malaysia increased at an average annual rate of 2.6% during 1971-80, a rate lower than that of 3% in the sixties. This was brought about by declining fertility which resulted from rapid socio-economic development, improved levels of education, particularly among females and wider acceptance of family health practices. Sabah and Sarawak, however, experienced higher rates of growth of 5.3% and 3% per annum, respectively. Sabah's high rate of growth was due mainly to large inflow of Filipino refugees and some immigrant workers after 1970. In terms of geographical distribution, 83.1% resided in Peninsular Malaysia, 7.7% in Sabah and 9.2% in Sarawak in 1980.

Mortality continued to decline in Peninsular Malaysia during the decade. The crude death rate fell from 7.3 per 1,000 population in 1970 to about six in 1980. The life expectancy at birth for males increased from 63.5 years in 1970 to an estimated 68 years in 1980, while for females the life expectancy increased from 68.2 years in 1970 to about 72 years in 1980. The increase in life expectancy was mainly due to the expansion and improvement of health and sanitary services and water supplies. Although recent data on life expectancy at birth for Sabah and Sarawak are not available, on the basis of past trends it is estimated that the life expectancy improved

more rapidly than in Peninsular Malaysia largely as a result of declines in childhood mortality.

Fertility too continued to decline during the period under review. In Peninsular Malaysia, the total fertility rate declined from 4.8 in 1970 to 3.6 by 1980. The decline was more among the Chinese and Indians than among the Malays. The crude birth rate in Peninsular Malaysia declined from 33.9 per 1,000 population in 1970 to an estimated 28.9 in 1980. As a result of fertility decline during the decade, some shifts in the age structure occurred as shown in Table 4-1. The population within the age group 0-14 years declined from 44.5% in 1970 to 39.5% in 1980, while the proportion of the working-age group 15-64 years increased from 52.2% to 56.8% over the period.

The rapid increase in the working-age population brought about a decline in the age dependency ratio, from 91.4% in 1970 to an estimated 76% in 1980. Thus, in 1980 the age dependency ratio was still quite high, implying a substantial demand for such social services as education, health and housing.

In Peninsular Malaysia, the school-age population 6-18 years had been growing at an average annual rate of 1.6% per annum during 1971-80. At the primary level, the school-age population 6-11 years grew at only 0.8% per annum. However, at the secondary level, the school-age population 12-18 years grew faster at 1.6%, 2.5% and 3.4% per annum for the lower, upper and post secondary levels, respectively. These higher growth rates were partly the effect of high fertility levels experienced in the late 1950s and early 1960s. However, the growth in school enrolment was faster than that of school-age population, reflecting an increase in enrolment ratios, particularly at the lower and upper secondary levels. At the primary level, the ratio increased from 86.8% in 1970 to about 96% in 1980, indicating near universal enrolment.

The ethnic composition of the population in Peninsular Malaysia is shown in Table 4-2. The proportion of the Malays increased slightly from 52.7% in 1970 to 53.9% in 1980, while that of the other ethnic communities experienced a slight fall. Generally, however, all ethnic communities tended to maintain their relative proportions of the total population.

As shown in Table 4-3, the number of households in Peninsular Malaysia expanded by 3.2% per annum during 1971-80 with the average household size decreasing from 5.5 persons in 1970 to 5.2 persons in 1980. Malay households grew at a rate of 3.7% per annum, compared with 2.7% for the Indians, 2.5% Chinese and 0.6% Others. The average size of the Malay, Chinese and Indian households all declined over the period, becoming 4.8, 5.9 and 5.5 in 1980, respectively.

As shown in Table 4-4, the labour force is estimated to have increased from 3.7 million in 1970 to about 5.4 million in 1980, growing at an average rate of 3.9% per annum. Thus, there were about 1.7 million new entrants into the labour force during

the period, of which 83.3% were in Peninsular Malaysia, 8.5% in Sabah and 8.2% in Sarawak. The growth of labour force in Sabah at 5.1% per annum during the period 1971-80 was higher than the growth rate estimated either for Peninsular Malaysia or Sarawak. This was due to the large-scale inflow of Filipino refugees and some immigrant workers into Sabah after 1970.

In 1980, 37.6% of the labour force is estimated to comprise those in the 25-39 age group, compared with 36.3% in 1970. The younger age group 15-24 years also exhibited a similar rising trend where the proportion increased from 32.5% to 34.2% during the period. However, the proportion of the labour force in the age group 50-59 years declined from 10.9% in 1970 to 9.6% in 1980. Similarly, the proportion of those in the age group 60-64 years fell from 3.4% to 2.6% during the period. In absolute terms, however, the trends for these older age groups had been on the increase. Another important feature is the rapid increase in the participation of females in the labour force, particularly in the non-agricultural sectors.

### **III : POPULATION DISTRIBUTION AND URBANIZATION**

A notable feature of Peninsular Malaysia's population in the decade of the seventies was that a greater proportion had become urbanised. Continuing urbanization meant that in 1980, about 35% of the population lived in urban areas, compared with only 28.8% in 1970. In absolute terms, urban population increased from 2.6 million in 1970 to about 4.1 million in 1980 with growth rates averaging 4.6% per annum as shown in Table 4-5.

This rather rapid rate of urbanization during the decade was primarily attributable to the growth of construction, manufacturing, utilities and services sectors which offered an increasing number of job opportunities. Regional development and the establishment of new growth centres also resulted in smaller towns growing more rapidly. The types of skills needed in these areas were less sophisticated, thus encouraging migration from rural areas.

The ethnic composition of the urban population changed with increased involvement of Malays in the industrial and commercial sectors of the economy in line with the New Economic Policy (NEP). While in 1970, only 14.8% of Malays in Peninsular Malaysia were in urban areas, by 1980 the proportion rose to 21.3%. The rate of growth of the urban population was highest for the Malays but the Chinese still accounted for more than half or 53.8% of the total urban population in 1980, followed by Malays 32.8%, and Indians 12.3%.

#### **IV : THE EMPLOYMENT SITUATION, 1970**

At the beginning of the decade there was a labour surplus economy, largely a result of a rapidly growing labour force and relatively low rates of employment growth in the sixties. In 1970, out of a total labour force of 3.7 million, some 3.4 million were employed giving an unemployment rate of 7.8%. In absolute terms about 286,000 persons within the working-age group 15-64 years were unemployed.

By stratum, unemployment rates were higher in urban areas where labour markets were more formalised than in the rural area. In rural areas, though open unemployment rates were low, underemployment was a serious problem. Overall, the female unemployment rate in 1970 was about one and a half times the male unemployment rate. Unemployment was heavily concentrated among young people most of whom were first time job-seekers. In 1970, about 50% of the unemployed were below the age of 19 and another 27% in the age group 20-24 years. Unemployment rates of around 17% and 10% were experienced by those in the age groups 15-19 years and 20-24 years, respectively. These rates were much lower for those above 25 years, ranging on the average around 2% to 4%.

Another striking feature of the unemployed was the high incidence of unemployment among secondary school leavers. While unemployment rates of 5% and 9% were recorded for those with no formal education and those who had completed primary education respectively, lower and upper secondary school leavers experienced an unemployment rate of around 20%. This was largely attributable to the large inflow of secondary school leavers into the labour market in the late sixties as a result of the abolition of the standard six examination and the introduction of automatic promotion to secondary education in 1964.

In 1970, agriculture continued to be the mainstay of the economy, employing more than half of the total workforce, while the manufacturing sector only accounted for 11.4% of total employment. The services sector comprising government services, finance, wholesale and retail trade, and other services employed 27.3% of the workforce. Mining and construction accounted for 2.6% and 4% of total employment in 1970, respectively.

Within the agricultural sector, of the 1.7 million employed in 1970, about 40% were in padi cultivation, mixed farming, the cultivation of miscellaneous crops, market gardening and horticulture, while another 4% were employed in fishing. The cultivation of crops requiring substantial processing which included rubber, oil palm, coconut, tea and coffee, employed 47% of the workforce in agriculture with the majority of them, about 90%, in the rubber industry. Despite the significant decline in rubber estate employment in the sixties, rubber estates and smallholdings still accounted for more than 40% of the employment in agriculture and about 22% of total

employment in the country. Since the majority of the oil palm schemes were only started in the early part of the First Malaysia Plan (1966-70) under the diversification programme, employment in oil palm was insignificant, accounting for only 2% of agricultural employment in 1970.

## **V : EMPLOYMENT GROWTH**

Rapid economic growth during the decade enabled the country to achieve an unprecedented rate of growth in employment of 4.1% per annum resulting in a net increase of about 1,697,600 jobs. Consequently, the unemployment rate as a percentage of the labour force was reduced from 7.8% in 1970 to 5.3% in 1980. Labour force growth also continued to accelerate in the seventies increasing at a rate of 3.9% per annum, adding some 1,698,100 new entrants into the labour market. The effect of such rate of labour force growth, matched against the equally unprecedented rate of employment expansion, was to maintain the absolute numbers unemployed at about 286,500 over the decade. Table 4-6 gives employment by sector and the shares of the various sectors in total employment.

In line with the structural changes in the economy during the seventies, there were significant changes in sectoral employment growth. The pattern of employment growth indicated a shift in the demand for labour away from agriculture to the more productive secondary and tertiary sectors of the economy. During the decade, manufacturing recorded the highest rate of employment growth of 7.6% per annum while employment in construction and utilities also grew rapidly at 6.8% and 6.5% per annum respectively. The services sector also performed well with employment growing at rates higher than the average for the economy as a whole. Employment in government services, finance, and wholesale and retail trade grew at average annual rates of 6%, 5.2% and 5.7%, respectively. Agricultural employment increased at only 1.9% per annum. The low rate of growth of agricultural employment was related to a shift in the structure of economic growth away from agriculture and to a certain extent, the modernization of the sector.

The agricultural sector accounted for only 21% of the new jobs generated during 1971-80, providing on the average 35,200 jobs per year. Correspondingly, the share of agricultural employment in total employment declined substantially from 50.5% in 1970 to 40.6% in 1980. Manufacturing generated the largest number of jobs with a net employment increase of 416,600, accounting for about 25% of total new employment. This increased its share in total employment from 11.4% in 1970 to 15.8% in 1980. The share of construction employment also increased substantially from 4% to 5.2% providing about 126,100 new jobs. Within the services sector, the biggest increase was in the public sector providing a total of 313,500 thus increasing its share in total employment from 11.7% to 13.9%.

Trends in employment growth during the decade indicated that even within each of the sectors substantial changes took place in the composition of employment. In agriculture, the bulk of the new employment came from land development, increases in livestock production and forestry. The rapid expansion of employment in higher income agricultural activities and in the more productive secondary and tertiary sectors of the economy resulted in the movement of labour away from low productive agricultural activities. Towards the end of the seventies, locational labour shortages in certain agricultural activities began to emerge, particularly in new development areas in Pahang, Johor, Trengganu and Kelantan. The number of people involved in activities such as padi cultivation, mixed farming and fishing declined substantially. In Peninsular Malaysia, the proportion employed in such activities declined from 44% of total agricultural employment in 1970 to 36% in 1978.

Employment in rubber estates declined by about 49,000 during 1971-78, or about 22% of the 1970 workforce. Besides the conversion of rubber to oil palm, the decline was also attributable to the technological changes within the rubber industry and the phasing down of labour use in activities related to replanting. This decline was, however, largely offset by the increase in employment in rubber smallholdings so that total employment in rubber remained more or less constant. Employment in oil palm increased fourfold during the period, providing 72% of the new jobs generated in the sector, thus increasing its share in agricultural employment to about 9.5% by 1978.

In manufacturing, the growth in employment was largely due to the strong output growth experienced by the sector, with value added increasing by 12.5% per annum, and the large-scale expansion of labour-intensive and largely export-oriented industries in the seventies. The Monthly Surveys of Manufacturing for Peninsular Malaysia indicated that during 1973-78, employment in labour-intensive industries such as electrical machinery, including electronics, and textiles and clothing, increased at average rates of 22% and 13%, respectively. There was also substantial employment generation in wood-based industries with employment in the manufacture of wood furniture increasing at about 8% per annum. Rubber products industries, however, recorded an employment growth of only 6% per annum during 1973-78. The surveys also indicated that, on the average, employment in food manufacturing, non-electrical machinery and transport equipment industries grew rather slowly, at around 5%, 4% and 6.7% per annum, respectively.

Within the manufacturing sector in Peninsular Malaysia, industries which were given pioneer status accounted for about 37% of the new employment in the sector during 1971-78. The number of establishments given pioneer status increased from 210 in 1970 to 473 in 1978 and these industries generated on the average about 14,200 new jobs annually, thus increasing its share in total manufacturing employment from 10% in 1970 to 23% in 1978.

The rapid growth in construction activity during the decade and the strong demand for housing resulted in a significant growth in employment in the sector. Total employment in the sector increased from 136,700 in 1970 to 262,800 in 1980, indicating an average annual growth rate of 6.8%. Within the services sector, the public sector recorded the highest rate of growth in employment of about 6% per annum. A total of 313,500 jobs was generated over the ten-year period. Much of this expansion in employment was to meet the implementation needs of the development plans, the expansion of education and health services and the expansion in personnel requirements for defence and internal security.

## **VI : LABOUR UTILIZATION**

Unemployment as a percentage of the labour force declined from 7.8% in 1970 to 5.3% in 1980. Both urban and rural unemployment rates declined in line with the overall decline in unemployment. The 1974-78 data from the Labour Force Surveys, Peninsular Malaysia indicated that in the urban areas open unemployment declined from 7.7% to 6.7% while rural unemployment declined from 6.9% to 6.1%. By sex, male unemployment declined from 5.8% in 1974 to 5.4% in 1978 while female unemployment declined more substantially from 9.8% to 7.9%.

There was a significant improvement in the hard-core unemployment situation. during 1974-78, the proportion unemployed for more than a year who were actively seeking work fell from 32.9% of total unemployment in 1974 to 18.8% in 1978. During the same period, the proportion unemployed for six months to one year also dropped from 21.1% to 17.7%. In 1974, of those actively unemployed about 27.2% were unemployed for less than three months, compared with 44.6% in 1978. Thus in line with the improvement in the employment situation in the seventies, the proportion unemployed for long durations dropped and in 1978, about half of those out of work was unemployed for only three months or less.

During the decade, unemployment among youth between the ages 15-19 declined significantly though it still remained high. During 1974-78, the unemployment rate for youth declined from 19.3% to 16.3%. In terms of rural-urban stratum, the unemployment rate for youth declined from 20.7% to 17% in urban areas while in rural areas the unemployment rate declined from 18.7% to 16%. The majority of the unemployed youth were looking for their first job. In 1978, about 58.3% of the unemployed youth had never worked before while the balance of 41.7% had previous work experience. However, since 1974 the proportion of first time job-seekers had dropped from 68.6% to 58.3%.

The rapid upgrading in the educational profile of the new entrants into the labour market resulted in an increasing proportion of upper secondary school leavers entering the labour market. Consequently, the unemployment rate for those with



upper secondary education increased from 10.8% in 1974 to 11.9% in 1978. For those with lower secondary education, the unemployment rate declined substantially from 11.8% to 9% with the drop being more significant for females, from 19.4% to 12.5% while for males it dropped from 9.4% to 7.9%. Despite this, unemployment rates among females with lower and upper secondary education remained considerably higher than those among males.

Despite rapid employment growth in the seventies and overall reduction in unemployment rates, underemployment as a percentage of the labour force increased from 1.5% in 1974 to 2.6% in 1978. The data from the Labour Force Surveys which measured underemployment in terms of hours of work (those working less than 25 hours per week and wanting additional work) indicated that about 113,000 people were underemployed in 1978.

Underemployment was largely a rural phenomenon. During 1974-78, while the urban underemployment rate remained fairly steady, 1.7% in 1978 compared with 1.8% in 1974, underemployment in rural areas increased from 1.9% to 3.1%. In 1978, about 80% of the underemployed were in rural areas. High underemployment in rural areas was related to farm size and substantial seasonality in crop cultivation resulting in vast underemployment of farm labour during the slack season and shortage of labour during harvesting.

Rapid employment growth in the seventies was accompanied by substantial increases in labour productivity. This resulted from a combination of factors such as improvement in the educational and skill attainment of the workforce, adoption of new technologies and modern equipment, as well as modernization of the administrative services in the public and private sectors. During 1971-80, overall output in real terms grew at 7.8% per annum with 53% of this growth arising from new employment and 46% reflecting increases in productivity. Consequently, as shown in Table 4-7, real value added per worker rose from \$3,624 in 1970 to \$5,141 in 1980, reflecting an increase of 3.6% per annum in labour productivity.

The increase in output per worker was experienced in most sectors of the economy. During 1971-80, output in agriculture grew at 4.3% per annum with 44% of the increase in output arising from new employment, while 56% of the growth reflected increases in labour productivity. In absolute terms, value added per worker increased from \$2,215 to \$2,810. In manufacturing, productivity grew more rapidly at 4.6% per annum compared with 2.4% in agriculture. Consequently, while in 1970 output per worker in manufacturing was about 1.9 times that in agriculture, in 1980 it increased to about 2.4 times the productivity in agriculture. In 1980, output per worker in agriculture was about the same as in the other services sector. In construction, output per worker increased at 2.7% per annum during the period.

The analysis of wage movements during the decade was rather restricted in coverage in view of limited data on wages and earnings for the various sectors of the economy. Within the agricultural sector, data on average monthly earnings in rubber estates were available from the Rubber Monthly Statistics of Malaysia for the period 1973-79. A study on wage trends and differentials indicated that during 1973-79 real earnings in rubber estates grew by only 1.8% per annum while those of tappers grew at even a lower rate, around 1% per annum during 1973-78. Relative to rubber, the 1973-79 data on earnings in oil palm estates indicated that overall real earnings had grown faster, at 4.6% per annum.

In manufacturing, the data from the Monthly Industrial Statistics, Peninsular Malaysia, covering selected industries, indicated that wages grew fairly steadily with a slightly higher rate of growth during 1976-79. However, in view of the high rate of inflation in 1973/74, real wages remained more or less constant during 1973-75, after which they began to rise with a significant jump of 5.2% between 1978-79. Overall for the period 1973-79, real wages rose at an average annual rate of 2.6%. The rates varied from industry to industry with real wages growing by 4% to 5% per annum in plywood and particle board, textiles, and automobile and lorry assembly; at 3% to 4% for rubber remilling and electrical appliances; and at only 1.3% for rubber products manufacturing. Real earnings in textiles and electronics grew at 4.8% and 3.4%, respectively. However, in 1979 average monthly earnings in electronics was still 13% higher than in textiles. In general, most of the larger industries and the high growth industries of the seventies experienced higher rates of growth in earnings than the average for all industries. This, however, was partly attributable to the lower level of earnings at which they started relative to the older and more established industries.

## **VII : OCCUPATIONAL STRUCTURE OF EMPLOYMENT**

The estimated growth of employment by major occupational group is shown in Table 4-8. During the period 1971-80, the shares of all occupational groups increased steadily except the agricultural workers whose share declined from 48.3% in 1970 to 38.8% by 1980. In contrast, the share of production workers increased from 25.2% in 1970 to 30.8% in 1980. This reflected the shift towards industrialization and the success of the Government's industrial strategy during the decade.

Although the share of agricultural workers declined sharply, in absolute terms it still increased by about 337,400 during the decade, more than half were in Peninsular Malaysia. This represented a growth of 1.9% per annum, compared with 6.2% for production workers, 5.9% for service workers, and between 5.2% and 5.8% for the other occupational groups. The higher growth rates for these categories of workers indicated a trend towards greater demands for better educated labour force. The number of administrative and managerial workers increased by only 25,700, while production workers registered the highest increase of 710,600 or about 42% of the

total increase of 1.7 million during the period. The increases for service, sales, clerical, and professional and technical workers were 195,300, 198,000, 110,000 and 120,600, respectively.

The pattern of sectoral employment by major occupational group is shown in Table 4-9. In the primary sector, the bulk or 95% of the workforce in 1980 was made up of agricultural workers. Within the sector, the professional and technical, and administrative and managerial workers increased at rates of 2.9% and 3.1% per annum respectively, compared with 1.9% for the agricultural workers, indicating to a certain extent the effects of agricultural modernization during the decade. In the secondary sector, production workers accounted for about 86% of the workforce in 1980, while clerical workers accounted for 6.2% and the other groups between 0.5% and 2.7%. There was a small but steady increase in the share of production workers during the period, from 84.5% in 1970 to 85.5% in 1980. All categories of workers showed high rates of growth, particularly the sales, professional and technical, and production workers, increasing at 7.2%, 6.8% and 6.5% per annum, respectively. These indicated a significant advance in the drive towards industrialization, particularly in the promotion of labour-intensive industries. In the tertiary sector, the composition of the workforce was more balanced. In 1980, sales, service and production workers accounted for 27.6%, 25% and 20.3%, respectively. Compared with the other sectors, this sector showed a very high proportion of professional and technical workers, accounting for 14.3% of the total workforce in the sector. The clerical, administrative and managerial, and agricultural workers made up only 10.9%, 1.4% and 0.5%, respectively.

The data also showed the distribution of the occupational groups among the sectors. The bulk of professional and technical, sales and service workers in 1980 were found in the tertiary sector, accounting for 86.3%, 95.9% and 93.6% of the workforce in those groups, respectively. The concentration of professional and technical workers in this sector was largely explained by the primary and secondary school teachers and nurses. While almost all of the agricultural workers were found in the primary sector, those in the administrative and managerial group, the clerical group and the production group were concentrated in either the secondary or tertiary sector. In 1980, about 58% of administrative and managerial workers and about 74% of production workers were in the secondary sector, but the majority of clerical workers or about 66% were in the tertiary sector.

Over the decade, the distribution of occupational groups among the sectors had been changing resulting from structural changes in the economy as shown by the different rates of growth of occupational employment among the sectors. In the professional and technical group, the average annual growth rate of these workers differed among the sectors, ranging from 2.9% for the primary sector to 5.9% for the tertiary sector and 6.8% for the secondary sector. Similarly, the administrative and managerial workers increased at a rate of 3.1%, 5.6% and 5.5% in the primary, secondary

and tertiary sectors, respectively. Such wide differences in the growth rates were also found for the other occupational groups, affecting the overall sectoral employment pattern. Thus the proportion of the total workforce in the primary sector declined from 50.5% in 1970 to 40.6% in 1980. However, the proportion of the secondary sector workforce increased from 21.4% to 26.5% and that of the tertiary sector workforce from 28.1% to 32.9%.

## **VIII : SUPPLY OF TRAINED MANPOWER**

The decade of the 1970s experienced a substantial expansion of education and training institutions to meet the increasing manpower requirements generated by the growth of the economy. The rapid economic growth during the period brought about an expansion of employment opportunities both in the public and private sectors. This led to a heavy demand especially for high and middle level manpower in the scientific technical and managerial fields.

To overcome the shortage of high and middle level manpower, the period 1971-80 witnessed a rapid expansion of tertiary education. In 1970, there were only two universities - the Universiti Malaya (UM) and the Universiti Sains Malaysia (USM) - with a total enrolment of 7,498 students. By 1975, the number of universities had increased to five with the establishment of the Universiti Kebangsaan Malaysia (UKM) and the upgrading of the College of Agriculture to Universiti Pertanian Malaysia (UPM) and that of the Institut Teknologi Kebangsaan to Universiti Teknologi Malaysia (UTM). At the college level, the Institut Teknologi MARA (ITM), the Kolej Tunku Abdul Rahman (KTAR) and the Politeknik Ungku Omar expanded in terms of their facilities and courses. In addition to these three colleges, the Politeknik Kuantan was established in 1976. With the establishment and expansion of these universities and colleges, total student enrolment in degree and diploma courses increased threefold from 11,000 in 1970 to about 34,300 by 1980.

The bias towards degree programmes in the past had resulted in significant shortages of middle level manpower, especially in the scientific and technical fields. However, as shown in Table 4-10, progress had been made in increasing the supply of sub-professional technical manpower vis-a-vis the professionals. During 1971-80, a total of 5,400 diploma holders in various technical subjects was produced, compared with 2,150 degree holders. In agriculture and related sciences, a total of 2,980 diploma holders was produced, compared with 980 degree holders over the period. The acute shortage of sub-professionals would remain for quite some time as some of the diploma holders would pursue higher studies either immediately after graduation or, in the majority of cases, after working for a short while to gain the necessary experience. The two-tier programmes in UTM and UPM helped to increase the supply of sub-professionals in the scientific and technical fields.

The degree programmes in the universities were biased towards the arts and humanities resulting in shortages of scientific and technical manpower at the professional level. There had, however, been a shift in the course structure in the universities as shown in the Table. The proportion of students enrolled in arts declined from 63.5% in 1970 to 47.8% in 1980, while that in science and technical courses increased from 36.5% to 52.2%. In terms of output, the ratio of science (science including technical courses) to total output improved from 35% during 1971-75 to 39% during the second half of the decade, which was still below the desired target of 60%.

With the rapid economic development taking place during the last decade, there was a great need to ensure that shortages of skilled and semi-skilled manpower of various categories would not hinder industrial and agricultural development. Efforts were made by the public sector to expand training programmes in order to accelerate the production of skilled and semi-skilled manpower required by industry. The private sector was also encouraged to provide more opportunities for on-the-job training to supplement and complement existing training programmes. The vocational, technical, industrial and agricultural training in the public sector was carried out mainly by the Ministry of Education, the Ministry of Labour and Manpower, the Ministry of Agriculture, the Ministry of Culture, Youth and Sports, and MARA.

Table 4-11 shows the enrolment and output of skilled and semi-skilled manpower from various public training institutions in the country, including KITAR, Politeknik Ungku Omar and Politeknik Kuantan which also provided courses at the technician level apart from their diploma programmes. The annual output showed a steady upward trend, from about 3,200 in 1970 to around 13,000 by 1980. A total of about 87,300 youth was trained during the period 1971-80, of which about 42,000 or 48.2% were from the vocational schools. The other major contributors were the technical schools, the various Institut Kemahiran MARA and the Industrial Training Institutes under the Ministry of Labour and Manpower, producing about 17,700, 7,400 and 7,200 respectively. The increasing skill output from these training institutions reflected not only the skill demands of industry but also the priority given to enhancing educational and training opportunities, particularly for youth.

The type of skilled and semi-skilled manpower produced by the public sector training institutions is indicated in Table 4-12. More than half of the total output during 1971-80 were trained in various engineering trades, of which the bulk or about 30,000 were trained in mechanical trades. The other popular engineering course at the certificate level was electrical trades which produced about 13,300 skilled technicians, or slightly less than half of the output from mechanical trades. The training done in building trades, commerce, home science and agriculture was also significant, with output ranging from about 6,800 for agriculture to about 14,800 for building trades. The substantial increase in output for most of the skill trades suggests a strong demand for skilled technicians and craftsmen which could only result from

## **IX : CONCLUSION**

Although fertility has been declining over the decade, its impact on the labour force will be felt only in the late eighties and nineties. Despite a high rate of labour force growth during the decade resulting from the post-war baby boom, the rapid expansion of the economy was able to generate sufficient job opportunities, significantly improving the employment situation. The reduction of the unemployment rate, fuller utilization of labour and increasing labour productivity reflect not only the success of the development efforts towards achieving the New Economic Policy (NEP) objectives but also the effective implementation of the training programmes both in the public and private sectors. The occupational structure of employment indicates that as the economy grows and modernises, there will be greater demand for better educated and trained manpower

## **CHAPTER 05 : REGIONAL DEVELOPMENT**

### **I : INTRODUCTION**

The objective of regional development under the New Economic Policy (NEP) is to narrow the disparities in the standard of living between the regions by accelerating the rate of growth of the less-developed regions relative to those which are more developed. This is to be achieved through the exploitation of the full potential of the human and physical resources of the less developed regions and through equitable distribution of basic services and amenities. In pursuing the above objective, regional development will contribute to the restructuring objective of the NEP by increasing the share of Bumiputera employment in modern economic activities and creating a strong and viable Bumiputera commercial and industrial community through the dispersal of industries as well as the development of existing urban areas and the establishment of new townships.

### **II : REGIONAL ECONOMIC GROWTH**

Progress achieved in raising the level of economic activity and income of the population of each state is reflected in the changes in Gross Domestic Product (GDP) and per capita GDP of the states. Tables 5-1 and 5-2 show the GDP by industry of origin and the per capita GDP of the states in real terms for the years 1971 and 1980 respectively, indicating changes in the levels of regional economic activity and income during the period 1971-80. At the beginning of the decade, Selangor, which included the present Federal Territory, was the richest state with a per capita GDP almost double the national average and an overall high rate of economic activity. On the other hand, Kelantan, with its per capita GDP less than half the national average, was the poorest state. Kedah, Perlis and Trengganu were also low-income states at the beginning of the decade. The population of these states was mainly rural-based, engaged in low-productive, traditional agricultural activities. Changes in the GDP and per capita GDP over the period are summarised in table 5-3. Johor, Melaka, Negri Sembilan, Pahang, Perak and Pulau Pinang fell within the category of middle-income states with relatively high per capita income. These states possessed high levels of activities in the primary and secondary sectors. Sabah, supported by its forestry output, and Sarawak, boosted by its forestry and petroleum production, were also middle-income states.

By the end of the decade, some progress was achieved in raising the income levels of the poor states. Trengganu's growth in GDP and per capita GDP was remarkable at 12.3% and 8.8% per annum, despite a population growth rate of 3.2% per annum,

substantially higher than the national average of 2.8%. Trengganu's economic growth can be attributed to the off-shore petroleum production which began late in the decade and to the large-scale land development programme in the Trengganu Tengah area. Kelantan's GDP grew at 7.4% per annum compared with the national GDP growth rate of 8.1%, with the manufacturing, utilities, government and other services representing the fastest growing sectors. With a 2.7% population growth rate, Kelantan's per capita GDP increased at 4.6% per annum compared with the national per capita GDP growth rate of 5.1%.

Economic growth in Kedah/Perlis was attributable to the accelerated development of modern industrial activities following the establishment of industrial estates especially in the latter part of the decade. The manufacturing sector of Kedah grew at 12% per annum during the period 1971-1980 which was comparable with the national average of 12.5%. The overall accelerated growth coupled with a relatively low population growth of 1.8% per annum resulted in a per capita GDP growth rate of 4.7% per annum for the states. In Perlis, there was an improvement in overall agricultural productivity and income due to better irrigation facilities in the Muda Agricultural Development Authority (MADA) area, improved animal husbandry practices and better marketing facilities. Industrial ventures also helped the state to achieve economic growth during the period.

Among the middle-income states, Pulau Pinang, Sabah and Johor registered high rates of economic growth. During the decade, the manufacturing and services sectors of Pulau Pinang grew at 18.9% and 10.3% per annum, respectively, higher than the national growth rate for these sectors, contributing to the high growth of GDP and per capita GDP. Johor's economic growth was the result of increased agricultural output in the state mainly from land development and expansion of industrial and commercial activities. In Pahang, large-scale land development in the Pahang Tenggara and Jengka areas and the subsequent establishment of resource-based industrial activities were the major contributors to the state's growth in GDP. Perak, Negri Sembilan and Melaka continued to expand their economic base through increased output in the agricultural and industrial sectors. In 1980, agriculture remained the largest contributor to Perak's GDP, while manufacturing emerged as the second largest in place of mining.

Petroleum production, which began in the later part of the decade, and the exploitation of forest resources helped Sabah achieve an annual GDP growth rate of 9.4%. In Sarawak, timber and petroleum production continued to be the mainstay of the economy which grew at 7.9% per annum. The Federal Territory had the highest per capita GDP followed by Selangor, both experiencing high levels of economic activity in the manufacturing and services sectors. In 1980, output from the manufacturing sector of the Federal Territory and Selangor together accounted for 46% of the total manufacturing output of the country.



The Agriculture Census 1977, which covered rural and urban households in both agricultural and non-agricultural sectors, shows that Kelantan had the lowest monthly gross income per household, followed by Kedah, Perlis, and Trengganu. In 1976, about 75% of the households in Kelantan and 70% in Kedah, Perlis and Trengganu earned income less than \$300 per month compared with the national average of 49%. The percentage of households in Sabah earning income less than \$300 per month corresponded with the national average, while that of Sarawak was higher at 56%. Selangor and the Federal Territory had 30% and 15% of their households, respectively, within this income category.

Efforts to improve the quality of life of the people in all regions were centred mainly on the provision of adequate social and infrastructural facilities such as health, education, transport and communications, utilities and recreation. Table 5-4 contains some social indicators for the years 1970 and 1980 which reflect the progress made during the decade in achieving a more equitable distribution of such social services between states. The decrease in infant mortality rates between 1970 and 1980 indicates improvements in general health. While the low-income states of Kelantan and Trengganu registered rates substantially higher than the national average, there was a marked decrease in the rates during the decade for these states. In the less developed states, there was a decrease in the number of persons per registered doctor and dentist as well as in the number of people per acute hospital bed and rural/midwife clinic, reflecting a better distribution of basic health services. Overall improvements in education facilities and the access to such facilities during the past decade are reflected in the teacher/pupil ratios and the transition rates between various educational levels. The purchasing power within a state can be gauged, among other indicators, by private vehicle ownership as indicated by registration of private motorcars and motorcycles. While the more developed states continued to show a rapid increase in the purchase of motor vehicles, there was also an upward trend in the registration of private vehicles in the less-developed states.

The urban population of Peninsular Malaysia grew by 4.6% per annum during 1971-1980 in response to the increasing number of job opportunities generated by the growing manufacturing and service sectors, the establishment of new townships in regional development areas, and the growth of intermediate towns. States which underwent high rates of urban growth were Trengganu, Kelantan, Negri Sembilan, Pahang, Selangor and the Federal Territory. In 1980, Selangor, which encompasses the highly industrialized Kelang Valley, and Pahang experienced the highest rates of urbanization, doubling their 1970 urban population. The growth rates of Melaka and Pulau Pinang were the lowest.

During the early part of the decade, urban development was mainly concentrated in towns with population size of 75,000 and above, with the four largest towns of Kuala Lumpur, George Town, Ipoh and Johor Bahru accounting for 44% of the urban population in 1970. However, rapid growth of these towns had led to urban

congestion, rising opportunity costs of land, problems of water supply and waste disposal and, therefore, efforts were made to regulate urban expansion and seek a balance between the positive and negative features of urban growth. Subsequent to these efforts, the later part of the decade saw the relative lessening of the dominance of these towns and the increasing importance of intermediate towns within the category of 40,000-75,000 population such as Kota Bahru, Alor Setar and Kuantan. These intermediate towns had strong potential for growth and were identified under the Third Malaysia Plan (TMP) for priority development into growth centres.

Various programmes were implemented under the urban strategy to spread urban development and reduce concentration of population and urban activities in the already congested urban areas. More towns were established in the less-developed regions to provide easy access to urban services and facilities and market outlets for the rural population as well as to act as a catalyst for growth and industrial development within these regions. In addition, new townships in regional development areas such as Bandar Muadzam Shah in Pahang Tenggara and Bandar Penawar in Johor Tenggara, as well as existing urban areas with potential for resource-based economic activities like Gua Musang in Kelantan Selatan, were identified for priority attention. Much progress was made during the decade in developing the basic infrastructure requirements for these towns. By the end of the decade, 28 new townships were established in the regional development areas of Johor Tenggara, Kelantan Selatan, Pahang Tenggara, Jengka and Trengganu Tengah involving the settlement of about 74,000 people. The development of these new townships contributed to the restructuring objective of the NEP through increased urbanization of Bumiputera and the provision of opportunities for the development of a Bumiputera commercial and industrial community. By 1980, Bumiputera individuals and trust agencies held about 77% of the total share capital of public enterprises in agriculture, forestry, mining and quarrying, construction, tourism and agro-based industrial ventures in Pahang Tenggara, 98% of that in Johor Tenggara, 99% and 100% in Trengganu Tengah and Kelantan Selatan respectively. In addition, 20 Bumiputera private sector companies engaged mainly in plantation, forestry and other agro-based industries were established in these areas.

In Sabah, urban services were concentrated in four main towns of Kota Kinabalu, Sandakan, Lahad Datu and Tawau, all of which are situated in the coastal areas, while the hinterland was served by small towns with a limited range of services. During the decade, 20 new townships were identified for priority attention, and programmes for the development of nine of these towns were initiated in 1980. At the same time, an urban study for Kota Kinabalu was completed aimed at the formulation of specific targets and guidelines for its future economic and spatial expansion. In Sarawak, there was concentration of economic activities around the main towns of Kuching, Sibul and Miri, and efforts to disperse growth through a strong urban network throughout the state included the identification of nine sub-regional centres for

priority development. In addition, Bintulu was identified as a regional growth centre to serve the potential development area of the Fourth Division, and towards this end, an urban study was completed to prepare economic, social and physical plans for its orderly growth.

In order to ensure systematic and integrated development of areas, new townships and growth centres, a number of masterplan studies were undertaken during the decade, such as the Pahang Tenggara, Johor Tenggara and Miri-Bintulu regional studies, which provided a comprehensive basis for regional development efforts as well as a long-term plans for the phased development of these areas. Studies were also undertaken to assist in the identification of the opportunities for the re-development of areas such as the Trengganu coast and Trans-Perak. Urban studies were completed for Kelang Valley, Pulau Pinang and South Johor, providing guidelines for their orderly development in the face of rapid urbanization and industrial growth.

During the decade, programmes and projects implemented in the agricultural, industrial and infrastructural sectors contributed substantially to the growth of regions through the accelerated development of their natural resources, improved spatial distribution of industrial activities and growth centres as well as the development and improvement of their infrastructural and communication networks.

Natural resources development. During the decade, new land development programmes provided an important means of promoting growth in the less-developed states through greater utilization of land. As shown in Table 5-5, a total of 154,080 hectares were developed in Kedah, Kelantan, Perlis and Trengganu involving the settlement of about 16,000 households, mainly the underemployed and landless, thereby providing them with more productive employment and relieving population pressure in the agricultural areas. In addition, about 5,700 households from these states also benefitted from employment opportunities created in the land development schemes in Johor, Pahang and Negri Sembilan which accounted for the bulk of land developed and had the capacity to absorb settlers from both within and outside the states.

In situ development of agricultural areas was also given emphasis. The major programmes undertaken during the period in the less developed states included the Integrated Agricultural Development (IAD) projects, namely Muda Phase I project in Kedah, Kemubu project in Kelantan and Besut project in Trengganu which, taken together, helped raise the productivity of 160,000 hectares of agricultural land and the income of 109,000 farm families in these states.

The development of forestry and mineral resources in the less developed states provided opportunities for the diversification of their economic base. The progressive shift in the concentration of forest-based industries from the west coast

to the forest-rich east coast states of Kelantan, Pahang and Trengganu enhanced the role of the forestry sector in the industrial development of the states. By 1980, 209 of such industries were located in the east coast states, compared with 153 in 1971. During the decade, efforts were undertaken to exploit the known mineral deposits identified through prospecting exercises carried out in the earlier years. Production of petroleum in Trengganu and copper and petroleum in Sabah which began during the decade had a significant effect on the economies of these states. In 1980, the mining sector contributed 21.9% and 13.0% to the GDP of Trengganu and Sabah respectively, compared with 4.5% for Trengganu and 0.3% for Sabah in 1971.

Migration. During the decade, substantial inter-state movement of people was experienced, much of which could be attributed to the response to job opportunities available in the manufacturing and services sectors. The planned relocation of excess labour from the congested and depressed agricultural areas to other areas with underdeveloped resources also played a role in this movement. During the period 1971-80, Johor, Kedah, Kelantan, Melaka, Perak and Pulau Pinang had relatively high net outflow of migrants. Pahang experienced a high net inflow of migrants which provided the labour force needed for the land development and settlement programmes in the state. Selangor and the Federal Territory which had a high concentration of modern economic activities, especially in the Kelang Valley, absorbed a substantial number of migrants from other states through the availability of employment opportunities in the secondary and tertiary sectors. In 1980, employment in the manufacturing, construction, transport, government and other services sectors in the Kelang Valley alone grew by more than 100% above its 1970 position, generating about 465,000 jobs during the decade. Sabah also experienced a large net inflow of migrants providing labour for lower occupational categories, particularly in the logging and plantation activities of the state. Low net migration was experienced by Perlis, Trengganu and Sarawak.

Industrial dispersal. At the beginning of the 1971-80 period, industrial activity was concentrated in the more developed states of Johor, Negri Sembilan, Perak, Pulau Pinang and Selangor. Together, these states contributed 87% to the total manufacturing output of the country in 1971, with the Kelang Valley alone accounting for 51%. Out of the nine industrial estates, only one was located in the less-developed states. During the decade, dispersal of industries to the less-developed states was encouraged through the provision of locational incentives, improvement of infrastructural facilities and establishment of industrial estates. By 1980, these states increased their share of industrial activities, accounting for 20 out of the 76 industrial estates established throughout the country during the decade, and 136 or 28% of the ready-built factories offered for sale by the Malaysian Industrial Estates Sendirian Berhad (MIEL). Of the 4,200 industrial projects approved by the Malaysian Industrial Development Authority (MIDA) during the decade, 338 or 8% were for implementation in the less-developed states of Kedah, Kelantan, Perlis and Trengganu, accounting for a proposed capital investment of \$1.2 billion and proposed

employment of 53,000 workers. The share of manufacturing output in the economy of these states increased from 4.3% in 1971 to 6.7% in 1980. Table 5-6 shows the progress made in the dispersal of industries to the less-developed states during the period 1971-80.

Infrastructure and communications. Emphasis was placed on infrastructural and communications development, particularly in the east coast of Peninsular Malaysia and Sabah and Sarawak, to help strengthen the physical linkages between regions. The strengthening of such linkages, apart from fostering closer integration between regions, also paved the way for greater mobility of factors of production, such as machinery and equipment and skilled labour, essential for accelerating agricultural and industrial development in these regions. The major highway and road projects initiated during the decade included the East-West highway, the Kuantan-Segamat highway, the Kuala Krai-Gua Musang-Kuala Lipis-Bentong highway, and the Jerangau-Jabor highway. The East-West highway and the Kuantan-Segamat highway were nearing completion towards the end of the decade. When completed, The East-West highway would facilitate the development of the northern and eastern hinterlands of Peninsular Malaysia and would link the eastern region with Pulau Pinang, while the Kuantan-Segamat highway would support development efforts in the southern and eastern regions of Peninsular Malaysia. The Kuala Krai-Gua Musang-Kuala Lipis-Bentong highway, which is in the early stages of construction, would, on completion, provide the impetus to resource and industrial development in Ulu Kelantan and North-West Pahang. The Jerangau-Jabor highway, which is the spinal road for Trengganu Tengah, was completed during the decade, providing increasing accessibility to areas of high development potential.

The completion of the Papar-Sindumin, Tamparuli-Ranau and the Semporna-Lahad Datu roads in Sabah in the Fourth Malaysia Plan (FMP) period would link the eastern and central areas with the relatively more developed west coast. In Sarawak, a number of roads under the First Trunk Road System was upgraded to improve linkages between the major towns.

The expansion and modernization of port and airport facilities also made a significant contribution towards greater flow of inter-and intra-regional movement of activities during the decade. The establishment of the port at Pasir Gudang in Johor provided an important outlet for the southern region of Peninsular Malaysia and Sabah and Sarawak. The Kuantan Port, when fully operational, would complement the agricultural and industrial development of the eastern region. The major airport improvement and extension programme undertaken during the decade at Kota Bharu, Alor Setar, Kuching and Kota Kinabalu, apart from providing improved air services, also helped foster closer linkages between regions. Work to develop the airport at Senai into a regional air cargo centre commenced during the later part of the decade.

### **III : CONCLUSION**

Although the various programmes implemented in the last decade had contributed to the reduction of regional disparities, regions and states still experience different rates of growth as the result of their varying historical development and resource endowments. Much more, therefore, remains to be done to spur and accelerate the development of the less-developed regions through the optimal exploitation of their resource potential and the provision of social services to bring about a more equitable distribution of socio-economic benefits accruing from a growing economy. The policies and programmes in the FMP will be designed to further narrow the regional disparities by effecting a shift in the pattern of investment and channelling development efforts to the less-developed states of Kedah and Perlis located in the northern region and Kelantan and Trengganu in the eastern region. Besides contributing to the accelerated development of the nation as a whole, the redressal of regional imbalances will ensure greater opportunities for economic and social advancement of people in different parts of the country, thereby enhancing their well-being in accordance with the goals of the NEP.

## **CHAPTER 06 : PUBLIC SECTOR PROGRAMME AND ITS FINANCING**

### **I : INTRODUCTION**

The public sector programmes of the past decade represented a major effort by the Government to implement the objectives of the New Economic Policy (NEP). The programmes and projects were designed to expand employment opportunities and to improve the productivity and incomes of the poor, to accelerate the pace of restructuring society and to expand the productive capacity of the economy through investments in infrastructural facilities, education and training. In addition, emphasis was placed on programmes such as health, housing and other social services to improve the quality of life. The expansion of the public sector programmes, including the strengthening of the economic base of the less-developed states, stimulated private sector activity and, therefore, contributed to the overall rapid progress of the country.

### **II : DEVELOPMENT EXPENDITURE**

The total public development expenditure for the decade amounted to \$34,730 million out of an allocation of \$48,179 million, representing an achievement of 72.1%. Under the Second Malaysia Plan (SMP), 1971-75, public development expenditure amounted to \$9,793 million out of an allocation of \$11,457 million, while in the Third Malaysia Plan (TMP), 1976-80, this amounted to \$24,937 million, out of an allocation of \$36,722 million. The rapid expansion of public development expenditure during the TMP was due to the improvement in the machinery for project preparation, the expansion in the implementation capacity of public sector agencies and to a certain extent, cost escalation.

The investment component of public development expenditure amounted to \$23,620 million or 67% of total development expenditure. The remainder of the public development expenditure was mainly spent on transfers to the private sector. Under the SMP, public sector investment was \$6,326 million or 64.1% of the development expenditure, while under the TMP, it amounted to \$16,934 million or 67.9% of the total development expenditure. Overall, during the decade, public investment grew at 20.8% per annum in current prices, or at 12.6% in real terms, due to increases in prices of construction materials and capital goods. The rapid increase in public investment resulted in the share of the public sector in total investment to increase in real terms, from 32.1% in 1970 to 33.2% in 1980.

As shown in Table 6-1, Federal Government expenditure accounted for 82.4% of the total development expenditure for the period under review. The state governments and public authorities accounted for 9.8% and 7.8% of total development expenditure respectively. During the decade as a whole, expenditure by the Federal Government grew at 21.3% per annum, while expenditure by state governments and public authorities grew at a rate of 19.2% and 27.4% per annum, respectively.

### **III : PATTERN OF DEVELOPMENT EXPENDITURE**

One of the major improvements during the decade was the development of specific criteria in the allocation of public development expenditure. Emphasis was given to programmes and projects which would have the greatest impact on reducing the wide economic and social imbalances existing among the races and within the ethnic groups and within the regions, with the view to reducing the incidence of poverty and restructuring of society. Considerable emphasis was also placed on building up infrastructural facilities such as roads, railways, ports and airports and in expanding the supply of skilled manpower.

In addition, the public development expenditure was used to improve the macro-economic performance of the economy through appropriate annual phasing of development expenditures to soften the impact of external economic conditions on the domestic economy. Overall, the impact of the public sector programmes was to contribute significantly towards the achievement of the NEP objectives and to expand the productive capacity of the economy.

A major portion of the development expenditure was for economic and social programmes followed by expenditures on defence and internal security, and general administration. Table 6-2 provides information on development expenditure by sectors of the economy. Within the economic sector, which amounted to \$18,527 million or 53.3% of the total development expenditure, agriculture and rural development was given the highest priority amounting to \$6,466 million or 18.6% of the total development expenditure. Within the agriculture and rural development sector, the major expenditures were on land development, rubber replanting, drainage and irrigation, agricultural credit and marketing. The expenditure of \$3,824 million on land development included programmes of the Federal Land Development Authority (FELDA), Federal Land Consolidation and Rehabilitation Authority (FELCRA), and other regional agencies such as the Pahang Tenggara Development Authority (DARA), Johor Tenggara Development Authority (KEJORA) and Trengganu Tengah Development Authority (KETENGAH).

Infrastructure development expenditure amounted to \$7,350 million or 21.2% of the total development expenditure. Expenditure on infrastructure included construction costs of highway networks, ports and airports, telecommunications, and water and



electricity supply. A considerable portion of the expenditure was directed at improving the infrastructural facilities in less-developed areas, including those in the more developed states, in order to expand the momentum of economic activities and to improve the quality of life. Among others, a total of \$2,463 million was spent on improvement and construction of roads and bridges, and \$243 million on rural electrification. In addition, infrastructural facilities in the urban areas were considerably expanded and strengthened to cater for the increasing urban population and economic activities.

The expenditure on commerce and industry amounted to \$4,679 million or 13.5% of the development expenditure. The main focus of expenditure on commerce and industry was to enable public enterprises such as the Perbadanan Nasional Berhad (PERNAS), the Urban Development Authority (UDA), the Majlis Amanah Rakyat (MARA) and the State Economic Development Corporations (SEDCs), to expand their activities in support of greater involvement of Bumiputra in commerce and industry. In addition, funds were provided for the expansion of the Malaysian International Shipping Corporation (MISC) and the Malaysian Shipyard and Engineering Berhad (MSE). As a result of the funds channelled by the Federal Government to these agencies by means of loans, equity investments and grants, the involvement of the public sector in the production of goods and services in the country expanded.

The share of expenditure on education, health, housing and other social services amounted to \$4,845 million or 14% of the total development expenditure. The largest component of expenditure for the social sector was on education and training to meet the rising enrolments, especially at the secondary level, and to improve the quality of education. Of significance was the expenditure of \$2,244 million on the expansion of vocational and technical schools, vocational training institutions and institutions of higher learning to increase the supply of skilled and high level manpower. The expenditure on health was for the modernization and construction of hospitals and for the expansion of health clinics in both the rural and urban areas. Expenditure on defence and internal security accounted for \$4,552 million or 13.1% of the total development expenditure while that for general administration amounted to \$615 million or 1.8%. The expenditure on general administration was mainly for the construction of new office buildings and purchases of equipment.

As shown in Table 6-3, the allocation for anti-poverty projects amounted to \$2,350 million or 26.3% of the Federal allocation during the SMP, while allocation for restructuring of society amounted to \$508 million or 5.6% of the Federal allocation. During the TMP, the allocation for anti-poverty projects was \$6,373 million or 20.5% of the Federal allocation and the allocation for restructuring of society was \$2,376 million or 7.6% of the Federal allocation. The respective allocations by state during the TMP is shown in Table 6-4. About 16.5% of the allocation were in the less-developed states of Kedah, Kelantan, Melaka, Perlis and Trengganu where income levels were below those of others.

The bulk of the expenditure in the less-developed states was for the development of agriculture, infrastructure and social services. One of the major tasks undertaken to speed up the development of these states was to improve project planning and implementation capacity. The existence of on-going projects from previous plans which had to be carried into the TMP as well as several projects which were national in nature benefitting several states, made it difficult in the short-term to effect marked changes in the quantum and the direction of the resources allocated. During the TMP, necessary steps were taken to redirect certain physical facilities where feasible, to stimulate economic activity in the less-developed states and their effects could be felt only in later years when the projects are fully completed.

#### **IV : FINANCING OF THE PUBLIC SECTOR PROGRAMME**

The financing of the public sector programme during the decade called for a major effort on the part of the Government to mobilise domestic and foreign resources, given the urgent need to expand the economy on the one hand and to ensure reasonable levels of price stability on the other. Malaysia was able to withstand the challenge through sound policies and programmes aimed at diversifying the economic structure and therefore the revenue base, and through appropriate fiscal and monetary policies, to broaden the tax base of the country. Monetary and fiscal policies, while placing primary emphasis on price stability, were able to mobilise domestic resources through the development of viable financial institutions and capital market to finance both public and private investments. The success of these policies enabled Malaysia to finance about 84% of the overall development expenditure requirements from domestic sources during the decade. The major sources of revenue of the Federal and state governments are shown in Table 6-5. Total revenue increased at 18.1% per annum during the decade from \$2,861 million in 1970 to \$15,048 million in 1980. Federal Government revenue increased at an average rate of 18.3% per annum above the rate of growth of the Gross Domestic Product (GDP) in current prices of 15.1% per annum, reflecting the elastic revenue base of the economy, while revenue of the state governments increased by 16.8% per annum. Revenue from taxation accounted for 76.3% of total revenue, while the rest were from non-tax sources such as licenses, permits, fines and services fees.

Revenue from direct taxes, such as personal and corporate taxes, increased at a rapid rate of 22.8% per annum from \$701 million in 1970 to \$5,466 million in 1980, reflecting the strengthening of the income base of the economy and the increase in the number of income tax payers as well as new sources of revenue such as excess profit tax (1975) and petroleum cash payments. Direct taxes as a portion of Federal Government revenue increased from 29% in 1970 to 43% in 1980.

Revenue from indirect taxes increased from \$1,299 million in 1970 to \$6,457 million in 1980 or at an average annual rate of 17.4% for the decade. The growth in indirect taxes was due to substantial increase in collections from traditional sources such as export and import duties, surtax, excise duties and road tax and the introduction of new taxes such as sales tax (1972), tin and palm oil export surcharges (1974) which were merged with the existing export duties in 1978, services tax (1975) and petroleum export tax (1980). While taxation resulted in substantial revenue to the Government, it was also used to promote investment and to improve the free flow of goods within the country through the harmonization of tax rates between Peninsular Malaysia, Sabah and Sarawak. In addition, it was also used to promote a more equitable distribution of income and wealth through a progressive income tax structure and to alleviate the burden of inflation, especially on the lower income groups.

In addition to the increased total development expenditure, Federal and state current expenditure also rose at an average rate of 18.8% per annum during the decade. The Federal Government accounted for more than three quarters of the current expenditure, while state governments accounted for the remainder. The rapid growth in Federal Government expenditure of 18.7% per annum during the decade was due to expansion in the activities of the Government and increases in the payment of salaries and wages which accounted for 38.8% of Federal Government current expenditure in 1980 compared with 29% in 1970. In addition, the rapid growth was also due to large provisions for subsidies and transfer payments.

During the decade, current expenditure on social services including education, health and housing grew at 17.7% per annum while expenditure on defence and security grew at 16.7% per annum. Expenditure on general administration and economic services grew by 13.8% and 14.1% per annum respectively. Transfer payments including pensions and gratuities, grants to state governments, contribution to statutory funds and subscription to international organizations registered the highest average annual rate of increase of 26.5%. During the decade, constitutional grants to the state governments such as the capitation and road grants were reviewed and a "revenue growth grant" was introduced, with a view to supplement the state governments' revenue in the light of higher expenditures and constraints in the expansion of the states' revenue. The new rates of the capitation grant also provide for a fairer and more equitable distribution of Federal funds between the richer and poorer states. The road grant was increased from \$4,600 per mile to \$6,200 per mile in view of the increasing cost of road maintenance. The revenue growth grant was approved in 1976 to give further financial assistance to the state governments.

Taking into account the overall consolidated revenue and expenditure of the Federal and state governments and the surplus of public authorities, as shown in Table 6-6, overall deficit amounted to \$7,556 million during 1971-75 and \$17,101 million during 1976-80. This deficit was financed through domestic and foreign borrowing and the

use of accumulated assets and special receipts. Domestic borrowing was the major source of non-inflationary financing of the public development expenditure, financing about 58.4% of the overall deficit during 1971-75 and 56.2% during 1976-80. The bulk of domestic borrowing was from the non-banking private sector, namely the Employees Provident Fund (EPF), the National Savings Bank, insurance companies and other non-bank institutions, which together accounted for 78.9% of domestic sources during the decade. The EPF, being the principal source, contributed about \$6,672 million during the decade. The contribution from the EPF for 1976-80 amounted to \$4,784 million, largely due to the increases in the number of contributors as well as the rate of contribution to EPF from 10% in 1970 to 13% in 1975. The commercial banking system as a whole contributed about 21% of domestic borrowing. Purchases of Treasury bills and Government securities by the commercial banking system increased by 18.8% per annum during 1971-75 and 13.4% per annum during 1976-80.

External borrowing, comprising market and project loans, grew at 15.4% per annum during 1972-80, amounting to \$2,083 million during 1971-75 and \$3,907 million during 1976-80. The share of market loans to total external borrowing declined during the decade, reflecting the growing importance of project loans. Despite the fact that foreign borrowing had grown, the debt service payment expressed as a ratio to export earnings averaged about 3.9% during the decade.

The technical assistance obtained during the period 1971-89, included the provision of experts, equipment and training components aimed at improving the skilled manpower resources required for development programmes, and the provision of volunteers for the various sectors. The main sources of technical assistance were from arrangements under the Colombo Plan, United Nations Development Programme and bilateral sources.

# **CHAPTER 07 : THE PRIVATE SECTOR: ITS ROLE IN NATIONAL DEVELOPMENT**

## **I : INTRODUCTION**

The private sector has played an important role in meeting the development objectives of the nation. It has provided a major source of investment, technological progress and skills. The sector contributed substantially to output and employment in the plantation, mining, manufacturing, construction and the services sectors, either on its own or in joint-venture with the public sector. The rapid growth of the public sector also facilitated the progress towards achieving the New Economic Policy (NEP) objectives. The increasing role played by the private sector has been due to its positive response to investment opportunities and to the active promotion and the maintenance of a favourable investment climate by the Government.

## **II : OVERALL GROWTH IN PRIVATE INVESTMENT**

During the decade, private investment including oil grew at 12% per annum in real terms from \$1,490 million in 1970 to \$4,635 million in 1980 or in current prices, at 21.1% per annum from \$1,490 million to \$10,083 million. The overall performance of the private sector during this period was strongly influenced by development in the international economy which affected the growth of domestic income and production. In addition, the counter-cyclical fiscal and monetary policies of the Government provided significant stimulus to private sector expansion, especially during periods of weak external demand.

Private investment grew by 10.5% per annum in real terms from \$1,490 million in 1970 to \$2,454 million in 1975. The relatively weak external demand during this period, when exports grew by 5.9% per annum, had a dampening effect on private sector expansion. However, the adverse effect of weak external demand was offset by domestic expansionary fiscal and monetary policies, leading to a sizable expansion in private investment. Between 1976 and 1980, private investment grew at a higher rate of 13.6% per annum in real terms from \$2,454 million in 1975 to \$4,635 million in 1980, as a result of both rapid growth in real exports of 9.4% per annum and the Government policies and programmes to encourage rapid expansion of the private sector.

The growth in private investment was marked by pronounced cyclical variations. During the years 1971-74, private investment grew by 19.6% per annum while during 1975 and 1976 private sector performance was dismal. In 1975, real private investment

declined by 19.5% from \$3,047 million in 1974 to \$2,454 million in 1975, while in 1976 private investment increased negligibly by 0.4%. The poor level of investment activity during 1975 and 1976 was due to the impact of world-wide recession on domestic activity and the prevalence of domestic excess capacity and the accumulation of stocks during 1973 and 1974 when private investment in real terms grew at 29.1% and 23.5%, respectively in response to boom conditions in the economy. In addition, the passing of the Petroleum Development Act (PDA) in 1974 and the Industrial Coordination Act (ICA) in 1975 caused anxiety among investors and had a depressing effect on private sector investment in 1975 and 1976.

During 1977-1980, private sector investment picked up considerably to grow at 17.1% per annum due to good export performance and to the concrete steps taken by the Government to allay the anxiety of the private sector through amendments to the ICA and the PDA. Overall, the growth in private investment has not been expansionary as public investment which grew at 12.6% per annum in real terms resulting in the decline of the share of private investment in total investment from 67.9% in 1970 to 66.8% in 1980.

### **III : SECTORAL COMPOSITION OF PRIVATE INVESTMENT**

The growth of private investment contributed to the overall increase in Gross Domestic Product (GDP) and its share in total output creation increased during the decade. This was reflected in the growth of the manufacturing, construction and the non-government services sector such as wholesale and retail trade, banking and financial services, which together recorded growth in output above the national average of 7.8% per annum, and accounted for 80% of total private investment. There was also a notable shift in composition of private investment from agriculture and mining towards other sectors, particularly manufacturing and construction. Data of the value of fixed assets of limited companies in Peninsular Malaysia available up to 1975, indicated that the share of fixed assets declined from 45.8% in 1970 to 28% in 1975, while that of the manufacturing sector rose sharply from 28.9% in 1970 to 34.4% in 1975. The shift of private investment to the non-agricultural sectors, mainly in manufacturing and construction activities, continued during the second half of the decade as evidenced by the rapid growth in output of this sectors.

The role of the private sector in helping to accomplish the goals of rapid growth and diversification of the economic structure was manifest in the rapid rate of industrialization during the decade. The share of the manufacturing sector in total GDP increased from 13.4% in 1970 to 20.5% in 1980 and accounted for 26.8% of the net increase in GDP and 24.5% of the net increase in employment.

The distribution in private investment also underwent considerable change in line with the change in the emphasis given by the Government in industrial development.

During the initial period of industrialization, private investment was heavily concentrated in import substitution industries such as food and other low technology consumption goods. When the emphasis was shifted to export industries, private investment in this industries increased both in magnitude and share in total manufacturing sector investment. The principal industries included within this category were resource-based industries such as rubber and wood products, which grew at 5.6% and 10.3% per annum respectively, and labour-intensive industries such as textiles, electrical machinery equipment, all of which together grew at 14.2% per annum. There were also major increases in private investment in import substituting intermediate and capital goods industries such as ferrous and non-ferrous products, chemicals and chemical products, non-metallic mineral products, non-electrical machinery and transport equipment. These industries recorded production increases ranging from 8.3% to 11% per annum.

Investment in the construction sector expanded during the period in response to the implementation of public sector programmes and development of residential housing. The demand for housing accelerated as a result of expansion in loans and advances by the commercial banks and finance companies and also public sector funding of houses for Government officers. The amount of loans approved by commercial banks and finance companies rose from \$107 million outstanding at the end of 1970 to \$2,797.9 million at the end of 1980 while loans extended to public sector employees amounted to \$1,476.3 million during the decade. The implementation of low-cost housing schemes and the expansionary role of the public sector development expenditure for infrastructure projects also contributed to sustaining high levels of construction activity. As a result, the construction sector registered an average annual growth rate of 9.6% per annum in real terms during 1971-80, faster than that for the economy as a whole. Investment in building and construction accounted for about 40% of total private investment in 1980.

Investment in the mining sector was largely related to oil exploration. Private investment in the oil industry picked up considerably with the passing of PDA, the subsequent establishment of Petroleum Nasional Berhad (PETRONAS) in 1974 and the signing of the Production Sharing Agreements in 1976 between PETRONAS and the oil companies. Total investment in oil amounted to \$3,529 million, mainly for the exploration of oil deposits in the East Coast of West Malaysia and in Sabah and Sarawak. Investment in the liquefied natural gas (LNG) project in Bintulu amounted to \$742 million in 1980.

One of the major benefits of increasing private investment was the technological progress that took place during the decade. The growing sophistication of production techniques, changes in physical plants, layout and organization and on the job training contributed to substantial increase in labour productivity. Overall

productivity per worker increased at 3.6% per annum, with increases of 2.7% for construction, 2.8% for services sector and 4.6% for manufacturing.

The major source of technological change was through the imports of capital goods, mainly machinery and equipment which accounted for about 22.9% of total imports in 1970 and increased at a rapid rate of about 11% per annum to reach 25.9% of total imports in 1980. Direct foreign investment also contributed towards technological progress, initially bringing technology in a package consisting of new techniques, capital, marketing and management skills. During the decade, as industrial structures became more developed and diversified, the transfer of technology was facilitated by the increasing participation of Malaysians in production and training activities of the public and private sectors. Despite these efforts, considerable scope exists particularly with respect to the participation by Malaysians in the development of technology, managerial and organizational skills.

#### **IV : PRIVATE SECTOR CONTRIBUTION TO NEP**

By 1980, private investment accounted for more than half of total investment reflecting its sustained role in the economy. Indeed, the growth of the corporate sector, especially in manufacturing, was dependent to a large extent on the inflow of foreign capital, management, technical knowhow and market outlets, especially for the high technology industries.

In the face of dynamic changes within the corporate sector, the need was felt very early in the decade for the establishment of a new institutional set-up to oversee the implementation of the NEP, especially in the restructuring objective. Particularly important were the acquisition by foreigners of assets or interests of Malaysian companies and business through mergers and take-overs which brought no tangible economic benefits to the economy and which would further accentuate the imbalances in ownership between Malaysians and foreign interests. Likewise, mergers and take-overs involving Malaysian-owned and controlled companies and business, if left unregulated, would also make it more difficult to achieve the restructuring objective of the NEP.

Against this background, a Foreign Investment Committee (FIC) was established in 1974. The FIC is guided in its work by the Guidelines for the Regulation of Acquisition of Assets, Mergers and Take-Overs of companies and businesses with interest in Malaysia. Essentially the Guidelines sought to ensure that proposed acquisition of assets or interests, mergers or take-overs would result directly and indirectly in improving efficiency and in achieving the restructuring objective of the NEP.

Part of the progress in restructuring the ownership of share capital from the mid-seventies was achieved through the work of the FIC. Many of the companies, including transnational corporations, voluntarily submitted their restructuring plans



for approval of the Government through the FIC. Companies which were involved in acquisitions, mergers and take-overs, and those which had specific schemes for restructuring, were requested to restructure their equity along the lines of the NEP. During the period 1974-80, about 840 proposals for acquisitions, mergers and take-overs and restructuring schemes were submitted to the FIC by the private sector. These proposals involved a total of about 1,940 companies mainly in plantation, mining, manufacturing, trading and property development.

The progress in restructuring of share capital in the corporate sector was undertaken in such a manner as to avoid disruptive redistribution in the ownership of share capital and not to adversely affect the investment climate. To accelerate the pace of restructuring, the Government introduced a tax incentive for equity restructuring in late 1979. Exemption of five percentage points of the company income tax of 40% is to be allowed to any company conforming to the equity restructuring requirement of the NEP with at least 70% equity ownership for Malaysians, including at least 30% for Bumiputera, and not more than 30% equity ownership of foreign interests. Initially, the incentive would be offered on an annual basis for three assessment years, from assessment year 1980 to assessment year 1982. In order to qualify for the tax exemption, the company must either have a paid-up capital of \$1 million unimpaired by contingent liabilities or a net asset (before evaluation) of not less than \$1 million. Pioneer companies and companies enjoying tax incentives would not qualify for the incentive. Specifically, the incentive would be granted to the following companies:

- (a) any company incorporated in Malaysia whose issued and
- (b) any company incorporated in Malaysia with at least 70%
- (c) any company incorporated in Malaysia with at least 51%
- (d) any company incorporated in Malaysia with at least 70%

The private sector had also contributed to programmes for the eradication of poverty alongside the efforts of the public sector. Thus during the period 1971-80, the private sector, on its own and through joint-ventures with the Federal and state agencies, developed for agricultural plantations of about 120,000 hectares.

The growth of the private sector in urban based activities also contributed to the reduction in the incidence of urban poverty, particularly in the number of poor households engaged in manufacturing and services. In 1970, almost a third of the households engaged in the manufacturing private were in poverty and this declined to 18.4% by 1980. In the services sector, about a fifth of the households were in poverty in 1970 and it declined to 11.6% in 1980, while in commerce, the incidence of poverty declined from 30.3% in 1970 to 19.2% in 1980. These findings highlighted the complimentary nature of the public and private sectors in the process of eradicating poverty, and the special importance of an expanding private sector in the industrial and commercial sectors in reducing the incidence of poverty. Private sector growth in

manufacturing during the 1971-80 period absorbed a significant number of the rural poor who migrated to the urban areas in search of jobs.

The encouragement by the Government towards dispersal of industries to the less-developed regions, enabled the poor rural and urban households to be gainfully employed in manufacturing activities, thereby raising their level of income. In 1971, about 44% of the total approved manufacturing projects were planned to be located in the relatively less-developed states where the incidence of poverty was high. By 1980, the proportion increased to about 59% of the total approved manufacturing projects.

While the relatively large-scale, privately-owned manufacturing and commercial enterprises spearheaded the momentum towards industrial and commercial growth, the smaller scale privately-owned enterprises also provided opportunities for the relatively poor to be gainfully engaged in economic and commercial activities. The maintenance of a climate of free market enterprise during the past decade permitted private sector interests to respond to the growing economic opportunities.

## **V : PRIVATE INVESTMENT AND ITS FINANCING**

Private long-term capital inflow financed about 22.3% of private investment during the period 1971-75 and about 22.6% during the period 1976-80. The small increase in the share of inflow of private long-term capital as a source of financing indicated the greater participation of domestic sector resources, both in terms of equity and loans, in private sector financing. As shown in Table 7-1, domestic financing of total private investment increased from \$11,467 million during 1971-75 to \$23,719 million during 1976-80.

During 1976-80, private savings grew at a rate of 21.9% per annum compared with 10.3% per annum during 1971-75. The higher rate of savings generated during 1976-80 was a result of a relatively faster rate of increase of disposable income of 16.4% per annum compared with an annual rate of increase of 15.1% in consumption expenditure. During 1971-75, the rate of increase of consumption expenditure was 12.4% per annum while that of disposable income was only 12.7% per annum. Hence, the total sum of savings amounted to \$30,031 million during 1976-80 compared with \$12,799 million during 1971-75.

Not all savings was available for financing of investment in the the private sector. After taking account of net remittances abroad by individuals, purchases of Government securities by non-bank institutions as well as Bank Negara Malaysia, outflow of short-term capital abroad, and increases in currency holdings including deposits with Bank Negara Malaysia, the amount available for self-financing in the private sector was \$6,927 million and \$15,319 million during the periods 1971-75 and

1976-80, respectively. Self-financing of investments by the private sector accounted for 47% and 50% of total private investment during the two periods.

The balance of domestic financing requirements was met by Government transfer of funds to private sector activities. This included the transfer of funds to institutions such as Perbadanan Nasional Berhad (PERNAS), Urban Development Authority (UDA), the State Economic Development Authority Corporations (SEDCs), Majlis Amanah Rakyat (MARA) and the Bumiputera Investment Fund with the purpose of accelerating the advancement of Bumiputera in commerce and industry. In addition, funds were also available in the agriculture sector for rubber replanting, agricultural credit and marketing and land development. In line with the Government's policy to encourage home ownership, funds were provided for loans and construction of low-cost houses. The total sum of these transfers amounted to \$4,540 million during 1971-75 and \$8,400 million during 1976-80.

## **VI : POLICIES FOR PRIVATE SECTOR DEVELOPMENT**

The expansion of the private sector was fostered by the positive policies of the Government on trade and investment. In particular, fiscal and monetary policies were designed and implemented to provide for an adequate rate of return on investment and to enhance the contribution of private investment to the NEP objectives. They were also used as counter-cyclical measures to provide necessary stimulus for increased private sector activity and to restrain inflationary pressures in order to ensure an orderly growth of private investment.

An important factor which affected the growth in private investment was the increase in prices of imported capital goods as a result of the increase in the price of fuel during 1971-80 at an average annual rate of 21.6%. The import price of machinery and equipment rose by about 7% per annum while that of construction and building materials increased by 10%. In the face of these price increases, Government policy was directed to reducing domestic supply rigidities through tax incentives and to lessen the impact of the full costs of imported investment goods by selective reduction of import duties on essential inputs.

The Government also introduced a wide range of incentives under the Investment Incentives Act of 1968 to encourage domestic and foreign investment. In addition to pioneer status, the Government implemented the locational incentives scheme in 1973 to encourage the dispersal of industries. The labour utilization relief was another scheme introduced in 1968 to provide incentives for the expansion of labour-intensive industries. Capital allowances were given to projects not qualifying for pioneer status, investment tax credit or labour utilization relief. The increased capital allowances were provided to firms engaged in modernising their production techniques or in setting up a modern factory. The Investment Incentives Act was

amended in 1979 to expand its coverage to approved agricultural industries including planting of fruit and vegetable crops, rearing of inland water and sea fish, prawns and dairying. The number of approvals by type of incentives is shown in Table 7-2.

Specific tax incentives were also provided to encourage the growth of export-oriented industries. The export incentives provided for export allowances were based on the amount of export sales and tax deductions for promotional expenses in overseas markets. In addition, the export refinancing facility was introduced in early 1977 to provide Malaysians exporters of manufactured goods with credit facilities at preferential rates of interest. By mid 1980, the total amount of refinancing facility provided to exporters amounted to \$2,003 million.

The Government also took a number of measures to expand physical facilities for industrial development. The expenditure on infrastructure, particularly in the less-developed states was expanded to complement and aid private sector expansion in industrial and commercial activities. Government funds were also channelled to the SEDCs for the establishment of industrial estates and Free Trade Zones covering a total area of 9,649.2 hectares.

In order to induce the inflow of foreign investment, the Government undertook vigorous promotional efforts. Among these were the establishment of overseas centres by Malaysian Industrial Development Authority (MIDA) in major world financial capitals. Major investment missions were organised abroad and within Malaysia with high level participation by representatives of Government and private sector. Malaysia also concluded double taxation agreements with ten countries. In order to promote exports, the Government in addition to sending trade missions and participating in trade fairs and exhibitions overseas, established an Export Trade Centre located in Kuala Lumpur to channel information on products and markets to local and overseas investors.

In addition to the use of monetary policy for stabilization purposes, efforts were made to promote the development and modernization of the financial structure in order to mobilise and channel private savings into productive investment in both the public and private sectors. The Government, through Bank Negara Malaysia, took measures to develop the money, and capital markets to raise the level of savings and accelerate the process of financial deepening necessary to harness adequate resources for development. In order to enhance the availability of short-term funds for investment, the Government, apart from raising the return on time and fixed deposits, introduced two money market instruments, namely the bankers acceptance and negotiable certificate of deposits. The Kuala Lumpur Commodities Exchange was established in 1980 to promote Kuala Lumpur as an international exchange for the marketing of primary commodities.

The expansion of the Kuala Lumpur Stock Exchange was considerably enhanced by the New Securities Act, 1973, which provided for an orderly and efficient development of the corporate securities market. By July, 1980, there were 253 companies with a total nominal paid-up capital of \$7,146 million listed on the stock exchange compared with 256 companies with a total nominal capital of \$2,880 million in 1970. The expansion of the securities market facilitated the corporate sector to finance new investment or expand its existing capacity through mobilization of domestic savings. During the decade, the total amount of funds raised by new issues amounted to \$4,266 million.

The growth of domestic banks and the expansion of the banking network especially into rural areas and small towns were encouraged. The expansion of financial institutions during the decade was impressive. By 1980, there were 38 commercial banks which formed the core institutions linking savers and investors, supplemented by 37 finance companies, 12 merchant banks, five discount houses, six foreign exchange broking enterprises, two stock exchanges and a number of other specialized institutions serving the needs of the expanding economy. In order to increase the development role of commercial and financial institutions, specific lending guidelines and criteria were formulated and implemented to step up commercial lending to the priority sectors of the economy. Table 7-3 provides the pattern of loan and advances by commercial banks to the private sector.

Table 7-3 shows that about one-third of the loans and advances went to the manufacturing, construction and housing sectors. Loans and advances to these sectors grew at a rapid rate of 25.1% per annum. Specific steps were taken to ensure that the Bumiputera community, small-scale enterprises and prospective house owners had ready access to credit at reasonable cost. Credit extended by commercial banks to small-scale enterprises rose at an average rate 26.2% per annum from \$343 million in 1970 to \$2,784 million by the end of 1979. In addition, the Government established the Credit Guarantee Corporation in 1973 to provide guarantee to commercial banks for approved loans extended to small-scale enterprises in the agricultural, commercial and industrial sectors of the economy. Under this scheme, a total of \$738 million was provided since 1973 to small enterprises, mainly those owned by Bumiputera.

## **VII : ADMINISTRATIVE AND LEGISLATIVE MEASURES**

A number of administrative and legislative measures were introduced to facilitate the achievement of national objectives in the industrialization process. Of major importance was the ICA, enacted to provide the legal framework within which the private sector is to be encouraged to undertake the orderly development of manufacturing industries. The main feature of the Act was the licensing of manufacturing establishments so as to ensure that individual enterprises conduct their operations in a manner consistent with the requirement of national objectives. The ICA was amended in 1977 and 1979 to assure the private sector that the implementation of the Act would be carried out in a pragmatic and flexible manner. Among others, the amendment provided for the establishment of an Industrial Advisory Council with representation from the private and the public sectors to advise the Minister of Trade and Industry on matters pertaining to the Act, and procedures for appeals related to matters on licensing.

As a further step to speed up the approval and implementation of industrial projects, a Central Unit was established in MIDA and staffed by senior officers from major Ministries and Departments involved with all aspects of industrial development. This one-stop agency which became operational in September 1978, was designed to reduce delays.

## **VIII : PUBLIC-PRIVATE SECTOR COOPERATION**

In order to facilitate the growth of the private sector and to resolve issues and problems faced by them in the implementation of Government policies, close consultations were held with the private sector and various organizations representing the industrial groups. The scope of these consultations were wide and varied and they enabled the Government and the private sector to respond to issues and problems in a pragmatic and flexible manner consistent with national objectives and led to the improvement of the investment climate and an atmosphere of mutual trust and confidence.

## **CHAPTER 08 : NATION BUILDING AND NATIONAL UNITY**

### **I : INTRODUCTION**

The past decade was marked by rapid economic growth and structural changes enabling Malaysians to enjoy a higher standard of living. While rising income, output and employment are important in themselves, the overriding objective of development is the achievement of national unity. No nation, however prosperous, will remain viable and secure if its citizens are disunited and lack a strong sense of commitment to the nation. Prosperity and progress without unity, stability and a deep sense of loyalty on the part of its citizens will, in the long run, weaken the foundation of Malaysian society. The past decade, therefore, emphasised on the development and strengthening of the political, administrative, economic, sociocultural and security framework, and on international cooperation, necessary for the building of a strong and united Malaysian nation.

### **II : POLITICAL AND ADMINISTRATIVE FRAMEWORK**

Malaysia is committed to maintaining a political framework which allows for a democratic way of life, consistent with the maintenance of peace and stability within the country. The May 1969 incident taught the nation a bitter lesson and showed that unrestricted, emotional and extreme appeals to communal issues were detrimental to peace and stability. Amendments were, therefore, made to the Federal Constitution to remove sensitive issues from the realm of public debate. Discussions on these issues were conducted in the National Consultative Council, and on the dissolution of the Council, in the National Unity Board. Following the dissolution of the Board, discussions were then continued in the Department of Rukun Tetangga and National Unity.

Complementary to the spirit of the constitutional changes, the then Alliance was re-organised and expanded to form the Barisan Nasional. The aim of the coalition was to strengthen political consensus and reduce "politicking" so that more time and resources could be devoted to national development. The Barisan also helped to maintain continuity and stability to the planning and development efforts throughout the decade. It also provided the link between the Federal and State Governments, leading to greater identification of the components of the Federation with the aspirations of the nation. The institutional machinery provided by the Constitution, namely the National Land Council, the National Finance Council and the National Council for Local Government, was extensively utilised and strengthened to improve consultation and cooperation matters affecting national interest.

During the decade, the administrative machinery at both Federal and State levels was expanded, strengthened and oriented to achieve the objectives of national development and to respond to the needs of a plural society. New institutions were established to carry out additional functions of the Government while existing ones strengthened to ensure effective delivery of services to the rakyat. The public service, not only provided the necessary continuity to the planning and implementation process, but also stability to the nation. It also maintained its impartiality in the implementation of Government programmes and policies to ensure that the public was adequately served. The independence of the Judiciary upheld the supremacy of the rule of law and together with accessibility to legal redress, enhanced the feeling of security among the people.

### **III : ECONOMIC FRAMEWORK**

The May 1969 incident also taught the nation a lesson that poverty as well as wide economic imbalances along ethnic lines would generate feelings of dissatisfaction and disenchantment among the people. The New Economic Policy (NEP) was, therefore, formulated with a two pronged strategy of eradicating poverty irrespective of race and accelerating the process of restructuring Malaysian society to correct economic imbalance, so as to reduce and eventually eliminate the identification of race with economic functions. The NEP also emphasised on improving the quality of life of Malaysians by expanding social services and amenities, especially to poor households.

The NEP strengthened the economic foundation of national unity during the decade by harnessing the nation's physical and human resources towards building a just and equitable society. The poverty eradication programmes brought poor households into the mainstream of development and increased their feeling of security and sense of belonging to society and reduced feelings of deprivation and alienation. In addition, restructuring of society through development of new growth centres also created capacities for all to benefit. The new growth centres provided opportunities for the creation of more balanced settlement patterns allowing Malaysians of all ethnic groups to live side by side and to interact in their daily activities. Restructuring of the pattern of employment and ownership also provided Malaysians with the environment to interact.

Progress in poverty eradication and restructuring of society during the decade has been elaborated in Chapter III. The expansion in the economy enabled the NEP to be implemented in a manner that increasing income, employment and ownership opportunities benefitted all Malaysians. Growing incomes of all ethnic groups during the decade, as shown in Table 3-9 and especially among the low-income population,



as shown in Table 3-3, bear testimony to the fact that all have benefitted from economic development.

There were marked improvements in the quality of life of all Malaysians during the decade. The Government played a major role in the delivery of public goods and services, especially to meet basic needs such as health, education, housing, water supply and electricity. Key indicators on health, life expectancy and literacy for all ethnic groups, indicated that there were significant improvements during the decade. These programmes helped to reduce the feeling of deprivation which once existed as a result of the concentration of facilities and infrastructure in the urban centres.

The progress achieved towards restructuring of Malaysian society helped to reduce the degree of segregation along ethnic lines. There were indicators which suggested that the process of ethnic integration in the economic sphere was well under way. A survey indicated that a majority of employees were not concerned with the ethnic identity of employers. The survey also indicated that Malaysians were not concerned with the ethnic identity of fellow employees. Employment restructuring, especially in the large modern sector enterprises, increasingly brought different ethnic groups closer together as workers. together as workers.

Industrialization and modernization have encouraged more and more inter-ethnic partnerships and involvement in commercial and industrial ventures. An increasing number of Malaysians from different ethnic origins were brought together in common endeavour, sharing the fruits of their joint labour and enterprise. The expanding corporate sector, especially the public companies, allowed an increasing number of Malaysian individuals as well as institutions to be involved in various aspects of corporate growth especially in employment, ownership, distribution and marketing, as suppliers of finance and services. The growing multi-racial character of many of these large conglomerate companies, with their activities touching almost every aspect of the economy, meant that Malaysians from all ethnic origins had a stake and influence in almost every facet of the nation's livelihood. Family-owned enterprises, impelled by the need to grow and meet competition, started to seek external resources beyond the confines of their ethnic group, thus slowly allowing other Malaysians to participate in the ventures. These developments, therefore, gradually reduced the degree of ethnic segregation of commercial enterprises, making them more Malaysian in outlook and gradually establishing a framework for greater inter-ethnic economic partnership and cooperation.

#### **IV : SOCIO-CULTURAL FRAMEWORK**

The political and economic frameworks by themselves are not sufficient to build an integrated society. They need to be reinforced by the development of individuals' values. Towards this end, the Government continued to expand and strengthen its socio-cultural programmes during the decade, especially by widening opportunities for education and social mobility, promoting the growth of a more balanced residential pattern, encouraging greater participation by the people in development efforts and fostering the growth of a national culture.

The education system created the environment, as well as facilities and opportunities, for all children to interact thus enriching their experience of Malaysian values and culture from an early age. The progressive use of Bahasa Malaysia, as the main medium of instruction in schools since 1970, helped to create a new generation capable of effective communication through a common language. The teaching of civics and good morality in all schools was emphasised in line with the policy of having an education system to serve the needs of a multi-racial society.

The implementation of a common syllabus for all schools and the attention given to the study of the country's history, people and cultures, were major components in the development of an education system for an integrated society. School-going children began to perceive history from a Malaysian viewpoint and became more and more appreciative of Malaysia's rich history and culture and the contribution by Malaysians from different ethnic groups to its heritage. The integration of Sabah and Sarawak into the national education system, with greater emphasis on the use of a common syllabus for various subjects, further enhanced the integration of the two states into the Federation.

Residential patterns in Malaysia also changed during the decade. The growing urbanization of Bumiputera resulted in the growth of Bumiputera residents in urban areas. The Government, with the cooperation of the private sector, encouraged the growth of residential patterns in housing estates which would be more ethnically balanced and more Malaysian in outlook. The development of low-cost housing schemes, including flats, enabled the urban low-income households of all races to acquire decent living places. Many of these housing schemes were provided with recreational facilities, allowing greater opportunities for the various communities to integrate freely in their daily lives.

The Government also designed and implemented a number of other programmes to bring about greater understanding and cooperation among Malaysians, as well as to provide opportunities for the people to participate in nation building. The National Unity Board, and later the Department of Rukun Tetangga and National Unity, conducted National Solidarity Classes, set up Community Relations Committees in

urban centres and undertook other activities, such as community sports and the establishment of kindergartens. The enrolment in the National Solidarity Classes, of which more than three-quarters consisted of non-Bumiputera towards the end of the decade, increased substantially. The National Solidarity Classes emphasised on Bahasa Malaysia and civics to encourage greater use of the National Language and appreciation of the cultures and customs of the various ethnic groups. The activities under the purview of the Community Relations Committees included the organising of kindergartens, vocational classes, gotong-royong activities and sports, including community games. There was increasing participation by all races, especially the youth, in all these activities.

The Rukun Tetangga scheme, originally conceived mainly as a security project, also encouraged greater cooperation among Malaysians. The scheme provided opportunities for residents of gazetted areas to cooperate for their common good. In some Rukun Tetangga areas, the residents also promoted social activities, such as cultural shows and sports, which helped to create a stronger spirit of neighbourliness among the participants.

To improve the security of villages, Ikatan Relawan Rakyat (RELA), was formed in kampung areas to enable the people to assist the security forces in facing any subversive and undesirable elements threatening the security and stability of the villages. In addition, there was also increased participation in the membership of the Territorial Army, indicating the support given by the public in maintaining law and order at the district level. Participation by all races in the Territorial Army, improved as a result of greater awareness of the importance of the people's role in security and development.

The setting up of Jawatankuasa Kemajuan dan Keselamatan Kampung (JKKK), provided a link between the Government and the people at grass-root level on matters pertaining to development and security of villages. The JKKK became effective channels of communication between development agencies and the people to ensure their greater involvement in the decision-making process affecting their livelihood.

Support from the people on major matters affecting national resilience improved substantially. The control of drug abuse and trafficking through joint governmental efforts and the Persatuan Mencegah Salahguna Dadah (PEMADAM), a voluntary association to curb the misuse of drugs, was testimony to the close association between the people and the Government in nation building efforts. Community services, such as the Red Crescent and the St. John's Ambulance, helped complement public efforts in widening the scope of participation by the people.

The Government encouraged self-reliance efforts among the people through training for skill and

entrepreneurship development. The focus of these measures was on youth, through programmes such as the Youth Training Centres in Dusun Tua and Pertak. The training also covered business aspects in order to provide them with opportunities for gainful employment.

#### **NATION BUILDING AND NATIONAL UNITY SOCIO-CULTURAL FRAMEWORK**

The mass-media, particularly radio and television, played an important role in creating an environment for greater understanding, social integration, cultural development and the development of a disciplined society. Sabah and Sarawak were incorporated into the national radio and television network during 1971-80. The mass-media also emphasised on spiritual development in order to promote a balanced growth of the individual in the process of development.

An integral part of developing a Malaysian identity and nation building is to foster the development of a national culture, based on the cultures of the ethnic groups of this region, incorporating elements of other cultures which are suitable and appropriate, and with Islam as an important element in its formulation. During the decade, the Government encouraged the development of a national culture by promoting greater awareness of the richness and vibrant cultural heritage of each ethnic group and the part it played in the evolution of a national culture.

The Government also encouraged experimentation with forms of cultural expression to foster the growth of a national culture. Emphasis was also given to cultural and social programmes which brought the youths from different ethnic and social backgrounds together, and Malaysians of different ethnic origins increasingly participated in the various cultural programmes, organised by the Government. Underlying these developments, the growth in the use of Bahasa Malaysia, the National Language, especially in literature, allowed Malaysians greater and easier access to the cultural heritage of the peoples of the region.

#### **V : INTERNATIONAL RELATIONS AND NATION BUILDING**

International economic cooperation between nations also contributes towards nation building. During the decade, together with other developing countries, Malaysia actively participated in negotiations with the developed countries to bring about a new international economic order which would be more just and equitable to the less-developed countries. Malaysia participated actively in various international fora under the aegis of the United Nations(UN), and also forged closer economic ties with other less-developed countries through participation in the Non-Aligned Movement and also as a member of the Group of 77 countries. Malaysia, with the majority of her people belonging to the Islamic faith, also strengthened her economic ties with other Islamic nations during the decade. Malaysia and other Islamic nations participated actively in the Organization of Islamic Conference to progressively

strengthen cooperation in the fields of trade, and financial and technical assistance. In addition, Malaysia also maintained good economic relationship with other nations through the Commonwealth and countries associated with the Colombo Plan.

Malaysia is an active member of ASEAN, a community of nations committed to promoting regional, economic, social and cultural development, through regional cooperation. The growth in intra-regional trade, the flows of human and financial resources between ASEAN countries and the bright prospects for joint development efforts encouraged greater cooperation between Malaysia and other members of ASEAN countries. Malaysia actively supported the implementation of complementary development projects which would bring economic benefits to all member countries.

## **VI : SECURITY FRAMEWORK**

The maintenance of peace and security within the country and the region is of paramount importance to enable the nation to progress and prosper unhindered by uncertainty and threats to its sovereignty. During the decade, despite international political and economic instability and threats to domestic peace by militant communism and anti-national elements, the nation was able to weather successfully these adverse developments. The security forces, as well as other supporting security measures, were expanded and strengthened to contain the threats to the security and sovereignty of the nation.

An increasing number of Malaysians participated in improving the security of the nation and public safety. Service in the security forces was open to all Malaysians. Through recruitment from a broad base, the Armed Forces brought together people from different ethnic groups and social origins. In addition to providing security and defence to the nation, the security forces also provided valuable services to the community. In Sabah and Sarawak, the Armed Forces assisted in the opening up of the interior of the states for development while in Peninsular Malaysia, the Armed Forces constructed bridges and supplemented civilian capacity in the clearance of land and the construction of buildings for accommodation, the provision of medical and educational services and improvements to local roads and bridges. Complementary to the Armed Forces, the Rukun Tetangga scheme, RELA and the reserve component of the Armed Forces, were expanded during the decade, providing security to the citizens.

Malaysia was also actively involved in promoting regional political stability and creating a peaceful order for the Southeast Asian region through ASEAN. In 1971, Malaysia initiated the concept of the Zone of Peace, Freedom and Neutrality (ZOPFAN) for the region. Growing instability in the neighbouring areas of the region towards the end of the decade, resulted in a change in the regional power configuration and created a climate of uncertainty. Malaysia also played an active

role, through ASEAN, in finding a political solution to the security problems of the region.

## **VII : CONCLUSION**

The institutional framework for nation building and national unity has been expanded and strengthened and the process towards national integration has gained momentum. Despite the progress achieved during the decade, much remains to be done. Malaysians with differing backgrounds need to further identify themselves with the nation and cultivate a sense of pride and belonging to the nation. They need to regard their diversity as a source of strength and take advantage of the wisdom and richness of their heritage. They should emphasise more and more on their commonness\* in experiences and in values, such as tolerance, goodwill, accommodation, mutual respect, devotion to duty, loyalty to family and spirit of humility reinforced by the teachings of Islam and other religions.

The future generation of Malaysians will face challenges and problems in their efforts towards nation building and the forging of national unity. Deep-seated psychological feelings, attitudes, sensitivities and perceptions of individuals are susceptible to emotional appeals which can exacerbate the problems inherent in a plural society. Extremists forces may seek to undermine the institutional framework for fostering better communal relations between the ethnic groups. Chauvinistic appeals to narrow sectional interests may weaken the progressive forces of greater socio-economic and cultural integration. Inequitable economic demands by one group may lead to a feeling of deprivation and neglect among others, and efforts to create a just economic order will not achieve the desired results if individuals do not respond to a new economic opportunities and strive towards self-reliance. The elders, therefore, have a profound duty to exercise more responsible leadership and guide the young to meet the challenges and problems ahead and to adopt values consistent with Rukunegara and the realities of a plural society.

## **CHAPTER 09 : PROSPECTS AND STRATEGIES FOR THE EIGHTIES**

### **II : OUTLOOK FOR WORLD ECONOMIC SITUATION**

The continued growth of the Malaysian economy during the eighties must be viewed in terms of the anticipated development in the international economy as well as the country's own strength and resource position. The international economic environment in the eighties is expected to be characterised by slow output growth in the major industrialised countries in the midst of persisting inflation, rising rates of unemployment, slackening of world trade and increasing balance of payments deficits. The forecasts made by the Organization for Economic Cooperation and Development (OECD) indicate that there would be a moderate improvement in economic activity in industrialised countries after 1983. The recovery is expected to be slow and will depend on the strategy of these countries in striking a balance between the objectives of greater price stability on the one hand and a reasonable rate of output and employment growth on the other, to avoid the considerable dislocations experienced in the past from severe inflation and recession.

Overall, the economic outlook of the industrialised countries during the next decade is expected to be less favourable than that of the previous decade. Gross Domestic Product (GDP) is expected to grow at a slower rate of 4.2% per annum in real terms compared with 4.9% per annum achieved during 1971-80. Japan's economy is expected to grow at nearly 6% per annum while those of USA and Europe will grow at or below the average rate for the group.

The projected slow growth in industrialised countries, which account for more than 70% of global imports, combined with increasing protectionism, international inflation as well as exchange rate instability, will lead to a slower of world trade. World trade is this projected to expand at an average annual rate of 5.7% per annum during the next decade compared with a growth of about 7.4% per annum during the seventies. Trade in non-fuel primary commodities is expected to expand by 3.3% per annum, lower than the 4.4% per annum recorded during 1971-80, largely due to slower growth anticipated for the industrialised countries which import over 65% of world primary exports. In addition, there is growing tendency by the industrialised countries to restrict imports of agricultural products which compete directly with domestic farm products. Exports of manufactures will also expand at a slower rate during the eighties. As the industrialised countries import more than 60% of manufactured exports of the developing countries, their slower growth would have a direct effect on the export performance of developing countries.

In addition, the slower growth will be aggravated by the rapidly changing imbalances in external payments, due to increasing oil prices and generally higher commodity prices. To correct these imbalances, there will be a continued tendency by some industrialised countries to rely on protectionism which will further reduce world trade

### **III : MACRO ECONOMIC STRATEGIES**

During the eighties, the Malaysian economy faces greater challenges than the last decade, as it has to accomplish not only the long-term targets of the NEP, but also to compensate for past shortfalls in terms of performance. The perspective growth target was set at 7.9% per annum but the rate achieved during the last decade was 7.8% per annum implying that during the next decade, the economy will have to grow at least by 8% per annum to enable the achievement of the various socio-economic objectives. Apart from ensuring rapid growth, strategies to effect the desired structural pattern of development is of paramount importance. Such structural changes in the composition of output, employment and skills and in the ownership of assets will result in substantial reduction in income inequalities among Malaysians and ethnic groups and facilitate the achievement of the restructuring target.

Growth in the economy during the last decade was a result of the diversification of agriculture and the adoption of an export-oriented development strategy to maximise the comparative advantage of Malaysia's resource endowment. During the eighties, the country will face a number of constraints, although the prospects for commodity exports, particularly rubber, appear bright. While policies and programmes will be implemented to accelerate new planting and replanting of rubber, their impact will be felt only during the end of the eighties. The production of timber which accounted for a significant portion of export earnings, is expected to decline as a result of conservation policies while growth in the manufacturing sector will be constrained by the slower growth in export-oriented and labour-intensive industries such as electronics and textiles, largely due to the rising cost of labour. In the face of constraints on exports and the rising deficits in trade of invisibles, the maintenance of a strong balance of payments position will be a challenging task.

Increasing the productivity of agriculture, the expansion and diversification of the industrial base, modernization of the financial and services sectors and diversifying the sources of growth are, therefore, important elements of the development strategy. Investment and exports will have to continue to grow at rapid rates and new sources of export growth and import substitution identified and developed. Export promotion and import substitution strategies will be coordinated to maximise the benefit from inter and intra-industry linkages. Fiscal and monetary policies will be geared towards accelerating exports and encouraging efficient import substitution in



intermediate and capital goods, mainly to meet the input needs of export-oriented industries and to foster greater integrated production of goods.

Another essential element of the development strategy is a balanced socio-economic development among the regions in the country. Attention will be increasingly focussed towards narrowing the existing disparities through a balanced spatial distribution of programmes and projects including the development of new growth centres. Infrastructural facilities and services will be increasingly dispersed to ensure wider access to such services. To meet this requirement, Government implementation machinery will be increasingly decentralised and monitoring and evaluation functions of the public sector agencies will be strengthened.

A related problem of rapid development, including industrialization and urbanization, is its impact on environment. Current environmental problems, although not substantial, can be traced to the exploitation of the country's natural resources as well as the discharge of effluents and emissions arising from rapid industrialization and urbanization. Appropriate policies and programmes will continue to be developed to protect and enhance the quality of environment as well as to ensure a sustained development and a healthy and safe environment for future generations.

#### **IV : PROSPECTS FOR GROWTH**

The growth of the economy during the second decade depends on the capability of the country to bring about the necessary structural change to further diversify the economy as well as to increase the efficiency in the use of resources. The country's resource will continue to remain strong. However, an orderly development of the natural resources coupled with adequate monitoring of the various demand aggregates is required to sustain the rate of economic expansion consistent with relative price stability.

The macro-economic projections of the final demand expenditure, consistent with the attainment of the projected GDP growth of 8% per annum in real terms for the eighties is shown in Table 9-1. Both external and domestic demand will play an increasing role. Exports of goods and services are projected to increase at a higher rate of 9.1% per annum in real terms compared with 7.6% per annum achieved during the 1971-80 period. Total investment is estimated to grow at 7.6% per annum with private investment growing at 9% per annum in real terms to account for 76% of total investment by 1990. In 1980, total investment as a ratio to GDP stood at 26.5% which is already high by international standard. The rate of growth of total investment for the eighties is set at a more moderate level. For the period 1971=90 as a whole, however, the rate of growth of total investment will be 9.9%, higher than that originally projected in the OPP. Public investment will grow more slowly at 4.1% per annum after having grown at 12.6% per annum in real terms during the last decade.

The strategy for the remainder of the perspective plan is, therefore, to provide an increasing role for the private sector in the expansion of the investment base of the economy as well as in the attainment of the NEP objectives.

Notwithstanding the need to set aside considerable resources for investment, there will be ample growth in consumption to allow for substantial improvements in the welfare of all. Total consumption will constitute about 78% of GDP in 1990. Living standard will be raised as private consumption is projected to grow at 7.4% per annum during the eighties, well ahead of population growth, while public consumption will grow at 9.1% per annum.

The change in income and consumption levels implies considerable change in distribution of consumption across sectors. Thus, the share of income devoted to food products will continue to decline while the share of income expended on the purchase of utilities, transport and other services will increase markedly. Of particular importance is the increase in expenditures for such services as housing, transportation, education and health. It is important that the economic structure adapts itself to these changes so that the desired goods can be provided to continue to match consumer expectations.

Although the economy will continue to rely on imports to meet a large part of its total demand, import growth during the eighties is projected at 8.7% per annum in real terms, well below the 9.8% per annum recorded during the last decade. The structure of imports, which has already undergone substantial changes in the past in response to import substitution, is expected to undergo further changes as a result of import substitution in intermediate and capital goods industries.

With the increase in aggregate demand, domestic production will undergo further structural changes during the decade as shown in Table 9-2. Value added in agriculture will expand at a rate of 3.5% per annum, lower than the growth of 4.3% per annum achieved during 1971-80, resulting in its share in total GDP to decline further from 22.2% in 1980 to 14.4% in 1990. Value added in mining and quarrying is projected to increase at 4.4% per annum during the decade, with value added increasing by 3% per annum during 1986-90, compared with 5.8% per annum during 1981-85. Value added in the manufacturing sector will grow at 10.9% per annum, a rate lower than that of 12.5% per annum achieved during 1971-80. This reflects the larger base as well as the fact that further rapid growth in manufacturing will call for the exploitation of opportunities in more complex industrial activities than in the past. Compared with other sectors, however, the manufacturing sector will record the fastest growth resulting in its share of GDP to increase from 20.5% in 1980 to 26.6% in 1990.

The growth in both the agricultural and industrial sectors calls for rapid expansion of a number of supporting sectors. Transport, wholesale and retail trade, financial and business services and government services, on the average, will

expand at 8.5% per annum while the construction sector will expand by 9.5% per annum, slightly lower than the 9.6% per annum recorded during the last decade.

Productivity increases during the eighties will become crucial if the output expansion envisaged is to materialise. The country has reached a stage where its comparative advantage in surplus labour is being eroded and labour cost will gradually cease to be a key factor in providing competitive edge to the economy. Growth in the economy will, therefore, have to emphasise productivity increases through better use of existing capital and labour and more capital-intensive methods of production. Such a development requires increasing access to technology to develop production techniques appropriate to current factor endowments by encouraging local firms and institutions to undertake research and development activities and by increasingly requiring foreign private investment to share their technological and management expertise with Malaysians. Equally important is to continuously upgrade the educational level of the labour force and expand the training facilities of both the private and public sectors.

## **V : SECTORAL STRATEGIES**

The agricultural sector will continue to be developed in view of its importance as a source of export earnings and raw materials for the manufacturing sector as well as for poverty eradication, despite its decline in importance in terms of contribution to GDP. In the agricultural sector, further efforts will be made to expand production and improving productivity and incomes of farmers. The country's major agricultural commodities such as rubber, palm oil, cocoa and timber will experience continued strong prices during the eighties.

Rubber, in particular, will benefit considerably from the expected increases in energy costs which make synthetic rubber less competitive. It is envisaged that natural rubber will be able to absorb the major portion of the increase in demand for total elastomers on account of its competitiveness. Total elastomers is forecast to increase by 5.3% per annum in the eighties and it is likely that the demand for natural rubber would exceed this rate of increase. Malaysia will benefit from an accelerated growth in production, and taking into account capacity increases in other rubber producing countries, the country should expand its production at a rate of about 7% per annum, that will not materially affect the price trends in the world market. This entails opening up of new land for rubber at a rate of 58,300 hectares per annum. At the same time, intensified effort to improve productivity through new production techniques, credit and subsidy schemes and improvement in farming operations will be undertaken.

In the case of palm oil, increases in export prices are expected to decelerate in the light of the prospective increases in the world supply of oils and fats. The return to

investment, however, will still be high to justify further increases in production. While it is expected that the market share of palm oil in total oils and fats would decline, Malaysia is expected to be capable of securing increases in the share of world palm oil market. The strategy on the planting of oil palm will be to increase productivity of existing acreages through replanting.

An important element in the strategy for rubber and oil palm is the monitoring of labour supplies in the cultivation of these crops. To maintain the competitive edge requires that labour supplies are maintained in these activities or new technologies be developed to allow an efficient substitution of labour for capital.

Timber resources, another mainstay of the economy, are being depleted and an efficient use of timber resources to reduce wastages and a consistent reforestation programme will be required to ensure adequate supplies of timber for the manufacturing and construction sectors. In this regard, the National Forestry Policy, adopted in 1978, will be implemented vigorously for the conservation, management and development of the forest resources on a systematic basis.

With respect to food production, continuous effort will be made to increase the supply of food. With increases in population, consumption of rice is anticipated to grow at 2.4% per annum. The policy of self-sufficiency in rice production will be maintained through increases in the yield of existing acreage as well as increases in acreage. In addition, other food crops and livestock production will be expanded, through optimal utilization of existing cultivable land and expansion of the livestock industry.

The manufacturing sector is projected to grow at a rapid rate of 10.9% per annum. The source of growth for this sector will come from export expansion and import substitution. The continued expansion of this sector is vital to provide employment opportunities as well as to reduce poverty and imbalances in the structure of employment among ethnic groups and regions.

In order to achieve the manufacturing sector output target, greater effort will be made to exploit the comparative in the processing of agricultural products. In 1980, the share of domestic processing of rubber accounts for only 2.7% of domestic production. The Government will emphasise the processing of primary commodities, as part of its strategy to encourage the growth of resource-based industries to meet the demand for the domestic market and for export. Such further processing of primary products will lead to increases in value added, employment and foreign exchange.

The domestic demand for textiles is expected to grow at about 9% per annum and the scope for further expansion of the textiles industry will depend on progress made in liberalising trade restrictions and development of new markets. Considerable

consolidation and rationalization of the textiles industry will be required to further increase its efficiency to compete in world markets. In the case of electronics and electrical industry, encouragement will be given for it to proceed further from the initial phase of assembly operations to manufacturing products embodying more advanced technology through research and development and participation in industrial marketing leading to the consolidation of the electronics and electrical industry. More importantly, the competitive position of labour-intensive industries such as textiles and electronics are likely to be eroded over time as the economy moves to a position of full employment. Necessary steps, therefore, will be taken to develop new manufactured export activities based on Malaysia's comparative advantage and which requires relatively less labour.

The expansion in the size of the domestic market and the increases in income and living standards of the population will result in the growth of domestic demand for consumer durables. In addition, the expansion of the industrial base will also make it profitable for an expanded development of capital and intermediate goods, the imports of which accounted for 50.3% of total imports in 1980. Further, with the growth in domestic markets and exports, the outlook for packaging materials industry is favourable. The growing demand for building materials to meet the public and private sector construction programmes will require expanded domestic supplies of construction materials and considerable emphasis will be placed on the expansion of industries related to the manufacture of construction materials.

With the establishment of the Heavy Industries Corporation Malaysian Berhad, a coordinated effort will be made to develop the capital goods industries jointly with the private sector. The development of heavy industries will enable a greater integration and strengthening of the linkages in the economy. The success in the projected expansion of the manufacturing sector will depend on domestic demand as well as rapid growth in exports. While in 1980, manufactured exports accounted for 27.5% of total exports, its share is projected to increase to 41% by 1990, leading to a declining share of primary commodity exports. The achievement of this high level of manufactured exports will pose major challenges and requires efforts to develop new export industries, improve the competitiveness of existing and new exports as well as to expand into existing and new markets.

In view of the rapid changes which have taken place in the manufacturing sector and the projected changes in the structure of industries, present incentives and tariff system will be reviewed. The review will form a component part of the sub-sectoral studies of the manufacturing sector to be undertaken in conjunction with the preparation of a long-term master plan for the industrial sector. The result of the studies will be used to assign priorities in industrial development in terms of the contribution to development objectives as well as a basis for selection of industries for export promotion as well as further import substitution.

The mining sector is projected to increase at 4.4% per annum during the eighties with output increasing at 5.8% per annum during 1981-85 and at a rate of 3% per annum during 1986-90. The slow growth in the eighties is due to the depletion in alluvial tin bearing deposits as well as slowdown in the rate of production of crude petroleum. While upgrading of technologies and favourable price and tax position will allow existing mines to continue to operate, the scope for further expansion is limited. Alternative sources of minerals, including tin, are available in the Central Mountain Range and offshore areas. Exploitation of these non-traditional sources will carry high risks as it requires large outlays of capital, application of sophisticated technologies and highly trained manpower. Appropriate policies will be formulated to assist the industry in meeting these new challenges and ensure an orderly transition to new supply sources.

In 1980, oil accounted for about 95% of the total energy consumption. With increasing emphasis on industrialization and mechanization of agriculture and expansion of transport, energy consumption is expected to grow at a rate higher than the overall growth of the economy. While in the short-term, this growth in demand will have to be met by oil, the longer term efforts will be focussed on diversifying into other sources of energy such as natural gas, hydro-electricity, coal and solar.

The prospects for the development of the natural gas industry to meet domestic and export needs are bright. The present reserves of natural gas provide an important alternative source of energy which would enable a smooth transition from oil to other commercially viable forms of energy. Natural gas from offshore fields in Trengganu, Sabah and Sarawak will be used for generation of electricity and to produce liquefied petroleum gas (LPG) to meet increasing demand by household and transport sectors as well as for the development of the petro-chemical industries. In addition, during the decade, the domestic refining capacity will be significantly enhanced with the establishment of oil refineries in Melaka and Trengganu.

The Government is also undertaking a study for the development of the country's water resources to meet the energy needs. In its efforts to develop an overall energy plan, emphasis will be placed on the development and exploitation of alternative energy sources, conservation and efficiency in the use of energy through realistic pricing policy and research and development.

Value added in the construction sector is projected to increase at 9.5% per annum during 1981-90, slightly lower than the rate of 9.6% per annum achieved during 1971-80. The major source of growth for the construction sector will be related to the demand for non-residential buildings as a result of the expansion of the manufacturing and services sectors as well as demand for housing.

The demand for housing will continue to accelerate and will receive priority attention by the Government. While the magnitude of the housing problems will be sizable,

priority will be given to expand the supply of low-cost housing units. The Government will expand its resources to public sector housing agencies and state governments to increase the supply of low-cost houses, including provision of adequate incentives for house ownership and subsidised loans. In addition, measures will be taken to lower the cost and prices of dwelling units through curbing speculation in real estate transactions, improving administrative procedures and ensuring adequate supplies of construction materials and skilled labour. Further, research into cost reducing methods of construction will be undertaken.

The services sector as a whole is estimated to grow at 8.5% per annum. Activities of the individual services sector will expand considerably in line with increasing diversification of the economy and modernization of the services provided by both the public and private sectors.

The utilities sector is expected to grow at 9.7% per annum largely in response to Government's programme to increase the capacity of power generation and water supply and to ensure their wider distribution. The transport, storage and communications sector is also envisaged to expand at 8.5% per annum as a result of expansion of infrastructural facilities, with emphasis on increasing such facilities in the less-developed areas. In addition, the expansion in the activities of the Malaysian International Shipping Corporation (MISC) and the Malaysian Airlines System (MAS), together with the policy of encouraging Malaysian cargo to be carried in domestic vessels, will also be an important contributing factor. Further, the expansion of domestic shipping capacity will also help to reduce the dependence on foreign vessels for international transportation of Malaysia's exports and imports and contribute towards reducing the deficits in the services account of the balance of payments.

Expansion of the government services sector at 9% per annum will be largely due to continued provision of economic and social services to meet the NEP objectives. The growth of 8.2% and 7.9% per annum, respectively, in the wholesale and retail trade, and banking, financial and insurance services will be mainly due to the expansion of manufacturing, construction, mining and agricultural sectors. As the range of products and markets, especially in the manufacturing sector, widens and becomes more diversified, the supporting activities of these sectors are envisaged to grow at rapid rates. The banking, financial and insurance services sector is expected to grow in sophistication with continuing improvement in the provision of its services in order to mobilise savings as well as to finance business activities, especially in the rural areas. In the case of the insurance industry, a major factor which will account for its expansion is the Government's policy of reducing the deficit in the services account of the balance of payments, through increasing the capacity of the domestic insurance industry to provide insurance services to export and import businesses which in the past were provided mainly by insurance companies located overseas.

## **VI : PRICES AND WAGES**

The objective of promoting rapid growth and reducing imbalances will be pursued within a framework of relative price stability. The high level of aggregate demand anticipated during the decade emanating from the relatively buoyant external sector, coupled with expanding public and private sectors expenditure will generate domestic inflationary pressures. The increase in prices of imported inputs and the rise in domestic wages as a result of labour market tightness will provide additional pressures for rapid increase in domestic prices. The strategy will be to check inflationary trends without slowing down the economy and to relieve the burden of inflation on the poor through appropriate fiscal and monetary policies as well as direct assistance to the poor.

Measures will be taken to ensure that growth in money supply is consistent with the need to stimulate business and investment activity without jeopardising the need to maintain monetary and price stability. In addition, efforts will be made to ensure that a rising proportion of bank lending will be directed towards the financing of investment to expand productive capacity, and that credit will continue to be made available to priority sectors at a reasonable cost.

Three major areas will constitute the focus for implementation of fiscal policies to contain inflation. First, public consumption expenditures not directly related to the implementation of programmes and projects will be given low priority. Public sector capital formation will concentrate mainly on programmes aimed at poverty eradication and restructuring of society and expanding social services such as education, housing and health and the essential infrastructural facilities. Second, public expenditure will only assume an expansionary role during periods of weak private sector performance and external demand, to the extent necessary to maintain aggregate demand in the economy. Third, taxes and subsidies will be used to remove supply constraints and to increase production. Among the measures to remove supply constraints will be intensification of food production, improving yield through research, credit, marketing and extension services, removal of bottlenecks in the distribution system of commodities and increasing the availability of inputs through domestic production.

As the economy moves towards full employment, inflationary pressures can be exacerbated by unrestrained increase in wages in both the public and private sectors. It will, therefore, be necessary for the development of norms to guide wage adjustments. While continuing efforts will be made through appropriate policies to relate wages of the lower income group to meet the minimum basic needs, wage adjustments at other levels should reflect productivity and the capacity to pay. Priority will be given to increase the effectiveness of the employment services as well as to improve data on cost of living, wages and migration pattern of labour. In



addition, programmes to ensure proper matching of demand and supply of labour by location, sectors and skills will be developed. However, as the economy advances towards full employment position, labour shortages can be ameliorated through efficient utilization of labour and continued introduction of labour saving devices.

## **VII : TOWARDS FULL EMPLOYMENT**

The growth and structural change projected for the period 1981-90 will lead to generation of employment opportunities such that by 1990 full employment of the labour force can be attained. Employment is estimated to grow by 3.2% per annum during 1981-90, a rate higher than the labour force growth of 3% per annum, leading to an unemployment rate of 3.2%.

Total number of jobs estimated to be created will amount to 1,908,200 compared with new entrants of 1,849,600 during the period. As shown in Table 9-3, about 37.7% of the new job creation is expected to be accounted for by the construction, mining and manufacturing sectors. The tertiary sector comprising the various service sectors, will account for 50.4% of the total new job creation, while the share of agriculture will amount to 8.2%. A greater portion of the investment in agriculture will result in increasing the productivity of workers in the rural areas. The leading sector, in terms of job creation, will continue to be the manufacturing sector, which will account for 19.5% of total employment in 1990, compared with 15.8% in 1980.

Labour productivity will increase significantly during the period. In the agricultural sector, value added per worker will grow at a higher rate leading to considerable reduction in underemployment thereby alleviating poverty. Value added per worker in manufacturing will grow more rapidly at 5.1% per annum largely, due to increases in capital intensity of production as well as better training of workers. The growth in value added per worker in the services sector will be less rapid than the secondary sector but will grow at a high rate due to increasing modernization of the sector.

The occupational structure of the labour force will undergo significant changes in line with the structure of production. With the increasing skill intensity in production activities, the share of professional, technical, administrative and managerial workers as well as production workers, will rise rapidly to 40.4% of the total employed, compared with 37.5% in 1980. The changes envisaged in the occupational structure will require continuing efforts to upgrade the productivity of the agricultural and industrial workforce through improvement in farm practices and extension services and expanded vocational training facilities. The public sector activities will need to be supplemented by the private sector to meet the trained manpower needs of the country.

One of the major challenges posed in the transition towards full employment is the emergence of labour shortages for specific skills and types which calls for considerable adaptation of production techniques and upgrading of skills. The aim is to provide for as smooth a transition as possible so that investment opportunities and production activities are optimised. The Government will develop the necessary information system to monitor the labour supply situation as well as to take corrective action.

## **VIII : STRATEGIES FOR ERADICATION OF POVERTY**

Progress in poverty eradication led to a decline in the incidence of poverty from 49.3% in 1970 to 29.2% in 1980. This progress was achieved as a result of rapid economic and social development during 1971-80, with significant improvements in employment and productivity in agriculture through programmes such as land and in situ development, and aided by high commodity prices.

The OPP envisaged that the incidence of poverty will decline to 16.7% in 1990. To achieve this target in the face of uncertainties in the prices of commodities and the possible escalation in consumer prices, requires concerted efforts to accelerate development in both urban and rural sectors where poverty still prevails. Towards this end, appropriate policy measures will be formulated and adequate resources provided for poverty eradication programmes and for the provision of basic social services. In Sabah and Sarawak, in view of the widely dispersed population, different agricultural practices as well as less-developed infrastructural and institutional facilities, strategies and programmes designed to meet the particular needs of the target groups will be developed.

One strategy for reducing poverty which the Government will continue to pursue is productivity improvements. In the past, the programmes for poverty eradication have enabled those close to the poverty line income to rise above poverty. However, those with low productive assets and skills were not able to do so although they shared in the benefits of development programmes. In view of this, the focus of poverty eradication efforts during the next decade will be the improvement of the hard-core poor, such as those farm households with uneconomic holdings, agricultural labourers, fishermen, shifting cultivators and mixed farmers.

The strategy of employment creation will be continued to reduce underemployment and to provide scope and leverage for absorbing the poor and the new entrants into the labour force. About 1.9 million jobs will be created during 1981-90, of which 91.8% will be in the non-agricultural sectors. In addition, programmes for land development involving a target of 81,000 hectares per annum and land rehabilitations of underutilised lands will also provide avenue for reducing underemployment and increasing farm \* utilization in the rural areas.

Development of existing agricultural areas on integrated basis is a strategy which will be continued as development along this pattern allows effective utilization of land and farm resources. Development inputs will be provided on an integrated basis to ensure quick and organised delivery of the various components of public sector programmes, such as input subsidies, extension, marketing and processing as well as social services. The aim is to accelerate poverty eradication in the agricultural sector through greater participation of the farming community in activities beyond production, in processing and distribution so as to diversify their productive capacity and facilitate income improvements among the poor.

Poverty eradication among the urban poor will continue to be emphasised during the eighties. It is expected that the urban poor will remain large in number due to rapid in-migration in search of better income earning opportunities. The high cost of urban living and inadequate housing are expected to be the main problems of the urban poor. The policy for advancing industrial development, especially of small-scale industries, will provide greater employment and help improve incomes of the urban poor while industrial dispersal to less-developed states and regions help to reduce the flow of the poor to a few established urban centres.

In view of the multi-faceted nature of poverty problem, the Government will continue to monitor major developments in the fields of input subsidies, consumer prices, public services and fiscal policies and their implications on poverty. This is to ensure that major constraints to poverty eradication efforts are reduced to the minimum to enable the attainment of the targets by 1990. The projection for 1990 in respect of poverty incidences for various groups is indicated in Table 9-4.

Table 9-4 indicates that the incidence of poverty is projected to decline to 15% of total households in Peninsular Malaysia in 1990, slightly below the OPP target of 16.7%. The projection shows that levels of poverty in the rural and urban areas are 21.6% and 6.9%, respectively. Within the rural areas, the rubber smallholders and estate households are expected to experience rapid decline in poverty in view of the expected high rubber prices during the decade. However, the incidence of poverty is still above the OPP targets for padi farmers and fishermen, in view of the problems of uneconomic farm sizes as well as inadequate capital and low productivity among the households.

The two important targets in the restructuring of society are that employment in the various sectors of the economy and at all occupational levels should reflect the racial composition of the country by 1990 and that ownership of productive wealth should be restructured so that by 1990, Bumiputera owns and operates at least 30% of the total.

## **IX : STRATEGIES FOR RESTRUCTURING OF SOCIETY**

The main thrust of the employment restructuring effort will be through education and training programmes to enable greater expansion of output of trained Bumiputera, particularly at the tertiary level. The share of Bumiputera output from local institutions in the fields of engineering, and architecture and town planning at the degree level is still low although rapid progress has been made in the share of Bumiputera enrolment and output in medicine and dentistry. Positive efforts will be made in the eighties to intensify education and training programmes for Bumiputera in areas related to business, science and technology. In addition, the continuing direct public sector involvement in the commercial and industrial activities will contribute to the employment restructuring effort. The combined effect of these programmes and those undertaken during the last decade, which are now beginning to produce results, will lead to an employment pattern by sectors and ethnic groups as projected in Table 9-5. The share of Bumiputera employment in the secondary sector will increase from 39.8% in 1980 to 50.1% in 1990 while in the tertiary sector it will stabilise at about 47%. The share of the Chinese in the primary sector will increase from 19.9% to 29.4% and that of the Indian will decline from 13% to 10.8% during the same period.

In specific occupations, particularly in the higher paid categories such as accountancy, law and architecture where professional training is required, positive efforts will be made to promote the provision of the required training programme. These include measures to encourage private sector employers to restructure their workforce at all levels of occupation through job placement and sponsorship schemes, and provision of fiscal incentives. By 1990, the employment pattern by occupation and ethnic groups is expected to be that as shown in Table 9-6. In 1990, Bumiputera representation in the professional and technical, and administrative and managerial categories are expected to be 48.5% and 47.9%, respectively. Overall, the percentage distribution by occupation will be about that of the racial composition of the population. The strategy to ensure the attainment of at least 30% Bumiputera ownership of share capital in the corporate sector will continue to be the acquisition of share capital by trust agencies. The trust agencies, which include Permodalan Nasional Bergad (PNB),

Perbadanan Nasional Berhad (PERNAS), Majlis Amanah Rakyat (MARA), and State Economic Development Corporations (SEDCs) will be the main vehicles for the purchase of existing shares that will be offered when companies restructure their equity and for the investment in new ventures. To accelerate this process, the manpower capacity and financial resources of such agencies will be increased during the eighties. Their activities and programmes will be further consolidated and rationalised so as to avoid duplication and economise on the use of resource. The

investment strategy for the trust agencies will focus on the high growth industries and those where current Bumiputera share capital ownership is relatively low.

The transfer of share capital of viable companies currently held by trust agencies to Bumiputera individuals and interest will be effected beginning in 1981. It is targetted that by 1990, the equity in these companies will be sold to PNB, the management and employees of the affected companies and several Bumiputera institutions including cooperatives. The shares held by PNB will be sold to Bumiputera through a national unit trust scheme with the objective that a large majority of Bumiputera will benefit from ownership of share capital. Such a scheme will also help in the growth of Bumiputera income and consequently enable them to acquire additional share capital on their own.

In addition to these strategies, Bumiputera individuals and interests including cooperatives are expected to avail themselves of the opportunities provided by the growth of the corporate sector for share capital acquisitions. The merging pattern of share capital ownership in 1990 is as shown in Table 9-7. To achieve the target, ownership by Bumiputera individuals and trust agencies will have to grow at an average annual rate of 21.2%. While the percentage own by other Malaysians will remain constant, in terms of absolute amount, their share will increase substantially from \$10.5 billion to \$29.8 billion by 1990.

The creation of a commercial and industrial community among Bumiputera will be more vigorously pursued in view of its significant contribution to increasing income, restructuring the employment pattern and asset ownership in the corporate sector. In this regard, current strategies involving the provision of training, financial and credit assistance, technical and advisory services, and administrative support will be further intensified.

New programmes and measures will be implemented to promote the growth of Bumiputera small-scale entrepreneurs. These measures, which include apprenticeship or adoption schemes whereby large enterprises provide on-the-job training to potential Bumiputera entrepreneurs, will be encouraged and promoted. The streamlining of activities of public enterprises will eliminate competition between them and Bumiputera individuals and interests.

To create a more visible and effective Bumiputera commercial and industrial community, MARA, UDA and SEDCs will intensify their efforts in the provision of premises to Bumiputera entrepreneurs in shopping complexes and new townships in both urban and rural areas. As a complement to these efforts, MARA will continue to provide training through its entrepreneurial development programmes.

In view of the comparatively lower average income of the Bumiputera, thereby placing them individually in disadvantaged position to exploit opportunities

generated by public policies and programmes, collective efforts will be promoted among them. In this regard, cooperatives and associations involving Bumiputera will be further developed to provide the necessary vehicle through which Bumiputera savings will be mobilised and a more concerted effort taken in the investment field. The existence of these cooperatives and associations will also help in directing the flow of Government assistance to the target groups and reduce the high overheads involved in mobilising savings and investment, and ensure that the benefits from opportunities generated by public policies and programmes are widely distributed.

Both the poverty eradication and restructuring efforts require large amount of resources, organization and time. The availability of resources coupled with continuing and vigorous efforts to implement policies and programmes will contribute to the attainment of the targets set for 1990. The progressive expansion of the economy will also provide ample opportunities for the participation of all Malaysians in the economic growth of the nation.

## **X : REGIONAL DEVELOPMENT**

In accordance with the goals of the NEP, regional development during the eighties will continue to be directed towards reducing the socio-economic disparities between regions. Towards this end, concerted efforts will be made to accelerate the development pace in the less-developed regions and improve their access to modern services and amenities. There will also be intensification of programmes for optimal exploitation of human and physical resources, dispersal of industries as well as extension and improvement of transportation and communication networks. In addition, development of growth centres will be further pursued through upgrading of existing towns and establishment of new townships which will facilitate, inter alia, the creation of a Bumiputera commercial and industrial community.

Reduction of economic disparities between regions and states will continue to be a major objective of regional development. Tables 9-8 and 9-9 show the GDP by state in real terms for the years 1985 and 1990. It is projected that by 1990, there will be a more balanced distribution of economic activities and a narrowing of income disparities between the low and high-income states such that the lowest income state will have a per capita GDP of not less than two-thirds of the national average as envisaged in the OPP.

Annual growth rates of GDP among the low-income states will range between 8.3% for Kedah and 12.4% for Kelantan. The per capita GDP of Kelantan is projected to grow at 9.9% per annum, raising it to about 69% of the national average by 1990. Economic growth in the state will continue to depend on increased productivity in existing agricultural areas and the exploitation of resources in the Kelantan Selatan area. The completion of the Kuala Krai- Gua Musang-Kuala Lipis-Bentong highway in

the later half of the decade will improve accessibility and facilitate exploitation of the state's forest resources, thereby providing for the establishment of resource-based industries. The expected completion of the East-West highway in the early part of the Fourth Malaysia Plan (FMP) period will reduce the major locational disadvantages presently faced by the state, paving the way for further expansion and diversification of the state's economy.

The economy of Trengganu is projected to expand rapidly due to petroleum and gas production and increased industrial and agricultural output. Rapid industrialization will take place in the state during the decade with the establishment of resource-based and heavy industries. Increased agricultural output will accrue mainly from land development and logging activities. Growth in these sectors will be aided by the availability of improved transportation facilities arising from the completion of the Jerangau-Jabor highway and its connections to Dungun, Paka and Chukai.

Kedah's economy will grow as a result of improved productivity and income in the agricultural sector and increased activities in the manufacturing and services sectors. The completion of the Changkat Jering-Alor Setar-Jitra highway will provide a more effective link to the regional commercial centre at Pulau Pinang, assisting efforts to attract investment to the state. The overall increase in economic activities coupled with a relatively low population growth of 1.3% per annum will result in a per capita GDP growth of 7%, raising it to \$2,163 in 1990.

In Perlis, the implementation of in situ projects such as Muda II and Titi Tinggi will lead to increased agricultural productivity, while programmes to encourage industrial and commercial activities are expected to lead to the expansion of the manufacturing sector. The growth of these sectors, coupled with a relatively low population growth of 2% during the decade, will help Perlis maintain a per capita GDP growth rate of 7.1% per annum, resulting in a per capita GDP of \$2,171 in 1990.

During the period 1981-90, the middle-income states of Johor, Melaka, Negri Sembilan, Pahang, Perak, Pulau Pinang, Sabah and Sarawak will have GDP annual growth rates ranging between 6.8% for Perak and 13.7% for Pahang. Growth in Pahang will be attributable to the increased agricultural production arising from new land development programmes, timber extraction and expansion of the manufacturing sector. The functioning of Kuantan Port will stimulate commercial and service activities in the state, while improved transportation facilities made available through the completion of the Kuala Lumpur-Karak and the Kuantan-Segamat highways and improvements to the Kuantan-Dungun road will facilitate the exploitation of the state's resources. The state is projected to have a per capita GDP of \$3,672 in 1990.

Growth of Pulau Pinang's economy will stem mainly from the increased establishment of high-technology industries such as the manufacture of medical, electrical and telecommunication equipment as well as the expansion of service

activities related to programmes aimed at strengthening the role of Pulau Pinang as the regional growth centre for northern Peninsular Malaysia. The rapid increase in the state's industrial activities will result in a 9.3% annual growth rate of the manufacturing sector and a 5.5% annual growth rate of the services sectors with the latter contributing 35.8% to the GDP of the state. The completion of the Penang Bridge will improve economic linkages with the mainland and have a favourable impact on the economy of the state. Pulau Pinang is projected to have a low population growth rate of 1.6% per annum, during the decade, which will result in a per capita GDP of \$3,985 in 1990, 27% above the national average.

In Johor, the agricultural and manufacturing sectors will continue to be mainstay of the economy, accounting for 18.7% and 31.7%, respectively, of the state's GDP in 1990. The implementation of the Johor Barat Integrated Agricultural Development (IAD) project and the resource development programmes in the Johor Tenggara area is expected to contribute to the expansion of the agricultural sector. Substantial increases in manufacturing output is expected from the already established industrial estate at Pasir Gudang. The port at Pasir Gudang, together with the related establishment of a wide range of ancillary activities, will contribute to the expansion of Johor's tertiary sectors which will assume greater importance in the economy.

Efforts at expanding the industrial base of Melaka will focus on improving facilities in existing industrial estates and attracting a larger number of labour-intensive industries which are expected to help contain the outflow of labour from the state. The commercial operation of an oil refinery beginning in 1985 will contribute to the expansion of industrial output, enabling manufacturing to emerge as the fastest growing sector. Agriculture will remain as an important contributor to the state's GDP, aided by the implementation of an IAD project. By 1990, Melaka is projected to have a GDP growth rate of 7% resulting in a per capita GDP of \$2,650.

In Perak, the manufacturing sector will account for 28.4% of the GDP in 1990, making it the leading sector in place of agriculture. The government sector will emerge as the second largest contributor to the state's GDP. Although the share of mining in the state's GDP is expected to decline, Perak will continue to be the leading producer of tin in the country. In situ and new land development programmes will be undertaken to increase productivity in the agricultural sector. Perak's per capital GDP is projected to reach \$2,790 in 1990.

Negri Sembilan will undertake programmes to develop its available reserves of land to maximise agricultural production. The state's main impetus for growth, however, will be from the expansion of its industrial and services sectors which will benefit from the state's proximity to the major urban centres of Selangor and the Federal Territory. The GDP of the state is projected to grow at 7.4% per annum during the decade, leading to a per capita GDP of \$3,242 in 1990.



Sabah will intensify efforts to develop its vast natural resources through new land development programmes, timber, petroleum and copper production. The industrial base of the state will be expanded and diversified through the establishment of more resource-based, export-oriented industries mainly oil refining and the processing of cocoa beans to be located within the existing industrial estates. By 1990, Sabah will have a per capita GDP of \$2,808.

Sarawak's GDP growth is projected at 8.7% per annum during the decade. The state will continue to experience economic growth through the implementation of new land development programmes and the establishment of resource-based and heavy industries including petro-chemical and liquified natural gas. Together, these industries will contribute to rapid expansion of the manufacturing sector which will grow at 9.5% per annum during the decade.

Selangor and the Federal Territory will continue to experience high levels of GDP and per capita GDP throughout the decade. In Selangor, there will be an overall high level of economic activity, especially in the manufacturing and related tertiary sectors. The substantial output of the manufacturing sector will mainly accrue from industries located in the Kelang Valley, accounting for 37% of the total output of the country. This proportion, however, is lower than that of the last decade as a result of measures taken to disperse industrial growth throughout the country. The economy of the Federal Territory, with its high concentration of government and commercial services and facilities, will experience economic growth of 4.9% per annum, leading to a per capita GDP of \$4,727 in 1990.

During the decade 1981-90, the urban development strategy will focus on accelerating development of towns identified in the TMP to enable them to play the role of growth and service centres for their respective hinterlands. Priority will be accorded to the provision of adequate infrastructural and communication facilities and the dispersal of commercial and service activities to these urban areas. Programmes will be undertaken to link these towns with their rural hinterlands as well as with other regional growth centres in line with the objective of establishing corridors of urban development, especially in the less-developed east coast of Peninsular Malaysia and in Sabah and Sarawak.

Urban studies will be undertaken to prepare structure plans for existing towns which have prospects for the creation of agglomeration economies. These structure plans will focus on key areas such as spatial zoning, orderly traffic arrangements, urban drainage, sewage and waste disposal, environmental protection, and the provision of adequate housing and utilities. By 1990, the majority of the state capitals will have structure plans to guide their future spatial and economic expansion.

To complement the growth of major urban areas in each state as well as to avoid concentration of population and services within these areas, satellite towns and

service centres will be developed. Within the Kelang Valley, the development of Shah Alam, Kelang, Kajang, Bangi, Rawang and Sepang will receive priority attention to disperse urban growth away from Kuala Lumpur is, therefore, expected to grow at 3.1% per annum between 1981-90 compared with 4% in the previous decade.

In Peninsular Malaysia, Pulau Pinang in the north, Johor Bahru in the south and Kuantan in the east will be fully equipped to play their role as regional growth centres more effectively. At the same time, second-order towns such as Alor Setar and Kangar in the south, Seremban and Melaka in the centre, Batu Pahat, Segamat, Keluang and Muar in the south and Kuala Trengganu and Kota Bharu in the east will be developed to complement the growth of the regional centres in line with the objective of strengthening the linkages between various towns through a close - knit system of urban centres of different sizes and specializations.

In Sabah, programmes for the establishment of a strong urban network will involve the development of 20 new townships which will be linked to the regional centres of Kota Kinabalu, Sandakan, Lahad Datu and Tawau. Kota Kinabalu's role as the main regional centre will be further strengthened through improved port and airport facilities. While Kuching will remain as the administrative centre for Sarawak Bintulu will be developed as the focal point for industrial growth in the state, especially for heavy industries, as well as the centre for the development of the resource-rich Fourth Division.

## **XI : NATIONAL SECURITY**

The maintenance of peace and security within the country is vital to the pursuit of economic and social development, which is the strongest foundation for nation building. During the last decade, substantial efforts were directed at building up the nation's capacity and resilience for dealing with problems of national security arising from activities of the communist terrorists and subversives and anti-national elements. The influx of refugees into the country brought a new set of problems requiring a different approach for resolution.

The growth of big power rivalry demonstrated by recent events in other parts of the world and in Southeast Asia, made it necessary that adequate and firm measures be taken to protect the nation's sovereignty. This has become even more urgent in view of Malaysia's proximity to countries in the Southeast Asian region which themselves have at various times been subjected to overt acts of aggression and to periods of internal political instability. The nation's defence planning has, therefore, to take into account these and other factors while efforts at bilateral, regional and international levels will continue to be pursued to establish a zone of Peace, Freedom and Neutrality (ZOPFAN) in this region in accordance with the Kuala Lumpur Declaration.

A substantial programme for national defence will be carried out to increase the capability and effectiveness of the armed forces to meet any external contingency. The armed forces will undergo rapid expansion with additional manpower and new and sophisticated modern equipment. Facilities for further training and accommodation will be provided to ensure the overall preservation of public order and internal security will also be expanded to enable the police to complement the role of the armed forces in national defence.

The problem of drug addiction and drug trafficking is a major concern to the Government. Drug taking is associated with moral decay and gradual loss of resourcefulness and, if unchecked, will pose a serious threat to the security of the nation. Drug addicts are not only a burden to society but then can be used by anti-national elements for subversive purpose.

In view of the adverse effects of drug addiction to the nation, the society and the individuals concerned, the Government will continue to undertake measures to control the availability and distribution of drugs. Since drug trafficking has world-wide connections, greater international cooperation with other Governments and agencies will be maintained. In addition, amendments to the Dangerous Drug Ordinance, 1952, have been made in 1977 to provide for mandatory capital punishment to those found guilty of trafficking 100 grams or more of dangerous drugs. Apart from these, the Government will also continue to step up its surveillance of drug trafficking along the coastal waters and at custom points.

To increase further public awareness of the problem and dangers arising from indiscriminate use of drugs, especially among children, Persatuan Mencegah Salahguna Dadah (PEMADAM), a voluntary national association receiving active support from the Government, has established branches throughout the country and conducted seminars and exhibitions for the benefit of parents and the public as a whole. A Narcotics Secretariat coordinates the work of the various public and private sectors bodies and provides the necessary guidance and direction in the all-out effort to deal with drug problem in the country. These activities will be further intensified during the next decade.

## **CHAPTER 10 : ORGANIZING FOR DEVELOPMENT**

### **I : INTRODUCTION**

In order to ensure that the policies and programmes for the decade 1981-90 will be successfully carried out, it is imperative that planning and implementation capabilities be enhanced and further initiative initiatives taken to organise the machinery of the Government to deal with the challenges ahead. The need for effective organization of the development effort is even more critical in the light of the less favourable outlook of the world economic situation, the need to ensure the attainment of the targets of the New Economic Policy (NEP), the challenges posed by advances in science and technology and the need to fully harness the nation's manpower resources for full participation in the development process.

### **II : BETTER PLANNING AND IMPLEMENTATION CAPACITY**

Planning at the Federal level is undertaken by central agencies, namely, the Economic Planning Unit (EPU), the Socio-Economic Research Unit (SERU), the Implementation and Coordination Unit (ICU), the Public Services Department (PSD), and the Malaysian Administrative Modernization and Manpower Planning Unit (MAMPU) in the Prime Minister's Department, the Treasury and Bank Negara Malaysia as well as the planning cells of various ministries. The EPU serves as secretariat to the National Development Planning Committee (NDPC), which comprises heads of all major economic development ministries, and to the National Economic Council (NEC), a committee of senior cabinet ministers under the chairman-ship of the Prime Minister, and coordinates the presentation of issues and policies for the consideration of the NDPC and NEC. At the state level, the State Economic Planning Units (SEPU) and State Development Offices (SDOs) are responsible for formulating state development strategies and coordinating the preparation of state development projects and programmes. Efforts were undertaken over the years to strengthen the planning and implementation machinery, but the large expansion of public sector development programmes during the last decade continued to impose a heavy strain on planning and implementation capacity of the public sector.

To ensure full implementation of programmes and projects during the Fourth Malaysian Plan (FMP), the capacity of public sector agencies will be further improved through a more coordinated and effective system of planning and implementation. Towards this end, the planning capacity of public sector agencies will be continually improved during the next decade through training of personnel in the field of regional and project planning as well as management of public enterprises

and organizations. While the National Census of Population and Housing, 1980, will provide current data for planning at the national level, an inventory of data compiled in 1979 will facilitate the collection and updating of a wide variety of data necessary for planning at the regional and state levels. Data from the National Agricultural Census, 1977, will be utilized to formulate programmes towards achieving the NEP objectives. Several surveys and studies aimed at providing better knowledge and understanding of the economy and improving the planning process will also be carried out during the next decade. In addition, a number of measures will be undertaken to improve implementation procedures and revamp the administrative system. Some regulatory changes will be introduced to improve efficiency and discipline in the civil service and certain administrative and financial procedures will be reviewed.

For the purpose of program monitoring and evaluation, social indicators already developed to measure socio-economic development will also provide benchmarks for assessing the progress achieved at regional, state and local levels. The results of impact studies will facilitate evaluation of the effectiveness of present policies and programmes towards achieving the NEP objectives. Monitoring and evaluation capabilities of agencies directly responsible for implementation projects will also be strengthened to enable the agencies to make timely adjustments during the implementation phase.

The National Integrated Data System (NIDAS) project will be implemented to facilitate centralization and standardization in the compilation of data important for planning, monitoring and evaluation. A pilot project has been completed and preparation for extending the system throughout Malaysia is underway.

### **III : PRODUCTIVITY AND TRAINING**

Effective management and utilization of the nation's resources are necessary conditions for intensifying development during the next decade. With the increasing tempo of industrialization and rapid technological changes, the need for more efficient utilization of labour becomes crucial. In addition, higher productivity provides opportunities for increasing for increasing real incomes, thus raising the general standard of living.

The productivity of labour in terms of value added per worker increased at an average annual rate of 3.6% from \$3,624 in 1970 to \$5,141 in 1980. There were, however, wide differences between sectors in the level of output per worker as well as the rate of growth in productivity over time. Manufacturing; mining and quarrying; and transport, storage and communications recorded rates of growth of productivity of 4.6%, 4.4% and 5.7% per annum, respectively. Productivity in government services and other services increased at 3.3% and 2.4% per annum, respectively, while

agriculture and wholesale and retail trade experienced rates of growth of productivity of around 2.4% and 1.5% per annum, respectively. These variations were the results of several factors such as size and pace of capital formation in the various sectors of the economy, choice of technology and growth and level of skills in the labour force.

The attainment of the long-term output growth of 8% per annum during 1981-90 will require an increase in productivity per worker of about 4.7% per annum during the period. To achieve this, several measures are planned which will have immediate and long-term results on the performance of the economy. Investments in education and training will be maintain at high level during 1981-1990 to improve the quality of the labour force through more emphasis on vocational, technical and industrial training. Various incentives will also be given to increase the pace of capital formation and to encourage the adoption of new and appropriate technology, especially in the low-productivity sectors of the economy. The efforts of the Government will be supplemented by the private sector through on-the-job training and management development programmes to upgrade the skills and capabilities of the workforce.

While major responsibilities in providing basic education and skills lies with the Government, the development of skills in employment is largely that of the respective employers. In the public sector, the National Institute of Public Administration (INTAN) will be strengthened to enable more training courses to be given at national and regional levels. The Malaysian Administrative Modernization and Manpower Planning Unit (MAMPU), besides coordinating manpower planning, is entrusted to provide consultancy services and introduce new management techniques and innovations to the public service, aimed at improving and modernising administrative systems and procedures so as to increase effectiveness and efficiency. At the management and supervisory levels, the National Productivity Centre (NPC) will continue to play an important role in the field of management development and supervisory training.

Efforts to raise productivity should be fully reflected at the level of the enterprise. Since investments in human resources development increase productivity, employers in the private sector have a major responsibility in upgrading skills as well as expanding their training facilities. The Malaysian Institute of Management (MIM) will continue to provide courses in various aspects of management in line with changing technology. In short, human resources development will need to be given high priority by employers in the public and private sectors to equip the economy for the management challenges during 1981-90.

#### **IV : ORGANIZING FOR EXPORTS**

The growth target for exports in the Outline Perspective Plan (OPP) was set at 8.3% per annum but the rate achieved during the last decade was 7.6% per annum, implying that exports need to grow at least by 9.1% per annum during the next decade to achieve the OPP target. This requires more progressive export promotion efforts and close monitoring of the factors contributing to export performance and competitiveness of Malaysia's export products.

During the last decade, efforts at export promotion were undertaken through bilateral and multilateral negotiations aimed primarily at lessening or eliminating tariff and non-tariff restrictions, and measures to widen existing markets for Malaysian exports and diversify into new areas. These measures included the setting up of trade offices overseas, organizing of trade missions and participation in international trade fairs. In addition, financial facilities and fiscal incentives were provided to Malaysian exporters.

Malaysia's trade offices which have been established in major trade centers overseas will form the backbone to the intensive efforts that will be undertaken for the promotion for Malaysia's exports in the years ahead. Together with Malaysian Industrial Development Authority (MIDA), they will provide information on trade and investment opportunities which will further strengthen the overall promotional efforts. In view of the increasing importance of regional markets in the developing countries, new trade offices will be established in West and East Asia, Eastern Europe, South America and North and Western Africa.

As part of its promotional measures, the Government will continue to participate in trade fairs overseas. Such fairs will not only enable Malaysian exporters to exhibit their products, acquire sales order and appoint agents but also obtain know-how of more modern production techniques and design which will further improve the export potential of Malaysia's manufacturers.

The Malaysian Export Centre in Kuala Lumpur was established primarily to disseminate information on export markets for Malaysian products and channel enquiries from overseas importers to Malaysian exporters. The activities of the Centre will be expanded to include the organization of seminars relating to export promotion and incentives, and trade fairs both in Kuala Lumpur and overseas. The Centre will also publish a directory of Malaysian exporters which will include information on types of products, production and export capacity as well as their export destinations.

In addition to these promotional efforts, the Government also provides financial facilities to encourage the development of export-oriented industries. The Malaysian

Export Credit Insurance Berhad (MECIB), a joint-venture between the Government and the private sector, was incorporated in 1977 aimed at protecting both the manufacturers and exporters against any possible loss arising from commercial, economic and political risks. The activities of MECIB will be extended to provide direct guarantee facilities to enable banks to insure their export credit to exporters. Facilities for specific guarantees for individual contracts for capital goods will also be provided. Regional offices of MECIB will be established in Kuantan, Kota Kinabalu and Kuching. Under both the pre-shipment and post-shipment refinancing facilities introduced in 1979 and 1977, respectively, Bank Negara Malaysia, through the intermediary of the commercial banks, provides facilities to refinance exports of specified manufactured goods at preferential rate of interests.

To further promote the growth of export-oriented industries, fiscal incentives are provided such as tax deductions in the form of export allowance based on the value of export sales, accelerated depreciation allowance and deduction for promotional expenses incurred overseas such as advertising, market research, overseas travel and cost of maintaining offices abroad.

The Government is also examining the feasibility of establishing large trading corporations to supplement the public sector efforts in increasing exports, particularly in obtaining new market outlets. These corporations, if established, will operate like any other private sector organization including entering into joint-ventures with transnational corporations in order to benefit from the latter's intensive marketing outlets and managerial expertise.

## **V : APPLICATION OF SCIENCE AND TECHNOLOGY**

The importance of science and technology in the economic and social development of the country is enshrined in the Rukunegara. During the last decade, emphasis was given to the development and transfer of appropriate technology covering major areas of activity such as agriculture, industry, energy, medical and health, and infrastructure.

The efforts of many years of research in science and technology have contributed to making Malaysia a leading producer of rubber, palm oil and pepper and to significant progress in padi production through the use of improved varieties. Continuing research on a wide area of subjects is being carried out by Malaysian Agricultural Research and Development Institute (MARDI), Rubber Research Institute Malaysia (RRIM), Palm Oil Research Institute of Malaysia (PORIM), Forest Research Institute (FRI), Mines Research Institute, Institute of Medical Research (IMR) and institutions of higher learning. The private sector has also undertaken a considerable degree of research activities and in addition, is able to call on the research programmes of their parent companies abroad.



Industrial research is of critical importance to the technological advancement in the manufacturing sector. To meet this need, Standards and Industrial Research Institute of Malaysia (SIRIM) was established to undertake research in the transfer of appropriate technology and to ensure acceptable standards. In the field of nuclear research, Pusat Tenaga Atom Tun Dr. Ismail (PUSPATI) was established at Bangi in 1979 to undertake training and research in the application of nuclear technology for agriculture, industry and medicine. It is expected to be operational in 1982.

The Ministry of Science, Technology and Environment is responsible for the coordination and promotion of science and technology and is assisted in this task by a National Council for Scientific Research and Development and the Coordinating Council for the Transfer of Technology. The main function of the former is primarily to advise the Government on scientific and technological matters. The Council has additional responsibilities to ensure that the manpower potential for research and development activities of the country are fully utilized and developed and to provide a liaison with other countries on scientific and research

In order to gain from research undertaken by the developed countries, Malaysia maintains close liaison with various international scientific organizations and undertakes international cooperation in the fields of science and technology through such agencies as the International Council of Scientific Unions (ICSU), Commonwealth Science Council (CSC), International Atomic Energy Association (IAEA) and the Pacific Science Association (PSA). As a member of the Asean Committee on Science and Technology, Malaysia also benefits from the researches undertaken by other member countries.

## **VI : PARTICIPATION BY THE PEOPLE**

In the nation's development effort, the people must respond positively to the challenges and be prepared to play their part. This they can do through their participation in the cooperative movement, sports and recreation, consumer movement, community and welfare organizations and maintenance of security. The cooperative movement provides an important vehicle for the promotion of economic activities, mobilization of capital and the acquisition of property. The participation of target groups such as small farmers and fishermen into farmer's and fishermen's cooperatives will be intensified during the FMP through the provision of infrastructure, working capital and management training. Small and inefficient cooperatives will be amalgamated into larger and more viable cooperatives. The youth, women and parent-teachers organizations will also be mobilized to enable them to participate more fully in the development efforts of the nation. The setting up of the National Advisory Council on Integration of Women in Development (NACIWID) in 1976, as the national machinery for channelling issues pertaining to

women, reflected the Government's commitment to integrate women in all aspects of development.

The consumer movement will be further encouraged to act as a watchdog on price trends and quality standards. Ikatan Relawan Rakyat (RELA) and Rukun Tetangga will be further consolidated to involve citizens in good neighbourliness and area security surveillance. The participation of the general public in sports and recreational activities will be strengthened through the establishment of sports complexes as well as through assistance to be provided to sports and related organizations. At the grassroot level, the Jawatankuasa Kemajuan dan Keselamatan Kampung will continue to assist the Government in local development, and security surveillance at the kampung level.

## **CHAPTER 11 : MACRO-ECONOMIC FRAMEWORK**

### **I : INTRODUCTION**

The economy will undergo further expansion and diversification during the Fourth Malaysia Plan (FMP) period. Opportunities for expansion of the economy are bright and the problems to be overcome are challenging. While the major concern will be the impact of external developments on the Malaysian economy, in particular the rate of domestic price increase, the strong resource base of the economy, coupled with appropriate policies and programmes, will enable the economy to sustain the momentum of development. The macro-economic targets and the strategies to be adopted during the FMP take into account developments in the international economy and Malaysia's resources and potentials for development.

### **II : PROSPECTS OF GROWTH**

Malaysia's strength will continue to lie in its strong resource base and the relatively well diversified and developed economic structure. The current international instability is forecast to continue until at least the initial years of the Plan and will have direct impact on the country's economic development. Exports now account for 43% of the Gross Domestic Product (GDP) while imports supply 47.5% of the domestic requirements. The relative weakening in aggregate demand of industrialised nations will have some dampening effect on the demand for Malaysia's exports, but as the international situation improves during the mid-period of the Plan, exports are expected to perform better. The prospects for Malaysia's commodity exports, will remain good in view of the increasing competitiveness of natural rubber against synthetics as well as the increasing demand for major primary commodities as a hedge against inflation and for stockpiling to meet strategic needs. The demand for manufactured exports will be largely influenced by external demand and the ability to make inroads into existing and new markets. Overall, the export sector is expected to grow at 14.7% per annum in current prices at 9.7% in real terms during the Plan period.

The real adverse effects of international instability is expected to come from the rapidly rising world oil prices and the continuing inflationary situation in developed countries pushing up prices of imports and domestic costs of production. Total imports are projected to increase by 16.4% per annum in current prices or by 8.6% per annum in real terms. The high cost of imports will add to domestic inflation which is expected to average between 6% to 7% per annum, greater than 4.6% per annum recorded during the Third Malaysia Plan (TMP). The actual outcome of domestic price

increase during the FMP is difficult to predict and will depend, not only on the impact of international inflation on imports but also on the ability to increase production and enhance efficiency in the use of scarce resources.

GDP is projected to increase at 7.6% per annum in real terms. While this rate of economic growth is lower than that achieved during the TMP, it represents a significant expansion given the constraints, both external and internal, to be faced during the Plan period. The agricultural sector, currently the largest contributor to GDP, will expand at 3% per annum while the manufacturing sector will experience the fastest rate of growth of 11% per annum, thereby becoming progressively more important in terms of income and employment. During the FMP, additional resources will be devoted to increase productive capacity particularly with respect to increasing the acreage under rubber, oil palm, padi and other agricultural crops. The major contribution of this expansion to output will be felt after the FMP period. Considerable emphasis will be placed on increasing the value added of primary commodities through domestic processing of raw materials including petroleum and in identifying and encouraging new areas for export promotion and efficient import substitution by the private sector. As in the past, considerable reliance will be placed on generating domestic resources through appropriate fiscal and monetary policies. The inflow of external resources required to supplement national savings in financing investment amounts to \$149 million over the five year period. The balance of payments reserves position will remain favourable.

The amount of investment over savings will be larger in the private sector than in the public sector. This reflects the policy of Government to step up the role of private investment in the productive expansion of the economy and in the achievement of the New Economic Policy (NEP). The major emphasis of public investment will be on programmes and projects geared to poverty eradication, restructuring of society and improving the quality of life. A lower rate of public investment growth is also accounted for by the rising share of expenditure for defence and internal security in the total development budget in order to further expand and strengthen the defence and security capabilities of the country.

### **III : GROWTH OF AGGREGATE OUTPUT AND INCOME**

Underlying the average five year GDP growth of 7.6% in real terms or 14% in current prices, is the expectation that the economy will slow down up to about 1983, but grow more rapidly through 1985 in line with the expected recovery of the world economy from low growth and high inflation. Although the GDP will expand substantially, nearly 104% more in current prices than during the TMP, the value of real resources available will not expand to the same extent in view of the expected change in the relative price of exports and imports or the terms of trade.

The terms of trade is expected to decline marginally during the FMP at a rate of 0.2% per annum as a result of a slightly higher increase in the price of imports compared with that of exports between 1980 and 1985. This will lead to some losses in the terms of trade estimated at \$479 million. As shown in Table 11-1, notwithstanding the losses from the terms of trade, the real per capita income will increase by 5% per annum, thus enabling Malaysians to experience continuing improvements in living standard.

#### **IV : PRODUCTION BY MAJOR SECTORS**

The continued expansion of industrial and agricultural production as well as the further diversification of the Malaysian economy will underlie the growth in GDP during the FMP period. The distribution of growth by supplying sectors reflects the continuity of past trends whereby the secondary and tertiary sectors will become more important relative to the primary sector. Table 11-2 shows the projection of GDP by sector of origin and the share of individual sector.

The growth of the agriculture, forestry and fishing sector, currently the largest sector in the economy, will be somewhat lower during the FMP period compared with its performance during the SMP and TMP periods. The sector is projected to grow at 3% per annum compared with 4.3% during the last decade. In addition, the sector's contribution to national output is expected to continue to decline from 22.2% in 1980 to 17.8% in 1985. By 1985, this sector will cease to be the largest in terms of its contribution to GDP.

This development is largely due to the slower growth anticipated for the sector's main commodities, namely, rubber and palm oil, as the full impact on production brought about by new planting and replanting had already been realised during the late 1970's. In addition, the increase in timber output, which in the past decade contributed almost 20% of the sector's output, is also expected to decline.

The development of the agricultural sector during 1981-85 will be guided by the principal objectives of increasing food production to meet the requirements of an increasing population, accelerating the growth of export earnings and increasing productivity and incomes of the agricultural labour force. An important aspect will be the formulation of an integrated development programme for agricultural commodities and the effort to assign priorities to commodity developments. The major tree crops will continue to be given priority as they are already dominant in the overall land use and the growth of these crops is expected to contribute significantly to the expansion in the sector's output and the income of the smallholders. Emphasis will also continue to be given to the production of other crops, such as cocoa, tobacco, vegetables and fruits, as mixed crops and to diversify farm activities, and to the expansion of the livestock and fisheries to generate additional incomes for the

agricultural poor. In addition, greater attention be given to the provision of improved marketing and institutional infrastructure.

Rubber production is anticipated to expand at 0.7% per annum, compared with 2.3% per annum growth recorded during the last decade. The slow growth is due mainly to the substantial decline in replanting from 172,500 hectares during 1976-80. However, the decline in acreage resulting from slower replanting will be offset by productivity increases.

Greater efforts will be undertaken to expand rubber output in line with the Government's Dynamic Production Policy, designed to maintain Malaysia's position as the leading producer of natural rubber. Under this policy, about 257,400 hectares will be replanted and 48,600 to 60,750 hectares newplanted during the FMP period. Apart from these efforts, the policy calls for further improvement and a wider application of production techniques and the intensification of research to identify new users.

The output of palm oil will continue to expand but at a lower rate of 8.5% per annum compared with a rate of 19.6% per annum achieved during the last decade. As in the case of rubber, the full impact of production resulting from past planting efforts would already be realised in the late 1970's and early FMP period. During the FMP period, a strategy to expand future production will continue to be pursued. To this end, new acreages amounting to 84,700 hectares will be planted with oil palm by major Federal agencies. In addition, a replanting programme for oil palm has also been formulated.

In Peninsular Malaysia, a National Forestry Policy was accepted and adopted in 1978, principally to conserve the existing forest reserves in view of the rapid rate of forest exploitation in the past. The aim of the policy is to ensure adherence by the state governments to the maximum quota for forest exploitation, the strict supervision of the intensity of forest harvesting, the expansion of capacity of wood processing mills and the acceleration in the rate of forest rehabilitation. With the implementation of the policy, sawlogs output from Peninsular Malaysia is expected to decline by 7% per annum. In Sabah and Sarawak, efforts to conserve forest resources are also anticipated to be implemented during the FMP period. As a result of these efforts, total sawlogs output will decline by 3.5% per annum during the FMP compared with the growth of 3.4% per annum during the last decade.

The policy of self-sufficiency in padi production will continue to be pursued during the FMP period. Other than ensuring that rice being the staple food is readily available for the population as world supplies are uncertain, continued efforts will be made to improve the incomes of the padi farmers. To achieve these objectives, the area under double-cropping will be further expanded and new areas amounting to 4,450 hectares per annum will be developed for padi production. In addition,

emphasis will be given to further improve productivity through the use of high yielding varieties, fertilizers, greater extension services, drainage and irrigation, and credit and marketing facilities.

During the FMP period, diversification of agricultural production will continue to be undertaken. Among the potential crops are cocoa, pepper and tobacco. The extent of expansion in the cultivation of these crops will take into account the availability of suitable land and the commercial viability of the crops. The livestock and aquaculture industries will also be encouraged.

The growth of the mining sector has been dominated by the increase in the output of crude petroleum since the middle of the last decade. During the FMP, production of crude petroleum is expected to increase by 5.3% per annum from 280,000 barrels per day in 1980 to 362,900 barrels per day in 1985. The prospects for the production of liquified natural gas (LNG) are bright with the existence of sizable reserves. With the completion of the Bintulu LNG project, the production of LNG is expected to come on stream by 1983, with a capacity to produce six million tonnes mainly for export.

Tin output has been declining since 1973 due to depleting tin ores in existing mines. It is expected to decrease by 0.8% per annum during the FMP period. Copper output is projected to decline on account of the limited availability of existing reserves in Sabah. Taking all these into account, the mining sector is estimated to record a growth of 5.8% per annum during the FMP period, a substantial part of which will be accounted for by LNG production. The manufacturing sector will continue to be the leading sector during the FMP but is projected to grow at a lower rate of 11% per annum compared with the rate of growth of 13.5% per annum recorded during the TMP period. The sector will account for nearly one-third of the increase in GDP and its share in total GDP will increase from 20.5% in 1980 to 23.9% in 1985.

The stimulus to expansion of the manufacturing sector will come from both external and domestic demand supported by availability of investible resources as well as by the industrial policy and promotional measures. The export-oriented industries such as timber products, electronics, textiles and rubber products will continue to enjoy increases in external demand but at lower rates of increase ranging from 4% to 19% per annum than those achieved in the past. A number of newly emerging products which have significant demand potential will be given strong encouragement and these include precision products such as surgical and dental instruments and equipment, and scientific gauges. In addition, several agro-based industries which have good potential for export and domestic demand will receive priority treatment and are expected to increase production substantially during the FMP. These include processing of cocoa and palm oil, production of heavy duty tyres and specialty rubber products like surgical and household gloves and high value timber-based products such as knock-down furniture, panels and carved doors and other joinery items.

Import substitution will also account for some increase in manufacturing production. Important among these are the production of processed food, intermediate goods such as oils and fats, industrial chemicals, chemical products and cement, which together accounted for 41.1% of the total imports in 1980. In addition, considerable scope exists for Malaysia to enter into the next phase of import substitution for the manufacture of capital goods, the import of which accounted for 45.4% of total investment goods demand in 1980. The Heavy Industries Corporation Malaysia Berhad was set up in 1980 to encourage, on a longer term basis, the growth of capital-intensive industries such as aluminium, cement and steel.

The construction sector value added is projected to increase at a rate of 9% per annum during the FMP, compared with 12.6% per annum during the TMP. This deceleration in growth is expected in view of the decline in non-residential and engineering construction attributed to the public sector during the FMP. The declining construction activity of the public sector, however, will be more than offset by the rapid expansion in construction by the private sector. Residential construction demand in the private sector will continue to be substantial in view of the encouragement given to home ownership and the relatively easy access to housing loans provided by both private and public sector institutions. Non-residential construction by the private sector is expected to increase, especially that related to the manufacturing sector in line with the high rate of increase in private investment targeted for the period.

The services sector which comprises mainly the wholesale and retail trade; transport, storage and communications; government services; finance; and utilities, is expected to expand at more or less similar rate as the overall GDP growth. The government services sector, the largest of all and which in 1980 accounted for 28.8% of total services value added, is forecast to increase by 9% per annum in line with expected increase in public consumption expenditure of about 9.2% per annum during the FMP. Past performance indicated strong relationship in the growth between the wholesale and retail trade; finance; and transport, storage and communications sectors with those of the agricultural and manufacturing sectors. During the FMP, these two latter sectors, together, is expected to increase by 7.1% per annum and they are expected to continue to influence the performance of the wholesale and retail trade; finance; and transport, storage and communication sectors.

Expansion of the utilities sector, as in the past, will keep pace with the growth in the manufacturing sector, though other factors such as the rate of urbanization and population increase will also influence significantly the performance of the utilities sector. The utilities sector is projected to grow at 10% per annum, in line with the increase of 11% per annum expected of the manufacturing sector. The remaining services sectors are projected to increase at about the same rate as the overall GDP



## V : SOURCES OF GROWTH

With public investment growing at 4.1% in current prices, the major source of growth for expansion of the economy will come from exports, private investment and public consumption. Exports are projected to increase by 9.7% per annum, while private investment is targetted to grow at 8% per annum in real terms. The growth in these demand aggregates, as shown in Table 11-3, will call for policies aimed to assist their expansion.

The performance of the exports sector during the FMP will be determined largely by development in the international economy and also by the supply response of the country's major export commodities. Many industrialised nations have adopted deflationary measures to control inflation and the recovery to a stable growth path is likely to be longer because of the lead time involved in adjusting to high energy costs. In addition, imports by industrialised nations are expected to grow slowly in view of the need to safeguard their current account positions and the marked increase in protectionist policies of industrialised countries. In light of these developments, it is expected that world export prices for primary commodities will also reflect a downward trend.

On the domestic front, a major constraint will be on the supply of primary commodities. The rates of increase in the volume of exports of rubber and palm oil are expected to decelerate while the volume of tin and copper exports will decline. In addition, the export volume of sawlogs will decline as a result of conservation policy.

Based on these considerations total commodity exports are projected to grow by 17.3% per annum in current prices, as shown in Table 11-4, compared with a growth rate of 25.2% during the TMP. Export earnings from agriculture are projected to increase by 10.4% per annum accounting for 26.5% of total exports by 1985 with earnings from rubber expected to increase by 10.6% per annum due mainly to price increase of 10.3% per annum and a 0.3% annual increase in the export volume. The prospects for palm oil exports during the FMP are less favourable compared with the TMP in view of the anticipated rapid expansion in the world supply of oils and fats which will dampen price increases.

Earnings from mineral exports are projected to increase by 19.7% per annum during the FMP due to increases in prices for tin, petroleum and copper and in the export of LNG amounting to \$3,284 million in 1985. The export volumes of tin and copper are projected to decline as a result of declining trend in output. In the case of petroleum, the export volume is projected to increase by 3% per annum.

Exports of manufacturers are anticipated to expand rapidly by 24.2% per annum. Textiles and electronics exports which experienced rapid expansion in the past will

still continue to be the leading sectors but the rate of expansion is likely to moderate for a number of reasons. To begin with the levels of textiles and electronics exports were already high in 1980 and to repeat past growth will require large absolute increases which will be difficult to achieve. In addition, the growth in textiles exports will be limited by quota restrictions and further expansion will depend on the progress of negotiations of textiles quotas with developed countries and on the availability of new markets. In the case of electronics, although international demand will grow, the rate of export expansion will depend on Malaysia's ability to maintain its competitive position in the face of new sources of international supply and the rising cost of domestic labour.

To achieve the rapid growth of manufactured exports, an aggressive export strategy will be formulated and implemented so as to expand into existing and new markets and to improve the competitive position of manufactured exports. Further, special emphasis will be given to develop products that have good export potential in order to diversify and broaden the base of manufactured exports.

Private investment is expected to play a major role in the domestic economic expansion and in the attainment of the NEP. Out of the total investment of \$102,639 million projected for the FMP period, \$74,111 million or 72.2% is expected to be met by the private sector. This implies a target growth of private investment (excluding investment in oil industry) of 11% per annum in real terms or 16.6% per annum in current prices. Investment in the oil industry which in 1980 accounted for 17.7% of private investment is expected to decline resulting in a private investment growth of 8% per annum in real terms or 13/1% per annum in current prices.

Significant scope exists for expansion of industries that fulfil important development criteria such as utilization of local materials, dispersal of industries and high rate of employment creation. Among the industries in which investment will be encouraged include resource-based industries, agricultural machinery and equipment, building and construction, and small-scale industries. In addition, efforts to promote capital-intensive industries will be accelerated with the setting up of the Heavy Industries Corporation Malaysia Berhad. A number of projects including iron and steel, aluminium and cement plants as well as an engineering servicing complex, has been identified as potential industries for promotion during the FMP.

The deteriorating international inflation expected during the period of the FMP, coupled with the relatively uncertain external demand prospects, could affect adversely the inducement to invest. To assist in the achievement of the private sector investment target, the Government will introduce measures to offset or minimise the adverse effects of weak demand and cost escalation, as well as to improve the administrative system to speed up investment decisions.

Private consumption which accounted for 58.5% of GDP in 1980 is projected to increase by 7% per annum in real terms during the FMP. This rate of increase is lower than that for the TMP but is nevertheless significant relative to overall demand in the country. With population projected to increase by 2.6% per annum, per capita private consumption will increase by 4.3% indicating continued improvement in welfare of the population. Public consumption is envisaged to increase by 9.2% per annum in real terms, resulting in its share in GDP rising from 20.2% in 1980 to 21.7% in 1985. This rapid growth in public consumption arises out of the need to cater for the increase in personal emoluments and the service functions of the Government.

Estimated public sector investment, including purchases of aircrafts and ships by MAS and MISC, during the FMP will amount to \$28,528 million. The share of public investment in total investment is 27.8% lower than the corresponding share of 36.8% during the TMP. In real terms, public investment will decline by 1.4% per annum compared with an increase of 9.3% during the TMP.

In the past, public investment has grown rapidly and, therefore, future growth is likely to be lower even if there are absolute increases in public investment. Furthermore, it is the objective of the Government to provide a major role for the private sector in building up productive capacity in the economy and to contribute towards the attainment of NEP objectives. The bulk of the public sector investment will be directed towards poverty eradication and restructuring of equity and asset ownership and to expand social facilities such as education, health and housing. Public sector agencies such as the Highway Authority Malaysia and the Heavy Industries Corporation Malaysia Berhad will, in addition to the initial equity, arrange for their own source of financing to implement their respective programmes.

The focus of public investment expenditure will be to consolidate past and existing development programmes and projects with a view to strengthen their effectiveness. Towards this end, the Government will take appropriate measures to improve implementation and coordination of public sector programmes and enhance the viability of public sector projects.

The slowdown in domestic demand and the increase in the degree of import substitution will lead to a lower growth in imports of 8.6% per annum. This growth compared with the high rate of increase of 14.8% per annum during the TMP is due primarily to the expected slowdown in total investment and a deceleration in private consumption. In addition, past and present efforts to encourage import substitution are expected to bear fruit during the FMP thereby contributing towards the lower rate of increase in imports.

## **VI : SAVINGS AND INVESTMENT**

The extent of the resource gap in terms of the difference between savings and investment for the economy as a whole, and for the public and private sectors, is shown in Table 11-5. Taking into account the growth in private disposable income and government revenue and the growth in private and public consumption, overall gross national savings is expected to amount to \$102,490 million, with the private sector accounting for 66.3% of the total. Gross national investment (including change in stocks) is estimated to amount to \$102,639, with the private sector contributing 72.2% of the total investment. The overall resource gap for the five year period is estimated to be \$149 million which will have to be met by the inflow of real resources from abroad.

The investment-savings gap will be substantial in the private sector compared with the excess of savings over investment in the public sector. The large size of the investment-savings gap in the private sector poses a great challenge to the private sector in mobilising its resources for investment. In this regard, the fiscal and monetary policies of the Government will be such as to facilitate the inflow of long-term private capital as well as providing public sector funds either through transfers or loans to the private sector to finance its investments.

## **VII : BALANCE OF PAYMENTS**

The prospects for the balance of payments position during the FMP will remain favourable. As shown in Table 11-6, the merchandise balance, comprising exports and imports is projected to register a surplus of \$35,241 million during the FMP compared with \$21,954 million during the TMP, largely due to the growth of commodity exports and the lower rate of growth in the value of imports projected for the period. However, the services account, comprising mainly payments for freight and insurance and investment income will continue to be in deficit. The services account deficit is expected to reach \$34,910 million due to the continuing expansion in foreign trade as well as the increasing contribution of foreign investment to the economy. Taking into account the merchandise and services account, the current account of the balance of payments will register a deficit of \$149 million.

During the FMP, the Government will seek to reduce the growing dependence on invisible imports through expansion of the national shipping line and the progressive implementation of the cabotage policy so that coastal shipping would be undertaken by Malaysian registered carriers. In addition, policies would be adopted to expand further the capacity of the domestic insurance industries to provide adequate underwriting services and an equitable sharing of the international insurance business.

In the capital account, the cumulative net long-term for private capital inflow is \$9,405 million. In line with the private investment target, Government policy will seek to improve the investment climate to attract greater volume of foreign investment.

Net inflow of official long-term capital is projected at \$4,000 million comprising \$2,000 million of project loans and \$2,000 million of market loans. Project loans will be raised from international lending institutions, bilateral sources and supplier credits. The potential for market borrowing is large in view of Malaysia's high credit-worthiness.

However, the amount actually capable of being raised remains uncertain and will depend on the requirement and feasibility of such operations, taking into account international money market conditions. The target for official long-term capital projected for the FMP period will lead to a decrease in the external public debt service ratio from an average of 4.5% during 1976-80 to an average of 2.4% during 1981-85, which is still low by international standards and consistent with sound monetary and fiscal policies, given the country's favourable long-term economic prospects.

The current and capital accounts, taken together, will yield an overall balance of \$9,524 million and the accumulation of external reserves of the order of about \$20,000 million by 1985.

## **VIII : PRICE DEVELOPMENT**

The major concern of the Government is the development in the domestic price level during the FMP. While during the TMP, Malaysia has been successful in containing inflation relative to other countries, there is considerable uncertainty as to the outcome of the domestic price level during the FMP because of the uncertain international price trends and the high cost of fuel. The forecast is that inflation experienced in recent years by the Organization for Economic Cooperation and Development (OECD) countries, which together accounted for 61.4% of Malaysian exports and 62.8% of imports, will continue through 1981 and decelerate as the impact of present demand policies begin to take effect. Over the five year period, international inflation is expected to average about 7% per year. In view of the openness of the economy, domestic prices will continue to be influenced by the rate of international inflation.

Another significant external influence is the import price of oil which increased by 16.9% per annum during the TMP. The country is estimated to import about 70% of its domestic requirements from West Asia by 1985 while uncertainty over the future

supply will continue to exert an upward pressure on the prices of oil. The increase in the price of energy will increase the cost of production of energy-intensive industries such as electricity generation, cement, iron and steel. Since the output of these industries forms an important input to most of the sectors in the economy, the overall effect will be to increase the domestic cost of production and the prices of consumption goods.

The forecast of the domestic price level during FMP, after taking into account trends in international prices is 6% to 7% per annum. Export prices are projected to increase by 7% per annum, compared with 14.1% per annum during TMP. The major determinants of the overall export price level will be the price of primary commodities.

The price of rubber exports which accounted for 17.1% of the value of total commodity exports in 1980 is projected to grow at 10.3% per annum. Given the impact of prices of energy on the cost of production of synthetic rubber and the rising demand for all elastomers over projected supply of natural rubber, the export unit value of rubber will continue to remain high. In addition, the finalization of International Rubber Agreement within the framework of the Common Fund will help to stabilise the annual price fluctuation of rubber.

Other primary commodities whose prices influence the export price index are timber, palm oil, tin and crude petroleum. The export unit value of sawlogs as well as sawn timber is anticipated to grow at a high rate of 11.9% per annum in view of the increasing use of timber by the construction and housing industry in both the exporting and importing countries and the conservation policies adopted by the exporting countries. Palm oil prices are expected to grow at a rate of 3.1% per annum. However, the increase in the price of palm oil which presently accounts for 8.7% of world production of all major oils and fats, is not expected to be as high as that of other primary commodities. The relatively slower growth in the unit value exports of palm oil compared to other primary commodities is due to the projected expansion of world supply of other oils and fats which are close substitutes for palm oil.

The medium and long-term price trends for petroleum remain uncertain in view of the market and non-market forces which influence inter-national price determination. Nevertheless, taking into account past increases and anticipated production levels of oil exporting countries, the export unit value of crude petroleum is projected to grow at 16% per annum.

The import price index is expected to grow at about the same rate as the projected international inflation of 7% per annum. The major determining factors in the movement of the import price index will be the import prices of consumption goods,

machinery and transport equipment, and oil which accounted for 56.5% of the total imports in 1980.

The major source of domestic inflationary pressure is likely to emanate from the emerging tight labour market and the bottlenecks in the supply of construction materials. While unemployment and under-employment still continue to exist, structural constraints in the supply of labour, particularly with respect to imbalances in specific types of labour and skills and location have led to shortages of labour for some sectors of the economy and, consequently, pressure on wages. The most affected were the labour-intensive manufacturing industries, the construction industry and the estate sector. In addition, continuing bottlenecks in the supply of construction materials in the face of rising demand for residential and non-residential construction will exacerbate the domestic inflationary situation.

In the face of all these developments, the effort to contain inflation within 6% to 7% per annum will be a challenging task. As in the past, the Government will continue its programme of fiscal and monetary policies and administrative measures to contain price increases. The implementation of fiscal and monetary policies along counter-cyclical lines will be an important means through which Government will seek to moderate cyclical fluctuations so as to sustain the orderly development of the economy. In particular, the Government will closely monitor the growth of money supply consistent with development needs and continue its policy of ensuring that a major part of lending by financial institutions is geared to the expansion of productive capacity, especially to the needs of small businesses. The expenditure programmes of the Government will be designed to effect counter-cyclical changes in the economy and the tax system will be kept under continuous review not only as an instrument of revenue, but also to stabilise the economy and to ameliorate the impact of any adverse developments on the poor.

The Government will, from time to time, review price control of approved items taking into account the need for reasonable return on investment by businesses and the welfare of consumers, particularly the poor. Price control, if used indiscriminately, will distort the allocation of resources and lead to shortages and black marketing. By the same token, indiscriminate increase in prices of essential commodities affects the livelihood of the masses of the population. The Government, therefore, in responding to requests by businesses for price increases of essential commodities, will continue to adopt a balanced approach.

One major area that has an important influence on the domestic price level is the protective tariff provided to the manufacturing sector, particularly the import substitution industries. While the present level of protection is still moderate by international comparison, the increase in the rate of effective protection has been substantial. With the emphasis on the expansion of the manufacturing sector and as the opportunities for import substitution are exploited, the need for a review of tariff

protection becomes important to ensure that productive efficiency on the part of those industries enjoying tariff protection are increased and the costs of protection to society are minimised. In this regard, Government attention will be focussed on undertaking a study of present tariff structure and levels so as to streamline the present tariff rates and levels consistent with the need to promote an efficient industrial structure.

A very important means through which any potential inflationary pressure can be curtailed is through increasing production. Constraints to production such as low productivity, artificial restraints and bottlenecks, structural rigidities and immobilities in the factors of production and inefficient marketing and distribution system lead to undue pressure on the cost of production and generate inflationary expectations. All these need to be progressively reduced with emphasis on increasing food production, the strengthening of marketing arrangements and increasing the supply of construction and building materials through expansion of capacity.

The task of controlling inflation requires the active and positive participation by the private sector and the population at large. While the Government will continue to implement appropriate policies and measures, excessive profiteering and hoarding on the part of business or excessive consumption and impulsive purchases on the part of consumers will only serve to generate an inflation psychology and nullify the efforts of Government to control inflation. Apart from strict monitoring and supervision of unhealthy business practices, the Government will also continue to provide encouragement for the growth of a responsible consumer movement to act as a source of information and restraint to excessive profiteering and hoarding.

The prospects for continued expansion of the economy during the FMP are bright. As demonstrated in the past, the resilience and the strong resource base of the economy will enable the country to withstand the adverse economic developments in the world economy. During the FMP, greater efforts will be made to monitor closely domestic and international economic trends so that appropriate and timely action can be taken to maintain the momentum of development. The reliance of the Government on the private sector to provide the leading role during the FMP indicates the trust and confidence that the Government places on the private sector to play a major role in the achievement of the NEP objectives while providing simultaneously opportunities for private initiative and creativity.



## **CHAPTER 12 : POPULATION, EMPLOYMENT AND MANPOWER DEVELOPMENT**

### **I : INTRODUCTION**

The development of human resources, in line with manpower requirements, is crucial to the success of the development efforts of the nation. In view of this, high priority will continue to be placed on manpower development and effective management of human resources to facilitate their optimal utilization in consonance with the objectives of the New Economic Policy (NEP). Greater emphasis will be given to reorientate the educational and training systems through restructuring of courses and establishment of more vocational training institutions. The creation of more job opportunities will be accelerated to provide for the increased labour force and reduce unemployment and underemployment in both the urban and rural areas.

### **II : GROWTH OF POPULATION AND LABOUR FORCE**

As shown in Table 12-1, the population is estimated to increase from 14.3 million in 1980 to about 16.2 million by 1985, growing at an average rate of 2.6% per annum during the Fourth Malaysia Plan (FMP). Due to a steady decline in fertility and also a gradual decline in mortality during the last decade, the population of Peninsular Malaysia is expected to increase at an average rate of 2.4% per annum, lower than the growth rate of 3.2% per annum estimated for Sabah and Sarawak.

The geographical distribution of the population is expected to remain about the same during the period with 82.6% residing in Peninsular Malaysia, 7.9% in Sabah and 9.5% in Sarawak by 1985. The slight increase in the proportion projected for Sabah and Sarawak is due to higher fertility levels and the inflow of workers into Sabah during the next five years.

Mortality declined rapidly during the sixties and seventies resulting from improved health and medical services, especially in the rural areas. Based on past trends, Peninsular Malaysia is not likely to experience a further decline in mortality as the crude death rate of about six per 1,000 population in 1980 is already low. Life expectancy at birth is expected to increase during the Plan period, from 68 years in 1980 to about 70 years by 1985 for males and from 72 years to about 73 years for females. In Sabah and Sarawak, further decline in mortality can be expected with greater improvement in the health and medical services.

Fertility level in Peninsular Malaysia has been showing a steady decline over the past decade. Since the average age of marriage at 23 years is already high, further decline in fertility will depend upon changes in norms and attitudes regarding family size. The total fertility rate is expected to fall from 3.6 in 1980 to about 3.1 in 1985 while the crude birth rate is estimated to decline from 28.9 per 1,000 population in 1980 to about 26 by 1985. In Sabah and Sarawak, a small but steady decline in fertility can be expected during the Plan period, although in the past there was no clear evidence of a declining trend.

The age structure of the population will change as fertility continues to decline. The population in the age group 0- 14 years is expected to decline slightly from 39.5% in 1980 to 38.6% by 1985 as a direct consequence of lower fertility experienced in the 1970s. On the other hand, the proportion of working-age population 15 - 64 years will increase from 56.8% in 1980 to 57.6% by 1985, reflecting higher fertility levels in the 1950s and 1960s. These shifts in the age structure will affect the age dependency ratio (ration of population below age 15 and above age 65 to the working-age population 15-64 years) which will decline from 76% to 73.7% during the period.

As shown in Table 12-2, the ethnic composition of the population in Peninsular Malaysia is expected to change slightly during the Plan period. The proportion of the Malays will increase from 53.9% in 1980 to 54.7% by 1985, while that of the other ethnic communities will decrease marginally. This is due to a relatively higher level of fertility and greater improvement in mortality among the Malays as compared with the other ethnics communities. Over the longer term, the various fertility levels tend to converge, thereby maintaining their relative proportions of the total population.

The school-age population between the ages of 6 - 18 years in Peninsular Malaysia is expected to increase from 3.7 million in 1980 to about four million by 1985, growing at an average annual rate of 1.5%. As shown in Table 12-3, school enrolment will increase more rapidly at 2.7% per annum, resulting in an increase in the enrolment ratio from 69% in 1980 to about 74% by 1985. At the primary level, school enrolment will grow at the same rate of 2% as the school-age population 6-11 years so that the enrolment ratio remains 96% throughout the Plan period. At the lower, upper and post secondary levels, the school-age population will increase at 1.2%, 1% and 0.9% per annum, respectively. School enrolment at these levels will continue to increase at a rate ranging from 2.2% to 8.4%, raising the enrolment ratios at the lower, upper and post secondary levels to 79.2%, 58.6% and 5.3% respectively by 1985. The rapid increase in the enrolment ratio at the upper secondary level from 41.1% in 1980 to 58.6% in 1985 is due to the implementation of the Government's policy of providing eleven years of universal education instead of nine years.

During the FMP, the population family health programme aims at bringing down the estimated crude birth rate of 28.9 per 1,000 in 1980 to about 26 by 1985. To achieve this, the programme will have to cater for about 732,000 new participants. The

implementation of the wider concept of family health programme will improve family planning services, strengthen family health care and nutrition and promote family development through community-oriented activities and services.

The growth and structure of the labour force are shown in Table 12-5. The labour force is estimated to grow at a rate of 3.1% per annum from 5.4 million in 1980 to about 6.3 million by 1985. The high growth rate is due to the increase in the working-age population and in the participation rate of the labour force, particularly for females, as a consequence of rapid socio-economic development. The labour force in Sabah is projected to grow at 3.4% per annum compared with 3.1% in Peninsular Malaysia and Sarawak, partly due to inflow of workers into the state.

The labour force in the age group 25 - 39 years will experience a higher rate of growth of 4.9% per annum during the Plan period compared with the other age groups which grow at rates ranging from 1.4% to 2.7% per annum. Its share in the total labour force increases from 37.6% in 1980 to 41.4% by 1985, indicating a trend towards older, more experienced and better educated labour force. The proportion of the labour force in the younger age group 15 -24 years is expected to decline from 34.2% to 31.4% during the period. A total of about 879,600 new entrants into the labour force is expected during the Plan period, of which about 83% will be in Peninsular Malaysia, 8% in Sabah and 9% in Sarawak. The majority of these are school leavers who are seeking jobs for the first time.

### **III : POPULATION DISTRIBUTION AND URBANIZATION**

The growth rate of urban population is expected to remain high throughout the 1980s. As shown in Table 12-6, urban population in Peninsular Malaysia is expected to grow at an average rate of 4.1% per annum from about 4.1 million in 1980 to an estimated 5.1 million by 1985. As a result, the proportion of urban population is expected to increase from 35% to 38% during the Plan period, reflecting a higher growth rate of urban population compared with the rural population which is expected to decline from 65% to 62% during the period. The high rate of urbanization is attributable to the expected growth in the modern sectors of the economy, the development of new growth centres and rural-urban migration.

Among the ethnic communities in urban areas, the Malay urban population is expected to experience the highest rate of growth of 5.7% per annum in view of its increasing participation and involvement in the manufacturing, commercial and services sectors of the economy. In absolute terms, the Malay urban population is projected to increase from 1.4 million to about 1.8 million during the Plan period, while its share of the total urban population will increase from 32.8% to 35.3%. The average annual growth rates of urban Chinese and Indians are expected to be at 3.3% and 3.6% respectively, with the Chinese still accounting for 51.7% of the total urban population by 1985.

#### **IV : EMPLOYMENT AND LABOUR SITUATION**

Towards the end of the Third Malaysia Plan (TMP) period, there were indications of labour shortages, particularly in agriculture, in the cultivation of padi, rubber and oil palm, and in specific industries and locations. In the estate sector, the problem is largely confined to Johor and estates in new development areas on the east coast of Peninsular Malaysia. In manufacturing, industries employing a large percentage of female workers have had problems in meeting their labour requirements. The construction sector also had problems in getting the requisite skilled manpower. On the other hand, wage trends in private sector do not indicate general labour market tightness. In terms of labour force participation and hours of work, there still appears to be substantial room to meet increased labour demand, particularly in rural areas. Periodic tightness in certain segments of the labour market is to be expected in any expanding and dynamic economy.

Whether Malaysia will shift, during the Plan period, from a situation of labour surplus, which has characterised its recent past, to one of general labour market tightness, depends on a number of factors. On the demand for labour, the most fundamental factor is the general level of economic activity. The rate of modernization in the agricultural sector and new land development will determine the degree to which labour will be used in agricultural activities while the rate and character of technological changes in manufacturing and the establishment of new industries will influence the pattern of industrial labour demand. Furthermore, the degree of labour mobility will affect the rate at which labour shortage in particular regions will be overcome by the flows from labour surplus areas.

On the supply side of labour, the size and quality of the labour force, reflected in labour force participation rates, and levels of education and skill attainment, will determine the ability of the economy to sustain a high level of economic activity without creating excessive labour market tightness. The supply of labour to various sectors and occupations will be further determined by relative wage levels and conditions of work. During 1981-85, the working-age population will grow at 2.8% per annum. The numbers available to the labour market will be further determined by labour force participation rates. The level of educational attainment in the population will influence the level of productivity of the labour force. The rate of growth of educational attainment in the Malaysian labour force has been quite substantial during the last decade and this trend will continue during the FMP period. New entrants into the labour market with upper secondary and post secondary education are estimated to grow at 9.2% and 5.8% per annum respectively, compared with the overall labour force growth of 3.1%. The increase in educational attainment during 1981-85, through its effect of increasing the efficiency of the labour force, will offset the slow-down in the growth rate of working- age population so that the growth of productive capacity of the labour force will be maintained.

## V : EMPLOYMENT GROWTH

Based on current plans and expectations, it is anticipated that about 860,600 new jobs will be generated during 1981-85, increasing total employment from about 5,093,500 to about 5,954,100. Given the present structure and trend of growth of adult population, labour force as shown in Table 12-7 is projected to grow at 3.1% per annum. About 879,600 new job seekers will enter into the labour market during the period in addition to the existing 286,500 unemployed. When matched against the anticipated job creation during the Plan period, the unemployment rate will be reduced from 5.3% in 1980 to 4.9% in 1985. In absolute terms, however, about 19,000 additional persons will be unemployed, increasing the total unemployed to about 305,500 by 1985.

Table 12-8 shows sectoral employment for the period 1981-85. manufacturing sector will continue to be a major source of growth and employment in the eighties. On the basis of projected growth of 11% per annum, employment in the manufacturing sector is expected to grow at 5.9% per annum, providing about 267,000 new jobs or 31% of total new employment. Its share in total employment will thus increase from 15.8% in 1980 to 18% in 1985. Much of the growth in employment is expected to come from the manufacture of construction materials, industrial chemicals and chemical products, electrical and non-electrical machinery and apparatus, and rubber products. Small-scale industries will continue to play an important role in job creation, particularly in the less developed regions.

The agricultural sector is expected to provide 8.3% of the new jobs and its share in total employment will decline from 40.6% in 1980 to 35.9% by 1985. With output projected to grow at 3% per annum and employment at 0.7% per annum, about 77% of the increase in output is expected to come from increasing productivity of those employed in the sector. The bulk of the employment in the sector will continue to come from new land development undertaken by Federal Land Development Authority (FELDA) and other land development agencies.

Employment in government services and utilities will grow at 4.6% and 4.4% per annum respectively, reflecting the continuing commitment of the Government to improve the quality and scope of public services and to meet the increasing demand for education, health and other social services. About 191,700 jobs will be generated during the five-year period. Employment in wholesale and retail trade, construction, and transport, storage and communications will grow at 4.7%, 4.4% and 3% per annum, respectively.

During 1981-85, greater attention will be given to increase the skills of the labour force and improve efficiency through better management of human resources. Furthermore, to facilitate the mobility of labour, the provision of housing and other

amenities will be further emphasised when under-taking investment in agriculture and industry.

The labour market monitoring system is to be strengthened to further improve the allocation of human resources. The availability of data on employment and unemployment by state from the 1980 Population and Housing Census of Malaysia and the quarterly Labour Force Surveys beginning in 1981 will enable a more detailed analysis of employment patterns and trends at the sub-national level. Continuous monitoring of trends in employment, shortages and surpluses of trained manpower and changes in wages will be obtained from the Employment Turnover Surveys undertaken since 1979. An integrated system of collecting wage statistics will be implemented during the FMP period.

## **VI : OCCUPATIONAL STRUCTURE OF EMPLOYMENT**

The demand for various categories of manpower will change as the economy develops and modernizes. The structural transformation of the economy towards industrialization implies that there will be greater demand for scientific, technical and managerial personnel and skilled production workers.

The pattern of manpower requirements during the Plan period is shown in Table 12-9. Compared with the agricultural workers which grow at 0.7% per annum, all the other categories of workers increase at higher rates, ranging from 3.8% for the clerical workers to 4.9% for the service and production workers. Professional and technical, and administrative and managerial workers increase at 4.5% and 3.9% per annum, respectively. In Peninsular Malaysia, a similar trend prevails, with the agricultural workers growing marginally at 0.6% while the professional and technical, administrative and managerial, service and production workers increase at 6.5%, 3.2%, 4.8% and 4.5%, respectively. This implies that the education and training systems will have to be geared even more towards producing professionals and sub-professionals as well as skilled workers in various trades.

As a result of the differentials in the growth rates among the various categories of workers, especially between the agricultural and non-agricultural workers, there is a marked reduction in the share of agricultural workers, declining from 38.8% in 1980 to 34.4% in 1985. On the other hand, the share of all other categories of workers increases, the highest being that of the production workers from 30.8% to 33.4% during the period. Out of a total of about 860,600 additional manpower required, the bulk or 49.3% is for the production workers while the professional and technical, service and agricultural workers account for 8%, 14.1% and 7.8%, respectively. About 68,300 professional and technical workers, 13,100 administrative and managerial workers, 121,300 service workers and 424,000 production workers are required over

the Plan period, with Peninsular Malaysia requiring the bulk of this additional manpower.

The growth and development in the various sectors of the economy will have bearing on the magnitude and types of manpower required as shown in Table 12-10. Overall, the workforce in the primary sector will increase at 0.7% per annum, compared with 4.9% for the secondary sector and 4.6% for the tertiary for the tertiary sector. Such a wide difference in the growth rates will cause a reduction in the share of the primary sector workforce from 40.6% in 1980 to 35.9% in 1985, while that of the secondary and tertiary sector workforce will increase from 26.5% to 28.7% and from 32.9% to 35.4% by 1985, respectively. The shift in employment from primary towards secondary and tertiary sectors is reflective of the structural changes in the economy. By 1985, the workforce in each of the primary and tertiary sectors is projected to be around 2.1 million while that in the secondary sector will be about 1.7 million.

In the primary sector, the bulk of the workforce will be agricultural workers, accounting for 94.9% by 1985 almost the same proportion as in 1980. Within the sector, the professional and technical workers grow at a rate of 2.2%, compared with only 0.7% for the agricultural workers, indicating continuing modernization of agriculture during the period. About 71,500 additional manpower will be required during 1981-85, accounting for about 8.3% of the total requirement. Of these, some 900 workers will be from the professional and technical category which includes agronomists, veterinarians, food technologists, soil scientists and silviculturists, and another 100 workers from the administrative and managerial category. The bulk or about 91.5% of the requirement is for the agricultural workers which include farm managers, supervisors and machinery operators, livestock workers and loggers.

In the secondary sector, 86.2% of the workforce in 1985 will comprise production workers, a higher proportion compared to 1980. Within the sector, all categories of workers are expected to grow at higher rates compared with the primary sector. The professional and technical workers grow at 5.2%, sales workers at 5.3% and production workers at 5% per annum. Some 362,800 additional manpower will be required during the Plan period, accounting for 42.2% of the total requirement. While about 88.4% of these will be for production workers, the requirements for the professional and technical, and administrative and managerial workers are also substantial, amounting to about 8,600 and 7,000, respectively. Some 320,700 production workers will be required by the sector of which about two-thirds will comprise skilled and semi-skilled workers.

The composition of the workforce in the tertiary sector is more balanced. In 1985, except for the agricultural, and administrative and managerial workers which together will account for less than 1.9%, all the other categories will be well represented with their share ranging from 10.6% for the clerical workers to 27% for the sales workers. Except for the agricultural workers which increase at 3% per annum, all

other occupational groups grow at a reasonably high rate. The service, production, professional and technical, and administrative and managerial workers increase at 5%, 5.2%, 4.5% and 4.6%, respectively. In absolute terms, an additional 426,300 workers will be required by the sector, accounting for 49.5% of the total requirement. Some 116,400 service workers, 104,900 sales workers and 99,000 production workers are required during the Plan period. Of the 58,800 professional and technical workers required, the bulk is made up of nurses and primary and secondary school teachers. Some 6,000 administrators and managers, and about 39,800 clerical workers will also be required, the latter accounting for 70.7% of the requirement for all sectors.

## **VII : SUPPLY OF TRAINED MANPOWER**

The growth of the economy during 1981-85 calls for continued expansion in the supply of trained and skilled personnel at the professional, sub-professional and technician levels. Greater emphasis will be placed on increasing the output of degree, diploma and certificate holders in the scientific, technician and managerial fields so that manpower shortages will not pose a serious constraint to development. Efforts will also be made to further upgrade the quality and raise the productivity of the workforce to enhance their incomes and growth of the economy.

There will be an overall expansion in the supply of degree and diploma holders from the higher educational institutions in the country as shown in Table 12-11. The annual output of degree graduates will increase steadily from about 4,300 in 1981 to about 6,200 in 1985, and the diploma holders, from 4,200 to about 6,000. A total of about 27,400 degree and 25,600 diploma students will graduate during 1981-85, of which half will be in the science and technical disciplines. Although, overall, less diploma holders will graduate compared with degree holders, there will be more sub-professionals produced in the agricultural and technical courses. The enrolments at both the degree and diploma levels will increase by 38.9% and 60%, respectively, indicating continuing expansion in the supply of high and middle level manpower.

At the degree level, efforts to increase the output in science and technical courses will continue to be taken as indicated in the higher enrolment increases for applied and natural sciences, pharmacy, architecture and town planning and medicine. The total enrolment in science and technical courses is expected to increase by 49.4% and 52.2%, respectively, compared with 26.6% for the arts, leading to an improvement in the science-arts enrolment ratio from 52:48 in 1980 to about 56:44 by 1985. As a result, there will be an increase in the share of science and technical output from 45.3% in 1981 to 51.5% by 1985 while that of the arts output will fall from 54.7% to 48.5%. About 1,580 medical doctors and dentists, 2,190 engineers, 470 architects and town planners, 180 surveyors and 920 graduates in agriculture and related sciences will be produced.



At the diploma level, emphasis will be given to the training of personnel for the commercial and technical fields. To meet the increasing demand for sub-professional technical manpower, the enrolment in surveying will increase by 60.2% and in agriculture and related sciences by 44.6% by 1985. The enrolment in economics and business which includes accountancy, banking and hotel management and catering will increase by about 116%. During 1981-85, a total of about 4,900 diploma holders in engineering, 900 in architecture and town planning, 1,100 in surveying, 1,800 in agriculture and 8,000 in economics and business will be produced.

The training of skilled and semi-skilled manpower at the certificate level will be considerably expanded during the FMP in view of the increasing demand for skilled workers, particularly in the rapidly expanding manufacturing and construction industries as well as in the high-technology industries. While efforts will be made in the public sector to increase the number and capacity of vocational and industrial training institutions, the participation of the private sector in supplementing and complementing the public sector training programmes is crucial. The recent establishment of the Manpower Development Board (MDB) will bring about closer cooperation and more active participation of the private sector in training efforts. Greater integration of training programmes will be effected with more on-the-job and inplant training. The MDB, in conjunction with the private sector, will devise a suitable financing scheme for industrial training.

The training programmes of agencies such as that of the Public Works Department, the Telecommunications Department, the Division of Fisheries, the Division of Veterinary Services, the Public Services Department and others will be improved and expanded. They will directly contribute towards increasing the technical, professional and managerial capability of staff in the public sector. The Industrial Training Institutes will continue to offer skill-upgrading courses to those who are already employed in industry. The Ministry of Labour and Manpower will also set up an Advanced Skill Centre to provide courses for upgrading of skills to the level of master craftsmen. In addition, courses for technicians, industrial foremen and instructors will also be offered at this Centre. The National Industrial Training and Trade Certification Board (NITTCB) will continue to play an important role in establishing trade standards. Studies on the employment experience of graduates from training institutions will be undertaken to improve the quality of training programmes.

Table 12-12 shows the enrolment and output of public sector training institutions. The enrolment is projected to increase from 27,600 in 1980 to about 48,000 by 1985. A total of 94,500 youth is expected to be trained during 1981-85, with annual output increasing steadily from 15,400 in 1981 to 24,400 in 1985. More than 40% of the total output or about 40,400 will be trained in vocational schools, 15,300 in technical schools and 13,100 in various Institut Kemahiran MARA. In line with the emergence of high-technology industries, efforts will be geared towards training more skilled

technicians and craftsmen in the engineering, building and printing trades. As shown in Table 12-13, a total of 43,500 youth is expected to be trained in the engineering trades during 1981-85, the bulk of whom will be in the mechanical and electrical trades. The output of skilled manpower in the building trades is expected to be about 15,300 during the Plan period.

## **VIII : CONCLUSION**

Population and labour force are expected to grow at fairly high rates during the Plan period, although lower than in the past. However, continuing good performance of the economy envisaged during 1981-85 will generate sufficient job opportunities, further reducing the unemployment rate from 5.3% in 1980 to about 4.9% by 1985. As the economy grows, the occupational structure of employment will change, indicating a need for continuous review of education and training systems in line with the country's manpower requirements. Greater efforts are required to effect better coordination of the public sector training programmes and between the public and private sector training activities.

# **CHAPTER 13 : PUBLIC SECTOR PROGRAMME AND ITS FINANCING**

## **I : INTRODUCTION**

The public sector development programmes during the Fourth Malaysia Plan (FMP) will continue to focus on attaining the objectives of the New Economic Policy (NEP) in the context of an expanding economy. The development efforts of the Government will also be directed to the poorer states to achieve regional balance in development. Defence, however, assumes greater importance compared with previous plans in view of security development in the region.

## **II : SIZE AND PATTERN OF PUBLIC SECTOR DEVELOPMENT PROGRAMME**

Total allocation for public sector development programmes during the plan period amounts to \$42,830 million. The share of federal government in the total allocation amounts to \$39,330 million, state governments, \$1,380 million and statutory authorities, \$2,120 million.

The allocations by sector for the FMP are shown in Table 13-1. A sum of \$22,765 million is provided for the economic sector, representing about 57.9% of the Federal allocation. A large portion of this, amounting to \$8,359 million, is for agriculture and rural development reflecting the Government's objective to increase income through higher farm productivity and creation of greater employment opportunities in the sector. An allocation of \$5,433 million is provided for programmes under commerce and industry, the bulk of which is for agencies dealing with restructuring programmes such as Majlis Amanah Rakyat (MARA), Perbadanan Nasional Berhad (PERNAS), State Economic Development Corporations (SEDCs), Urban Development Authority (UDA) and Permodalan Nasional Berhad (PNB) to accelerate the restructuring process, the creation of employment as well as to correct regional imbalances. The transport sector which is provided with an allocation of \$4,116 million, will continue to accord priority to rural transportation and expansion of inter-urban road network. The allocation for telecommunications amounting of \$1,399 million, will help meet the targets to install 1,200,000 telephones and to provide telex services for 15,000 subscribers by the end of the Plan period. In addition, the programme will also provide for an expansion of the international subscriber dialling facilities. The public utilities programmes, including energy and water supply, are provided with an allocation of \$3,349 million to meet domestic and industrial consumption.

The social sector is provided with \$6,388 million or 16.2% of the Federal allocation. The amount provided for education and training is \$2,993 million to meet the costs of new classrooms at the primary and secondary levels, new vocational and technical institutes, expanding higher education and increasing the number of scholarships and loans. The public housing programme is allocated a sum of \$1,000 million to provide adequate shelter and construct more low-cost housing units for the lower income groups. The health programme, with an allocation of \$588 million, will accord priority to population groups living in depressed areas, as well as areas unserved or underserved by essential health and medical services.

Under the FMP, the major objective of general administration is to improve the quality of services to the public as well as the working conditions of public sector employees. The major project include the construction of office complexes in the Federal Territory and in major towns throughout the country. An amount of \$805 million is provided for this programme. The allocation for security is \$9,372 million or 23.8% of the Federal allocation, substantially higher than the allocation under the Third Malaysia Plan (TMP). The programme is mainly for the build-up of the nation's defence capability and improving the capacity of the police to maintain law and order in the country.

Table 13-2 shows the allocations directed towards eradication of poverty restructuring of society during the FMP. The programmes for eradication of poverty are those aimed at increasing the incomes and improving the quality of life of the poor. Examples of such programmes are input subsidies for farmers, land development, extension services and rural roads. The allocation for poverty eradication programmes amounts to \$9,319 million. The programmes for restructuring of society are those aimed at correcting racial imbalances in the distribution of income, employment and wealth such as restructuring the ownership of the corporate sector, employment in the various sectors of the economy and real property such as commercial buildings, plantations and houses. The allocation for restructuring of society is \$4,398 million.

There are programmes which contribute to both objectives. An example of such a programme is land scheme on estate basis implemented by regional development authorities. Such a scheme provides income to the poor by way of employment, and corrects imbalances in ownership of large-scale land holdings. The allocation falling under this category amounts up to \$301 million.

Table 13-3 shows the optimal targets, target value and allocation of the public sector development programme by state. These target values are based on a number of factors such as per capita state Gross Domestic Product (GDP), human and natural resources potential and past growth rates. The allocations differ from the target values. For states like Perlis, Selangor, Pahang, Trengganu, Kelantan and Sabah, and the Federal Territory, the differences are substantial. Among the factors which

contribute to these differences are the existence of the TMP continuation projects and other large projects in the states concerned, whose beneficiaries are nation-wide. Appendix A shows the allocation by sector and state.

Those projects whose beneficiaries are nation-wide and whose locations cannot be determined are classified as multi-state projects. These include items such as equipment, scholarships, loans and investment funds. The allocation for multi-state projects under the FMP amount to \$11,305 million or 26.4% of total Plan allocation.

### **III : FINANCING OF PUBLIC SECTOR PROGRAMME**

During the FMP, the Government will continue its effort to ensure that current expenditures are adequately funded to meet the expansion in Government operations as well as to mobilise domestic and external resources to finance the public development expenditure. The financial policy aimed at mobilising resources will be undertaken without creating inflationary pressures in the economy. This is possible in view of the anticipated investible resources that will be generated by the projected expansion of the economy.

The major sources of revenue of the Federal and state governments are shown in Table 13-4. The revenue of the Federal Government is estimated to increase from \$12,870 million in 1980 to \$24,298 million in 1985, reflecting an average growth rate of 13.6% per annum while that of the state government is expected to increase from \$2,178 million in 1980 to \$3,500 million in 1985, showing an average annual growth of 10%. Government current revenue, taken as a whole, is expected to grow at a rate of 13.1% per annum for the FMP period, giving an estimated total amount of \$113,036 million. Federal Government revenue is estimated to account for 87.2% of this total and the remainder from the state governments' own sources.

Direct taxes account for about 45.9% of the total Federal Government revenue, indirect taxes 49.3% and non-tax revenue 4.8%. Receipts from direct taxes are estimated to grow at an average rate of 15.8% per annum during the Plan period. Major components of direct taxes include taxes on income from individuals, companies and petroleum and these together account for almost 95% of total direct taxes. The increase in income tax receipts is explained by the increase in the number of tax payers, number of companies paying profit tax and the growth of petroleum income tax payments.

Revenue from indirect taxes is expected to increase from \$6,457 million in 1980 to \$11,927 million in 1985 reflecting an average growth rate of 13.1% per annum during the period. Cumulatively, indirect taxes are estimated to amount to \$48,622 million during the FMP period compared with \$24,208 million received during the TMP. The growth in indirect taxes is explained by the increase in collections, particularly from

traditional sources such as export and import duties and surtax. Export duties are expected to increase due to higher prices for rubber and tin, and to the introduction of the petroleum export tax in 1980. Export duties from these commodities are expected to grow at an average annual rate of 13.2% during 1981-1985, accounting for about 39% of total indirect taxes. Import duties are expected to grow at an average annual rate of 9.7% during the period, contributing about 23% to total indirect taxes. The increase in receipts of import duties is due to higher prices of import commodities and higher taxes imposed on certain imported commodities to encourage import substitution industries. The growth of both export and import duties and other domestic indirect taxes also reflects an increase in the volume of domestic and foreign trade and rapid growth of domestic production.

As shown in Table 13-5, current expenditure of Federal and State Governments is estimated to amount to \$102,118 million during the period 1981-85, with 87.6% representing Federal current expenditure and the rest state expenditure. The amount of current expenditure estimated for both federal and state governments will be double the amount spent during the FMP. In terms of growth rate of 14% per annum. A major portion of the current expenditure is attributable to the payment of salary and wages, expansion of personnel and large provisions for transfer payments.

Federal and state government current surplus is expected to amount to \$10,918 million compared with \$5,983 million during the TMP. The surplus of state governments is accounted for by Sabah and Trengganu whose revenue receipts from timber and petroleum respectively, put them in a strong financial position compared with the other states. Public authorities are expected to have a surplus of \$33 million during the Plan period.

Taken as a whole, the current surplus of the Federal and state governments and public authorities amounts to \$10,951 million for the 1981-85 period which is more than one-third of the current surplus during the TMP. A development expenditure is targeted at \$32,829.5 million, the overall deficit is estimated to be \$21,878.5 million.

The deficit of \$21,878.5 million is to be financed through domestic and foreign borrowings. Domestic borrowing in the form of Government securities and Treasury bills is projected at about \$15,500 million or 70.8% of the financing requirements during the FMP. As in the TMP, Employees Provident Fund (EPF) will continue to be the main subscriber to Government Securities and Treasury Bills accounting for about 58% of the domestic resources to be mobilised while the remainder will be financed by other financial institutions which includes the National Savings Bank, insurance companies, discount houses, merchant banks, finance companies, Social Security Organization (SOCSO) and public authorities.

The amount of net external borrowing, both market and project loans is estimated to be \$4,000 million or 18.3% of the financing needs compared with \$3,907 million or

22.8% obtained during the TMP. The balance of financing requirements of \$2,378.5 million will be met from the use of accumulated assets and special receipts. The bulk of the foreign borrowing will come from institutional sources such as World Bank, Asian Development Bank and Islamic Development Bank. Although Malaysia continues to enjoy a high credit standing among the international financial community, the amount of market borrowing will be determined as the need arises to as to take advantage of favourable market conditions.

The amount of external borrowing targeted will lead to an average external debt service ratio of 2.4% during the FMP which is relatively low compared with other developing countries. The diversity of the export structure, the growth of the economy and the level of international reserves coupled with the low level of debt service ratio will enable Malaysia to continue to maintain its high credit standing.

## **CHAPTER 14 : ROLE OF THE PRIVATE SECTOR**

### **I : INTRODUCTION**

The private sector has an important role in fulfilling the growth target envisaged under the Fourth Malaysia Plan (FMP) and the attainment of the New Economic Policy (NEP). About 72.2% of the total investment targetted for the Plan is expected to come from the private sector. This calls for a more intensified effort, on its part, to mobilise resources for investment and to acquire skills, technical knowhow and management expertise. The Government will continue to maintain an investment climate conducive to the growth of the private sector and provide the necessary support in terms of infra-structure and other facilities.

### **II : PROSPECTS FOR PRIVATE INVESTMENT**

The amount of private investment, including oil, during the FMP is targetted at \$74,111 million or 72.2% of total investment compared with \$30,630 million or 63.2% of total investment during the Third Malaysia Plan (TMP). In terms of growth, total private investment is anticipated to increase at a rate of 13.1% per annum in current prices or 8% per annum in real terms.

The bulk of private investment will be in the non-oil sector which is anticipated to increase at 11% per annum in real terms during the FMP, a rate slightly higher than the 10.8% per annum achieved during the TMP. The share of non-oil private investment will increase 54.5% to 88.6% of total investment and the main areas of non-oil investment will be in the manufacturing and construction sectors.

Value added in the manufacturing sector is projected to grow at a high rate of 11% per annum. The source of growth for the manufacturing sector, as in the past, will be demand generated by both external and domestic sources. Export-oriented industries such as electronics, rubber products and timber-based products, will continue to enjoy increasing external demand and the growth of value added in these industries will range from 8% per annum to 15% per annum, as shown in Table 14-1. Industries with good export potential such as the manufacture of precision instruments, toys and sports goods, clay and silica-based products, will also contribute to the growth of private investment.

Although the country has a comparative advantage in resource-based industries such as rubber and timber products, the opportunities for greater expansion of these industries have not been fully exploited. The forward linkages of the resource-based



industries, such as the manufacture of furniture and fixtures, tyres and tubes, and shoes, could be further developed to meet the demand in both domestic and export markets. Similarly, processing of agricultural products could be further expanded to generate more value added for the economy.

The electronics industry so far has concentrated on assembly of imported components, and its rapid growth has benefitted the country substantially in terms of employment creation. With the emerging tight labour market situation, the industry will be encouraged to undertake integrated production which would also generate more value added.

Domestic demand which is estimated to account for about 58% of Gross Domestic Product (GDP) in the economy during the Plan period will also provide the necessary stimulus for private investment. During the past decade, per capita income increased by 4.9% per annum in real terms and, consistent with this increase in income, is the increase in demand for consumer durables and other items as recreation equipment, clothing, footwear, furniture and books. Further, with per capita income projected to grow by 5% per annum during the FMP, the scope for import substitution of these consumer goods will be large as the demand for these goods increases at a higher rate than income.

Considerable scope also exists in the manufacture of ancillaries by the engineering industries to generate domestic value added through the use of local component, and to develop and improve the level of technology. The development of industries along these lines will foster greater backward linkages in industrial development.

The Government will also embark on the promotion of heavy industries to strengthen the industrial development of the country. In order to spearhead their development, the Heavy Industries Corporation Malaysia Berhad was set-up in 1980, to initiate, implement and manage capital-intensive industries. The Corporation is wholly-owned by the Government, but it is established under the Companies Act so that it will have the flexibility of the private sector in responding to changes in economic conditions. The Corporation will also undertake projects on a joint-venture basis with the private sector. A number of heavy industry projects have been identified for further consideration by the Government. These projects include iron and steel, aluminium reduction and cement plants, and an engineering supporting services complex. The implementation of these projects will provide further opportunities for the private sector to participate in industrial development.

To encourage investment in projects with long gestation periods in all sectors of the economy, the Industrial Development Bank of Malaysia Berhad was established in 1979. The objective of the Bank is to finance the expansion of productive capacity in capital-intensive and high technology industries. One of the priority sectors is the shipping industry. The Bank's financial assistance scheme to the shipping industry

includes refinancing ship repairs at a preferential rate of 4.5% per annum for a maximum period of one year, to enable Malaysian shipyards to compete more effectively in the international markets. In addition, the Bank is finalising financing schemes to encourage Malaysians and foreign shipowners to build their vessels in Malaysian shipyards.

Investment in small-scale industries will also be encouraged as these industries have an important role in developing entrepreneurship and also to provide employment and a base for training and improving skills. Industries which are suitable for small-scale operations include manufacture of industrial machinery components, furniture, leather footwear, machine tools, confectionery and clothing. The Government will continue to encourage the growth of small-scale industries through extension of training, credit and financing facilities as well as improving marketing facilities. In order to increase the visibility of the industries, they will be closely tailored to the manufacture of ancillaries to meet the demand of the growing industrial sector. In this regard, a special unit has been set-up in the Ministry of Trade and Industry to modernise and restructure small-scale industries.

The prospects for investment in the building and construction industry are bright. The construction sector is anticipated to be buoyant during the FMP period, with the continued increase in demand for private residential buildings, as well as non-residential buildings. During the Plan period, the residential building sector will be further stimulated with the planned construction of 923,300 dwellings of which about 56.8% is expected to be undertaken by the private sector. In addition, the expansion of infrastructure facilities and projects in the social sector such as education and health will generate additional demand for investment in the private sector. One of the major concerns of the Government is the rising cost of construction materials and shortage of skilled labour. Efforts will be made to improve the supply of building materials through expansion of domestic production capacity and imports, and to increase the supply of labour through additional training facilities.

The size of investment needed for the development of the country's oil and natural gas resources will be substantial. In addition to the total investment undertaken during the TMP amounting to \$4,036 million, about \$7,900 million will be invested during the FMP to develop the oil fields and to complete the projects associated with the development of the natural gas resources in Bintulu, Labuan and Trengganu. In addition, sizable investment will be made to expand domestic refining capacities with the establishment of refineries in Melaka and Trengganu.

With the growth in agriculture, manufacturing, construction, and mining sectors, investment in the services sector will grow, particularly in wholesale and retail trade, banking and finance services, consistent with the growth in value added of the non-government services sectors of 7.8% per annum. The shipping and insurance

industries will also expand in response to Government's policy of reducing the deficit in the services trade.

### **III : FINANCING OF PRIVATE INVESTMENT**

The resources required for financing of private investment amounting to \$74,111 million (including stock changes) during the FMP are substantial. Domestic resources, which comprise self-financing of investments by the private sector and Government transfer of funds to private sector activities, are estimated to provide about 87% of the private investment financing needs. The balance will be met by net private long-term capital inflow estimated to be \$9,405 million of private investment during the FMP compared with \$6,911 million during the TMP. The increase in private long-term capital inflow reflect the continuing contribution of foreign investment to Malaysia's economic development.

Self-financing of private investment will amount to \$52,585 million comprising both past accumulated savings and new savings generated during the FMP after allowance has been made for purchases of Government securities, outflow of short-term capital and balance of payments errors and omissions as well as increases in currency holdings. An additional source of financing which will be available to the private sector is the funds that the Government will provide to public sector agencies operating in the private sector. These funds include transfers to institutions such as Perbadanan Nasional Berhad (PERNAS), Urban Development Authority (UDA), State Economic Development Corporation SEDCs), Majlis Amanah Rakyat (MARA) and the Bumiputra Investment Fund for the purpose of enabling the advancement of Bumiputra in commerce and industry. The total allocation for this purpose is \$5,444 million for the FMP period.

The financing of the projected investment represents a challenge to the private sector in its ability to mobilise resources for investment. The Government in financing the public investment programmes during the FMP will continue to ensure that the private sector has adequate access to funds to undertake investment.

#### **IV : PRIVATE SECTOR INITIATIVES IN KEY AREAS**

A major concern of the Government is the impact of international inflation and the rising cost of energy which is likely to affect domestic economic situation and the private sector's response to invest. The Government will continue to contain domestic inflation within 6% to 7% per annum. In addition, necessary steps will be taken by the Government, through fiscal and monetary policies and administrative measures, to contain price increases. The role of the private sector in complementing the efforts of the Government through expanding production to meet demand, improving efficiency, conserving energy, training and upgrading of skills, is equally important. The Government will continue to encourage competition among industries with a view to increase their efficiency in production.

The contribution of the private sector in meeting the projected exports and investment growth will continue to be crucial for the achievement of the overall targetted growth for the economy. During the FMP, exports of goods and services are projected to grow to 9.7% in real terms or 17.4% in current prices per annum. Manufactured exports are projected to grow at 24.2% per annum in current prices and rapid expansion in manufactured exports is crucial to generate demand for investment and to increase income as well as employment opportunities. The overnment will continue to place emphasis on the export of manufactured goods, particularly those of the resource-based industries, and provide the necessary incentives, credit and financing facilities. The ability to make inroads into existing and new markets, however, will depend significantly on the private sector. Continuing efforts will have to be made to improve the competitiveness of products through research and development aimed at improving quality, packaging and marketing techniques and to participate on an expanded basis in the promotion of export products. In this regard, the role of transnational corporation, located in Malaysia in the design and promotion of export products, becomes important. Mobilization of resources to meet the investment target will be sizable during the FMP. The banking and financial sector comprising the commercial banks, merchant banks and finance companies, is required to adopt a more service-and development-oriented approach in its operations so as to respond to the needs of the growing economy and to channel savings into productive investments, particularly with respect to mobilization of savings and financing of investments in the rural areas. The Government will continue to emphasise lending by the banking sector for productive purposes and to priority areas of investment including small-scale enterprises, residential housing and Bumiputra ventures. During the TMP, the banking sector in general was able to comply with the various guidelines on lending to these priority areas. In addition to the banking sector, the role of Government-sponsored institutions such as Malaysian Industrial Development Finance Berhad (MIDF), the Credit Guarantee Corporation (CGC) and Bank Pembangunan Malaysia Berhad (BPMB), will be expanded to provide

medium and long-term financing of industrial projects and to assist small-scale industries as well as to provide advisory and consultancy services.

During the FMP, the Government will vigorously pursue the policy of providing access to adequate shelter, with priority on the construction of low-cost housing units to meet the housing needs of the poor. While the public sector will continue to play an important role in the construction of these units, the private has a greater role in supplementing the efforts of the Government in providing low-cost housing.

A major constraint faced by the rapidly expanding economy will be continuing shortage of skills, in particular at the craftsmen and professional and managerial levels. The increasing sophistication of the economy, together with the rapid changes in skills, calls for greater industry - and enterprise-specific types of training to be undertaken by the private sector. Provision of such training facilities will not only enable an expansion of skilled manpower but will also contribute towards a rapid pace of restructuring employment at these levels. The Government, in addition to expanding its training facilities will continue to monitor the demand for skilled manpower with a view to provide incentives to the private sector to undertake its own training programmes in areas of critical skill shortages. A step in this direction has already been made through the provision of incentives to the construction industry to undertake organized on-site training programmes.

An important component of manpower training is the development of component managers through in-service training of supervisory and management personnel. The facilities of the National Productivity Center (NPC) and other public sector management training programmes will be expanded, while those of the Malaysian Institute of Management (MIM) and other professional bodies as well as industries, will need to be stepped up considerably. The development and upgrading of skills will facilitate the absorption of appropriate technology and improve productivity. The need for the private sector to continuously improve and modernise its personnel practices to improve efficiency and productivity cannot be overemphasised.

## **V : THE PRIVATE SECTOR AND THE NEP**

During the FMP period, the private sector will assume greater significance in facilitating the progress towards achieving the objectives of the NEP. Its strategic role is clearly shown by the large amount of total investment expected to be met by the private sector, accounting for 72.2% during 1981-85.

The process of restructuring the ownership of share capital of the corporate sector is expected to gain momentum during the FMP period. Growth of the corporate sector, from existing as well as new Malaysian and foreign companies, is expected to accelerate as the economy undergoes structural changes and becomes increasingly modernised and industrialised. Particularly important for the restructuring objective will be the growth of the manufacturing sector which is expected to account for 23.9% of the GDP by 1985 compared with 20.5% in 1980. As new investment opportunities are opened up, there will be greater demand for financial resources, including equity capital, from the Malaysian public. Ownership restructuring through an expanding corporate sector will continue to be the basis for increasing Malaysian ownership.

The Guidelines for the Regulation of Acquisition of Assets, Mergers and Take-Overs, which are implemented by the Foreign Investment Committee (FIC), will continue to regulate mergers, take-overs and acquisitions, to ensure that they are consistent with national interest. Many companies are expected to grow through mergers, take-overs and acquisitions during the FMP period and will, therefore, be required to restructure their pattern of ownership in line with the NEP. New companies will also be making their contribution to the restructuring objectives. To comply with the ownership policies of the various economic sectors, these companies will invite Malaysian equity participation at the time of incorporation, thus allowing Malaysians to have an early ownership stake in the companies.

Employment restructuring during the FMP will continue to accelerate with rapid industrialization and modernization of the economy. It is anticipated that employment growth, especially in manufacturing and wholesale and retail trade, coupled with expansion in education and training programmes, will allow for a faster rate of employment restructuring. The manufacturing sector is expected to generate about 267,000 new jobs while about 168,400 additional jobs will come from wholesale and retail trade. Efforts by the private sector to expand and accelerate its training programmes will have to be stepped up, if there is to be rapid restructuring of employment in the more skilled occupations.

Incentives will continue to be granted to private sector enterprises which have restructured, or plan to restructure, their pattern of ownership and employment, initially for the assessment years 1980, 1981 and 1982. Exemption of five percentage

points of the company income tax of 40% is to be allowed to any company conforming to the equity restructuring requirement of the NEP, with at least 70% equity ownership for Malaysians, including at least 30% for Bumiputra, and not more than 30% equity ownership for foreign interests. To encourage employment and marketing network restructuring, exemption of the five per cent development tax will be granted to any company or business enterprise that has an employment structure which reflects the racial composition of the country's population in all grades of appointment up to the managerial level, or at least 30% of its sales in the domestic market allocated to Bumiputra distributors. These incentives are expected to encourage the private sector to restructure their enterprises well before the end of the second decade of the NEP.

Private sector activities are further expected to contribute to reducing the incidence of poverty during the FMP. Private enterprises in the urban areas, especially in manufacturing and services, will provide jobs for the urban poor. With the increasing emphasis to be given to the development of resource-based industries, it is anticipated that more private manufacturing enterprises will be established in less-developed areas and private investment in resource-based industries will further assist in providing gainful employment to the rural poor.

The NEP objectives of poverty eradication and restructuring of society cannot be achieved without the growth and full cooperation of the private sector, both domestic as well as foreign. In the interest of national development and unity, the Government is confident that the private sector will respond positively and contribute towards the attainment of the NEP objectives.

## **VI : POLICIES AND MEASURES**

As in the past, the Government will periodically review policies and programmes in consultation with the private sector with a view to encouraging greater growth of private investment and ensuring that private sector plays a more effective role in national development and to the success of the NEP, in particular.

Fiscal and monetary policies will continue to serve as major instruments to encourage private sector expansion. In view of the dynamic changes taking place in the pattern of industrial development, the Government will streamline the incentive and tariff system to reflect the priorities of industrial development for the next decade. In doing so, the Government will take into account the impact of present incentives on industrial development and the need to strengthen the forward and backward linkages of industrial expansion in the economy through development of resource-based industries for export and domestic consumption, and development of small-scale industries.

A major concern of the Government has been the structural imbalances in the demand and supply of labour, resulting in shortages of labour for specific industries and location. Overall, the rapid growth of employment opportunities of 4.1% per annum in the past decade has led to a decline in the unemployment rate from 7.8% in 1970 to 5.3% in 1980, and consequently a tightening of the labour market. While this development is a positive indication of the success in employment generation, continued shortage in specific skills is likely to constrain the expansion of the private sector. The Government will monitor development in the labour market, particularly with respect to information on shortages of skills, wages, labour turn-over and spatial distribution of labour supply and demand, with a view of taking appropriate measures to bring about better adjustment between demand and supply. In this regard, the adjustment of the private sector to the changes in the labour supply position, through increasing the efficiency of labour use, training of manpower and upgrading of skills and improving wages and working conditions becomes important.

The continued growth of industrialization requires the maintenance of industrial harmony between employers and employees. In order to improve the efficiency and effectiveness of the industrial relations system, the Government has amended the Industrial Relations Act, 1967, and the Employment Ordinance, 1955. The Industrial Relations Act was amended to strengthen the conciliation and arbitration machinery so that issues and problems which arise within the collective bargaining relationship between employers and employees can be disposed of speedily, justly and efficiently. The amendment to the Employment Ordinance provides increased benefits to the employees and also prevents arbitrary action on the part of employees which disrupts production.

The corporate sector accounts for a substantial portion of private sector activities and its importance is expected to increase further during the FMP period. In view of its importance, Government has introduced amendments to the Companies Act, 1965, with the objective of maintaining a health and orderly corporate sector. Increasing sophistication in corporate behaviour and practices and the growing participation by the public in the ownership of companies have made it necessary to strengthen and streamline the Companies Act. A Code on Take-Overs and Mergers will be introduced to regulate corporate take-overs and mergers and to protect the legitimate interests of shareholders of companies effected by such take-overs and mergers. A panel responsible



## **VII : CONCLUSION**

The Government will continue to have consultations with the private sector to resolve issues and problems faces by the private sector in the implementation of Government policies. Such consultations will take place through established machinery for consultation as well as through meetings with respect to particular problems and issues. The annual budget dialogue sessions and the joint public-private sector committees established by various Ministries will serve as important for resolution of issues and strengthening the interdependence of the private and public sectors in the development process.

## **CHAPTER 15 : AGRICULTURE, LIVESTOCK, FISHERIES AND FORESTRY**

### **I : INTRODUCTION**

Agriculture continues to play an important role in the economy. Being a dominant sector in which the incidence of poverty among the households was as high as 46.1% in 1980, the sector gives emphasis to development programmes and projects aimed at increasing income of farmers, livestock holders and fishermen through raising productivity levels, creating and expanding employment opportunities and modernizing the traditional agriculture. Effective policies and strategies, formulated on the basis of the experiences of the first decade 1971-80, will be implemented. The in situ development which includes the provision of basic infrastructure and agricultural inputs as well as promotion of local activities will be enhanced. A more integrated approach in providing these facilities will be carried out, especially in less-developed areas where larger number of poorer farmers could benefit. In addition, new land development with perennial crops will be stepped up for the benefit of landless and underemployed farmers.

### **II : PROGRESS, 1971-80**

The agricultural sector registered a value added growth in real terms of 4.3% per annum while its share of the Gross Domestic Product (GDP) declined from 30.8% in 1970 to 22.2% in 1980. The growth rate of 4.3% per annum was slightly below the targetted rate of 5.4% of the Outline Perspective Plan (OPP). Agricultural production was severely affected during the first half of the decade by the world recession in late 1974 and in 1975 and, among others, by adverse weather conditions during the second half, as shown in Table 15-1.

Exports of commodities as a main source of growth for both the economy and the agricultural sector experienced severe fluctuations in prices during the decade. In addition, the decade witnessed increasing diversification of the economy and of its commodity export structure, changing the export composition in favour of the non-primary commodities. Agricultural exports declined in share from 52.1% in 1970 to only 35.8% in 1980 mainly due to the slow growth in the production of rubber and the emergence of crude oil and manufactured goods as important export commodities.

The second half of the decade also experienced increasing importance of palm oil and cocoa exports due to increased plantings and yields improvements. These commodities contributed 27.1% of total agricultural exports in 1980, compared with

the declining share of rubber, sawlogs and pepper. While efforts were made to process rubber into more value added products, the bulk of rubber exports, however, was still in the unprocessed form due to the slow absorption into semi-processed or manufactured goods.

Continued efforts were made to expand employment opportunities as well as greater utilization of agricultural labour. About 352,300 jobs or 20.8% of new employment opportunities were created by the agricultural sector. The sector experienced a growth of 1.9% per annum over the decade compared with the projected growth rate of 1.3%. Agriculture provided a total of about 2,067,000 jobs or 40.6% of the total employment in 1980 compared with about 1,715,000 jobs or 50.5% in 1970. New employment opportunities were largely from the Federal and State land development schemes of which the Federal Land Development Authority (FELDA) and the Federal Land Consolidation and Rehabilitation Authority (FELCRA) created a total of 92,300 jobs over the decade.

The incidence of poverty in the agricultural sector declined from 68.3% in 1970 to 46.1% in 1980 compared with the OPP target of 49.3% for 1980. This decline resulted from the larger public resource allocated for the sector to improve farm productivity and the relatively favourable commodity prices prevailing during the later half of the decade. Within individual sub-sectors such as padi, mixed agricultural and fisheries, however, the incidence was still high.

Major developments took place in existing agricultural areas as a result of the implementation of integrated agricultural development programmes as well as the expansion of drainage and irrigation and replanning programmes.

Integrated agricultural development. Several large drainage and irrigation based projects such as Muda, Kemubu and Besut projects were completed during 1971-80. These projects benefitted a total of 109,000 farm families and contributed 57% of padi output in Peninsular Malaysia. Yield improvement in these schemes varied from 1,448 gantang per hectare in 1970 to 1,909 gantang in 1980 for MADA, 1,071 gantang per hectare in 1970 to 1,624 gantang for KADA and from 721 gantang to 1,369 gantang in the case of Besut.

Construction works for several similar projects commenced during the period. These included Krian/Sungai Manik Project, North-West Selangor Project and Western Johor Project Phase I. In addition, studies were undertaken in the later part of the Third Malaysia Plan (TMP) on several new integrated projects in Kemasin-Semerak in Kelantan, Lower Trengganu, Melaka, Negeri Sembilan Timur and Rompin-Endau to determine their feasibility.

Drainage and irrigation. Large investments were made in drainage and irrigation infrastructures aimed at improving farm productivity as well as facilitating the

introduction of other diversified and high value crops during the period. About 68,000 hectares of land were provided with irrigation facilities for both single and double-cropping of padi in addition to the 97,400 hectares of existing areas already provided with similar facilities, benefitting a total of 136,800 farm families. This represented 67% achievement of the target.

Increased problems were experienced with regard to surface water supply, affecting the utilization of gravity irrigation facilities. Other sources of water including ground water were investigated for the purpose of supplemental irrigation. Several experimental projects using ground water for irrigation purposes in bris soil areas of Kelantan and Trengganu were also undertaken.

A total of 99,500 hectares of existing areas were provided with improved drainage facilities in addition to the 205,800 hectares of new areas which were provided with similar facilities. These areas were mainly in Western Johor Project and other sizeable but scattered tree crop growing areas such as Kesang Project in Johor, Bagan Datok, Bangsi, Bruas and Jenderata Projects in Perak, and Kelang, Kuala Langat and Pulau Lumut Projects in Selangor. These facilities enabled planting and intercropping with more remunerative crops as well as improving tree crop output.

Replanting. A total of 302,900 hectares were replanted with rubber and other crops by the Rubber Industry Smallholders Development Authority (RISDA), Sabah Rubber Fund Board (SRFB) and Development Authority Agriculture, Sarawak compared with 393,000 hectares targetted during the decade. Of these, 182,500 hectares were replanted during 1976-80. The response to the replanting programme undertaken by RISDA, however, was more from the larger holdings despite the increase in the replanting grant from \$2,223 to \$2,964 per hectare for holdings of 4.1 hectares and below due to the reluctance of smallholders to replant for fear of losing their income. As a result, the rate of replanting by RISDA declined from 34,500 hectares per annum during 1971-75 to 21,500 hectares per annum replanted during 1976-80. In view of this, the replanting grant was further increased recently from \$2,964 to \$5,434 per hectare for holdings of 4.1 hectares and below and from \$2,223 to \$3,705 per hectare for holdings of more than 4.1 hectares.

The replanting of coconut holdings with emphasis on intercropping expanded rapidly, facilitated by support services and improved drainage. About 8,000 hectares were replanted during the decade bringing the total of 12,100 hectares since the scheme started in 1963. Although this rate was below the target of 10,500 hectares for the decade, improvements in the rates of replaning during the 1970s especially with the introduction of the MAWA variety resulted in increased farm productivity and income. The acreage of smallholdings totalled 191,000 hectares in 1970 with 198,800 hectares in 1980.

As per pineapples, increased replanting efforts were hampered by the continued shortage of labour in addition to persistent agronomic problems of peat soil and market uncertainties. About 7,000 hectares were replanted during 1971-80 out of a total area of 18,200 hectares, a rate far below the replanting target of 9,300 hectares.

**REHABILITATION** During 1971-80, over 10,300 hectares of rubber and padi were rehabilitated by FELCRA in Peninsular Malaysia. Its efforts were mainly directed towards less successful land schemes developed by the various state governments. The rehabilitation programme involved the improvement of agricultural holdings through the adoption of modern agricultural practices and the provision of basic infrastructural facilities and support services. In addition, FELCRA also launched three pilot projects on land rehabilitation/consolidation, covering 761 hectares. These projects involved the restructuring and rehabilitation of existing kampung and agricultural holdings and the development of new areas on the fringe, aimed at maximizing production and increasing income. Following the completion of a feasibility study on the schemes of the Kelantan State Land Development Board (TAKDIR) in 1979, about 31,300 hectares were identified for rehabilitation and another 6,400 hectares of rubber and 2,100 hectares of orchard were being rehabilitated.

In Sarawak, the Sarawak Land Consolidation and Rehabilitation Authority (SALCRA) rehabilitated 4,500 hectares during 1976-80. Programmes undertaken by SALCRA were directed towards the agricultural and infrastructural development of holdings under native customary rights with a view to increasing income and reducing the practice of shifting agriculture.

About 35,300 hectares of coconut holdings were rehabilitated during the decade, bringing the total to 49,900 hectares. The acreage intercropped with cocoa and coffee totalled 9,800 hectares in 1980 as against 1,400 hectares in 1970. Smallholders continued to prefer rehabilitation as against replanting in view of income lost and the long gestation period of replanting despite income derived from intercropping.

**Crop Diversification.** Efforts to promote the planting of non-traditional crops for import substitution and exports were intensified through the provision of input subsidies, extension services and necessary marketing facilities. Significant progress was achieved through both individual and cooperative farming systems. Substantial acreage was planted with cocoa and groundnuts enabling intensified land use and increased farm income.

**Livestock.** There was marked growth in the poultry and pig rearing industries attributable to the efficiency of these industries. The production of eggs, poultry and pork was sufficient to meet domestic demand while only 65% of beef and 5% of milk requirements were produced. For the ruminant sector, efforts were made to expand

the population through increased imports and artificial insemination services. During 1971-80, about 17,500 heads of cattle were imported and 117,600 inseminated.

Established in 1972, the National Livestock Development Authority (MAJUTERNAK) was entrusted with the responsibility to develop beef/dairy farms on a commercial basis and reorganize and modernize abattoirs. Eight beef/dairy farms were established throughout the country with 12,000 heads of cattle. Under its abattoir reorganization and modernization programme, 10 out of 14 abattoirs constructed were fully operational by the end of 1980.

Fisheries. The Department of Fisheries undertook several programmes and projects during 1971-80 with the objective of improving the socio-economic position of fishermen and the supply of fish in the country. Several infrastructural facilities such as fishing harbour complexes at Kuala Kedah, Kuala Trengganu, Kuching and Lumut were completed during the period while those at Batu Maung, Chendering, Geting, Kuala Besut and Kuala Sedili were under various stages of construction. In addition, the Department also established other ancillary facilities such as landing jetties, packing sheds and cold rooms throughout the fishing villages.

The Fisheries Development Authority of Malaysia (MAJUIKAN) was established in 1971 to spearhead the development of commercial fisheries. During 1971-80, MAJUIKAN launched 152 boats under its trawler and pursue seine schemes out of a total of 187 boats planned for the period. About 800 people were employed in these schemes and many more in associated industries. During 1976-80, MAJUIKAN implemented several aquaculture projects on a commercial basis. By the end of 1980, about 150 hectares of land were developed for aquaculture and 609 cages launched.

As shown in Table 15-2, over 866,100 hectares of new land were developed, representing 96.7% of the targetted acreage of 895,900 hectares during the period. A sum of \$3,732.8 million was expended for land and regional development. The Federal land development agencies developed 67% of the total acreage. FELDA developed about 373,700 hectares, mainly in the States of Johor (22%), Negeri Sembilan (17%) and Pahang (46%) and FELCRA, 50,700 hectares. In addition, RISDA developed 31,500 hectares under its block newplanting programmes to supplement incomes from the replanted holdings.

State agencies such as the State Land Development Boards (SLDBs) State Agricultural Development Corporations (SADCs) and State Economic Development Corporations (SEDCs) developed 290,100 hectares out of a targetted acreage of 233,700 hectares during the period.

Private estates and joint-ventures between the private sectors and Federal and State agencies and regional development authorities were also undertaken during the period. A total of 120,000 hectares was developed, representing 89.2% of the target

of 134,600 hectares. The Pahang Tenggara Regional Development Authority (DARA), Johor Tenggara Regional Development Authority (KEJORA) and Trengganu Tengah Regional Development Authority (KETENGAH) developed a total of 35,800 hectares on a joint-venture basis with the private sector. With the establishment of the South Kelantan Regional Development Authority (KESEDAR) in 1978, about 6,000 hectares were identified for implementation.

With the accelerated rate of land development in 1971-80, the acreage under perennial crops increased significantly during the period. Of the 455,900 hectares developed by the Federal land development agencies, 282,900 with sugar cane, cocoa, coffee and padi.

Land development and settlement programmes in the new areas aimed producing viable farming communities continued to be emphasised. With the period, FELDA resettled 42,200 families while FELCRA resettled 16,600 families and 4,100 youths in its fringe and youth schemes respectively. SLDB schemes benefitted 9,288 families. In addition, about 142,500 workers were employed in projects operated by other agencies such as the SADCs, SEDCs, and regional development authorities. Income per settler differed due to varying holding size and crops cultivated. Income ranged from \$3,600 to \$6,600 per annum for settlers with 4.1 hectares of matured holdings in Federal land schemes.

TABLE 15-2 MALAYSIA : PROGRESS IN LAND DEVELOPMENT, 1971-80 AND TARGET ACREAGE 1981-85

Recognizing the vital role of forests for the community and the economy and the need for a common forest policy aimed at regulating the industry, the National Forestry Policy was accepted and adopted by the state governments in 1978. It provided for the establishment of permanent forest estates and formed the basis for a systematic approach in the conservation, management, utilization and development of forest resources. It also formed the basis for better coordination and understanding between Federal and State governments.

Programmes were identified for the continued promotion of optimal exploitation of forests on a sustained yield basis especially through proper management practices. Under the forest regeneration programmes of the state governments, a total of 47,700 hectares were regenerated and 12,700 hectares newplanted during 1971-80. In addition, with the completion of the Forest Industries Development Project (FIDP) in 1973, an inventory of logged-over forest was carried out over 181,500 hectares, of which about 91,300 hectares were treated, 78,400 hectares surveyed for regeneration possibilities, 8,700 hectares subjected to enrichment planting and 3,100 hectares developed for pine plantation in Peninsular Malaysia.

Institutional improvements including consolidation were undertaken to ensure a more effective machinery of providing agricultural support services such as extension, training, subsidies, research, marketing and processing. A major development was the introduction of geraktani concept in the later part of 1976-80 in order to assist farmers in obtaining agricultural support services provided by multiple agencies in coordinated manner.

Training and extension. During 1971-80, about \$166.6 million was expended on agriculture education and training at the professional, supervisory and operative levels. University Pertanian Malaysia (UPM) provided courses for professional and supervisory levels and by the end of 1980 produced 365 graduates at the professional level and 2,709 at the diploma level in the field of fisheries, veterinary science and agriculture. Six agricultural institutes conducted training for operative level personnel and up to 1980, about 7,700 were trained.

The Department of Veterinary Services provided training in animal husbandry and management to farmers and departmental personnel. During 1971-80, 2,300 farmers received training at the Veterinary Institute, Kluang, and 3,500 at the various poultry training centers in various aspects of animal husbandry and management. The total number of departmental personnel trained by the end of 1980 was 1,000.

For the fishermen and fish farmers, several types of training programmes were provided by the Department of Fisheries. The Fishermen's Training Institute in Pulau Pinang provided advanced technical training to produce skippers and enginemen and by the end of 1980, 405 operatives received training. The Marine Fisheries Training Centers in Pulau Pinang and Kuala Trengganu conducted short-term training courses to fishermen in basic navigation and engine maintenance and during 1971-80, 1,016 were trained. The Inland Fisheries Training Center and the various fish breeding stations provided training in fish culture to 2,400 people during 1971-80.

Facilities for training in skills associated with the timber industry were provided at the two logging training centers, two forestry schools, the Forestry College at Kepong and recently by the UP. During the decade, a total of 2,934 were trained at these institutions.

To facilitate the effective management of land development programmes, the Institute of Land Development of FELDA at Trolak, Perak was established in 1977 to cater for the intermediate and higher level staff in FELDA and other land development agencies. By the end of 1980, a total of 3,885 staff was trained at this center.

The training programmes and facilities for extension services were further expanded and improved with the implementation of the National Extension Project which provided for the expansion of extension staff and



n-service training facilities, as well as improved extension methods through the Training and Visiting System. By the end of 1980, a total of 50 districts was covered involving 400,000 farm families. During 1976-80, a total of 5,966 extension staff was trained. The six agricultural institutes were further equipped and expanded to increase the supply of agricultural technicians. In support of the mechanization efforts for farm activities 5,000 farmers were provided with training in this aspect in the ten Agricultural Mechanization Centers.

The training and extension programme for rubber smallholders was undertaken by RISDA while that for pineapple growers by the Malayan Pineapple Industry Board (MPIB). During 1971-80, RISDA trained 199,035 farmers and 9,284 departmental personnel while MPIB trained 5,600 farmers and 83 departmental personnel.

Agricultural credit and subsidies. Bank Pertanian Malaysia (BPM) which started its operations in 1970, contributed significantly in meeting agricultural credit requirements. During 1971-80, BPM approved loans amounting to \$642 million, of which \$159 million were during 1971-75 and \$483 million during 1976-80. The loans were mainly for padi production amounting to \$169.4 million or 27.1% of \$153.1 million or 23.9% for tobacco production and marketing and \$137.5 million or 21.4% for estate development. The rest amounting to \$154 million was for livestock, fisheries, agricultural machinery, agro-based industries, forestry and for purchase and development of land. In terms of coverage, as the end of 1980, 285,900 farmers received loans under the padi production credit scheme, 340,900 for tobacco production and marketing and 103 for estate development.

Credit was provided by RISDA to sustain income and supplement the replanting grants for holdings of more than 4.1 hectares which were eligible to receive \$2,223 per hectare. In addition, credit was also provided for intercropping, redemption of land titles, consumption during the period of immaturity and other agricultural activities. A sum of \$13.2 million was disbursed since 1979.

Since its establishment in 1973, the Farmers' Organization Authority (FOA) provided fertilizers, agrichemicals and planting materials under its subsidy programme amounting to \$53.5 million. In the later part of the 1971-75 period, FOA provided credit for agro-based industries, farm machinery and equipment and for off-farm activities. The Department of Fisheries provided various types of subsidies to fishermen and fish farmers. About 21,100 fishermen or 22% of the fishermen in the country received \$49.8 million assistance in the form of subsidies, raising the number of artisanal fishermen equipped with modern gears. For fish farmers, subsidies were given for pond construction and supply of fish fry and feed. A total of 5,700 farmers was given subsidies for fish culture during 1971-80 amounting to \$9.2 million. Fishermen associations/cooperatives were provided with \$16.3 million by MAJUIKAN during 1976-80 for for working capital to undertake trading activities in inputs and consumption goods.

The Department of Veterinary Services continued to provide subsidies to encourage the development of livestock. During the decade, \$28.9 million was expended for cattle breeding, \$8.8 million for poultry rearing and \$2.6 million for the rearing of pigs and goats. A total of 58,200 farmers benefitted from these schemes.

Various forms of subsidies were given to promote crop diversification. Under its Agricultural Inputs and Diversification Programme, the Department of Agricultural provided \$82.7 million for various crops, benefitting 573,524 farmers. Added to this, about \$34.3 million was spent under the pepper subsidy scheme for Sarwak while under the urea subsidy scheme for padi introduced in 1974, \$101.8 million was expended.

Agricultural research. Agricultural research activities were carried out by the Malaysian Agricultural Research and Development Institute (MARDI), the Fisheries Research Institute, the Veterinary Research Institute, the Forest Research Institute (FRI), the Rubber Research Institute of Malaysia (RRIM), the Malayan Rubber Producers Research Association (MRPRA) and the recently established Palm Oil Research Institute of Malaysia (PORIM). MARDI conducted research on appropriate agricultural technology and accorded priority to problems of the small farmers' crops such as padi, cocoa and coconut. New high yielding varieties of padi such as Sri Malaysia I and II and shorter maturing varieties such as MR7 and MR10 all capable of yielding between 1,730-2,718 gantang per hectare found widespread adoption by farmers. Significant progress was achieved in the development of vegetative methods of propagation of cocoa. For coconuts, suitable cultural practices and nutrient requirements for hybrids were studied. Applied research on problems related to handling, storage, processing of food and by-products were also carried out. Under its livestock programme, the main thrust was towards the improvement of supply and quality of feedstuffs, both for ruminants and non-ruminants. Studies on the spawning and rearing techniques in the breeding and reproduction of freshwater fish were also successful.

Initial research on oil palm was carried out by MARDI with emphasis on agronomic studies for crop improvement. During 1971-79, more than 700,000 commercial seeds were produced for public sector land schemes. Genetic materials of diverse types of oil palm were collected from Nigeria to accelerate palm breeding. With the establishment of PORIM in 1979, it took over the palm oil research activities of MARDI but placed initial emphasis on technological and end-use research. The activities of PORIM focussed upon expanding uses of palm oil, formulating new uses, improving agronomic practices and minimizing cost of operation.

In the field of rubber, RRIM in cooperation with the private sector, among others, was successful in reducing the immaturity period of rubber from six to four years in

introducing the application of ethrel to increase yields. In addition, the MRPRA introduced new uses of rubber in industrial and engineering applications.

During 1976-80, the Department of Fisheries carried out surveys on demersal and pelagic fish resources and conducted research to improve techniques of fishing. Several studies were also carried out on biological aspects of marine fishes.

The facilities at the Veterinary Research Institute, Ipoh were expanded to improve diagnostic activities and increase the production of vaccines for specific animal diseases. The six regional diagnostic laboratories established during 1971-80 had provided a much improved veterinary health coverage to farmers in the prevention of disease outbreaks. The outbreak of the foot and mouth disease in 1978 and in 1980 due to illegal movements of animals into the northern parts of Peninsular Malaysia was quickly stamped out. Forest research focussed on the development of forest regeneration techniques and timber utilization. Considerable efforts were directed by FRI to silviculture of regenerated forests and forest hydrology. Progress was also made in determining preservation and seasoning schedules of various local timber species; pulping properties of certain species; wider utilization of quick-growing species and rubber wood, and working properties of locally grown teak.

Agricultural processing and marketing. The period 1971-80 saw the expanded role played by Government agencies in the field of agricultural processing and marketing aimed at assisting small agricultural producers including livestock holders and fishermen. These activities helped farmers to obtain fair prices for their produce. The Malaysian Rubber Development Corporation (MARDEC) which was set up in 1971 established 15 factories during 1971-75 with a combined capacity of 110,000 tonnes per annum, benefiting 75,000 smallholders. RISDA set up 1,903 smallholders development centres, benefitting 47,100 smallholders. Beside processing farm commodities, FOA also transacted about \$46.3 million worth of rubber, padi, groundnut, tapioca, tobacco and cocoa, benefitting directly the farmers associations/organizations and individual farmers.

During the decade, the Lembaga Padi dan Beras Negara (LPN) expanded its activities in padi and rice marketing including the provision of processing, drying and warehousing facilities. With the setting up and completion of 16 integrated and drying complexes together with the additional milling capacities in existing ones, LPN was able to meet the processing requirements in the large drainage and irrigation project areas. LPN thus increased its drying capacity from 306,000 tonnes in 1971 to 540,600 tonnes in 1980 or 28.3% of padi production while the milling capacity expanded to 282,640 tonnes or 15% of padi production.

FELDA commissioned 30 palm oil mills with a total capacity of 1,087 tonnes of fresh fruit bunches (ffb) per hour to cater for its land schemes and other agencies such as FELCRA. It also established two Standard Malaysian Rubber (SMR) and two latex

concentrate factories with a combined daily capacity of 102 tonnes and 86.7 tonnes respectively. In addition, a cocoa mill to produce wet beans with a capacity of 10.2 tonnes per day was established in Kota Gelang, Pahang. Two subsidiary corporations, FELDA Milling (FELMILL) and FELDA Marketing (FELMA) were set up to handle the processing and marketing activities of FELDA respectively. The National Tobacco Board (NTB) established in 1973, regulated the production, processing and marketing of tobacco. These activities coupled with extension and other services resulted in increased acreage of tobacco from 4,000 hectares in 1971 to 13,400 hectares in 1980 and production of cured leaves to 10,200,000 kg. in 1980 compared with 3,900,000 kg. in 1971.

The Federal Agricultural Marketing Authority (FAMA) underwent significant changes during the decade. During 1971-75, FAMA operated on a more centralised basis in an advisory capacity to other Government agencies and rendered indirect assistance to the farming community through its market arrangement services, dissemination of market data and agricultural marketing surveys and studies. Regulatory marketing schemes for coconut, coffee and pepper were also introduced. With the establishment of LPN, MAJUTERNAK and MAJUIKAN in the early years of the decade, FAMA ceased to be involved in the marketing of padi and rice, livestock and fish products.

During the second half of the decade, FAMA intensified its involvement in other crops such as coconut, cocoa, coffee, pepper and vegetables and participated directly in marketing through the activities of its various processing centres. State and regional offices were established throughout the country to render direct assistance to the farmers. FAMA also expanded its market extension, survey and marketing research activities to complement its other programmes. Additional regulatory marketing schemes for cocoa and vegetables were introduced during the period.

The fish regulatory marketing scheme established by FAMA was taken over by MAJUIKAN in 1973. To date, the scheme covered Alor Setar, Changloun, Ipoh, Johor Bahru, Kuala Lumpur, Kuala Terengganu and Kuching. Since 1979, MAJUIKAN participated in wholesaling and retailing of fish to provide competition and stabilise the price of fish. MAJUIKAN also established ice plants in Geting, Kuala Perlis and Kuantan during the period.

Under the meat trading project of MAJUTERNAK, the marketing of beef was started in 1973 and poultry in 1976. As at the end of 1980, a total turnover of \$66 million for beef and \$4.9 million for poultry was transacted. In the case of poultry trading, 90% of the birds processed by MAJUTERNAK were purchased from farmers involved in Government sponsored schemes. A large proportion of the birds was supplied to Government institutions.

Production of rubber grew by about 2.3% per annum during the decade from 1,270,000 tonnes in 1970 to 1,600,000 tonnes in 1980, compared with the projected growth of 2.8%, largely due to increased acreage in the smallholder sector and overall improvements in yields. Excluding tea and pepper production which contributed insignificantly to GDP, export earnings and employment, the overall production growth rate of rubber was the lowest compared with those of sawlogs, palm oil and even padi which in the last few years experienced drought conditions. Planted acreage under the estates declined over the years from 647,000 hectares in 1970 to 507,000 hectares in 1980 and its production decreased to 40% due to the continued conversion to oil palm and other crops and the subdivision of estates. The overall acreage under rubber of 2,100,000 hectares was sustained mainly by the smallholder sector in particular in FELDA schemes.

In an effort to encourage further investment in rubber in view of its attractive prospect in the future, the rubber export duties were restructured and the smallholders' rubber replanting grant has improved the rate of replanting and this was further induced with the implementation of the restructuring of the rubber export duties in 1979. The continued increase in rubber prices in the last decade has, however, not provided sufficient stimulus for marked shifts to rubber investments and replanting, in particular among the smallholders faced with immediate short-term gains and long-term risks of replanting. The implementation of a Rubber Stockpile Scheme by the International Rubber Stabilization Agreement in the later part of the decade provided the necessary stability in rubber market for both output and prices.

Palm oil production expanded at 19.6% from 431,000 tonnes in 1970 to 2,590,000 tonnes in 1980. Between 1970 and 1980, planted acreage increased from 308,800 hectares to 890,000 hectares with smallholders accounting for 72% and estates 28%. The high rate of conversion to oil palm by the estates and the higher proportion of oil palm grown in land development schemes increased planted acreage which, together with substantial yield increases, accounted for the rapid production. The share of palm oil in agricultural value added increased from 9.6% in 197 to 25% in 1980 while its export earnings increased from \$264 million in 1970 to \$2,576 million in 1980.

Production of padi increased from 1,434,600 tonnes in 1970 to 1,913,200 tonnes in 1980. Drought conditions prevailing in late 1978 and in 1979 affected the production in those years. Yield per hectare increased from 1,055 gantang to 1,260 gantang during the period while acreage under padi increased from 533,400 hectares to 595,600 hectares, of which 56% was under double cropping. The gap between domestic supply and consumption has increasingly been reduced. Rice self-sufficiency level increased to 92% in 1980 from 78% in 1970.

Despite production deficits, the supply and price of locally produced rice in the country were stabilised in the face of fluctuations in international supply mainly due

to the rice and padi purchasing and stockpile activities of LPN. In addition to expanding warehouse facilities, LPN through its support price scheme enabled padi price to be maintained at a stable level to generate the necessary farm response.

Copra production declined during 1971-75 following the decreasing trend of acreage planted and harvested. This trend, however, was reversed due to the coming in production of trees replanted and rehabilitated under the coconut replanting scheme initiated in 1963 among the smallholders. Most of the coconut and copra produced were mainly from the smallholdings which increasingly intercropped with cocoa or coffee. The setting up of processing facilities by FAMA enabled the farmers to obtain better prices for both the nuts and the copra. Production of coconut, however, was still insufficient to meet the requirements of oil mills despite a production growth rate of 5.3% per annum during the decade from 195,100 tonnes to 326,600 tonnes. The increase in production of 67.4% over the decade took place even though acreage increased marginally.

Production of pepper, an important agricultural export commodity of Sarawak, showed an increasing trend in the later part of 1976-80 due to the fruition of replanted areas and the expansion of areas planted in the mid 1970s. Pepper prices continued to prevail at a higher level in the second half of the decade exerting strong influence on the utilization of existing land areas. Acreage planted with pepper increased at a rate of 3.8% per annum to 12,900 hectares in 1980 from 8,900 hectares in 1970 while production increased by 1.2% per annum from 31,600 tonnes to 35,700 tonnes during the period.

Sawlogs, one of the major export earners, experienced cyclical variations in output and prices during the decade in response to international demand. Production expanded at a rate of 3.4% per annum from 17,698,000 cu. metres in 1970 to 24,600,000 cu. metres in 1980 as against 1.6% and 5.2% during 1971-75 and 1976-8 respectively. The bulk of this output was from Sabah and Sarawak which exported most of their output as sawlogs. As a result of a substantial increase in export prices in the later part of 1976-80, production of sawlogs expanded rapidly although the rate of export growth was lower than that of production. This was due to increasing local use of sawn timber coupled with restriction on exports of logs since 1973. Production from Sabah, a major producer, declined as the State introduced control on logging. Sawlogs accounted for 8.6% or \$2,435 million of total commodity exports in 1980 compared with 12.5% or \$643 million in 1970.

Production of minor crops including cocoa, sugar cane, tobacco and fruits and vegetables experienced moderate output growth over the decade. Cocoa production grew rapidly with increased acreage estimated at 68,700 hectares in 1980 compared with 7,400 hectares in 1970. A large portion of the increase in cocoa area was from intercropping. Production of dry beans increased by more than eight fold to 33,000

tonnes in 1980, smallholders continued to be affected by problems of inadequate processing facilities and lack of technical knowledge with regard to acidity.

The cultivated acreage under sugar cane was estimated at 17,500 hectares mainly in Kedah, Perak and Perlis. Annual yields and output varied according to climate, soil suitability, occurrence of diseases and availability of labour. As the level of cane production was inadequate to meet the existing mill requirement, greater reliance was placed on imports of raw sugar. It was estimated that local production of sugar could only meet 13.8% of domestic demand.

Tobacco production increased rapidly over the decade as acreage planted expanded and was further stimulated by high stable prices. Despite high production costs, low yields and poor leaf quality, production of cured leaves increased by 22% annually from 1,890,000 kg. in 1970 to 10,500,000 kg. in 1980, the bulk of which was from the states of Kelantan and Trengganu which together accounted for 90% of total planted acreage of 13,000 hectares. Increased efforts were made to extend tobacco production to areas of problem soils particularly the bris areas.

During the decade, the cultivation of fruits and vegetables expanded as a result of the provision of subsidies and marketing incentives. The acreage under fruits increased from 68,500 hectares in 1970 to 86,600 hectares in 1980. Similarly, the acreage under vegetables also expanded from 7,700 hectares in 1970 to 9,000 hectares in 1980. Livestock and fisheries. Livestock production constituted about 6% of total agricultural output in 1980. It expanded at a slow rate of 2.2% per annum during the decade compared with the projected rate of 5-6% due to the foot and mouth disease in the later part of 1976-80. Much of the growth of the output in the first half of the decade was from rapid expansion of the poultry and pig production. Production of beef, milk and mutton also expanded as a result of the pawah programme and beef/dairy projects of the Veterinary Department and MAJUTERNAK. Milk production increased substantially with the implementation of the dairy development programme for smallholders. The development of the livestock industry, however, continued to depend on high cost imported feeds.

The modernization of the fishing industry and provision of support facilities enabled fish landings over the years to increase from 340,400 tonnes in 1970 to 866,000 tonnes in 1980. Production growth was estimated at 9.8% per annum during the decade compared with the projected rate of 6.7% while its contribution to agricultural output increased from 4.4% in 1970 to 11.2% in 1980. Programmes for the development of aquaculture for both prawns and fish were further expanded during 1976-80 to supplement marine production.

### **III : OBJECTIVES AND TARGETS OF AGRICULTURAL DEVELOPMENT, 1981-85**

The agricultural sector will continue to play its major role in the development of the economy and its resource allocation will be rationalised to sustain this role. Modernization and commercialization of the sector will continue to be emphasized through institutional improvements although the patterns and forms of investment in the sector are unlikely to change.

During 1981-85, agricultural value added is projected to grow at a rate of 3% per annum and continue to decline in its contribution to GDP to 17.8% in 1985. The main source of production growth will be palm oil which is expected to grow at 8.5% per annum, constituting 32.5% of total agricultural output in 1985. The share of rubber in agricultural output, however, will decline from 25% in 1980 to 22.3% in 1985. Cocoa production will increase substantially although the country's share of total world output would still be marginal. Sawlogs will continue to decline in importance.

The share of agricultural sector in total employment is expected to be 35.9% by 1985. The sector is projected to create about 71,500 new jobs mainly from new land development schemes, reflecting a growth rate of 0.7% per annum, substantially lower than that of 1.5% during 1976-80. This trend will be further accentuated as the sector continues to lag behind the real GDP per capita of other sectors. Planned operational adjustment of land and labor resources in the sector will be pursued to minimise disruptions to agricultural output and land utilization.

For the Fourth Malaysia Plan (FMP), the sector will be provided with the required quantum and pattern of allocation and supported by fiscal policies to further modernise and restructure the production base. Capital formations in new land development, perennial crops and drainage and irrigation infrastructure will continue to dominate the allocation for the sector although institutional and agricultural support facilities will greatly expand in importance, particularly extension, processing and marketing. About \$8,608.6 million or 20.1% of the public sector allocation is provided for the sector.

The trends and patterns of economic growth in general and those of agriculture in particular will result in a reduction of poverty incidence and number of agricultural poor as more underemployed in the sector are absorbed in the higher productivity land development schemes. A large portion of the agricultural poor will still be padi farmers, rubber and monocrop coconut smallholders and fishermen.

Policy objectives. In the light of continuing importance of agriculture in the economy and the prevailing high incidence of poverty in the sector, the over-riding objective in the sector will continue to be the increase in income through productivity improvements and creation of employment opportunities. Sectoral policies,



programmes and projects will, therefore, be geared to assist farmers and fishermen in less-developed areas. Efforts at maximizing farm productivity of existing holdings and creation of employment opportunities largely through integrated agricultural development and new land development will continue to be emphasised.

Issues and strategies. Two-pronged approach for agricultural development through in situ and new land development will continue to be sustained for the FMP. In drawing up a national agricultural policy for the future, broad evaluations on the effectiveness of present crop and land-use strategies were made, thus paving the way for concerted efforts to be undertaken in areas where the desired impact is lacking.

The integrated approach towards agricultural development was increasingly adopted in the last decade to ensure effective coordination of activities provided by various agencies. This strategy will be further enhanced with a more streamlined approach in project implementation through better screening of projects, distinct delineation of agency functions and improved monitoring and evaluation to ensure maximum results to intended beneficiaries and the overall economy.

With the limited availability of suitable agricultural land for large scale land development, the large numbers of landless poor, increasing costs of development triggered by high cost of labour, transport and farm inputs and the necessity of maintaining accepted levels of income and standard of living, the need for reviewing the strategy for new land development cannot be overemphasised. The present strategy of monocrop cultivation, contractual operations of field development and limited settler family participation in the development process will be reviewed in order to attain maximum benefits from land development programmes. In addition, in order to ensure equitable income among settlers, cushion them against fluctuations in income, minimise risks due to crop damages and problems attendant upon ownership of land, the Government will introduce share ownership system for future land development schemes. Under the new system, settlers would be given individual ownership of their houselot, receive wages for work and a share of the profits of the plantation.

The in situ programmes enable increases in the level of productivity and income. It is envisaged that with intensive farming coupled with off-farm activities, the income of farmers will be further enhanced. However, the full impact will not be realised generally because of uneconomic-sized holdings. The difference in income levels between the beneficiaries of in situ development and that of new land development as well as the continuing injection of massive investments in the former, necessitate the formulation of a land consolidation policy. For this purpose, the Government will make the necessary amendments to the FELCRA Act.

In situ development is also faced with the problem of rural-urban migration resulting in the shortage of farm labour. The absorption of the rapidly growing labour force into higher income jobs outside the farm necessitates a further emphasis in mechanization programmes.

The fisheries sub-sector has limited potential for expansion particularly in the inshore areas. In view of this, greater efforts will be made to induce fishermen to shift to fish farming using unutilised brackishwater and freshwater areas as well as offshore fishing.

#### **IV : PROGRAMMES, 1981-85**

The agricultural programmes for the FMP will continue to meet the objectives of the New Economic Policy (NEP). Emphasis will be given to coordinated and integrated development of the agricultural sector to ensure efficiency as well as enable the rural people to enjoy the basic infrastructure and essential support services previously not available.

Drainage and irrigation. In line with the objective of self-sufficiency in rice, drainage and irrigation facilities will be constructed for double cropping of padi to increase production. Similar facilities will also be provided for further diversification of cropping patterns and intensified land use in existing areas using surface and where feasible ground water resources. About 45,000 hectares of new padi land will be provided with these facilities in addition to 83,000 hectares of existing areas where facilities will be improved and upgraded for double cropping. Efforts will be made to expand irrigated areas for short-term high value crops and to improve infrastructural facilities in the principal rice bowl areas of KADA and MADA.

Integrated agricultural development. Several new projects including settlement schemes for padi cultivation will be implemented during the period. The Rompin-Endau and Trans-Perak Projects will settle 11,700 families while the Western Johor Phase II will provide improved and new drainage facilities to 210,500 hectares for tree crop smallholders. Other integrated projects include Kedah Valley, Kemasin-Semerak, Melaka, Negri Sembilan Timur, Pahang Barat and Lower Trengganu. Mixed cropping and diversified farm activities as well as intensified land use will be the main strategy in these projects. About 1,427,500 hectares are expected to be developed involving 446,045 farm families.

Replanting. In line with the Dynamic Production Policy of natural rubber, production of the country's natural rubber will be stepped up while at the same time, replanting of smallholdings of 4.1 hectares and below will be encouraged. Special attention will be given to smallholders owning two hectares and below. For 1981-85, RISDA has set a target of 141,500 hectares for replanting, benefitting 70,000 smallholders. Some of

the earliest schemes of FELDA are due for replanting within 1981-85, of which 4,000 hectares are earmarked for replanting beginning in 1983. The SRFB and the Department of Agriculture, Sarawak will replant about 8,100 hectares and 4,500 hectares respectively. As regards pineapple replanting, the MPIB will replant 5,000 hectares. The replanting of coconut intercropped with cocoa and coffee coupled with the rearing of livestock will continue to be promoted, adequately backed up with basic infrastructure and support facilities to maximise farm income. About 8,300 hectares will be replanted in the next five years involving 27,000 smallholders.

Rehabilitation. Land rehabilitation will continue to be the mainstay of activities undertaken by FELCRA. During 1981-85, FELCRA will rehabilitate 25,500 hectares mainly in the states of Kelantan, Pahang and Perak. In Sarawak, SALCRA will rehabilitate 16,200 hectares, of which 14,200 hectares will be for oil palm and the balance for cocoa.

The operations of TAKDIR will be stepped up on the rehabilitation of 9,700 hectares of rubber and 1,200 hectares of orchard. Housing, basic infrastructure and other social amenities will also be included to improve the effectiveness of its schemes. The coconut rehabilitation programme will be expanded with emphasis on intercropping with more remunerative crops such as cocoa and coffee. During the period, 23,400 hectares will be covered.

To complement the activities of the other agencies, \$78 million is allocated to FOA to develop and rehabilitate abandoned and underutilised land including land adjacent to existing agricultural areas on a cooperative basis.

Crop diversification. The crop diversification programme will be further expanded and implemented as a component of integrated agricultural development projects. The promotion of local fruits and other commercial crops will be supported by subsidies. About 120,700 hectares will be covered under this scheme. Growing of pepper will be further encouraged to sustain the production and exports of this commodity through newplanting of 8,300 hectares during the period.

The NTB will gear its activities to improve the income of farmers through productivity increases and the improvement and expansion of processing facilities and marketing system. It will also effectively regulate the industry with a view to ensuring that supply matches demand and that prices will be reasonable and fair to farmers, curers and manufacturers. Based on the projected demand for cured leaves, an additional 3,209 hectares will be planted with tobacco. The potential areas will be mainly in the bris soils of Kelantan, Pahang and Trengganu. For the FMP, an allocation of \$13 million is provided to the NTB to carry out its activities.

Livestock. During the period, efforts will be made on the progressive implementation of programmes to meet domestic requirements for beef and dairy. In addition, the

Government will continue to provide assistance to the poultry and pig sub-sectors particularly to the small farmers.

The Government, through existing agencies, will continue to lay emphasis on promoting and developing efficient management in beef & dairy enterprises. MAJUTERNAK will consolidate the operation of existing beef/dairy farms and, in addition, will import high quality animals for breeding purposes, a large portion of which will be for eventual distribution to small livestock holders through the Department of Veterinary Services. To ensure the hygienic processing of meat, the management of slaughter houses will be upgraded.

In conjunction with the activities of MAJUTERNAK, the Department of Veterinary Services will focus on the improvement of basic services for the development of animal husbandry. These include training, extension and health services as well as the provision of chicks, bulls and heifers under its subsidy programme.

Fisheries. With the view to improving the income and welfare of poor fishermen and increasing fish landing, efforts of both the Department of Fisheries and MAJUIKAN will be intensified and effectively coordinated during 1981-85. Infrastructural facilities such as fishing harbour complexes which were built during 1976-80 at Batu Maung, Chendering, Geting, Kuala Keluang and Kuala Sedili will be completed while a new fishing complex at Kuala Kemaman will be constructed. To facilitate the handling and marketing of fish, shore facilities such as cold rooms, auction halls and sorting and packing facilities will be provided. In addition, MAJUIKAN will continue to encourage the development of fishermen's associations not only to integrate their activities but also to reduce their dependence on middlemen.

More allocations are given to the Department of Fisheries and MAJUIKAN to develop aquaculture to supplement sources of protein and to create employment opportunities for the rural people. Under this programme, aquaculture in brackishwater will be implemented in the states of Johor, Kedah and Sarawak; inland aquaculture in the regional development authority areas such as DARA, KEJORA, KESEDAR and KETENGAH and the cage/pen culture in Perak and Selangor. In addition, hatchery projects will be established in Johor, Kedah, Sarawak and Trengganu.

The significant development in land development in the past for employment creation and income improvements provide a sound basis for the expansion of the programme. A target of 543,500 hectares is earmarked for development during 1981-85. With escalating cost of development due to difficulties of access and rising costs of materials and labour, the approaches to land development will be modified in the light of these factors to reduce the burden on the settlers. Intensive cultivation through intercropping and livestock rearing and greater participation from the settlers and their families in the development process will be encouraged in order to

maximise income. FELDA will continue to play its dominant role in new land development. It will develop a total of 149,800 hectares during 1981-85 for agricultural development and settlement including infrastructure. The target for settler intake is 30,000, with priority given to those coming from states where agricultural land is scarce.

FELCRA will develop 25,500 hectares of fringe schemes and 1,600 hectares for youths during 1981-85. Together with its consolidation and rehabilitation schemes, FELCRA will develop a total of 60,700 hectares signifying a two-fold increase over the TMP. Emphasis will be directed to stepping up the development of numerous pockets of land suitable for agriculture. The areas earmarked for youth schemes will be confined to the extension of existing schemes. Youths in future will be assimilated into other land schemes such as FELDA. A total of 23,500 families/youths will benefit from the land schemes of FELCRA.

RISDA will continue to develop its block newplanting schemes. Owing to the scarcity of land adjacent to existing holdings due for replanting, its target of about 15,400 hectares will be much smaller than the achievement during 1976-80. Of the total, 11,500 hectares will be for rubber and 3,900 for oil palm.

State agencies such as SLDBs, SADCs and SEDCs will complement the role of the Federal land development agencies and are targetted to develop 217,200 hectares. With increased Federal financial assistance to these agencies, a more efficient and streamlined approach to development is envisaged. The regional development authorities comprising DARA, KEJORA, KESEDAR and KETENGAH are targetted to develop a total of 34,400 hectares, the bulk of which will be in the KESEDAR area. Due to the limited availability of suitable land for agriculture and consistent with the distribution objectives of the Government, the acreage to be developed under private sector is expected to decrease. Close cooperation between public and private sectors will continue, especially in the field of estate management.

In view of the limited forest resources available and the need to maintain a major portion of remaining forests for conservation and protective purposes, the forestry development strategy for 1981-85 will be the optimal exploitation and maximum utilization of forest resources. In this respect, a more aggressive reforestation programme as well as the establishment of plantations with quick growing species will be pursued. To complement the capacities of the State Forest Departments, Federal financing will initially be provided for the reforestation programmes and forest plantations. It is also expected that the industry will in the long run finance this programme through cess collection.

Training and extension. During 1981-85, four additional Regional Extension Training and Development Centres (RETDCs) will be established to train 4,700 personnel. An additional 30 extension sub-centres will be established to provide training for 30,000

agricultural technicians. To further meet the need for additional extension staff, the six agricultural institutes will produce 2,400 graduates during the period.

The Department of Veterinary Services will continue to provide training facilities for both departmental personnel and farmers. During the period, a dairy technology training centre will be established at the Veterinary Institute, Kluang, Johor. The centre will conduct training of farmers in dairying, train dairy technologists and provide facilities for regional courses. The Department will set up an information and communication unit to organise and improve the extension services mainly to produce pamphlets and information material on various aspects of livestock production, health and other related activities.

The Department of Fisheries will continue to train fishermen to achieve a certain level of technical proficiency at the Fishermen's Training Institute in Pulau Pinang and at its Marine Fisheries Training Centres in Pulau Pinang and Trengganu. During 1981-85, about 400 trainees are expected to be trained at the Institute and 600 fishermen at the Centres. In addition, the Government will also provide training in freshwater aquaculture at the Inland Fisheries Training Centre at Bukit Tinggi, Pahang and the breeding stations at Enggor, Jitra, Machang and Tapah. A total of 6,820 fishermen and farmers are expected to be trained at these centres.

In-service training of forestry staff as well as training of private individuals with the objective of imparting new forestry technologies will continue to be undertaken by the Forestry Department and at the UPM. It is estimated that about 3,800 people will be trained at the various forestry schools and logging training centres. In addition, the UPM is expected to train 1,000 forestry students in 1981-85 both at degree and diploma levels.

To meet the increased training requirements of the staff of FELDA and land development agencies, training facilities at both the Institute of Land Development and Training Centre at Trolak, Perak will be expanded to accommodate about 300 trainees. At the same time, another FELDA training school is scheduled for completion at the Keratong Complex in Pahang. The various training centres and schools will continue to provide training to clerical and technical staff as well as settlers and their families. About 90,300 people are expected to receive training within this period.

Agricultural credit and subsidies. With the establishment of more branches, the activities of BPM will be further expanded covering among others, facilities for padi, tobacco production and marketing and fishing activities. It is envisaged that during 1981-85, BPM will expand its operations to cover the Krian-Sungai Manik and Seberang Prai Projects. The total allocation for BPM in the FMP is \$167 million.

RISDA will provide agricultural input subsidy and infrastructural facilities to encourage replanting among smallholders of 4.1 hectares and below. For this purpose, an amount of \$89.4 million is allocated. In addition, a sum of \$39 million is provided under its credit programme. To encourage self-reliance among smallholders for the betterment of their socio-economic life, RISDA will assist in the establishment of cooperatives and an amount of \$21 million is allocated as launching grant for this purpose.

A total of \$500 million is allocated for the urea subsidy scheme for padi to cushion the impact of increased cost of production. With the recent increase in the price of padi from \$2 to \$10 per pikul, the incomes of farmers will be further enhanced. The subsidy is also expected to stimulate farmers to intensify cultivation especially in abandoned land, thus increasing production to achieve self-sufficiency target. In addition, another \$32.5 million is for farm mechanization.

Subsidies for fishermen will continue to be provided to enable them to operate their boats efficiently with modern gear thus increasing productivity. In addition, subsidies will also be given to cover capital requirement for all types of aquaculture covering pond culture, cage culture, cockle and other shellfish culture. A total of \$88.8 million is allocated for the programme.

During 1981-85, the Department of Veterinary Services will continue its pawah and smallholder dairy schemes. Under the Coconut Smallholders Development Project, the Department will continue to implement the beef and dairy component including the establishment of a 1,200 hectare farm at Sisek, Johor and nine milk collecting centres. It is expected that about 4,500 farmers will benefit from this project.

Agricultural research. In line with the overall objective of the Government to increase income and eradicate poverty, research on the development of new or improved agricultural technologies which are suitable for adoption will continue to be emphasised.

MARDI will assign priorities to areas associated with technical and socio-economic constraints to increase farm productivity of the farmer and reduce costs and improve quality of crops, particularly those with import substitution or export potential. In addition, it will also gear itself towards solving post-harvest problems of storage, food handling, processing and marketing of major commodities to minimise wastage and quality deterioration as well as for the development of agro-based industries.

Certain shifts in research priority strategies will be undertaken during 1981-85. Research activities will be problem-oriented and location-specific, designed to produce results which are compatible with agro-climatic and socio-economic environments of any particular region or locality. Emphasis will also be on the development of integrated farming systems involving optimum combination of crops

or crop/livestock/freshwater fisheries in a particular farm, area or zone with similar environment.

During 1981-85, the Department of Fisheries will expand physical facilities of the Fisheries Research Institute at Gelugor, Pulau Pinang, carry out marine fisheries resource surveys and establish a regional research institute in Trengganu. Research will be intensified to improve existing and develop new technologies for aquaculture production, especially of species with good returns. Priority will also be given to mass seed production techniques, feed formulation and preparations as well as the improvement and development of culture systems.

Facilities for research on livestock and poultry diseases will be further expanded. Work on the expansion and improvement of the Veterinary Research Institute, Ipoh will be completed and this will include the construction of a disease reference centre and an electron microscope unit. In addition, laboratories will be established in important livestock districts in Sarawak.

In anticipation for higher demand for natural rubber in the next decade, the RRIM strategy on research and development will emphasise the implementation of the Dynamic Production Policy of natural rubber. Efforts will be aimed at increasing productivity through improvements in agronomic practices and labour utilization, optimum use of fertiliser and effective disease control. It will also intensify the use of natural rubber through the development of new forms of rubber for specific uses and, in conjunction with the Malaysian Industrial Development Authority (MIDA), promote the growth of the rubber-based manufacturing industry.

PORIM will continue to accord priority to biological research as well as technical and end-use research of palm oil, aimed at increasing the proportion and performance of palm oil in edible and non-edible use. In addition, techno-economic studies will be carried out on palm oil and on other oils and fats. Research on effluent treatment and disposal will also be undertaken.

The forestry research programmes for 1981-85 will be geared towards increasing the productivity of forests through silvicultural techniques, optimum utilization of wood waste including its potential as a source of energy, diversifying end-use and maximizing efficiency in processing. Efforts will also be directed to the greater utilization of rubber wood, coconut and oil palm trunks, bamboo and rattan.

Agricultural processing and marketing. MARDEC will expand the capacity of existing factories from 20 tonnes to 63 tonnes per day to meet the increasing demand for premium grade rubber. One SMR factory with a capacity of 40.8 tonnes per day will be constructed by FELDA while the capacity of two others will be expanded. RISDA will set up 2,000 smallholders development centres benefitting 40,000 smallholders during the period.



FELDA will complete the construction of eight palm oil mills started during 1976-80 and establish 13 more new mills during the FMP. The total capacity of these mills will be 1,207 tonnes ffb per hour. In addition, it will expand the capacities of 11 of its existing mills. A sum of \$78.9 million is expected for all its milling activities. To cater for the increased production of cocoa in FELDA schemes, another eight processing centres will be established with a combined capacity of 163.2 tonnes.

During 1981-85, FAMA will continue to improve the marketing system for farmers. A total of 24 cold rooms established during 1976-80 will be fully operational and help to reduce post-harvest losses of the produce marketed by farmers and hence, increase their incomes. FAMA will construct two more processing centres, one in Sabah and the other in Sarawak, coffee processing centres in Johor and Pahang, and three cocoa grading, storage and certification centres in Pahang, Sabah and Sarawak. FAMA will also establish ten agricultural marketing centres in Sabah and Sarawak. To further improve the marketing system, FAMA will expand its marketing extension and research programmes. FOA will promote and support further involvement of farmers' organizations in the processing and marketing of agricultural produce.

During 1981-85, MAJUIKAN will continue to be involved in the wholesaling and retailing of fish to provide competition with private intermediaries to ensure reasonable prices for both fishermen and the consumers. The fish regulatory marketing schemes introduced in Alor Setar, Changloun, Ipoh, Johor Bahru, Kuala Lumpur, Kuala Trengganu and Kuching will be streamlined.

MAJUTERNAK will continue to implement its meat and milk marketing schemes in the context of the overall price policy of the Government. It is expected to handle 15,600 tonnes of beef and 23,700,000 litres of milk by 1985, involving a turnover of \$151.7 million. In addition, a UHT (Ultra Heat Treatment) milk processing plant will be set up in Air Hitam, Johor.

Public sector role in trading and processing of padi and marketing of rice will be further strengthened to ensure adequate returns to the farmers and stable prices to the consumers. About \$111.2 million is expected to be invested in drying, milling and warehousing facilities to meet the increased processing and storage requirements of additional padi. About 140,000 tonnes per year of milling and 151,200 tonnes per year of drying capacities are planned for 1981-85.

## **V : ALLOCATION FOR AGRICULTURAL DEVELOPMENT**

Consistent with the NEP, large public sector development resources were allocated to the sector totalling \$8,727.58 million or 18.1% of the total public sector development allocation for 1971-80 as shown in Table 15-3. Of this amount, \$6,459.7 million or 74% was expanded. The bulk of the expenditure continued to be for capital formation although during 1976-80, more emphasis was given to expanding farm support services including marketing. About \$4,849.3 million or 75.1% of the expenditure was for new land development, drainage and irrigation as well as the replanting and newplanting of tree crops.

For 1981-85, a total of \$8,608.6 million is allocated for the agricultural sector, an increase of 277.7% of the SMP and 35.5% over the TMP allocations. Of this amount, \$892 million or 10.4% is for integrated agricultural development projects, \$3,982.1 million or 46.3% for land and regional development, \$860.3 million or 10% for drainage and irrigation and \$761.3 million or 8.8% for credit, marketing and processing.

## **CHAPTER 16 : MANUFACTURING**

### **I : INTRODUCTION**

Manufacturing continues to play a strategic role in the achievement of the New Economic Policy (NEP). It is expected to generate substantial employment for new entrants into the labour market as well as for the underemployed, especially in rural areas. Policies for the dispersal of industries will be further pursued to promote balanced industrial growth among regions. High priority will be accorded to the establishment of export-oriented industries and the promotion of intermediate and capital goods industries. In addition, resource-based industries will be further encouraged to generate higher value added and foreign exchange earnings. The overall strategy, therefore, will be to expand and diversify the manufacturing base.

### **II : PROGRESS, 1971-80**

The share of manufacturing in Gross Domestic Product (GDP) increased from 13.4% in 1970 to 20.5% in 1980. As shown in Table 16-1, value added in the sector grew by 12.5% per annum during the decade, making it the leading growth sector in the economy. This achievement was principally attributed to increased exports as well as rising domestic demand. Among the major industries which contributed to the growth of the manufacturing sector were oils and fats, textiles and electrical machinery.

During the decade, there were marked structural changes in the manufacturing sector. The initial period of the decade saw the continued expansion of import substitution industries among which food manufacturing accounted for the major share. In 1970, food manufacturing accounted for 15.3% of the manufacturing sector value added but as import substitution possibilities gradually decreased towards the end of the decade, its share in total manufacturing output declined to 9.3% in 1980. Import substitution shifted to consumer durables such as household appliances, furniture and clothing as the domestic market for these goods expanded with rising standard of living and increasing rate of urbanization.

The latter part of the decade also saw a shift towards the development of export-oriented industries. Exports of plywood, veneer and blockboards increased at a rate of 12.8% per annum while sawn timber exports expanded at about 9.4% per annum. This development stimulated the expansion of the overall wood products industry by 10.3% per annum, accounting for 12% of the manufacturing sector value added by 1980. Rubber products industry became increasingly diversified with the development of new export-oriented rubber products such as household and

surgical gloves, heavy duty tyres and medical equipment. While domestic oriented rubber tyres and footwear increased by 5.6% per annum, the speciality rubber goods expanded at a much more rapid rate. Similarly, while production of textiles for domestic market increased by 9.9% per annum, production for exports increased by 26%, resulting in an overall growth of 15.7% per annum and increasing its share in the manufacturing sector from 2.1% in 1970 to 3% in 1980. Its share of output for export market also increased from 23% in 1970 to 54% in 1980. The electrical machinery industry grew at an average rate of 13.3% per annum during the decade, reflecting continued strong demand from overseas markets. Its share in the manufacturing sector increased from 2.9% in 1970 to 3.4% in 1980. Within the industry, electronics recorded remarkable rate of growth in exports of 69% per annum. Export value of electrical machinery including electronics accounted for 1.8% of total manufacturing sector exports in 1970 and this share rose sharply to 37.4% in 1980.

During the decade, the sector continued to be dominated by consumer and intermediate goods. Capital goods which grew at 9.7% per annum accounted for a small portion of the sector and was confined mainly to a narrow range of light capital goods such as transport equipment and light machinery. Despite promotional efforts to encourage greater diversification in the product-mix of the capital goods industry, little change occurred. With favourable investment climate prevailing during the decade and in response to the promotional activities of the Government, 4,226 new industrial projects with a total proposed investment of about \$15.3 billion and a paid-up capital of about \$6.3 billion were approved. The largest amount of proposed paid-up capital was in food industry, followed by textiles and textile products, non-metallic and electrical and electronics industries. Of the total proposed paid-up capital, 34.1% constituted foreign sources, mainly from Japan, United Kingdom, Singapore, Hong Kong, USA and the Federal Republic of Germany.

With the objective of promoting and fostering closer economic relations, the Government concluded investment Guarantee Agreements with the Belgo-Luxemburg Economic Union, Canada, the Federal Republic of Germany, France, the Netherlands, Sweden, Switzerland and USA, while negotiations were initiated for similar agreements with Australia, Austria, Norway, Rumania, Singapore, Sri Lanka and the United Kingdom. During the decade, progress was made in regional economic cooperation among ASEAN countries, as reflected in the Industrial Complementation Scheme and the ASEAN Industrial Projects of which the urea projects in Indonesia and Malaysia were in the implementation stage. To further promote industrial development in ASEAN region, joint consultations between ASEAN member countries and Australia, the EEC, Japan and USA were held to reduce trade barriers and increase flow of capital and technology.

Industrial development during the decade led to a rapid increase in employment in the manufacturing sector. The sector generated 416,600 new jobs representing 24.5% of total new employment created. Consequently, the share of manufacturing sector

in total employment increased from 11.4% in 1970 to 15.8% in 1980. The textiles, electrical and electronics, food manufacturing and wood products industries together accounted for the bulk of the total number of new jobs created in the manufacturing sector.

Exports of manufactured goods continued to grow from \$814 million or 15.8% of gross merchandise exports in 1970 to \$7,158 million or 25.2% in 1980, registering an annual growth rate of 24.3% during the decade. The second half of the decade recorded a slightly higher growth rate of 24.7% per annum compared with the first half of 23.8% largely as a result of the rapid growth of sawn timber exports. By the end of the decade, electrical machinery, appliances and parts accounted for the largest share of manufactured exports, contributing about 37.4% followed by wood products, 27.9% textiles and footwear, 9.5% and food, 5.5%. Manufactured goods continued to be exported to traditional markets such as USA, Singapore, the EEC and Japan.

Despite representations made by developing countries in various international fora, little progress was achieved in world trade liberalization. The concessions which were given to the developing countries were inadequate both in scope and content and confined to products which were already given concessions under the Generalised System of Preference. On regional basis, progress was achieved in trade liberalization through implementation of the Basic Agreement on ASEAN Preferential Trading Arrangements signed in early 1977. Under these arrangements, ASEAN member countries adopted tariff preferences ranging from 10% to 30% for 4,325 items on a product-by-product basis. In addition, all items with import value of less than US\$50,000 c.i.f. as recorded in the import statistics for 1978 of each ASEAN country, were accorded a 20% margin of preference.

In consonance with the objective of balanced growth among regions, the Government promoted the growth and dispersal of industries to the less developed regions of the country. To accelerate the pace of industrialization in these regions, infrastructural facilities were expanded and special incentives provided. Out of a total of 76 industrial estates covering about 9,650 hectares established by the end of 1980, 28 were in the states of Kedah, Kelantan, Pahang, Sabah, Sarawak and Trengganu covering an area of about 2,442 hectares. In 1970, only Kedah had an industrial estate covering an area of about 40 hectares.

By the end of 1980, out of 2,341 approved and implemented industrial projects, 423 were for Kedah, Kelantan, Pahang, Perlis, Sabah, Sarawak and Trengganu. Among the main types of industries approved were food processing, wood and wood products, rubber, electrical and electronic, textiles and chemicals and chemical products.

To further stimulate the development of export-oriented industries, Free Trade Zones (FTZs) were established. At the end of 1980, there were eight FTZs covering a total area of 434 hectares, located in Melaka (Batu Berendam and Tanjong Kling), Pulau Pinang (Bayan Lepas, Prai, Prai Wharf) and Selangor (Sungai Way/Subang, Ampang/Ulu Klang and Teluk Panglima Garang), Kedah (Kulim), Kelantan (Pengkalan Chepa), Pahang (Gebeng) and Pulau Pinang (Pulau Jerejak) were designated for FTZs.

ACTUAL TEXT Small-scale industries played an important role in the development of entrepreneurship, creation of employment, mobilization of individual savings for investment, broadening of industrial base of the Bumiputera and providing inputs and supportive services for larger scale industries. During the decade, the Government promoted the development of small-scale industries through the provision of loans by public sector agencies such as the Majlis Amanah Rakyat (MARA), Malaysian Industrial Development Finance Corporation Berhad (MIDF), Bank Pembangunan Malaysia Berhad (BPMB) and Bank Pertanian Malaysia Berhad (BPM) as well as training, consultancy and advisory services by the National Productivity Centre (NPC) and MARA. Total loan provided by these agencies for small-scale industries during the decade amounted to \$203.5 million. The number of small-scale industries increased during the decade. These included motor workshops, welding, foundries, printing, traditional handicrafts, furniture making and wood works, food, textile and clothing, beverages and tobacco, rubber products and machinery. Some of these industries, particularly foundry and metal industries provided supportive services for such large-scale industries as electrical and non-electrical machinery and transport equipment industries.

### **III : PROSPECTS, POLICIES AND PROGRAMMES, 1981-85**

The manufacturing sector will continue to be the leading growth sector during 1981-85, but is projected to grow at a lower rate of 11% per annum compared with the growth rate of 12.5% during 1971-80. Its share in GDP is projected to increase from 20.5% in 1980 to 23.9% in 1985, overtaking the agricultural sector of 17.8% in terms of share in GDP. Sources of growth will continue to come from both external and domestic demand. Among the industries which will experience accelerated growth include resource-based, petroleum products, electrical machinery and paper and printing, all of which are projected to grow at rates greater than the average growth rate for the sector as a whole. The value of export of manufactured goods will increase further from \$7,158 million in 1980 to \$19,823 million in 1985, resulting in its share in gross merchandise export to increase from 25.2% in 1980 to 31.4% in 1985.

The sector will also lead in terms of employment generation. During the Fourth Malaysia Plan (FMP) period, it is expected to create 267,000 new jobs representing slightly over a third of new employment created. Manufacturing employment is

projected to increase from 803,100 in 1980 to 1,070,100 in 1985, accounting for 18.0% of total employment.

The industrialization strategy during the FMP will continue to be geared to meet the NEP objectives. Emphasis will be given to creation of employment, development of small and medium-scale and heavy industries and participation of Bumiputera in the manufacturing sector. The strategy will also be to encourage the growth and development of resource-based as well as export-oriented industries. The policy of dispersal of industries to the less-developed states of Kedah, Kelantan, Pahang, Perlis, Sabah, Sarawak and Trengganu will also be accorded high priority.

Incentives will continue to be provided and reviewed to promote the manufacturing sector. While a liberal system of taxation and incentives is necessary to stimulate private investment, the Government will also provide other non-fiscal measures to accelerate industrial growth.

The public sector, through its various agencies, will continue to be involved in the further development and expansion of the manufacturing sector. Promotional activities will be stepped up to encourage the establishment of more industries by both domestic and foreign industrialists. The Government will continue to work closely with the banking community, chambers of commerce and industry, industry associations and other relevant organizations to promote investment. Measures will be taken to streamline administrative procedures so as to speed up project approvals and implementation. With the objective to develop the sector in an orderly and balanced manner, the Government will undertake a Manufacturing Sectoral Study during the period.

The period 1981-85 is expected to pose increasing challenges to the sector. Inflationary trend accelerated by the increasing price of fuel and freight charges may offset the advantages in terms of labour costs, availability of abundant raw materials and other facilities which Malaysia offers. Malaysia's trade strategies, therefore, will include, among other things, direct selling of products to be undertaken through overseas and regional investment centers.

The Government will expand services such as dissemination of research, the provision of advisory and consultancy services, training, credit and loan facilities. Research into the end-users of rubber and rubber wood will continue to be undertaken by the Rubber Research Institute of Malaysia (RRIM) and Malaysian Rubber Producers Research Association (MRPRA), while the Malaysian Agricultural Research Development Institute (MARDI) will continue its research activities in the utilization and processing of agricultural products, livestock and fish for industrial and commercial uses. The Forest Research Institute (FRI) will continue to further develop the use of Malaysian timber as well as of plantation crops for pulping, while

the Palm Oil Research Institute of Malaysia (PORIM) will undertake research into the utilization and processing of palm oil.

The Perbadanan Kemajuan Kraftangan Malaysia (PKKM) will continue to promote the development and growth of handicraft industries. Pusat Daya Cipta, a product development centre, will be established during the FMP period to carry out research into production techniques, designing and other related fields to improve existing handicraft and develop new handicraft industries. Under the FMP, a sum of about \$5 million is allocated for this purpose. The Standards and Industrial Research Institute of Malaysia (SIRIM) will continue to identify its research activities aimed at the domestic application of a wide range of proven industrial technology for the manufacture of Malaysian products. It will also promote the use of Malaysian standards for commodities, processes and practices through the Certification Marking Scheme.

During the period, the Government will accord priority to the development of skills, technical know-how and entrepreneurship. Towards this end, the role of institutions such as Industrial Training Institutes, vocational institutes and schools, youth training centres, NPC as well as universities and colleges will be further enhanced. The private sector is also expected to complement the efforts of the Government in the development and training of skilled manpower in the manufacturing sector. In addition, consultancy and advisory services will continue to be provided by agencies such as MARA, NPC, PKKM and BPMB. Facilities for loans and credit provided by agencies such as BPMB, MARA and MIDF for the establishment and growth of the manufacturing industries will be further expanded during the Plan period.

Concerted efforts will be undertaken to provide training, advisory and consultancy services to small-scale industries by agencies such as MARA, NPC, PKKM, BPMB and the newly established Small-Scale Enterprises Division in the Ministry of Trade and industry. In addition, better terms and conditions of financing and more favourable incentives will be provided to these industries to stimulate their growth and development. Under the FMP, the allocation for the development of small-scale industries provided to MARA, BPMB AND BPM amounts to about \$318 million.

A total of 2,555 hectares of land in 37 new industrial estates will be developed during the FMP, principally by the State Economic Development Corporations (SEDCs), for which a sum of \$172.3 million is allocated. In addition, the Bintulu Development Authority will develop about 83 hectares of industrial land in the Bintulu area for petro-chemical, and other heavy industries for which a sum of \$11 million is provided. To complement the industrial infrastructure, the SEDCs will provide housing facilities for the industrial workers.

The public sector agencies such as the SEDCs, Perbadanan Nasional Berhad (PERNAS), Food Industries of Malaysia Berhad (FIMA) as well as PetroliaM Nasional



Berhad (PETRONAS) will continue to participate actively in the management and operation of manufacturing ventures. During the FMP, the SEDCs will undertake about 35 new manufacturing projects in food processing, agro-based, timber-based and building material industries. A sum of \$144.7 million is provided to SEDCs for their capital investment.

PERNAS will continue its activities in resource-based and other manufacturing industries including the manufacture of fertilizer, cement and telecommunication cables. A sum of \$43.7 million is allocated to PERNAS to undertake these ventures during the period. A sum of \$80 million is allocated to FIMA under the FMP to expand its existing projects such as the cashew nut, oil palm and fruit plantation and canning projects as well as to undertake new food-based and related projects such as the manufacture of desserts, and development of cocoa plantations.

The Heavy Industries Corporation of Malaysia Berhad (HICOM) has been established to plan, implement and manage projects in the field of heavy industries, requiring large investment outlays and having long gestation periods. A number of projects have been identified for study, including iron and steel and non-ferrous metals, manufacture of machinery and equipment, general engineering, transport equipment, building materials, paper and paper products, and petro-chemicals. In the pipeline of projects to be undertaken by HICOM during the FMP include a sponge iron project, a sponge iron and billet project, a cold rolling steel mill and a cement plant. Studies are also being undertaken for an engineering supporting services complex, a small engine project and an aluminium reduction plant. A launching grant of \$125 million is provided to HICOM during the Plan period.

#### **IV : ALLOCATION FOR THE MANUFACTURING, COMMMERCE, FINANCE, REAL ESTATE, TOURISM AND MINING SECTORS**

The allocation for public sector development agencies in the manufacturing, commerce, finance, real estate, tourism and mining sectors is shown in Table 16-2.

## **CHAPTER 17 : COMMERCE, FINANCE, REAL ESTATE AND TOURISM**

### **I : INTRODUCTION**

Commerce, finance, real estate and tourism together experienced relatively slower growth during 1971-80 compared with several other sectors in the economy. Their share in the Gross Domestic Product (GDP) declined slightly from 21.7% in 1970 to 20.8% in 1980. During the same period, employment in these sectors increased from 402,600 in 1970 to 700,600 in 1980. They are projected to grow faster during the Fourth Malaysia Plan (FMP) in line with the expansion in manufacturing and construction.

### **II : PROGRESS, 1971-80**

During the decade, expansion of commerce was mainly attributed to growth in manufacturing, agriculture, construction and mining. Employment in commerce increased from 371,100 in 1970 to 648,500 in 1980 and value added in real terms in the sector grew from \$1,633 million to \$3,295 million during the same period.

While the private sector continued to dominate the wholesale and retail trade, public sector participation was aimed at providing the requisite infrastructural facilities and support services as well as complementing the activities of private Bumiputera individuals and companies with a view to achieving the restructuring objective of the New Economic Policy (NEP). During the decade, Majlis Amanah Rakyat (MARA) assisted 98,946 traders in the field of commerce through provision of business premises, finance, training and consultancy services. The agency constructed 1,147 business premises, trained 44,836 entrepreneurs and provided consultancy services to 15,860 clients. Besides investing in commercial activities through its subsidiaries, MARA also provided loans to small-scale enterprises amounting to \$103.28 million.

Perbadanan Nasional Berhad (PERNAS), through its subsidiaries and associated companies, invested \$34 million in wholesale and retail activities in a wide range of merchandise, including consumer goods, chemical fertilisers, building materials, electronics, technical products scientific and medical instruments, communications equipment, textiles and paper products. PERNAS Edar also undertook extension services to develop skills among its clients in retail and wholesale activities.

Business premises were provided by the Urban Development Authority (UDA), State Economic Development Corporations (SEDCs), local authorities, Federal Land

Development Authority (FELDA) and regional development authorities. During the decade, these institutions provided a total of 7,138 business premises. While UDA concentrated its activities in the Federal Territory, SEDCs covered the smaller towns in the country. By the end of 1980, a total of 2,870 shophouses costing \$229 million were built by SEDCs. In addition, local authorities constructed a total of 423 units of business premises, costing \$9.49 million. Perbadanan Niaga FELDA focussed its commercial activities in FELDA areas to increase its network in distribution of consumer goods among the settlers. By the end of the decade, 282 units of FELDA operated business stores were in operation. Commercial activities in new growth centres were also undertaken by Pahang Tenggara Regional Development Authority (DARA) and Trengganu Tengah Regional Development Authority (KETENGAH) which together constructed 38 units of business premises.

During the decade, cooperatives in urban and rural areas expanded their commercial activities. The farmers' and fishermen's cooperatives were engaged in the distribution of essential commodities in rural areas. Cooperatives in urban areas participated in wholesale and retail business of a wide variety of consumer goods. The Government provided a sum of \$20.48 million in the form of loans and revolving capital to these cooperatives during the period.

During the decade, the assets of commercial banks increased by 21.5% per annum from \$4,460 million at the end of 1970 to \$31,187 million by the end 1980. Bank deposits rose from \$3,400 million at the end of 1970 to \$22,832 million by the end of 1980. The number of banking branch offices increased from 336 at the end of 1970 to 546 at the end of 1980. The past decade also witnessed the increasing importance of domestic banks in the financial sector. At the end of 1980, there were 21 locally incorporated banks compared with 16 at the end of 1970, while the number of foreign-incorporated banks decreased from 22 in 1970 to 17 at the end of 1980.

Total bank loans and advances, including trade bills, increased at a rate of 24.2% per annum, from \$2,360 million at the end of 1970 to \$20,580 million by the end of 1980. This growth was primarily attributed to increasing demand for credit to finance the rising level of business and investment activities. In October 1976, Bank Negara Malaysia introduced guidelines for commercial banks to increase the flow of credit to priority sectors and special group in the economy, namely housing, manufacturing, agricultural food production, small-scale enterprises as well as to Bumiputera community. In line with the guidelines, there was an increase in loans provided for manufacturing, real estate, construction and housing. During the decade, total credit extended to these sectors increased at 29.5% per annum from \$663 million at the end of 1970 to \$8,789 million by the end of 1980, increasing their share in total commercial bank loans and advances from 28.1% to 42.7%. There was a decline in the share of the agricultural and mining sectors in total bank loans during the decade. In the agricultural sector, it declined from 10.2% in 1970 to 7% in 1980 and in the mining sector, from 2.2% to 1%. This decline was mainly due to the relatively slower growth of

these sectors in the economy. The quantum of loan given to Bumiputera community increased from \$111.7 million at the end of 1970 to \$1,856.8 million by the end of 1980. Recognizing the importance of small-scale enterprises in economic development and their growing financial needs, the Credit Guarantee Corporation Malaysia Berhad (CGC) was established in 1972 to assist small borrowers in obtaining credit from commercial banks at reasonable cost. The amount of bank lending under the CGC scheme increased from \$11.8 million at the end of 1973 to \$563.9 million by the end of 1980.

Merchant banking, as part of the financial system in Malaysia, started in 1970. By the end of 1980, there were 12 merchant banks operating in the country with a total paid-up capital of \$126.9 million. Deposits constituted the major source of funds for these banks, accounting for \$1,135.8 million or 56% of total resources by the end of 1980 compared with \$385.7 million or 73% at the end of 1975.

Loans extended by merchant banks increased from \$341.2 at the end of 1975 to \$1,551.2 million by the end of 1980. The bulk of the loans was extended to business enterprises engaged in manufacturing and general commerce. The total value of portfolio investment funds managed by merchant banks increased from \$76.9 million at the end of 1975 to \$819.8 million by the end of 1980. Merchant banks also acted as underwriters for stocks, shares and bond issues estimated at \$93.3 million during 1980.

To facilitate the achievement of the restructuring objective, the Government established Bank Bumiputra Malaysia Berhad, and acquired shares in Malayan Banking Berhad and United Malayan Banking Corporation Berhad. In addition, the Government established development banks such as Bank Pertanian Malaysia Berhad in 1969, Bank Pembangunan Malaysia Berhad (BPMB) in 1973 and Bank Kemajuan Perusahaan (BKP) in 1979 to promote development in agricultural, commercial and industrial sectors. The Government also had shares in Malaysian Industrial Development Finance Berhad (MIDF) to provide long and medium-term loans for industries. In addition, the Government through its various agencies held equity in five out of 12 merchant banks.

The Government established BKP for the purpose of providing long-term loans to industries, particularly those engaged in shipbuilding and repair and other engineering projects. At the end of 1980, the bank had provided loans amounting to \$11.4 million, mainly for ship repair and shipyard expansion. Bank Simpanan Nasional, established in 1974, played an important role in mobilising savings among the general population, a function formerly operated by the Post Office Savings Bank which formed an important means of financing development projects in the country. Deposits in the bank increased from \$276 million in 1970 to \$1,084.2 million in 1980.

Lending by finance companies increased from \$263 million at the end of 1970 to \$3,499.7 million by the end of 1980. The bulk of the loans was in the form of hire-purchase financing, mainly for the purchase of motor vehicles, agricultural and industrial equipment. The share of hire-purchase financing in total finance company credit remained fairly stable at about 50% during the decade. In addition, finance companies also granted housing loans to individuals as well as credit for leasing finance. In terms of direction, loans to manufacturing sector as a share of total loans extended by finance companies declined from 5.9% at the end of 1970 to 4.9% by the end of 1980. The share of credit extended to the agricultural and mining sectors also declined during the decade from 20% at the end of 1970 to 13.2% by the end of 1980. Together with the commercial banks, finance companies were also required to observe Bank Negara Malaysia guidelines on the extension of credit to priority sectors of the economy.

Permodalan Nasional Berhad (PNB), established in 1970, initiated for the purchase of reserved shares of approved companies in the private sector as well as shares held in trust by other Government agencies for subsequent sale in the form of unit trusts to the Bumiputera community. Kompleks Kewangan Malaysia Berhadn (KKMB, which commenced operations in 1973, participated in unit trust activities, merchant banking, equipment leasing, discount house business and brokerage activities, insurance and foreign exchange trading and equity investment. Pilgrims Management and Fund Board, set up in 1969, represents another special investment institution. In addition to promoting and coordinating all aspects of activities connected with Muslims going on pilgrimage, the Board also utilised part of its fund for investment in corporate securities.

During the decade, insurance companies rechannelled substantial funds at their disposal into the capital market, particularly long-term funds which were mobilised by life insurance companies. These funds provided additional sources of finance for economic development. The number of insurance companies decreased from 92 in 1970 to 64 at the end of 1980, comprising five life insurance, 46 general insurance and 13 composite life and general insurance companies. The number of insurance companies increased from ten in 1970 to 39 in 1980, while foreign incorporated companies decreased from 82 in 1970 to 25 in 1980.

The total combined assets of all insurance companies increased from \$433.5 million in 1970 to \$2,233.6 million in 1980. This increase was due to the expansion of the manufacturing and construction sectors and the favourable performance in underwriting, investment and capital gains. The proportion of authorised Malaysian assets in insurance companies increased from 83.4% in 1970 to 89.6% in 1980. At the end of the decade, 24.4% of these assets was held in Government securities, 11.8% in corporate securities, 2.1% in domestic loans, 37.4% in cash and deposits, 6.7% in fixed assets, 0.03% in foreign securities and 17.6% in others.

The real property market expanded during the decade. The amount of credit extended to this sector increased by 44.7% per annum from \$101.6 million in 1970 to \$4,086.9 million in 1980. During the early seventies, most of real estate transactions were handled by the private sector. Public sector programmes in this field were mainly undertaken by UDA, MARA and the SEDCs. During the decade, UDA purchased and developed 1,258 units of shops and offices for leasing to the public. These were mainly in the Federal Territory, Pulau Pinang and Johor. By the end of 1980, the SEDCs leased 1,300 units and MARA, 1,147 units, comprising mainly small business stalls. In addition, some SEDCs acted as agents for the sale of houses, office space, shops and shophouses intended for Bumiputera. The number of houses, office units, shops and shophouses covered by these activities totalled 8,000.

Tourist arrivals into Peninsular Malaysia increased at 14.4% per annum from 528,000 in 1970 to 2,031,835 in 1980. This increase was partly due to promotional efforts undertaken by Tourist Development Corporation (TDC) and Malaysia Airline System (MAS), and the rise in the standard of living in other countries. However, during 1976-80, there was a slower growth of 6.8% per annum compared with about 22.6% recorded during 1971-75. This slower growth was due to higher travel costs which substantially influenced the choice of holiday locations by most tourists. Visitor arrivals to Sabah increased from 37,373 in 1975 to 78,600 in 1980 and to Sarawak, from 64,536 in 1975 to 110,400 in 1980. Foreign exchange earnings generated by tourist industry increased from \$132 million in 1970 to \$545 million in 1980. Tourism also generated employment in related support services such as tour, travel, transportation, recreational facilities and accommodation. Employment in hotel industry alone grew from 5,200 in 1970 to 14,800 in 1980.

In the field of domestic tourism, local tour operators in the private sector worked closely with Government agencies such as Keretapi Tanah Melayu (KTM), MAS and Masmara Sendirian Berhad to get Malaysians to know their country better. The number of domestic tourists visiting Sabah increased from 40,989 in 1975 to 56,100 in 1980, and Sarawak from 13,829 in 1975 to 36,800 in 1980.

The increase in tourist arrivals into the country was also due to the availability of requisite tourist facilities. The number of hotels increased from 766 with 21,746 rooms in 1976 to 835 with 27,559 rooms in 1980, out of which 10,024 rooms were in first-class hotels by international standards. In addition, the number of tour agencies increased from 553 in 1976 to 773 in 1980 while licensed tour coaches, limousine taxies and rental cars increased from 1,061 to 1,580 during the period 1976-80. The Government introduced special provisions relating to the hotel industry in the Investment Incentive Act, 1968, including the granting of pioneer status, locational incentives and abatement of income tax for the establishment of new hotels and expansion and modernization of existing hotels. During the decade, about 150 tourist projects including hotels and holiday resorts were provided with these incentives.

Tourist projects undertaken by public sector agencies during the decade supplemented the activities of the private sector. TDC, on its own or in joint-venture, developed four hotels with 440 rooms of which 420 were built during the Third Malaysia Plan (TMP). These included the Club Mediterranee near Kuantan, Rantau Abang Visitor Centre and Tanjong Jara Beach Hotel in Trengganu. In addition, facilities at the 100-room Langkawi Country Club were improved. Other tourist projects undertaken by TDC during the period included the Bukit Nenas project and the Batu Caves Funicular Railway in the Federal Territory, and Duty Free Shops at Kuala Lumpur and Pulau Pinang. UDA and SEDCs also participated in the development of 36 wholly-owned and joint-venture hotels, accommodating 5,201 rooms. KEJORA developed five tourist projects in Desaru, Johor.

Improvements in services provided by tour agencies and guides were made possible by TDC through provision of courses and training. In addition, MARA established a Hotel and Catering School for training of skilled and semi-skilled manpower in hotel administration and management. Construction of the Hotel and Tourism Management Institute of the National Productivity Centre began during the TMP period and would be completed in early 1981.

### **III : PROSPECTS AND PROGRAMMES, 1981-85**

Value added in commerce, finance, real estate and tourism is projected to grow at a rate of 7.8% per annum from \$5,450 million in 1970 to \$7,920 million in 1985. Their share in GDP is expected to increase from 20.8% in 1980 to 20.9% in 1985. Employment in these sectors is expected to increase from 700,600 in 1980 to 881,400 in 1985, and their share in total employment will increase from 13.7% to 14.8%.

As in the past, the private sector will constitute the major source of growth for commerce, finance, real estate and tourism. Nevertheless, the public sector particularly through its agencies, will continue to complement the activities of the private sector, thereby, contributing further towards the expansion of these sectors. Outlined below are the public sector programmes envisaged for the Fourth Malaysia Plan (FMP).

During the FMP, facilities for commercial activities to be provided by public sector agencies will be expanded. PERNAS, MARA, UDA and the SEDCs will continue to provide business premises, credit and advisory services. The activities of PERNAS in the supply of consumer goods, agricultural inputs and building materials will be intensified. MARA will continue to build shophouses and bazaars to cater for small-scale enterprises in smaller towns, while UDA will provide business premises in selected urban locations. The SEDCs and regional development authorities will provide shops and shophouses in growth centres within their areas of operations. These agencies together are allocated \$983.6 million to implement their respective

physical programmes. The newly established Perbadanan Perfileman Malaysia is provided with an allocation of \$17 million to finance its activities relating to production, distribution and exhibition of films.

Banking facilities will be expanded, particularly in the financing of priority sectors and special groups, including Bumiputera, small businesses, agricultural food production, manufacturing and construction. Public financial institution will supplement the private institutions in investments, savings and loan activities. KKMB will consolidate its present activities, while BPMB will continue its role in provision of credit to small and medium-scale industries with particular emphasis on the manufacturing sector. The bank's extension services will be stepped up and geared towards improving the performance of small-scale enterprises. BKP will provide long-term financing in ship-building and repair, and engineering facilities. Bank Simpanan Nasional will continue to mobilise savings among the population. PNB, the executing arm of Yayasan Pelaburan Bumiputera, and subsequently distribute them through the operations of Amanah Saham Nasional Berhad.

The development of real estate, particularly in strategic places in major towns, will be facilitated through the operation of land-bank concept. SEDCs will further acquire real properties such as office buildings and shophouses and continue to act as selling agents for properties intended for Bumiputera. During the FMP, a sum of \$585.67 million is allocated for this programme.

Programmes to promote the development of tourist industry will be further expanded. By 1985, tourist arrivals into Peninsular Malaysia, Sabah and Sarawak are projected to be in the region of 2,823,000, 126,600 and 162,200, respectively. To meet the projected increase in tourist arrivals, an additional 30,485 rooms will be required. Employment is projected to grow at 5% per annum from 31,800 in 1980 to 40,000 in 1985. Foreign exchange earnings from tourism are expected at \$877 million at the end of 1985.

During the FMP, the development of tourist facilities in locations other than Kuala Lumpur and Pulau Pinang will be undertaken. Further extensions are being planned for the Tanjong Jara and Rantau Abang projects in Trengganu. The main focus of tourist programme of TDC under the FMP will be development of tourist complex at Tanjong Rhu, Pulau Langkawi and the expansion of the Rantau Abang Visitor Centre in Trengganu. Under the FMP, a sum of \$40 million is provided to TDC to implement these projects. In addition, the regional authorities and the SEDCs will further expand their tourist programmes.

TDC will concentrate its marketing efforts in ASEAN countries, Japan, Hong Kong, Australia, New Zealand, Germany and United Kingdom in addition to exploring new market areas with potential such as West Asian countries, France and the USA.



Marketing and promotional activities will be reinforced by tourism sales missions to selected markets.

#### **IV : ALLOCATION FOR COMMERCE, FINANCE, REAL ESTATE AND TOURISM**

The allocation for public sector development programmes in these sectors is shown in Table 16-2.

# CHAPTER 18 : MINING

## I : INTRODUCTION

The development of the mining sector requires an orderly exploitation of known mineral deposits and continued prospecting to identify new resources. The availability of mineral resources, particularly oil and gas, provides opportunity for future expansion and diversification of the economy and to enhance the process of restructuring society. During the Fourth Malaysia Plan (FMP), the strategy will focus on striking a balance between increasing revenue from the exploitation of mineral resources and the need to conserve these resources for future development.

## II : PROGRESS, 1971-80

The mining sector accounted for 4.6% of Gross Domestic Product (GDP) in 1980 compared with 6.3% in 1970. This decline was attributable to the overall low rate of growth for the sector with the depletion of reserves in existing tin bearing areas while the impact of the oil industry was felt only towards the second half of the decade. Value added in the sector grew at 4.6% per annum in real terms, from \$778 million in 1970 to \$1,214 million in 1980. The growth during 1971-75 was 0.4% per annum compared with 8.9% during 1976-80. The higher growth rate during the latter part of the decade was due to the increase in production of crude oil. In 1970, the total export value of major minerals was \$1,177 million or 22.8% of total merchandise export receipts, rising to \$9,817 million or 34.5% in 1980, giving a growth rate of 23.6% per annum. Total employment in the mining sector remained fairly stable, increasing slightly from 88,600 in 1970 to 89,600 in 1980. Table 18-1 shows the production trend of major minerals.

During the first half of the decade, all of the crude oil produced came from Sabah and Sarawak. With the discovery of new oil fields during the latter part of the decade, the oil industry assumed greater importance. By the end of 1980, there were 14 oil fields in operation, three in Sabah, eight in Sarawak and three in Trengganu. Consequently, production of crude oil increased from 17,969 barrels per day (bpd) in 1970 to an average of 280,000 bpd in 1980. The export of crude oil accounted for \$164 million or 3.2% of total value of merchandise exports in 1970, rising to \$7,200 million or 25.3% in 1980. The total investments in exploration, production and terminal facilities in the oil industry increased from \$235 million in 1975 to \$1,246 million in 1980. Production of tin-in-concentrates was 73,800 tonnes in 1970, reached a peak in 1972 at 76,800 tonnes and declined to 58,700 tonnes in 1977 with the gradual depletion of known reserves. Output rose to 61,500 tonnes in 1980, mainly attributed to higher world prices. Gravel

pump mining accounted for 56% of total tin production in 1980 compared with 55% in 1970. The value of tin exports increased at a rate of 9.5% per annum, from \$1,013 million in 1970 to \$2,504 million in 1980, although its share in total value of merchandise exports declined from 19.6% in 1970 to 8.8% in 1980.

With the reaching of full designed production status by the sole copper mine in Mamut, Sabah, the output of copper concentrates increased from 13,300 tonnes in 1975 to 113,000 tonnes in 1980. The value of production increased from \$11 million in 1975 to \$113 million in 1980, attributable to the increase in volume and higher prices of precious metals, such as gold and silver, present in the concentrates.

With the closure of mines at Bukit Besi in Trengganu and Rompin in Pahang in 1970, iron ore production declined from about 4.5 million tonnes in 1970 to 300,000 tonnes in 1980. As a consequence of declining output and stagnant prices, the value of production decreased from \$98 million in 1970 to \$9 million in 1980.

In 1970, about 1.1 million tonnes of bauxite were produced from mines in Johor. As a consequence of declining overseas markets, particularly Japan, production decreased to 705,840 tonnes in 1975 and 386,500 tonnes in 1979. With the availability of new markets, however, production rose to 600,000 tonnes in 1980. In consequence with the buoyant domestic construction activity during the decade, quarrying which involved the exploitation of limestone and other rocks, gravel, sand and clay, experienced increased level of output. More than two-thirds of the limestone output in 1980 was channelled for construction purposes and the remainder, for the production of cement and other non-metallic materials.

Major projects relating to oil and gas were under various stages of preparation. Construction work began in 1979 on the liquefied natural gas (LNG) project in Bintulu, Sarawak, with a planned installed capacity of six million tonnes per annum, costing about US\$1,016 million. Work was also initiated on the construction of two supply bases, one in Kemaman, Trengganu and another in Labuan, Sabah, in order to facilitate off-shore exploration and production of oil and gas. Petroliaam Nasional Berhad (PETRONAS) carried out studies to determine the feasibility of setting up a major refinery with a capacity of 165,000 bpd and a smaller one with a capacity of 30,000 bpd. A study was also undertaken to determine the feasibility of establishing in Bintulu an ammonia-urea plant, one of the ASEAN Industrial Projects, with a capacity of 1,000 tonnes of ammonia and 1,500 tonnes of urea per day and estimated to cost US\$350 million.

In early 1979, a Memorandum of Understanding was signed between Malaysia and Thailand to mark an accord reached in respect of a portion of the adjacent continental shelf within the Gulf of Thailand, which is under claim by the two countries. This memorandum is concrete evidence of the true spirit of cooperation and friendship between the two countries which will not allow conflicting claims to

delay or hinder the exploitation of the resources within the seabed of the area. During the Third Malaysia Plan period Perbadanan Nasional Berhad (PERNAS) through its subsidiary, Malaysia Mining Corporation Berhad (MMC), operated 37 tin dredges in Peninsular Malaysia, representing 71% of the total number of dredges operating in the country. Since 1976, off-shore prospecting was also undertaken by MMC. MMC also entered into joint-ventures with various state governments to develop new areas for mining. In addition, PERNAS Mining Sendirian Berhad continued to operate its two gravel pump mines, one in Melaka and the other, in the Federal Territory.

The Perak State Economic Development Corporation (SEDC) continued to operate its two tin gravel pump mines at Kampar and four more at other locations. In addition, it participated in three dredging operations through joint-ventures, two already in operation and one under construction. The Corporation also carried out prospecting of tin and other minerals in Lahat, Kampar and at several other locations in the State. Work on the formulation of the National Mining Code was initiated in 1977 to establish the mining industry on a firmer basis through the standardization of all mining enactments pertaining to prospecting, land alienation, issue and renewal of leases and conversion of mining land in the various states. A National Mineral Policy was also initiated in 1980 to encourage diversification beyond alluvial tin mining and to ensure orderly exploitation and development of non-hydrocarbon minerals.

The Central Belt Project was initiated in 1977 by the Geological Survey Department to prospect for tin and other metals as part of the efforts to increase tin output and to pursue the mineral diversification policy of the country. The project area covered about 31,000 square kilometres in the states of Kelantan, Pahang, Perak and Trengganu. Partly completed regional geochemical surveys conducted up to the end of 1980 indicated that the area has potential deposits of base-metals. An aero-geophysical survey over the project area was completed in 1980. In addition, preparatory works were undertaken to investigate and determine the extent of coal deposits in the Bintulu area and to explore other economic mineral deposits in the Bau and Landa-Semantan areas of Sarawak.

Efforts were also made to raise the quality of services and research activities in the mining industry. The Mines Department, through its Mineral Investigation Drilling Unit, carried out scout prospecting works in 13 new areas in Malay Reservations, covering an area of about 20,300 hectares. A new geotechnics laboratory was established by the Department within the Mines Research Institute of Malaysia at Ipoh, Perak, to carry out research works relating to mine safety. Other facilities at this Institute were also further improved. In addition, the facilities at the geochemical laboratory of the Geological Survey Department at Ipoh were expanded during 1977-78 in order to analyse the metal contents in the rock samples, collected from the Central Belt Project area.

### **III : PROGRAMMES, 1981-85**

During 1981-85, value added in the mining sector is projected to grow by 5.8% per annum while 2,300 jobs will be generated. The exploitation of oil, gas and tin will continue to be developed as a major activity while other minerals, although of lesser importance, will continue to be mined.

Production of crude oil is projected to increase from 280,000 bpd in 1980 to 362,900 bpd in 1985. The export volume of crude oil is projected to increase by 3.0% per annum. With an increase in the export price of 16.0% per annum, the export receipts are expected to increase by 19.5% per annum. The export volume of LNG will reach 4.0 million tonnes by 1985, giving a receipt of \$3,284 million.

During the FMP, PETRONAS will establish a major oil refinery with a capacity of 165,000 bpd in Melaka and a smaller one with a capacity of 30,000 bpd at Kerteh, Trengganu. The LNG and the ammonia-urea plants in Bintulu, Sarawak are scheduled to be completed by the end of the Plan period. Efforts will also be undertaken to develop the down-stream activities further including the production of methanol and other petro-chemicals and related activities.

PETRONAS will continue to play an important role in the development of the oil and gas industry and to safeguard the long-term interests of the nation. In view of expected international development in the oil industry, the agency will be strengthened to enable it to exercise its functions more effectively. This will be in line with the Government's policy of maintaining a balance between revenue maximization from oil and its products and conserving this depleting and irreplaceable natural resource.

Negotiations between Malaysia and Thailand regarding the constitution for the proposed Joint Authority will be continued. This Joint Authority shall assume all rights and responsibilities over the overlapping areas in the Gulf of Thailand, to be known as the Joint Development Area, but the validity of existing concessions, licences, agreements or arrangements of both countries are not to be in any way affected or curtailed. It shall exercise on behalf of both governments all powers related to functions in all exploration and exploitation activities.

Tin production during the FMP will still be obtained from alluvial deposits in existing mines as well as the proposed new mines at Kuala Langat, Selangor and Kuantan, Pahang. However, appropriate policies will be formulated with a view to encouraging lode mining, taking into account of the high risk and capital-intensive nature of such operations. Output will decrease marginally by 0.8% per annum during the FMP, from 61,500 tonnes in 1980 to 59,000 tonnes in 1985.

The global outlook for tin appears to be fairly promising in spite of the adverse effects of the announcement regarding the future release of the US General Services Administration stockpiles on price stability. In this respect, the major tin producing countries will be adopting a common strategy for the Sixth International Tin Agreement (ITA) with the expiry of the Fifth ITA in mid-1982. Among the main contentious issues will be buffer stock size, its financing and export control mechanism.

The Government will intensify its efforts to undertake prospecting in Malay Reservations through the Mineral Investigation Drilling Unit of the Mines Department. PERNAS and several SEDCs will undertake new tin mining ventures and development of downstream activities.

Output of copper concentrates during the FMP will remain at the 1980 production level of about 110,000 tonnes per annum. Iron ore production is expected to decline from 280,000 tonnes in 1981 to 200,000 tonnes in 1985. Production of bauxite, however, is expected to remain at about 600,000 tonnes per annum.

The geochemical survey for the remaining areas of the Central Belt Project will be completed by the end of the Plan period. Detailed surveys will be undertaken to determine the extent of base metal mineralization in this area. A regional laboratory will be established in Kuantan, Pahang in 1981 to carry out testing and analytical work on rock samples for their metal contents. Exploration for coal and other minerals in Sarawak is also expected to be completed while the exploration of mineral potentials in the Grik-Baling-Kroh areas of Perak and Kedah will be undertaken. In addition, the Mines Research Institute of Malaysia at Ipoh, will be strengthened with the acquisition of modern machinery and reorganisation of functions. A Mining Technology Testing Centre will also be established within the Institute to undertake various tests in modern techniques of tin mining to ensure high productivity. A programme for manpower training in mineral resource industries will be initiated by this Institute.

The public sector development expenditure for mining is shown in Table 16-2.

## **CHAPTER 19 : TRANSPORT AND COMMUNICATIONS**

### **I : INTRODUCTION**

The provision of an efficient and balanced transport and communications system is an integral part of the development process. During the Fourth Malaysia Plan (FMP) period, various modes of transport and related infrastructure requirements will be further expanded and improved to accelerate socio-economic development of the country. The programmes for the transport sector will continue to accord priority to rural transportation and to the expansion of the inter-urban road network. In the communications sector, vital domestic and international links will be further upgraded.

### **II : PROGRESS, 1971-80**

During the decade, the number of motor vehicles in Peninsular Malaysia grew by 12.6% per annum from 669,300 in 1970 to 2,200,700 in 1980. In Sabah, it grew by 10.7% per annum from 35,000 to 97,100 vehicles while in Sarawak, it grew by 12.3% per annum from 39,500 to 125,900 vehicles. This resulted in the increase in the overall vehicle-population ratio from 72 per thousand in 1970 to 170 per thousand by the end of 1980.

In order to provide sufficient capacity for the rapid increase in the traffic as well as to generate development in new areas, the programme for road infrastructure was expanded. The programme included the construction and improvement of approximately 22,670 kilometres (km) of roads in Peninsular Malaysia, 4, 020 km in Sabah and 2,720 km in Sarawak.

During the period, major road programmes undertaken were the following:

- (i) upgrading and improvement of existing road network for Routes I, II, III and other major roads in Peninsular Malaysia;
- (ii) construction of new road network in Peninsular Malaysia such as the East-West highway, the Kuala Krai-Gua Musang road, major highways in Sabah, the completion of the First Trunk Road System and the initiation of the Second Trunk Road system in Sarawak;
- (iii) construction of new development and feeder roads in regional development schemes such as Johor Tenggara, Pahang Tenggara, Trengganu Tengah and Kelantan

Selatan in Peninsular Malaysia, the Kinabatangan Basin in Sabah and Bintulu region in Sarawak;

(iv) construction and improvement of village and security roads;

(v) implementation of the Highway Rehabilitation Programme in Johor, Kelantan, Pahang, Perak, Trengganu, Sabah and Sarawak; and

(vi) implementation of the Accelerated Rural Roads Programme (ARRP).

The construction of Kuala Lumpur-Seremban, Kuala Lumpur- Karak and Jerangau-Johor highways was completed during the Third Malaysia Plan (TMP). The Kuala Krai-Gua Musang, Johor Bahru-Senai, Kuantan-Segamat and East-West highways were under various stages of construction at the end of 1980. The total length of these roads is about 680 km. In Sabah, substantial progress was made in the construction of Paper-Sindumin, Tamparuli-Ranau and Semporna-Lahad Datu roads. In addition, about 350 km of roads were constructed and upgraded. In Sarawak, the Bintulu-Tanjung Kidurong road was completed while Beluru-Long Teru road was in an advanced stage of construction.

The major urban highway projects undertaken were the Kuala Lumpur Urban Transport and the Pulau Pinang Traffic Dispersal Scheme. Detailed engineering designs of inter-urban highways were completed for the stretches between Ipoh North and Changkat Jering, Ipoh South and Bidor and between Jitra and Bukit Kayu Hitam. Major bridge projects were also undertaken including reclamation works for the Penang-Mainland linkage which were started in 1980.

Approximately 2,394 km of development and feeder roads were constructed in Peninsular Malaysia to serve Federal Land Development Authority (FELDA) schemes, and the major regional development schemes in Johor Tenggara, Trengganu Tengah and Kelantan Selatan. In Sabah, designs for roads to the agricultural development areas and growth centres were finalised. In Sarawak, a total length of 222 km of development roads was completed.

A Highway Rehabilitation Programme, launched in 1976, involved the pavement strengthening of 1,056 km of trunk roads in Johor, Kelantan, Pahang, Perak, Trengganu, Sabah and Sarawak. By the end of 1980, 710 km were completed mainly in Johor, Kelantan, Perak and Sabah.

The ARRP was launched during the TMP period involving the construction of about 1,243 km of new rural roads and upgrading of 1,369 km of existing roads. By the end of 1980, about 241km of new roads were completed and 1,000 km were upgraded. These roads not only provided social and economic services but also contributed to



enhancing security measures. In addition, village roads were improved to allow for easier access in the villages.

The Malayan Railway (MR) began implementing its long-term programmes of replacement, rehabilitation and modernization in 1971. These programmes have resulted in the improvement of the overall performance of the railway, particularly with regard to passenger traffic, which showed an upward trend, increasing from 5,174,900 passengers in 1970 to 7,000,000 in 1980. In terms of passenger-kilometres, this showed an increase from 620 million to 1,356 million. Freight traffic showed an increase from 1,202 million tonne-kilometres in 1970 to 1,637 million tonne-kilometres in 1980. Substantial investment was also made by the MR in rolling stock such as goods wagons, passenger coaches and shunting locomotives as well as in the acquisition of new plants and machinery. About 230 bridges were also rehabilitated to meet the operational requirements of trains with heavier loads running at faster speed. The continued growth in rail traffic, especially for bulk cargo and long distance passenger traffic, enabled the MR to meet its operating costs while providing an essential service to meet the transportation needs of its users.

During the decade, the development of ports and the promotion of shipping industry were undertaken to cope with the rapid growth in traffic and other related maritime activities. The increase in traffic was particularly significant with the rapid growth in Malaysia's international trade. By the end of 1980, a total of 16,200,000 tonnes of cargo was handled by the ports in Peninsular Malaysia compared with 7,900,000 tonnes in 1970, showing an annual increase of 7.4%. In Sabah, a total of 2,800,000 tonnes was handled in 1980 compared with 600,000 tonnes in 1970 while in Sarawak, 2,900,000 tonnes was handled in 1980 compared with 1,600,000 tonnes in 1970, showing an annual increase of 16.6% and 6.1%, respectively.

Ports. A major expansion programme for Port Kelang was undertaken during the decade to enable it to cope with the increased traffic generated by the country's rapid economic growth. The programme included the expansion and extension to the North Kelang Straits by about 2,680 metres of wharves, provision of container facilities, construction of a Roll on-Roll off (Ro-Ro) ramp and specialised facilities for dry bulk terminal as well as on-shore infrastructural facilities. As a result of this programme, Port Kelang increased its capacity to handle traffic from 4,400,000 tonnes in 1970 to 8,000,000 tonnes in 1980 and its container throughput increased from 41,900 Twenty Foot-Equivalent Units (TEUs) in 1974 to 134,500 TEUs in 1980.

The expansion programme for Penang Port included the construction of a bulk cargo terminal, a vegetable oil jetty, a container terminal and Ro-Ro facilities. The Port also acquired container cranes, tug boats, and passenger launches. As a result of this expansion programme, traffic through Penang Port increased from 3,500,000 tonnes in 1970 to 5,600,000 tonnes in 1980, and container throughput increased from 8,900 TEUs in 1975 to 43,500 TEUs in 1980.

The Johor Port was completed in 1977 with facilities consisting of a twin berth oil jetty for liquid bulk cargo, two ocean berths and a coastal berth for dry cargo. The oil jetty has a handling capacity of 1,600,000 tonnes a year, while the facilities for dry cargo have a combined annual capacity of 900,000 tonnes. The overall sea-borne cargo handled through Johor Port increased from 1,100,000 tonnes in 1977 to 2,200,000 tonnes in 1980. The Kuantan Port was completed in 1979 with facilities for liquid bulk and general cargo. Due to technical deficiencies, it was only opened for partial operation in 1980. The Government has taken measures to determine and rectify the deficiencies.

The expansion programmes of Kota Kinabalu and Sandakan ports were completed in 1976 and 1977, respectively. As a result, the handling capacity of Kota Kinabalu Port increased from 311,000 tonnes to 953,000 tonnes while that of Sandakan Port from 335,000 tonnes to 624,000 tonnes. With the facilities, both ports were able to cope with the increasing volume of cargo and reduced delays and congestion.

The construction of a new port in Bintulu, Sarawak began in 1979 to cater for both general and bulk cargo traffic as well as specialised handling of liquified natural gas (LNG), ammonia and urea. The expansion of Kuching Port was completed in 1975, increasing the overall capacity of the port from 300,000 tonnes to 650,000 tonnes while that for Sibul Port was completed in 1977, thereby increasing the capacity of the port from 175,000 tonnes to 450,000 tonnes.

Shipping. The Malaysian International Shipping Corporation (MISC), the national shipping line, continued its fleet expansion and diversification programmes during the decade. By the end of 1980, it owned and operated a diversified fleet of 31 vessels with a total tonnage of 813,733 deadweight tonnes comprising six conventional liner ships, two third-generation container ships, two fully cellular container ships, two container feeder vessels, three parcel tankers, one ore/oil carrier, two woodchip carriers, eight bulk carriers and five coastal ships. In 1971, it had a fleet of only six vessels with a tonnage of 65,000 deadweight tonnes. In terms of its carriage of Malaysian cargo, MISC increased its market share by 4% for liner, 2% for dry bulk and 2% for tanker.

During the period, domestic shipping was largely operated by foreign registered ships. In order to confine domestic shipping to locally registered vessels, the Government introduced the Cabotage Policy in early 1980, the implementation of which is to be in stages. Up to the end of 1970, about 60% of the domestic shipping tonnage in the country was still dependent on foreign ships. Since the inception of the Policy, the Domestic Shipping Licensing Board (DSLBB) which is the authority responsible for issuing licences, issued licences to more Malaysian registered vessels than foreign owned vessels.

The coastal liner trade discharged at ports in Sabah and Sarawak from Peninsular Malaysia, amounted to 1,400,000 tonnes of the total seaborne trade of 2,700,000 tonnes in 1980. In 1970, it constituted about 800,000 tonnes of the total of about 1,700,000 tonnes. The coastal liner trade into Sabah and Sarawak, therefore, formed about 47% and 52% of the total sea-borne trade in 1970 and 1980, respectively.

In line with the Government's long-term objective of making Malaysia a maritime nation, a comprehensive study was initiated in the latter part of 1980 to determine both the future shipping requirements of export and import trades and new programmes and policies to promote the growth of the shipping industry.

Marine. To ensure the safety of marine transportation, the Government improved both the preventive and enforcement measures with the introduction of the Traffic Separation Scheme in the Straits of Melaka, installation of additional navigational aids and improvement to security arrangements.

The decade marked a rapid growth in the development of civil aviation and air transportation in the country. In Peninsular Malaysia, passenger traffic increased from 816,000 in 1970 to 3,531,300 passengers in 1980, showing an annual growth of 11.7% and 13.9% respectively. Freight traffic in Peninsular Malaysia increased from 3,500 tonnes in 1970 to 35,200 tonnes in 1980, registering an annual growth rate of 26%. Freight traffic in Sabah during the same period increased from 5,070 to 9,106 tonnes and in Sarawak, from 2,186 to 7,500 tonnes giving an annual growth of 6% and 13.1% respectively.

Several major airport improvements and expansion were undertaken during the period. The expansion programme for the Penang International Airport was completed in 1978, enabling it to cater for wide-bodied aircraft and the increased traffic. The expansion works for the Kuala Lumpur International Airport, which included modification to the terminal building, were in progress. Extension to the runway of Kota Kinabalu International Airport was completed, enabling it to receive wide-bodied aircraft while improvement works to Kuching International Airport were being implemented. The expansion of Johor Baru, Kota Bharu and Sandakan airports were also initiated during the period. In addition, masterplans and preliminary designs for Sibul, Bintulu and Limbang were also completed in late 1980.

The Malaysian Airline System (MAS) expanded and upgraded its domestic and international services with the expansion of its fleet size from 22 in 1972 to 27 in 1980 by the replacement of three B707 with three Airbus, the acquisition of one F27, two B737 and two DC10 as well as the increase in landing rights as a result of the signing of new air services agreements. In addition, MAS continued to give priority to rural air services in Sabah and Sarawak with the number of aerodromes served increasing from 17 in 1972 to 25 in 1980. In conjunction with the Lembaga Urusan dan Tabung Haji (LUTH), MAS also provided special flight for Muslim pilgrims.

As a result, MAS carried a total of 3,500,000 passengers in 1979/80 compared with only 1,902,000 passengers in the second year of its operation in 1973/74, which showed an annual growth of 10.7%. The carriage of cargo also showed a significant increase from 9,382 tonnes to 81,572 tonnes, giving an annual growth of 43.4%.

In line with international requirements, the Government tightened its security arrangements at all airports with the provision of modern equipment to ensure maximum security. For this purpose, a security unit was set up within the Department of Civil Aviation to ensure proper security screening of passengers boarding the aircraft.

During the decade, telecommunications programmes were expanded to provide more efficient services for telephones, telex and telegraphs as well as communications facilities for broadcasting, civil aviation, police, customs and fisheries. The number of telephone subscribers increased from about 104,000 in 1970 to 400,000 in 1980, increasing the telephone-population ratio from 1 per 100 population in 1970 to 2.8 per 100 population in 1980. On the other hand, demand for telephones increased more than four-fold during the decade from 117,500 in 1970 to 520,000 in 1980, resulting in higher percentage of waiting list from 11.6% to 23%.

The microwave trunk telephone network was extended in Peninsular Malaysia to connect all the main towns. In Sabah and Sarawak, a new microwave trunk telephone network was also established to link all the main towns. Peninsular Malaysia was linked to Sabah and Sarawak via satellite and the troposcatter system and by the recently completed submarine cable between Kuantan and Kuching, enabling the operation of a nation-wide Subscriber Trunk Dialling (STD) by the end of 1980. This development also facilitated the expansion of the television broadcasting services throughout the country. Direct telecommunications links were established to various countries through the use of satellites and submarine cables. The establishment of these direct links facilitated the introduction of a limited International Subscriber Dialling (ISD). Together, the ISD and the STD assisted the operations of the newly established Kuala Lumpur Commodity Exchange. At the regional level, Pulau Pinang-Medan Cable Project and the ASEAN cables linking Thailand, Malaysia and Singapore, were in various stages of implementation.

Telex services were expanded during the period as a result of the automation of the services and in response to growing domestic and international demand. This progress led to an increase in the number of telex subscribers from 183 in 1970 to 3,500 in 1980.

The main programmes undertaken by the Postal Department during the decade included the establishment of a total of 188 mobile post offices and 1,406 postal agencies to serve the rural areas. A total of 184 new post offices were constructed

while the rate of mail conveyance was improved principally with the addition of new vehicles and staff. By the end of 1980, the number of mail traffic handled was 1,260 million compared with 590 million in 1970. The Department also provided services to other agencies such as the Bank Simpanan Nasional, Telecoms and Broadcasting departments as well as the National Electricity Board (NEB).

The Meteorological Department continued to provide a variety of services through the establishment of additional storm warning radars and meteorological/seismological stations. Among the principal users are the civil aviation, agricultural research, education and other sectors. The Department also started marine meteorological services for shipping, fishing and oil exploration activities.

### **III : PROGRAMMES, 1981-85**

The road investment during the Plan period is designed for the following programmes:

- (i) expansion of highway network to meet the projected growth in traffic;
- (ii) construction of new development and feeder roads to open up new areas; and
- (iii) improvement to rural and village roads to support in situ agricultural programmes so as to enhance socio-economic well-being and facilitate security measures.

In addition to the various projects continued from the TMP, new projects will be implemented in the FMP. These projects include the Penang-Mainland linkage and inter-urban highways from Bukit Kayu Hitam to Johore Bahru. The construction of these highways will be undertaken by the newly established Highway Authority Malaysia which will be responsible for their administration and maintenance including the collection of tolls. The Authority will ensure that the construction of the new highways will be expedited to cope with the increased level of traffic along the major towns in the western corridor of Peninsular Malaysia. The completion of these projects by 1986 will enable greater mobility and reduce travel time as well as enhance road safety.

The programme for the upgrading and improvement to existing roads involves the widening of road carriageway to 7.3 metres wide and where possible, the construction of dual carriageway. The programme will include the following:

- (i) improvement of Kuala Lumpur-Seremban Expressway including the construction of eight new interchanges;

- (ii) extension of the six-lane dual carriageway of Kuala Lumpur-Petaling Jaya highway to the Kuala Lumpur International Airport interchange;
- (iii) improvement and widening of the Grik-Kuala Kangsar road;
- (iv) improvement of the Ipoh-Lumut road;
- (v) improvement of the Kuantan-Kemaman-Dungun road;
- (vi) construction of a dual carriageway from Senai to Johore Bahru Airport; and
- (vii) construction of the Johore Port access road. Rapid urban population increase and an excessive concentration of major urban functions and facilities in the central business districts of urban centres together with intensified motorisation, has produced an acute transportation demand in the urban centres. To minimise the level of congestion in the two major city centres of Kuala Lumpur and George Town, projects for the improvement of the urban traffic system, which include the Kuala Lumpur-Petaling Jaya and Pulau Pinang traffic dispersal schemes, will continue to be implemented. A similar project is also being initiated to relieve the traffic congestion in Johore Bahru. A major issue in these projects is the development of public transport and measures to restrain the use of private vehicles in the central business districts.

The construction works for the East-West highway and the Kuala Krai-Gua Musang road are expected to be completed by the end of 1981 and 1982, respectively. In addition, the supporting road systems to the East-West highway and the Gua Musang-Kuala Lipis-Raub-Bentong road will also be undertaken. The construction of the West Coastal Road-Sungai Perak-Lumut road links, which will connect Kg. Kayan to Sitiawan and Sabak Bernam-Teluk Anson, is expected to commence in 1981. Included in the programme is the continuation of the rehabilitation of roads in Johor, Kelantan, Perak, Pahang, Trengganu, Sabah and Sarawak as well as roads in Kedah, Negeri Sembilan and Pulau Pinang. A total of 1,093 km of roads is expected to be rehabilitated. In Sabah, the priority is to complete the paving of all the existing gravel roads connecting the major towns and to construct new roads linking up minor population centres. About 350 km of existing gravel and new roads will be reconstructed. Construction works on the Semporna-Lahad Datu, Tamparuli-Ranau and the Papar-Sindumin roads continue to be undertaken. A programme for the reconstruction and improvement of trunk roads such as stretches from Berungis to Kota Belud, Lahad Datu to Sandakan and Sandakan to Telupid will also be initiated during the Plan.

In Sarawak, priority will be given to the completion of the First Trunk Road System which forms the spinal road of the state-wide road network. Under the programme, the stretch of road between Ulu Batang Mukah and Bintulu will be undertaken. In addition, improvement and bitumen surfacing of various sections of the Miri-Bintulu road will be stepped up. Work will commence on the Second Trunk Road System including the link from Long Lama to Limbang and from the Bintulu region to the interior which will provide access to the proposed hydro-electric project in Pelagus.

Other roads such as the Bintulu-Tanjung Kidurong, Kuching-Bako and Batang Ai trunk roads leading to important development projects will be further developed. The Kuching bypass and the first eight km of the Miri-Bintulu road will be upgraded to four lanes.

A new set of criteria has been developed for the purpose of selecting and constructing new rural roads during the FMP. Included in the criteria are the population per km of the proposed roads, the percentage of smallholding and the construction cost per km. The use of these criteria will ensure better utilisation of resources for rural roads programme. During the FMP, a total of 1,407 km of rural roads will be constructed mainly in the less-developed states. About 1,078 km of development and feeder roads will be constructed to serve the regional development areas in Johor, Kelantan, Pahang and Trengganu. In addition, 60 km of access roads to the integrated agricultural development areas and growth centres in Sabah will be implemented.

The improvement programme for the kampung roads will also be continued during the FMP. The construction of these roads will be based on both economic criteria and social needs so as to facilitate the marketing and processing services for agricultural produce and to provide better access to social amenities.

The Government is concerned with the increasing rate of motor accidents on the highways. As a step towards reducing the number of these accidents, necessary data will be collected and analysed while studies on road safety measures and axle load effects on roads will be conducted. Similarly, to reduce traffic congestion at railway level crossings, the existing level crossings in Peninsular Malaysia will be investigated with a view to replacing them with overhead road/rail bridges.

A study will be initiated to assess the capability and capacity of both the public and private sectors in the road construction activities. The study, among others, will examine in-depth information relating to the level of demand and the availability of supply of construction materials, technical and manpower capacities and will recommend measures to improve the planning and implementation capacity in the road construction industry as a whole.

In the field of training, the Public Works Department will continue with on-the-job training for personnel at the professional, sub-professional and operation levels. A training school for this purpose will be established in Bangi.

During the Plan period, both the rail passenger and freight traffic are projected to grow from 1,410 million passenger-kilometres and 1,737 million tonnes-kilometres in 1981 to 1,649 million passenger-kilometres and 1,963 million tonnes-kilometres in 1985, respectively. To cater for the traffic growth and the continuing need for expansion and modernisation, the Railway will undertake the following programmes:

- (i) purchase of rolling stock;
- (ii) renewal and doubling of tracks and rehabilitation of bridges;
- (iii) provision of rail links from Tampoi to Johor Port, from Sungai Way to Kuala Lumpur International Airport and from Senai to Johor Bahru Airport;
- (iv) modernisation of the Sentul Workshop;
- (v) remodelling of the railway marshalling yard at Brickfields and the construction of institutional quarters and stations; and
- (vi) modernisation of signalling and communications and conversion of open level-crossings to automatic gate-crossings. expected to be trained.

The rail links to Johor Port will facilitate the movement of passengers and cargo traffic from Tampoi to Pasir Gudang, serving both the Johor Port and the Malaysian Shipyard Engineering Berhad. The railway marshalling yard at Brickfields will be rearranged and expanded to improve locomotive and wagon utilisation, thereby reducing delays to passenger and freight trains. The rail link between Sungai Way and Kuala Lumpur International Airport is designed to facilitate the transportation of aviation fuel. The MR will also purchase container handling equipment and provide associated facilities to meet the requirements of the growing container traffic handled by MR.

The training programme for the staff of the MR will continue to be undertaken during the period. The main aspect of the programme is the three-year apprenticeship training that produces skilled railway technical workers. A two-week induction course is also conducted for all new workers apart from various in-service and on-the-job training. For the management level, a separate training programme has been designed, covering courses which include management development and administration conducted jointly by the MR and the Institut Tadbiran Awam Negara (INTAN).



During the Plan period, the total cargo tonnage expected to be handled by the ports in Peninsular Malaysia is estimated to increase from 16,200,000 tonnes in 1980 to 25,500,000 tonnes in 1985, giving an annual growth of 9.5%. In Sabah, the total cargo tonnage is expected to increase from 2,800,000 tonnes to 4,900,000 tonnes while in Sarawak from 2,900,000 tonnes to 6,500,000 tonnes, giving an annual growth of 11.8% and 17.5% respectively. Based on the growth in traffic, programmes for effective utilisation of the existing facilities together with expansion and improvement programmes of the ports will be accelerated. In addition, the expansion programmes for MISC will be continued during the Plan period, to keep pace with the increasing demand for services and technological changes in the shipping industry.

Ports. With the completion of three general cargo wharves, dolphin wharves and dry and liquid bulk terminals, the capacity of Port Kelang will be increased to 13,900,000 tonnes by the end of 1985. The expansion programme of Port Kelang, involving the construction of new facilities at Pulau Lumut, will also be implemented to meet increased demand for additional facilities. The completion of the facilities is expected to generate further development in the surrounding areas.

The capacity of Penang Port will be increased to 12,900,000 tonnes with the implementation of a container project at North Butterworth and an additional berth to the existing bulk cargo terminal. Dredging of the North Channel will also be undertaken. The container project includes a container terminal of two berths, Ro-Ro facilities, and container handling equipment. The construction of an additional berth to the existing bulk cargo terminal is to provide the terminal with greater handling capacity and separate handling facilities for edible and non-edible commodities. The dredging works involve the deepening of the channel from 7.4 to 11.8 metres to accommodate bigger container and bulk cargo vessels.

The expansion of Johor Port, scheduled for completion by 1983, comprises the extension of the existing marginal wharf to provide for an additional multi-purpose ocean berth for general cargo as well as containers and two berths for dry bulk cargo. The completion of these facilities together with the lighterage wharf, dangerous cargo jetty and other ancillary on-shore facilities will increase the total cargo handling capacity of the port from 3,500,000 tonnes to 7,600,000 tonnes. In addition, further modernisation and replacement of equipment will be undertaken.

Kuantan Port will be fully operational when repairs to the structural defects, mainly at dry cargo berths and transit sheds, are completed. The port facilities consist of one multi-purpose berth, three general cargo berths, a palm oil berth and a mineral oil berth. The phase 1 work on the port commercial complex, providing supporting facilities to the port, will also be implemented.

The construction of the Petroleum Supply Base in Kemaman, Trengganu to meet the requirements of petroleum exploration activities is expected to be completed by 1982. The project consists of terminal shore facilities, a harbour basin of 120 metres width and an approach channel of 9 metres draught, sufficient to accommodate supply ships of 5,00 deadweight tonnes.

In Sabah, the construction of an industrial jetty complex at Sepangar Bay and expansion of Tawau Port are scheduled for completion by 1982. The industrial jetty complex will provide facilities mainly for the handling of bulk cement, mineral and palm oil. The expansion of Tawau Port will include the construction of four additional berths, a new transit shed and ancillary port facilities. The expansion of Kota Kinabalu and Sandakan ports include the extension of wharves, construction of container freight stations and installation of container handling equipment. With the expansion, the capacity of Kota Kinabalu Port is expected to increase from 900,000 tonnes to 2,500,000 tonnes and Sandakan Port from 600,000 tonnes to 1,200,000 tonnes.

In Sarawak, the new port in Bintulu will provide not only berthing facilities for general and bulk cargo but also specialised facilities for handling LNG, ammonia and urea. The facilities comprise of a bulk cargo berth, two general cargo berths and a Ro-Ro ramp to serve the growing export and import traffic. The LNG harbour, which will accommodate LNG vessels of 70,000 deadweight tonnes, will provide facilities for the export of LNG, ammonia and urea. The port, which is scheduled to be completed by the end of 1982, is expected to handle 1,700,000 tonnes of throughput in 1983, including LNG. The traffic is projected to increase to 3,200,000 tonnes by the end of 1985. On completion, the port will act as a catalyst for the accelerated development of the region.

The phase II expansion of Kuching Port, involving the construction of an additional wharf and transit sheds, will also be implemented during the Plan period. The expansion will increase the capacity of the port from 700,000 tonnes to 1,300,000 tonnes. Sibul Port will also be provided with new storage facilities, thereby improving its operational efficiency.

Shipping. The activities of MISC will be expanded and diversified in order to increase its participation in both domestic and international shipping. An additional fleet of 46 vessels is estimated to be added to the current fleet of 31 vessels to reach a target of 2,500,000 deadweight tonnes by the end of 1985. The expansion will be in container, Ro-Ro tanker, bulk and coastal services. Another priority area of MISC's involvement will be in the shipment of LNG scheduled to commence in 1983. The delivery of the five LNG carriers will be made progressively during 1981.

Marine. In order to enable the Marine Department to play a more effective role in ensuring the safety of marine transportation and the marine environment, a number

of projects will be implemented during the Plan period. In Peninsular Malaysia, the main projects include the purchase of additional dredger, speedboats, launches, communications equipment, replacement of jetties and the construction of institutional quarters. In Sabah, the projects include the purchase of hydrographic equipment, improvement to lighting, navigational aids and the workshop at Pulau Berhala. In Sarawak, the projects include the construction of the marine complexes in Bintulu, Sejingkat and Sibu and the purchase of vessels.

Training programmes for port personnel will be provided by the proposed National Ports Training Centre in Port Kelang and the Sabah Ports Training School in Kota Kinabalu. The primary objective of the National Ports Training Centre is to undertake centralised training of port personnel at all levels in order to ensure that a standardised and uniform system of training is provided to meet the needs of the various ports in the country. The Sabah Ports Training School will provide facilities for the training of personnel in the operational categories. The Maritime Training Centre in Melaka and the Politeknik Ungku Omar in Perak will provide training in shipping and marine services. The Maritime Training Centre will continue to provide training courses for ratings, deck officers and marine engineers to meet the needs of not only the public sector but also the private sector in the shipping industry. Meanwhile, the Politeknik Ungku Omar will continue to offer courses in marine engineering as well as other aspects of engineering training. With the implementation of the above training programmes, the management and technical capabilities of personnel will be upgraded to provide better performance in the industry.

During the FMP, the passenger and cargo traffic is expected to grow at a rate of 10% and 15%, respectively. The international passenger traffic growth is expected to be faster than that of domestic traffic. To meet this growth, the development programme for civil aviation will include expansion and improvement of airports, provision of navigational aids, installation of additional facilities for the Flight Information Region(FIR) and establishment of a Civil Aviation Training College. In terms of fleet development, MAS will continue to acquire more aircraft to improve further the capacity and frequency of both domestic and international services.

The phase I expansion of Kuala Lumpur International Airport is to improve the capacity and facilities in order to accommodate the rapid growth in air traffic. The works, continued from the TMP, involve the extension to domestic and international parking apron, renovation to existing terminal building, construction of a second terminal, a new cargo complex, passenger loading bridges and overhead taxiway and associated facilities. A study on phase II expansion programme for the airport will also be undertaken.

Kota Bharu Airport will be developed to cater for wide-bodied aircraft and is expected to be completed in 1983. Johor Bahru Airport will be upgraded as a regional

air cargo centre, while sufficient facilities will be provided to Kuala Trengganu Airport to cater for short-range jet aircraft.

In Sabah, works for the expansion of Sandakan Airport will commence in 1981 to cater for the medium-range aircraft. The expansion of Kota Kinabalu Airport, involving the construction of a terminal building, cargo complex, fire station and other associated facilities, is expected to be completed by 1983. In Sarawak, new airports at Sibul and Bintulu, catering for short and medium-range aircraft, and at Limbang will be constructed. The expansion of Kuching Airport, involving the construction of a new terminal building, cargo complex and other ancillary facilities, is programmed for completion by 1982.

The continuing growth in passenger and air traffic has led to congestion at a number of airports. To improve the situation, the Government initiated a review of the national airport infrastructural development in the country. The study will not only cover all airports and aerodromes which are currently served by scheduled air services but also identify townships requiring rural air services. The study will also undertake the preparation of airport master plans for Ipoh, Pulau Langkawi and Tawau.

Navigational aids, communications and radar facilities will be further improved in order to ensure that the air traffic services in the country will be able to provide the necessary services in the Malaysian FIR. During the FMP, the country will assume full responsibility over the air space with the take-over of the southern portion of the Kuala Lumpur FIR.

MAS is expected to increase its fleet to cater for the projected growth in its passenger and cargo traffic. Along with this fleet expansion, MAS will continue its efforts to consolidate its operation in existing routes and establish new destinations overseas. For the domestic services, it will continue to meet the needs of the growing domestic passengers by providing direct services and additional frequencies. It will also develop cargo along the same lines as passenger traffic by promoting Kuala Lumpur, Penang and Johor Bahru airports as the gateways and transshipment centres for international air freight.

In order to enable MAS to expand its services overseas, the Government will continue to seek traffic rights through bilateral negotiations with the foreign countries concerned. At the same time, efforts will be made to improve the present terms and conditions of the existing agreements.

Rural air services in Sabah and Sarawak will be expanded not only by providing more rural aerodromes but also by introducing bigger STOL(short take-off and landing) aircraft. In Peninsular Malaysia, MAS will also provide additional frequencies and capacity improvements on these services.

The Civil Aviation Training Centre at Subang provides basic training for air traffic control officers. However, due to increased responsibility arising from rapid development in civil aviation and air traffic control over the country's air space, the present training centre will be expanded. A new Civil Aviation Training College will be established in the FMP to cater for the training needs of technical and management personnel required to operate and maintain the civil aviation services. The civil aviation security training school, to be located in Pulau Pinang, will provide intensive training for security personnel.

Telecommunications programmes include the improvement and extension of local subscribers' network and automatic exchanges as well as trunk and junction network to fulfil future needs of the country. The target is to install 1,200,000 telephones and to provide telex services for 15,000 subscribers by 1985. To meet this target, computer-controlled SPC(Stored Program Control) exchanges will be installed to increase the existing capacity of 667,000 telephone links to about 1,900,000 in 1985. The automatic telephone network will also be extended to cater for the need of the rural population. The domestic telex services will be improved and more public telephones installed. To improve the capacity and efficiency of the Telecommunications Department, the billing system for the telephone and telex services will be decentralised and further computerised. It is anticipated that by the end of 1985, the number of applicants in the waiting list for telephones will be reduced to 10% compared with about 23% in 1980.

The external services programme include the expansion of the ISD facilities to be made available to more people in the country. The Pulau Pinang-Medan and the Thailand-Malaysia-Singapore submarine cables system, expected to be completed by the end of the Plan period, will complement the international facilities and services currently being provided by the satellite earth stations at Kuantan and Melaka. This system, together with the proposed installation of a new international gateway telephone exchange, will improve the communications system between Malaysia and countries throughout the world, especially with the ASEAN region.

Training programmes for telecommunications staff are being conducted at the Training Centre in Kuala Lumpur and at the sub-centres in Kota Linabalu and Kuching. The Centre provides on-the-job and in-service training for technicians and operative staff as well as for middle level management groups. To cater for the increasing training needs, three more training sub-centres will be set up in Kuala Trengganu, Melaka and Taiping. Training for the senior level management is provided at INTAN and overseas. A new training centre will be established at Bangi during the Plan period to meet the training requirements of engineers as well as senior management staff.

The postal services programmes will be geared towards meeting the long-term targets of establishing a post office for every area with a population of over 3,000 and to have a postal agency for areas between 1,000 and 3,000 population. The postal programme will be designed to accomplish the mail delivery service within 24 hours between major towns in Peninsular Malaysia and within 48 hours between major towns in Sabah and Sarawak and the Peninsular. The FMP projects of the Postal Department include construction of 116 new post offices and 37 replacement post offices, the construction of a Postal Training Institute and completion of the General Post Office and Postal Headquarters in Kuala Lumpur. In addition, the postal programmes will also include the establishment of 357 postal agencies and the launching of 104 mobile post offices throughout the country.

The Postal Training School at Kuala Lumpur provides training for clerks, postmen and supervisors while senior officers are being trained at INTAN, National Productivity Centre(NPC) as well as overseas. During the Plan, two new training will be established at Bangi and Kota Kinabalu and a total of 5,000 postal staff is expected to be trained.

The programmes for meteorological services include the establishment of additional observatory stations and the introduction of modern electronic equipment. In addition, a storm warning radar will be installed in Sarawak and one seismological station each will be installed for Sabah and Sarawak.

#### **IV : ALLOCATIONS FOR TRANSPORT AND COMMUNICATIONS SECTOR**

The allocations for transport and communications programmes during the FMP period is shown in Table 19-1. As indicated, the allocation for the transport sector amounts to \$4,116.1 million, of which \$2,468.1 million or 60.4% is provided for the road development programme. The allocation for communications sector amounts to \$1,523.52 million, of which \$1,399.5 million or 91.8% is provided for the telecommunications programme. In addition, the Telecommunications Department is expected to supplement this amount from its own internally generated funds. The table also shows the financial performance over the decade within which a total of \$4,076.7 million was expended for the transport sector and \$1,327 million for the communications sector. The overall performance achieved is estimated at about 72.7%.

## **CHAPTER 20 : ENERGY AND UTILITIES**

### **I : INTRODUCTION**

The energy, water supply and sewerage programmes will continue to be expanded to contribute to the promotion of economic growth and improvement in the quality of life. In view of the increasing cost of fuel since 1973, high priority is given to finding alternative sources of energy and the formulation of a comprehensive energy policy. Water supply programmes will be accelerated to meet increasing domestic and industrial demands of both the urban and rural areas. In order to improve urban environment, public health and sanitation, the sewerage programmes will be extended to major towns during the Fourth Malaysia Plan (FMP). Rural electricity and water supplies, which have direct impact upon the quality of life of the rural population, will continue to be given emphasis.

### **II : PROGRESS, 1971-80**

Energy consumption in the country during 1971-80 grew at an annual rate of about 9%. Petroleum products contributed about 88% of the total energy consumption in 1970 and this increased to about 95% by 1980. The consumption increased from about 63,300 barrels per day oil equivalent (bdoe) in 1970 to nearly 155,000 bdoe in 1980, an increase of 144.9%. Among the petroleum products consumed, the largest proportion was fuel oil at 38.1% in 1979, followed by diesel at 29.6%, petrol 18%, kerosene 4.8% and others 9.5%.

The demand for electricity in Peninsular Malaysia during the period showed an annual growth of about 12.7%, from about 2,178 million kilowatt hour (kwh) in 1970 to 7,266 million kwh in 1980, more than a three-fold increase. Although the development of hydro-electric power generation was given emphasis during the Third Malaysia Plan (TMP), due to its long gestation period, the major source of power generation was still achieved mainly through thermal plants using fuel oil. At the beginning of the Second Malaysia Plan (SMP), electricity generation by the National Electricity Board (NEB) from its thermal, hydro and gas power stations was estimated at 770 Megawatts (MW), which increased to 2,140 MW in 1980. This increase in supply of electricity was principally due to the commissioning of Sultan Ismail Power Station at Johor Bahru (60 MW), Tuanku Jaafar Power Station at Port Dickson (480 MW), Prai Power Station (390 MW), Temenggor Hydro-electric Project (340 MW) and five gas turbines of 20 MW each. The generating capacity installed by the NEB by the end of 1980 totalled about 2,140 MW, of which 1,405 MW (65.7%) was generated by

oil-fired thermal and diesel power stations, 635 MW (29.3%) by hydro power and 100 MW (5%) by gas turbines.

With the increased generating capacity, the transmission and distribution systems were also expanded. Transmission lines increased by 83.6% from 1,400 kilometers (km) in 1970 to 2,570 km in 1980, while distribution lines increased by 400.7% from 2,085 km in 1970 to 10,440 km by the end of the period. Following the commissioning of the Temenggor Hydro-electric Project in 1979, transmission lines were extended to Tanah Merah and Kota Bharu, bringing these areas within the national grid. The percentage of the NEB electricity supply not covered by the national grid was reduced from 8.2% to 5.4% during the same period.

During the TMP period, the NEB took over the supply of electricity for Pulau Pinang from the then Electricity Supply Department of Penang Town Council. The take-over included the acquisition of major stations at Glugor and other diesel stations with a total capacity of 43.3 MW.

The total installed generating capacity of Sabah Electricity Board (SEB) increased from 34 MW in 1970 to 132 MW in 1980, an increase of 288.2%. The major projects completed during the decade included the installation of generating sets of 48 MW diesel sets at Kota Kinabalu, 31 MW sets at Sandakan, 11 MW sets at Labuan and other smaller units totalling 8 MW sets dispersed in various towns in Sabah. Tenom-Pangi Power Project phase I, the first hydro-electric project in Sabah, which was initiated in 1979 has an initial capacity of 66 MW and the generated power will be transmitted by a 120 km long double circuit transmission line of 132 kilovolt to Kota Kinabalu. The project is scheduled for completion in 1984.

With the completion of Sungai Biawak Power Station with a generating capacity of 36 MW, two diesel sets of 8.5 MW each at Sungai Priok, two diesel sets of 7.8 MW at Sibu and one 4 MW gas turbine at Miri, as well as the installation of two gas turbines of 4 MW each at Bintulu-Tanjung Kidurong Station, the total installed generating capacity of Sarawak Electricity Supply Corporation (SESCO) increased from 32 MW in 1970 to 112.6 MW at the end of 1980. The feasibility study of Batang Ai Power Project, the first hydro-electric project in Sarawak, was completed in 1978 and work on detailed engineering design interfaced with construction began in 1980.

During the decade, 3,621 rural electricity projects costing about \$187.2 million were implemented in Peninsular Malaysia, thus increasing the number of households provided with electricity from 345,600 in 1970 to 790,000 in 1980, an increase of 128.6%. By the end of 1980, about 29% of the rural population in Sabah had access to electricity supply compared with 7.5% in 1970. The above achievement was due to the implementation of rural electricity projects costing \$23.8 million during the decade. In Sarawak, about 5,000 households in 73 villages benefitted from the implementation



of about \$13.4 million worth of rural electricity projects by 1980 compared with 870 households in six villages in 1970.

Accelerated water supply development undertaken during the decade enabled a wider coverage of the population to be served with potable water. The number of people benefitting from the implementation of the programmes increased from 4,968,000 in 1970 to 8,479,000 in 1980, representing 46.1% and 59.4% coverage of the total population, respectively. In Peninsular Malaysia and Sarawak, urban coverage increased from 83% and 90% in 1970 to 90.7% and 93% in 1980 whilst rural coverage improved to 47.2% and 25% from 39% and 13% in 1970, respectively. In Sabah, urban coverage increased from 95% in 1970 to 99% in 1980 whilst rural coverage was about 18% by the end of the decade.

With the completion of several major water supply projects such as Alor Setar phase III, Durian Tunggal stage I, Kota Kinabalu phase II, Kuantan/Sungai Paching, Kuching, Sibu, Sungai Langat phase II and III as well as Sungai Linggi phase II, the treatment plant production capacity was increased from 246 million gallons per day (mgd) in 1970 to 597 mgd in 1980. Works on other new projects such as Bintulu, Dindings stage II and III, Durian Tunggal phase II, Muar, the New Kuala Trengganu, Segamat, Sungai Batu, Sungai Linggi phase III, Sungai Terip stage I and Tawau water supply schemes were in various stages of implementation.

As a result of the Federal Government's financing of the entire capital costs of rural water supply projects in deficit states and two-thirds in non-deficit states since 1977, the implementation of rural water supply programmes was accelerated. By 1980, 1,014 rural water supply schemes were implemented in Peninsular Malaysia, thereby, increasing the number of households benefitting from these programmes to 600,700. In Sabah, the construction of 27 rural water supply projects by 1980 benefitted 18,300 households, whilst in Sarawak, the number of rural water supply schemes implemented was increased from 22 in 1970 to 30 in 1980.

During the decade, the provision of water supply to Federal Land Development Authority (FELDA) schemes facilitated the settlement of 45,640 families in 90 schemes. The provision of water supply facilities for the regional development areas gained momentum towards the end of 1980. The original target set for these authorities was to complete 14 projects with a total production capacity of 35.7 mgd. By the end of 1980, ten projects were completed supplying 17 mgd.

The water resources management studies for Kelang Valley, Pahang Tenggara and Kedah/Perlis were completed during 1979-80. These studies included an assessment of the future water supply requirements up to the year 2000. In line with the finding of the Kelang Valley Water Resources Study, the design of phase Sungai Semenyih water supply project was initiated in 1980 to meet the increasing domestic and industrial water supply requirements of the Kelang Valley. Similar studies were

started for the South Coastal Trengganu region as well as for Melaka, Negeri Sembilan and North Johor.

In view of the competing use of surface water and the need to integrate water resources development and management on a national basis, a national water resources study was initiated in 1979. Sewerage programmes were concentrated mainly in the larger urban areas. In 1970, 11% of the urban population in Peninsular Malaysia was provided with central sewerage systems. In 1980, the population covered increased only to 14%. This was due to the completion of certain sections of Kuala Lumpur and George Town sewerage project.

Work on phase I of the Kuala Lumpur Sewerage Project was 50% completed sewerage Bungsar, cochrane, Datuk Keramat, Imbi, Old Kelang Sewerage Scheme was initiated during the TMP and, when completed, would serve 26,240 households. Feasibility studies and preliminary engineering designs were also initiated for a number of sewerage schemes such as Alor Setar, Butterworth-Bukit Mertajam, Johor Bahru, Kota Kinabalu, Sandakan and Tawau.

In addition, new housing projects are being implemented both by the private and quasi-government sectors with central sewerage facilities. In Kuala Lumpur and George Town, these provided coverage to an additional 65,000 and 19,500 households, respectively

### **III : PROGRAMMES, 1981-85**

A comprehensive national energy policy is being formulated to meet the increased requirement in energy inputs in line with the economic goals as stated in the Outline Perspective Plan 1970 to 1990. The need to identify all available energy resources in the country has, therefore, become urgent. For purposes of the national survey of energy resources, all forms of conventional and non-conventional sources of energy will be identified and inventorised into a master list. Appropriate technical and economic studies will be carried out to determine the time-frame for utilisation of these resources depending on priorities. The Government will also take into consideration realistic pricing as well as the environmental implications of energy development and conservation during the course of formulating the policy.

During the FMP, the main targets of the energy sector will be to reduce the country's over dependence on petroleum for electricity generation by utilising other alternative sources such as hydro power and gas as well as to increase the coverage of electricity supply to the rural households.

Several major hydro-electric projects and thermal power plants initiated during TMP such as Bersia (72 MW) and Kenering (120 MW) in Perak, Kenyir (400 MW) in

Trengganu, phase I (66 MW) and phase II (44 MW) of Tenom-Pangi Project in Sabah as well as Pasir Gudang thermal power station (240 MW) in Johor and Connaught Bridge Gas Turbine Station (160 MW) in Selangor will be completed during the Plan period, thereby, increasing the total installed generating capacity in the country by 1,100 MW. In addition, projects such as Batang Ai (92 MW) and Pelagus (1,000 MW) Hydro-electric Projects in Sarawak, Port Kelang thermal power station, phase I (600 MW) in Selangor and the natural gas powered stations in Paka, Trengganu (450 MW) as well as in Labuan, Sabah (120 MW) will be implemented. With the commissioning of these projects, total electricity generating capacity in the country will be further increased by 2,320 MW to 6,090 MW by the year 1990.

During the FMP, electricity supply to rural areas will be further extended through implementation of mini hydro schemes and solar installations. The NEB expects to increase the number of rural households supplied with electricity from 790,000 in 1980 to 1,090,000 by 1985. In Sabah, about 270 minor projects and mini hydro schemes are being planned by SEB to supply electricity supply to about 17,000 households. In Sarawak, SESCO intends to widen electricity supply to about 17,000 households in 192 villages through conventional diesel generators, mini hydro schemes and solar installations.

During the FMP, the water supply programmes will concentrate on further expansion of rural water supply. In addition, completion of urban water supply projects and implementation of new schemes will also be emphasised. With the implementation of both programmes, it is anticipated that 73.1% of the total population will be provided with safe water supply by 1985.

An allocation of \$349.8 million is allocated for rural water supply during the Plan to complete the construction of projects initiated during TMP as well as to implement new schemes. Out of the above allocation, \$263.8 million is for Peninsular Malaysia, \$30 million for Sabah, \$36 million for Sarawak and \$20 million for pilot projects to be initiated under the National Rural Water Supply Study. With the accelerated implementation of rural water supply programmes, the rural population coverage is expected to reach 63% in Peninsular Malaysia, 39% in Sabah and 35% in Sarawak by 1985. In view of the recurrence of prolonged drought over certain period of each year, the implementation of the crash programme to drill and construct approximately 250 production wells for village water supply, which was initiated for the States of Kedah and Perlis in 1980, will be completed during the FMP.

Water supply programmes for FELDA schemes will continue to be given priority during the Plan. A sum of \$122 million is allocated for the implementation of 48 projects. For the regional development areas, an allocation of \$80 million is provided to implement eight water supply schemes.

The urban water supply schemes initiated during the TMP include Alor Setar phase IV, Durian Tunggal phase II (Melaka), Greater Kuantan, Kota Bahru, Kuala Lumpur phase III, the New Kuala Trengganu, Sungai Linggi phase III (Negeri Sembilan), Sungai Semenyih phase I and II (Selangor) as well as Kuching and Niah Subis water supply schemes in Sarawak. Most of these projects will be completed during the FMP and will increase the total treatment plant capacity to 771 mgd.

Several new water supply schemes will be implemented during 1981-85. The construction of phase I of Sungai Semenyih scheme to meet the increasing demands for water in Kelang Valley areas will commence in 1981 and is scheduled to be completed by 1984/85. Others include Dindings phase II (Perak), Greater Kuantan, Kota Kinabalu, Mengkuang (Pulau Pinang), Sandakan, Sungai Batu (Selangor), Sungai Terip stage I (Negeri Sembilan) and Tawau water supply schemes. With the completion of these new projects, it is anticipated that the treatment plant capacity of 1,013 mgd will be available by the end of 1985.

To meet the domestic and industrial water supply requirements for the South Coastal Trengganu region, which is geared for rapid development, the implementation of the South Coastal Trengganu Water Resources Study, which was initiated in late 1980, will be continued and is due for completion in late 1981. The Melaka, Negeri Sembilan and North Johor Water Resources Study will also be implemented during 1981-82. The primary objective of the study is to prepare an optimum plan for the development of Sungai Muar and its tributaries as the main source to meet the domestic and industrial water supply requirements up to the year 2010 for the areas both within and outside Sungai Muar basin including Melaka state. The study will also recommend specific water supply projects to be implemented to solve urgent water supply problems.

The implementation of the second phase of the National Water Resources Study, which commenced in July 1980, will be continued during the FMP. The third phase of the study will be initiated in mid 1981 and is anticipated to be completed in the first quarter of 1982. The objective of the study is to formulate a master action plan with a view to promoting a comprehensive integrated approach to national water resources assessment, planning, development, conservation and management. The study is addressed not only to problems of water demand and supply in the country but also to those of constitutional and legal aspects as well as possible conflict among water users in the absence of effective arrangements to ensure coordination of water use and multi-purpose development of water resources.

The National Rural Water Supply Study will be initiated in mid 1981. The study is designed to produce a master plan for rural water supply development up to 1990 for the whole country.

During the FMP, in order to improve health and sanitation standards, the sewerage programmes will continue to give emphasis to the replacement of inefficient, insanitary and potentially hazardous methods of disposal with central water-borne sewerage systems especially in heavily populated areas. In addition, measures to prevent the pollution of rivers and coastal waters will be undertaken to reduce environmental pollution.

A sum of \$200 million is provided in the Plan to implement sewerage programmes. The second phase of the Kuala Lumpur Sewerage Project covering the areas of Bunas, Damansara, Gombak, Jinjang, Kerayong, Langat, Pantai, Petaling, Serdang and Sungai Besi as well as the George Town Sewerage Extension Scheme covering Batu Ferringhi and Bayan Baru will be implemented. On completion, the Kuala Lumpur and George Town sewerage projects will provide sewerage facilities to about 105,000 and 30,200 households, respectively.

In Selangor, the Bangi New Town and Shah Alam sewerage projects will be implemented to provide a more efficient waste disposal in the rapidly growing housing and industrial areas as well as to control the pollution of rivers, particularly Sungai Kelang, Sungai Langat and Sungai Renggam. The Butterworth-Bukit Mertajam and Ipoh sewerage schemes will also be implemented. Work will be initiated on the sewerage schemes will also be implemented. Work will be initiated on the sewerage projects for the municipal areas of Johor Bahru, Kelang and Port Kelang, Kuala Trengganu, Kuantan, Melaka, Seremban and Taiping during the Plan period. Sewerage schemes for Bintulu, Kota Kinabalu, Kuching, Miri, Sandakan, Sibul and Tawau will also be initiated during 1981-85.

#### **IV : ALLOCATION FOR ENERGY AND UTILITIES PROGRAMMES**

The allocations for energy and utilities programmes for the Plan period are shown in Table 20-1. As indicated, the allocation for energy sector amounts to \$2,163 million, out of which \$682 million or 31.5% is for hydro power development and \$522.5 million or 24.2% is for rural electrification programmes. The allocation for utilities sector amounts to \$1,487 million, out of which \$1,287 million or 86.5% is provided for water supply programmes. Table 20-1 also shows the financial performance of the sector during 1971-80 within which a total of \$2,088 million was expended. Out of this total, a sum of \$1,328 million was expended for the energy sector and \$759.6 million for the utilities sector.

## **CHAPTER 21 : EDUCATION AND TRAINING**

### **I : INTRODUCTION**

Policies and programmes for education and training will continue to be geared towards fostering national unity and increasing participation of all Malaysians in national development. The policy to make Bahasa Malaysia as the main medium of instruction will be fully implemented at the secondary level by 1982 in Peninsular Malaysia and Sabah, and by 1990 in Sarawak. By the end of the eighties, the policy will be fully implemented at the tertiary level. The use of English as a second language will be given greater emphasis.

### **II : PROGRESS, 1971-80**

The most significant development in the field of education during the decade was the progress made towards the establishment of a national education system in which Bahasa Malaysia was the main medium of instruction. In 1970, all primary schools which previously used English started to use Bahasa Malaysia as the main medium of instruction in Standard One, in Peninsular Malaysia and Sabah, and by 1980 all classes up to Form Five were in Bahasa Malaysia medium. In Sarawak, the change was started in 1977 and by 1980, all classes up to Standard Four were in Bahasa Malaysia medium. The education systems in Sabah and Sarawak were progressively integrated with the national system, particularly in the field of teacher training, and the use of common curriculum in schools, apart from the use of Bahasa Malaysia as the main medium of instruction. In line with the Education Act, 1961, Government and Government -aided schools at the primary level which used Chinese or Tamil language as the medium of instruction continued to exist. During the decade, curriculum in schools was developed not only to impart skill and knowledge but also to instil and inculcate values and norms in line with the principles of Rukunegara. Besides having common syllabus and examinations, the curriculum also gave importance to various aspects which would contribute towards national unity and a disciplined society. These included religious education for Muslim students, civics, history and geography which gave emphasis on the historical, economic and social development of Malaysia and the Asian region. Other co-curricular activities such as membership in various clubs and associations and participation in athletics and sports activities became an important part of the school curriculum.

With regard to curriculum development, the Curriculum Development Centre, established in 1973, was responsible for the systematic planning and development of the curricular at primary and secondary levels in all subjects except technical and

vocational, health and Islamic studies. In this respect, the Centre improved the syllabi for a number of subjects and produced support materials for teachers and pupils in the teaching and learning of Bahasa Malaysia, English Language, science and mathematics. In addition, the Centre conducted in-service training for teachers to acquaint them with improved teaching techniques and aids for the teaching of the above subjects.

To further improve the teaching and learning process in schools, especially those in the rural areas, the activities of the Education Media Service Division were further strengthened and expanded through the introduction of educational services on television in 1972. The education media service was also extended to Sabah and Sarawak in the Third Malaysia Plan (TMP). During the period, about 92% of schools in the country were equipped with radio and television.

In 1979, the Malaysian Examination Council was established to take over the administration of the Higher School Certificate (HSC)/Sijil Tinggi Persekolahan Malaysia (STP) examinations from the Examination Board, University of Cambridge. With the take-over, all examinations at the school level will be prepared locally from 1982. Since its establishment, the Council had formed various committees to provide guidance and advice on the administration and management of examinations. It had also appointed a secretariat for the Council and prepared examination procedures and syllabus.

In 1972, a Dropout Study was carried out and its recommendations, to reduce dropouts from the education system, were implemented, resulting in improvements in the survival rates at the primary and secondary levels. A number of small schools in the rural areas, especially at the primary level, were amalgamated to the extent possible so as to effectively utilize resources aimed at improving the quality of education. Scholarships were also awarded to needy pupils at the secondary level. During the decade, 448,900 pupils benefitted from this programme. A Text Book Loan Scheme was introduced in 1975 to provide basic learning facility to pupils from the low-income group. During 1975-80, 13,648,729 pupils benefitted from the scheme. Supplementary Feeding Programme in schools was introduced in 1976 to improve the health of rural children and their performance in schools. Under the programme, supplementary feeding was given free to about 15% to 45% of pupils in primary schools.

Enrolment at all levels of education increased significantly with the expansion of facilities, especially at the tertiary level. In order to gear tertiary education to manpower requirements, efforts were undertaken to increase courses in science and technology at the diploma and degree levels. Enrolment in these courses also increased significantly. Table 21-1 summarizes enrolment at the various levels of education.

Primary education. During the decade, enrolment at the primary level increased by 19.5% from 1,679,798 in 1970 to 2,006,760 in 1980. In Peninsular Malaysia, enrolment increased by 16.5%, Sabah 25.6% and Sarawak 43.7%. The enrolment in 1970 constituted 85.1% of those in the six to eleven age group, while in 1980 it was 91.4%. To cater for the increased enrolment and to replace sub-standard facilities in the rural areas, a total of 12,087 classrooms were built in Peninsular Malaysia, 876 in Sabah and 1,531 in Sarawak. In view of the importance of library facilities as a means to develop interest in knowledge, the inclusion of library facilities was made an essential part of the school building programme. In 1980, about 67.7% of primary schools in Peninsular Malaysia, 70% in Sabah and 15% in Sarawak were equipped with centralised library facilities.

Secondary education. At the secondary level, total enrolment in the Government and Government aided schools increased from 539,233 in 1970 to 1,067,587 in 1980. The abolition of the Common Entrance Selection Examination for entry into lower secondary classes in 1964 and the provision of nine years of universal education comprising six years of primary and three years of secondary education ensured a significant increase in enrolment at the lower secondary level. Measures taken to improve the survival rates from primary to secondary level also contributed towards the increase in enrolment. In 1980, 84.3% of pupils in Standard six proceeded to the lower secondary. To cater for the increased enrolment, a total of 6,207 classrooms, 1,065 science laboratories, 403 workshops and 282 libraries were constructed during the decade.

To provide and increase the opportunity for students from rural areas to have access to secondary science education, residential science schools were established throughout Peninsular Malaysia. By the end of the decade, there were ten residential science schools with a total enrolment of 6,162. MARA established Junior Science Colleges to provide additional secondary science education facilities particularly for Bumiputera. By 1980, there were five Junior Science Colleges with a total enrolment of 3,390.

Secondary technical and vocational education. Vocational education was conducted at the upper secondary level in subjects such as engineering trades, agriculture, commerce, and home science, leading to the Malaysian Certificate of Vocational Education. Optional subjects such as surveying, engineering workshop practice, building construction, technical drawing, agriculture and commerce were offered at the technical schools. The vocational and technical schools were established to provide general education and to develop skills and technical knowledge suitable for employment in the public and private sectors.

During the decade, nine technical and 24 vocational schools were established. Enrolment in technical schools, including those at post-secondary level, increased from 1,973 in 1970 to 5,769 in 1980, while enrolment in vocational schools increased



from 2,672 to 11,415 during the same period. Five more vocational schools in Peninsular Malaysia, two in Sarawak, one extension and two new projects in Sabah were under different stages of construction.

Teacher training. Teacher Training Colleges for the training of primary and secondary school teachers in Government and Government aided schools increased from 14 in 1970 to 25 in 1980, of which 19 were in Peninsular Malaysia, three in Sabah and three in Sarawak. During the decade, the number trained increased from 1,040 in 1970 to 5,876 in 1980. Of those trained during 1970-80 to teach at the lower secondary level, 5,372 were in science and mathematics, 5,574 in commercial, technical and vocational subjects and 789 in agricultural science. In addition, 4,006 were trained to teach Bahasa Malaysia and 1,598 to teach English as a second language.

In-service courses were also given importance, not only to train serving temporary teachers but also to upgrade the knowledge and teaching methodology of teachers in various subjects such as science, mathematics, Bahasa Malaysia and the English Language. During the decade, various in-service courses were conducted for about 223,302 qualified teachers. A total of 12,089 serving temporary teachers were also given training.

Training of teachers at the degree level was carried out at Universiti Malaya (UM), Universiti Sains Malaysia (USM), Universiti Kebangsaan Malaysia (UKM) and Universiti Pertanian Malaysia (UPM). During the decade, 6,962 graduated from these institutions, of whom 2,817 were in science and related subjects and 4,145 in the arts and humanities. In addition, UPM and Universiti Teknologi Malaysia (UTM) also conducted science with education courses at the diploma level. A total of 1,085 teachers graduated with diploma in science with education. UM also conducted courses in the teaching of English as a second language to serving teachers. Courses in education technology were conducted at the USM.

The increased intake of trainee teachers at the colleges and universities was necessary to cater for the increased enrolment at the primary and secondary levels. Overall shortage of teachers in various subjects was also gradually reduced with the expansion of programmes to train teachers in specific subjects. However, shortage of teachers in subjects such as science and the English Language continued to exist, necessitating the recruitment of teachers from abroad.

During the decade, programmes for tertiary education were reviewed and expanded in line with the overall manpower requirements. Courses at diploma and certificate levels were expanded to meet shortage of manpower at the sub-professional and technician levels, while courses in various science, technical and related subjects at both the diploma and degree levels were given greater emphasis. Enrolment in tertiary education increased by 235.5% from 11,364 in 1970 to 38,125 in 1980. At the degree and diploma levels, enrolment in science and technical subjects increased by

311.7% from 4,750 in 1970 to 19,555 in 1980, while enrolment in the arts and humanities increased by 156% from 6,245 to 15,985. The breakdown of enrolment increases for the various institutions in tertiary education is shown in Table 21-2.

As indicated in Table 3-12 Chapter III, the number of Bumiputera in certain professional occupations such as architect, accountant, engineer, dentist and doctor was low, ranging from 3.1% to 7.3% in 1970. A deliberate measure taken to improve the situation was to increase intake of Bumiputera in the various professional courses in the country as well as abroad. The output from these training programmes improved the situation, and by 1979, Bumiputera in these professions increased to between 7.6% to 29.2%.

To provide additional facilities for training at the sub-professional level in engineering and commercial subjects, a second polytechnic was established at Kuantan in 1976 at its present temporary premises, and by 1980, it trained a total of 321 at the certificate level. Politeknik Ungku Omar in Ipoh, Politeknik Kuantan, Kolej Tunku Abdul Rahman (KTAR) in Kuala Lumpur and the Institute Teknologi MARA (ITM), in total trained 15,008 in various arts, science, engineering, technical and commercial courses at the certificate and diploma levels.

In the development of higher education, the decade saw the establishment of the UKM in 1970, UPM in 1971, and the UTM in 1972. In addition, branch campuses were also established, namely branch campuses of the UPM in Sarawak, UKM in Sabah, UM in Kelantan and the ITM in Sabah, Sarawak, Perlis and Trengganu. Many new fields of studies were also introduced, and existing ones expanded. The number of faculties offering degree and diploma courses in various subjects increased from 15 in 1970 to 40 in 1980. This development included the establishment of the Faculty of Dentistry, Faculty of Law, Language Centre and Centre for Post-Graduate Studies and Research at UM, the Faculty of Medicine and Faculty of Economics and Management at UKM, the School of Housing, Building and Planning, and the School of Medical Sciences at USM. New course structures such as the integrated diploma courses at the UTM, and the integrated science with education courses were also established at UM, UKM, USM and UPM. The universities were also engaged in important research in relevant fields such as environmental pollution, engineering, housing, agriculture, uses of agricultural wastes, solar energy and traditional medicine. Research facilities at the various faculties in the universities were established and expanded to enable extensive inter-disciplinary research activities to be carried out at the graduate and post-graduate levels. A Centre for Policy Research at USM was established in 1974, a Centre for Extension and Post-Graduate Studies at UPM in 1976 and a Centre for Post-Graduate Studies at UM in 1979.

A major programme initiated during the decade was the establishment of preparatory courses for Bumiputera with Malaysian Certificate of Education (MCE) or HSC qualifications in science subjects to enable them to pursue science, engineering,

medical and other technical courses in ITM and the various universities except UTM. This included the matriculation courses conducted by USM and UKM, preparatory courses conducted by ITM and UPM and basic science course conducted by UM. This programme contributed substantially towards increasing the number of Bumiputera in science and related fields.

Off-campus courses specially designed to enable those already employed to obtain a degree level education was introduced by USM in 1971. Courses in humanities and social science and pure science were offered.

Many Malaysians, privately as well as sponsored by the Government, pursued studies in overseas institutions. To help parents finance children studying overseas, income tax allowance for children educated abroad was increased from double to quadruple the amount of children's relief. To enable better planning and assessment of available and projected manpower supply in the country, efforts were made to obtain comprehensive information regarding the number of Malaysian students overseas, their ethnic composition and levels of study and courses pursued. In 1980, the number of Malaysian students overseas were estimated to be 39,908, of whom 60.5% were Chinese, 23% Bumiputera, 15.9% Indians and 0.6% other Malaysians. Of the total number of Malaysian students overseas, 19,515 were in degree courses, 4,953 in diploma courses, 5,263 in certificate courses and 10,177 in post-secondary level education. Table 21-3 shows the breakdown of enrolment in tertiary education by race and levels of education in public and private institutions in the country and overseas. To cater for the welfare of the students and to provide information and recreational facilities, students departments were established in Cairo, Jakarta, London, New Delhi, Ottawa, Sydney, Washington D.C. and Wellington. In addition, 42 student centres were established in Australia, Belgium, Egypt, India, Indonesia, Iraq, Japan, New Zealand, Pakistan, Saudi Arabia, United Kingdom, United States of America and West Germany.

Skill training. During the decade, skill training programmes were expanded to increase the supply of trained manpower in technical, vocational and commercial fields, the target group being those outside the school system. Training programmes were expanded through the establishment of training institutions and the introduction of courses in various trades such as automotive, building, woodworking, electrical and electronics, mechanical and printing, relevant to the requirements of trade and industry. A second Industrial Training Institute (ITI) was established at Prai in 1972. Six additional vocational institutes at Johor Bahru, Kuala Lumpur, Lumut, Pekan, Petaling Jaya and Sungai Petani and one commercial institute at Kuala Lumpur were established by MARA. Facilities at the youth training centres in Dusun Tua and Pertak were also expanded. During the decade, about 43,900 were trained by these institutions.

The setting up of the National Industrial Training and Trade Certification Board (NITTCB) in 1971 ensured common trade standards in vocational institutions and improved syllabi and course structures. NITTCB also prepared national training syllabi for 23 industrial trades at the basic level and 20 at the intermediate level.

In 1979, a Manpower Development Board (MDB) was established to take over the functions of the National Advisory Council on Industrial Training and the Co-ordinating Committee of Officials on Employment and Training. Since its establishment, the MDB had carried out various activities aimed at overcoming specific problems in the fields of manpower development. The activities included the preparation of a preliminary National Masterplan for Manpower Development and State Masterplan for Manpower Development for Kedah, Melaka and Negeri Sembilan. The MDB also carried out studies on the shortage of instructors in training institutions which were responsible for manpower development and shortage of technical assistants in public sector.

Management training. Training in managerial and administrative fields undertaken by various institutions such as the National Productivity Centre (NPC), National Institute of Public Administration (INTAN) and the ITM were expanded to cater for more intake. During the decade, the ITM were expanded to cater for more intake. During the decade, 28,660 were trained by the NPC, 17,760 by INTAN also established regional centres. The construction of a main campus for INTAN at Bukit Kiara, Kuala Lumpur and regional centres at Kemaman, Kluang and Sungai Petani commenced during 1980. NPC established a regional centre in Kuantan in 1976.

### **III : PROGRAMMES, 1981-85**

The emphasis of education and training programmes during the Fourth Malaysia Plan (FMP) will be to expand and increase further their efficiency as an important instrument in meeting manpower requirements and achieving the New Economic Policy (NEP) objectives. The recommendations contained in the Report of the Cabinet Committee to Review the Implementation of the Education Policy 1979, as agreed to by the Government, will form the basis of these programmes. Measures aimed at Government, will form the basis of these programmes. Measures aimed at improving the teaching and learning process, such as class size, class-teacher ratio and curriculum, and the implementation of education support programmes such as remedial education and amalgamation of small schools in the rural areas, will be given priority during the FMP.

The use of Bahasa Malaysia as the main medium of instruction will continue to be progressively implemented such that by the end of the eighties, it will be the main medium of instruction at the primary, secondary and tertiary levels. The teaching and learning of Bahasa Malaysia, especially in Chinese and Tamil medium schools will be

further improved through the provision of trained teachers. Measures aimed at strengthening the teaching of English as a second language will be continued. Towards this end, steps will be taken to ensure that more teachers will be trained in the teaching of the English Language. Resource centres will be set up at the state level to ensure that schools are well equipped with teaching materials. In-service courses for English Language teachers will also be continued so as to enable teachers to use the latest teaching techniques and methods more effectively.

Islamic religious education will continue to be compulsory for Muslim students at the primary and secondary levels. Non-Muslim students will be taught moral education and ethics during the period when Muslim students and those who choose to do so are attending classes in Islamic knowledge. The main objective of religious and moral education and ethics is to build a strong basis for developing a disciplined society with high moral values. During the Plan period, ten new Islamic secondary schools will be constructed and those taken over from State Governments will be provided with additional facilities. These schools have similar curriculum as the academic secondary schools, but with emphasis on Islamic teachings and the Arabic Language. The teaching of Islamic religious knowledge in schools will be further improved with intensive training for teachers. A new Islamic Teacher Training College will be built in Selangor to replace the temporary college building at Petaling Jaya.

Primary education. Enrolment at the primary level in the Government and Government aided schools is estimated to increase from 2,006,760 in 1980 to 2,260,366 in 1985. During the period, 8,000 classrooms will be constructed to cater not only for the existing shortage of classroom facilities but also for the increase in enrolment. Some of the new classrooms will be built mainly to replace the sub-standard facilities of schools in the rural areas, and to reduce over-crowding in those in the urban schools. In the urban schools, where the average class size is 42, the class size will be gradually reduced to 36 by the end of the Plan period. The average class size of 30 in the rural schools will be maintained, but more classrooms will be built to replace those of sub-standard quality.

A new curriculum is being formulated for primary level which will be able to establish a firm education foundation, especially in reading, writing and arithmetic (3 Rs). The new curriculum will be divided into two phases, the first phase from Standards One to Three and the second, from Standards Four to Six. For the first phase, the curriculum will be designed such that 75% of the time will be spent on the acquisition of the 3 Rs; and the other 25% on other education activities. In the second phase, the basic skills will still be the thrust of the curriculum. At this stage some of the basic academic element will be introduced in an integrated way to incorporate various disciplines and knowledge. This new curriculum will be planned, developed and tried out during 1981 and 1982. It is anticipated that phased implementation will begin in 1983 with Standard One.

Secondary education. Enrolment at the lower secondary level in the Government and Government aided schools is estimated to increase from 809,663 in 1980 to 955,149 in 1985, while that in the upper secondary from 230,924 to 383,339. The increase in enrolment at the upper secondary level will be significant as it forms the initial implementation of the policy of extending the existing nine years of universal schooling to eleven years. This would entail an increase in the number of classrooms, not only to cater for the increase in enrolment at the lower and upper secondary levels, but also to reduce the class size at the secondary level from the existing average of 42 per class to 33 in 1985. During the Plan period, 4,000 classrooms at the secondary level will be constructed. In addition, ten MARA Junior Science Colleges will be built.

Technical and vocational education. Steps will be taken to replace the present system of streaming into arts, science, technical and vocational at the upper secondary level with streaming into general education and vocational in line with the recommendations of the Cabinet Committee. To achieve this objective, more vocational schools will be built to cater for the increase in enrolment. In 1980, pupils in vocational schools form 4.6% of the total enrolment at the upper secondary. This will be increased to 6.3% in 1985. During the Plan period, 12 new vocational schools will be constructed. An added feature to vocational education will be the introduction of one year specialised courses for those possessing the Malaysian Certificate of Vocational Education. The courses will be designed to train students to a level of skill required by industry. Courses will be in various trades such as tool and dye making, foundry practice, welding, refrigeration and air conditioning, architectural and structural drafting. Short term courses of one year duration will also be conducted for those with the Sijil Rendah Pelajaran. The courses, in various trades such as general mechanical fitting, tiling and flooring, bricklaying and plastering, plumbing and welding will provide basic skills to enable the trainees to be gainfully employed after their course.

Teacher training. To improve the quality of teachers at primary and lower secondary levels, the training period will be extended from two to three years beginning with the intake of trainee teachers in 1981. Expansion of existing physical facilities and building of two new teacher training colleges will be undertaken during the Plan period. The class-teacher ratio will be revised so as to improve the teaching and learning process. It is estimated that 21,330 teachers will be trained during the Plan period. In-service teacher training programme will continue to play a significant role as an overall effort to improve and upgrade the performance of teachers and the quality of education. Towards this aim, the four Education Resource Centres under construction at Alor Setar, Kota Bharu, Kuala Trengganu and Kuantan will provide valuable support programmes for the in-service training of teachers.

Programmes to increase the supply of graduate teachers at the diploma and degree levels will be continued. During the Plan period, it is estimated that a total of 5,900 teachers will graduate from the five universities. Of these, 3,530 will be in the science and related subjects.

Programmes for higher education will be geared towards increasing output of trained and skilled manpower at the diploma and degree levels to meet national manpower requirements. During the Plan period, courses at the diploma and degree levels will continue to be reviewed to ensure that the contents and curriculum are relevant to national requirements. More practical training will also be emphasised in the science, engineering and technical courses. Intake into the science courses at the diploma and degree levels will continue to increase so as to achieve the target output of 60% science and 40% arts graduates. Likewise, the intake into courses at the diploma level will also be increased to meet the demand for manpower at the sub-professional level. Programmes for post-graduate students and research will also be expanded to enable various inter-disciplinary research and studies to be carried out.

Programme for off-campus courses at the USM will be expanded to include courses at the diploma level in computer studies, applied science, education, humanities and social science. To further improve the administration of the programme, regional centres at Alor Setar, Ipoh, Johor Bahru, Kota Kinabalu, Kuala Lumpur, Kuala Trengganu, Kuantan, Kuching and Melaka will be established.

Skill training. During the FMP, the MDB will update the National Masterplan for Manpower Development and review the National Apprenticeship Scheme. The Board will also work towards formulating an incentive system for the private sector to carry out training programmes. Facilities and programmes for manpower development in the public and private sectors will also be reviewed with the aim of co-ordinating and improving the labour market requirements.

To increase the effectiveness of training programmes carried out in the various institutions, the private sector, especially the smaller firms, will be encouraged to participate in the apprenticeship training and placement of trainees for in-plant training. With the rapid growth in the industrial sector, the course content of training institutions will need to be reviewed to meet the needs of industries. Training institutions will also be established in smaller towns throughout the country to cater for the requirements of the local industry and also to provide training opportunities to the local people.

With the completion of the extensions to the ITIs in Kuala Lumpur and Prai and the establishment of new ITIs in Johor Bahru, Kuala Trengganu and Labuan, the number trained will increase from 1,133 in 1980 to 2,175 in 1985. In addition, five new ITIs, each with a training capacity of 400, are also being planned for construction during the FMP. These new ITIs will conduct basic preparatory courses in engineering, electrical

and construction trades, trade courses for school dropouts and introductory courses for production workers. In addition, an Advanced Skill Centre to provide training for supervisors, foreman and instructors will be built.

MARA will establish three new Institiut Perdagangan MARA at Alor Setar, Kuala Lumpur and Seremban and six new Institiut Kemahiran MARA in the Federal Territory, Perlis, Pulau Pinang, Sabah, Sarawak and Trengganu. The Insitiut Kemahiran will conduct trade courses ranging from construction, electrical, metal works, carpentry, automotive and printing. With the completion of the new institutes, MARA will be able to train a total of 22,360 trainees during the Plan period.

Training capacity will also be increased considerably with the establishment of three new youth training centres now being planned in the Federal Territory, Selangor and Trengganu. Facilities at the two existing centres in Dusun Tua and Pertak will also be expanded. The total output would increase from 1,053 in 1980 to 1,620 in 1985 with the completion of the new youth training centres.

During the FMP, INTAN will give more emphasis on the training needs of agencies in the public sector, particularly personnel of those agencies which play an important role in national development, personnel of agencies which play an important role in national development, personnel of agencies in the less-developed states, as well as for officers who are involved with departmental training. With the completion of facilities at its regional campuses in Kemaman, Kluang and Sg. Petani, INTAN would be able to give more emphasis on courses which would meet the requirement of states or regions. The total training capacity for INTAN would increase from 7,000 in 1980 to about 16,000 per year at the end of the Plan period.

NPC will construct regional offices in Johor and Pulau Pinang. With the expansion of its training facilities, NPC will be able to carry out managerial and supervisory training for about 23,300 participants and another 21,200 under the Entrepreneur Development Programme.

#### **IV : ALLOCATION FOR EDUCATION AND TRAINING**

The revised allocations and expenditure for education and training during 1971-80 and the allocations for the Plan period are shown in Table 21-4.



## **CHAPTER 22 : HOUSING**

### **I : INTRODUCTION**

The objective with regard to housing is to ensure that all Malaysians, in particular the low income group, will have access to adequate housing. To meet this objective, the housing programmes in urban areas will be accelerated with particular emphasis given to low-cost housing. In the rural areas, emphasis will be given to improving the quality of houses in existing villages and providing them with adequate amenities, such as water supply, electricity and sanitation facilities. In addition, low-cost houses will be constructed in land schemes.

Measures will continue to be taken to bring housing within the means of the people, particularly the low income group. These measures include innovations in the planning and design of houses without sacrificing reliability and durability.

### **II : PROGRESS, 1971-80**

The 1970 Population and Housing Census indicated that there were 1.6 million private living quarters in Peninsular Malaysia in 1970. The number of households in an occupied dwelling unit was 1.23 in urban areas and 1.03 in rural areas, giving an average of 1.082. This average figure shows that the housing stock in 1970 was broadly adequate to house the population in Peninsular Malaysia and was within the United Nation's norm of 1.5 households per unit. The Census also indicated that 43.7% of the occupied private living quarters were served with electricity, 47.5% with piped water, 18.6% with flush toilets and 61.3% with other sanitation facilities.

In 1980, based on the preliminary count of the 1980 Population and Housing Census, there were 2.63 million private living quarters, of which 2.21 million were in Peninsular Malaysia, 184,600 in Sabah and 230,500 in Sarawak. The average density was 1.077 households per occupied private living quarter for Peninsular Malaysia, 1.1 for Sabah and 1.09 for Sarawak. These statistics show that the housing situation improved slightly during the decade for Peninsular Malaysia and was adequate to accommodate the population in Sabah and Sarawak. This favourable position was attributable to the overall good performance of the economy and to the incentives provided by the Government to accelerate housing construction by the private sector such as easier credit facilities and favourable conditions for approval of licences and permits for housing development.

During the decade, however, rapid urban in-migration resulted in growth of squatter areas in major towns which were characterised by high density and inadequate amenities. This situation was more acute in the Federal Territory where squatters constituted at least 24% of the total population. Of the 744,000 units built during the decade, the public sector accounted for 207,590 units and the private sector the remaining 536,410 units. Table 22-1 shows the data on houses built during the decade.

During the decade, the emphasis was on the development of housing for low income group, settlers in land development schemes and some categories of public sector employees. The target groups for low-cost housing were defined as households earning less than \$500 per month in Peninsular Malaysia and less than \$700 in Sabah and Sarawak. To bring housing within the means of these target groups, the costs of the houses were established at about \$12,500 per unit for flats and \$8,500 per unit for terrace, cluster and other types of houses in Peninsular Malaysia and about \$10,000 per unit in Sabah and Sarawak. These low-cost houses were built by state governments and Dewan Bandaraya with subsidised Federal loans. The National Housing Department, established in 1974 provided supervisory and technical expertise to state governments on their request.

A number of measures was adopted to keep the costs of houses within these limits. These included higher density construction, reducing built-up areas to a maximum of 51 sq. metre for flats and 69 sq. metre for other types, reducing the frontage and the standard of infrastructure facilities as well as economising on the quality of finish. Various designs were experimented, including cluster link houses, cluster terrace houses, sites and services, low-rise-medium-density compact houses and timber terrace houses. At the end of 1980, 39,490 units were completed compared with the target of 110,320 units. In addition, another 54,490 units, initiated in the later part of the decade, were in various stages of implementation.

Houses for settlers in land development schemes formed an integral part of land development projects. Most of these low-cost houses were made of wood. During the decade, it was estimated that 78,740 units were completed, of which 44,090 units were constructed by Federal Land Development Authority (FELDA), 1,100 by Federal Land Consolidation and Rehabilitation Authority (FELCRA), and the remaining by Pahang Tenggara Development Authority (DARA), Johor Tenggara Development Authority (KEJORA), Trengganu Tengah Development Authority (KETENGAH), Sabah and Sarawak Land Development Boards and Jabatan Orang Asli. Another 36,210 units were under various stages of implementation.

Institutional quarters were provided for some categories of Government employees posted to remote areas or whose duties require them to be close to their place of work. During the decade, 44,800 units were completed and 27,500 units were under various stages of implementation.

Medium and high-price houses were built by Urban Development Authority (UDA), Government Officers' Housing Company and State Economic Development Corporation (SEDCs). During the decade, SEDCs developed 28,250 units while 17,490 units were under construction. UDA, in association with private sector, completed 8,910 units while 5,440 units were under various stages of construction.

To improve housing conditions in rural areas, the Government, apart from providing amenities, launched the Kampung Rehabilitation Programme in 1979. Under this programme, material assistance amounting to \$1,000 per unit was provided to improve deteriorating and dilapidated houses on gotong royong basis. About 28,900 houses in 885 villages benefitted from this programme.

Private sector housing expanded rapidly during the decade, reflecting strong demand for housing generated by rapid economic and social development. A total of 2,265 advertising permits were issued to private developers for the development and sale of 313,820 housing units. Of this 232,690 units were approved during the second half of the decade, reflecting the momentum in housing construction during the Third Malaysia Plan (TMP) period. An estimated 29% of these houses were in the Federal Territory, 23% in Johor, 11% in Selangor, 11% in Perak and 7% in Pulau Pinang. During the decade, 264,350 units were completed. Another 49,470 units were under various stages of implementation.

Most houses constructed by private developers were in the medium and high-price category, and about 70% of those approved during the second half of the decade were single and double-storey terrace houses which were in great demand. The prices of all types of houses increased substantially during the decade, particularly in the Federal Territory, Pulau Pinang and certain areas in Selangor. These increases were mainly due to increases in effective demand and the costs of land, building materials and labour. Housing cooperative societies completed 7,700 units of houses. In addition, 264,360 units were estimated to be constructed by individuals and groups.

To meet the objective of providing adequate housing, financing at reasonable terms was made available, through the provision of funds to Ministries, agencies and the Malaysia Building Society Berhad (MBSB), mainly for low-cost housing. In addition, finance was provided by banking and financial institutions in accordance with guidelines provided by Bank Negara Malaysia.

The Government, through its agencies provided both bridging and end financing for housing at concessionary terms, particularly for low-cost housing. In 1977, the rate of interest on loans provided to the state governments for low-cost housing was fixed at 4% per annum with a repayment period of 20 years. The state governments were directed to relend to house buyers at a rate not exceeding 5.5% per annum. In 1978, the repayment period was extended to 25 years. During the period, the total loans

for housing provided to state governments and the Dewan Bandaraya amounted to \$684.8 million.

A revolving fund of \$10 million was set up to provide housing loans up to \$7,500 at an interest rate of 5.5%, repayable within 25 years. This scheme catered for the needs of individual Malaysian owning small lots within a certain radius from his place of work or an industrial estate, residents of New Villages, estate and mine workers and squatters directly affected by development projects. At the end of 1980, \$4.1 million was approved to construct 636 housing units.

At the end of 1976, the Government launched another financing scheme through the MBSB for houses costing below \$20,000 per unit. The scheme provided loans at an interest rate of 5.5% per annum, repayable within 20 years. Preference was given to houses costing about \$12,000 per unit. Contributors to the Employees Provident Fund (EPF) and other Malaysians earning less than \$500 per month were eligible for loans under this scheme. The scheme was financed jointly by Bank Negara Malaysia and EPF with an initial loan of \$403 million for 27,410 units of low-price houses.

In 1970, a housing loan scheme was instituted to assist public sector employees to own houses. These loans were provided at 4% interest rate, repayable within 15 years. In 1980, the period was extended to 25 years. To facilitate the acquisition of houses by public sector employees, the Government Officers' Housing Company was formed in 1971 and at the end of 1980, the Company completed 6,020 houses. The loan extended to public sector employees amounted to \$1,476.3 million.

Housing was accorded priority for bank lending. In 1976, Bank Negara Malaysia introduced guidelines requiring commercial banks and finance companies to channel at least 10% and 25% respectively, of the net increases in their loans and advances as housing loans to individuals. For loans not exceeding \$200,000, the maximum interest rate chargeable was 10% per annum. From 1977, the interest rate on new loans was further reduced to either 9% or 1.5% per annum above the prime rate, whichever was lower. These measures resulted in a significant increase in the amount of loans approved by commercial banks and finance companies, which rose from \$107 million outstanding at the end of 1970 to \$2,797.9 million at the end of 1980.

### **III : PROGRAMMES, 1981-85**

The objective to provide access to housing for every Malaysian will be pursued during the Fourth Malaysia Plan (FMP). Special emphasis will continue to be given to low-cost housing to cater for the low income group. While the public sector will continue to play a significant role, the private sector is also expected to be more actively involved in the provision of low-cost housing. It is estimated that about 923,300 units of houses will be required during the 1981-85 period. Of these, an estimated 365,300 units are required to cater for the increasing population, 273,600 units to meet the needs for replacement and 284,400 units to cover the backlog in housing stock. Urban population is estimated to be about 35% in 1980 and 38% in 1985. Out of the 923,300 units required during the FMP, urban requirement is estimated to be 337,000 units, constituting about 36.5% of the total.

The National Consultative Council on Housing, launched in early 1980, representing both the public and private sectors, will provide the forum for continuous dialogue with regard to finding solutions to problems affecting the housing industry. This task will be supplemented by research and data analysis undertaken by the Research Section in the Ministry of Housing and Local Government, which in the FMP will be expanded to form the National Housing Research Department.

During the FMP, with the objective of optimising use of land and enhancing quality of life, the Government will implement low-cost housing schemes based on the condominium concept. Under this concept, a number of three storey walk-up flats will be clustered together to be linked by walk-ways and provided with amenities such as shops, playgrounds and community centres. In high density areas such as the Federal Territory, high rise flats will continue to be constructed but on the concept of condominium. It is expected that the average cost of a low-cost housing unit will be in the region of \$14,000, excluding the cost of infrastructure development. Under the new concept, houses will be rented out to the beneficiaries for a period of 25 years. The tenants will be given the option to purchase the houses subject to the condition, among others, that they have stayed in these houses continuously over a period of ten years.

In addition, the Government will introduce measures directed towards increasing the stock of houses, which include:

(i) increasing the amount of revolving fund from \$5 million to \$20 million to each state government to enable it to finance preliminary works such as land acquisition, site preparation and infrastructure development;

(ii) setting up a State Liaison Committee in each state which will be responsible for the implementation of the low-cost housing scheme;

(iii) requiring the private sector to reserve between 30-50% of its housing development for the condominium concept of low-cost housing. To ensure these houses reach the target group the Government will participate in their distribution or in some cases may purchase them for eventual distribution;

(iv) introducing some form of prefabrication or industrialised system of construction in the low-cost housing schemes to save time and cut cost;

(v) ensuring the adequate supply and smooth flow of funds;

(vi) ensuring adequate supply and proper distribution of building materials;

(vii) ensuring adequate supply of semi-skilled and skilled construction workers and supervisory and managerial staff; and

(viii) exempting from custom duties for the importation of equipment and machinery and selected construction materials.

The Government, in addition to expansion of training facilities at MARA, Industrial Training Institute and National Productivity Centre, will also provide incentives for three month on-site training schemes to be undertaken by trainers provided by the contractor or developer. The incentives comprise an allowance for trainer and a double deduction for income tax purposes for all expenses incurred by the developer or contractor for this purpose.

The public sector housing programme will constitute 43.2% of total construction to be undertaken during the Plan period. As shown in Table 22-2, the public sector will construct 176,500 units of low-cost houses to cater for households earning not more than \$750 per month, including for workers in industrial estates, residents of New Villages and workers in estates; 110,010 units houses for settlers in land development schemes; 58,500 units institutional quarters and 53,560 units medium and high-price houses, giving a total of 398,570 units.

The private sector is expected to build about 524,730 units or 56.8% of total Plan target. Private developers are expected to build 349,470 units of which 90,000 are in the low-cost category. Individuals and groups are envisaged to build another 150,000 units.

To enhance living condition and quality of environment, priority will be accorded to the provision of open spaces for community services and recreational facilities, particularly in housing estates. The formulation of structure plans and local plans, as

provided under the Town and Country Planning Act, 1976, sets out planning policies and framework of a town, details of land allocation including zoning, density and layout plans whilst placing more importance to positive environmental planning. In addition, efforts will be made to beautify urban centres, particularly Federal Territory, through improvement of existing parks and gardens, developing new parks, planting trees along roadsides and encouraging housing developers to plant vegetation in newly developed areas.

#### **IV : ALLOCATION FOR HOUSING DEVELOPMENT**

Total initial allocation for housing to be undertaken by the public sector is \$3,399.12 million, the breakdown of which is shown in Table 22-3.

## **CHAPTER 23 : HEALTH AND SOCIAL WELFARE**

### **I : INTRODUCTION**

Health and social welfare programmes play important roles in accelerating the socio-economic development of the nation. The provision of improved health services throughout the country will not only lead to better quality of life for the population but will also enable them to be more productive, while improved social welfare services will provide the less fortunate members of the society with the support necessary for them to participate in the mainstream of modern economic activity.

### **II : PROGRESS, 1971-80**

During the Fourth Malaysia Plan (FMP), the Government will continue to strengthen and extend these services, particularly to the rural areas. To achieve maximum benefits from these services, the adoption of an integrated approach in research, planning and delivery of health and welfare services will be emphasised.

During the decade, emphasis continued to be given to both curative and preventive programmes aimed at improving the health standards of the population. These programmes aimed at improving the health standards of the development; promotion of health, sanitation and nutrition; preventive services; dental services and training.

The thrust of patient care services was on the provision of diagnostic and curative services. Towards this end, the Government undertook the development of new and improvement of existing hospitals as well as the decentralization of outpatient services. During the decade, 15 new hospitals were constructed, six in Peninsular Malaysia, five in Sabah and four in Sarawak bringing the total number of hospitals to 97. Another nine hospitals, six in Peninsular Malaysia and three in Sabah, were in various stages of construction. A major part of the expansion programme for the General Hospital in Kuala Lumpur was also completed. In addition, improvements and extensions to 75 other existing hospitals in the country were undertaken. The major components of this programme included the provision of outpatient department, operation theatres, additional wards, intensive and coronary care units, radiological support services, laboratories, blood banks and mortuaries.

In order to relieve overcrowding in outpatient departments, outpatient services were decentralised in major towns through the establishment of 16 polyclinics covering Alor Setar, Ipoh, George Town, Johor Bahru, Kuala Lumpur, Melaka, Seremban, and



Taiping. Besides providing outpatient services, these polyclinics also provided dental, material and child care.

The long-term target is to attain a ratio of two acute beds per 1,000 population. Table 23-1 shows the increase in the number of acute beds and the bed-population ratios by state. During the decade, although the absolute number of acute beds in the country increased from 17,083 in 1970 to 22,602 in 1980, the bed-population ratio remained at 1.59 per 1,000 population. In Sabah and Sarawak, there were 1,207 and 1,141 acute beds respectively in 1970. These numbers increased to 1,723 and 2,104 by 1980 while the bed-population ratios for Sarawak improved. There was also an improvement in the bed-population ratios in Johor, Kedah, Kelantan, Melaka, Perak, Perlis and Pulau Pinang.

The utilization of patient care services in the country increased. The number of admissions and outpatients grew from 490,000 and 5.8 million, respectively in 1970 to 700,000 and 7.5 million in 1980. To cope with the increasing demand for inpatient care, the available hospital beds were more effectively used with the average number of patients treated per occupied bed per annum rising from 40.6 in 1970 to 53.0 in 1980. In addition, the average duration of patients' stay in hospital wards was reduced from nine days in 1970 to seven days in 1980. The number of doctors increased from 2,528 in 1970 to 3,300 in 1980, changing the doctor-population ratio from 1:4,263 in 1970 to 1:4,321 in 1980.

During the decade, specialist services in the country were expanded. By 1980, there were 220 specialist units in Peninsular Malaysia, 25 in Sarawak and 15 in Sabah, compared with 121, five and four, respectively in 1970. These services were also extended to the larger district hospitals in order to make them available to the rural population. The specialist-bed ratio improved from 1:131 in 1970 to 1:87 in 1980.

Rural health services. During the decade, there was improvement in the provision of preventive and curative services in rural areas with the conversion of the three-tier system of health care delivery which began in 1974. By this change, the three-tier rural health system of one main health centre, four health sub-centres and twenty midwife clinics-cum-quarters to serve every 50,000 rural population was converted to a two-tier system by upgrading the health sub-centres to health centres to serve 15,000 to 20,000 rural population and by upgrading midwife clinics to kelinik desa with two jururawat desa to serve 4,000 population. The two-tier system was designed to achieve higher quality of care through more sophisticated services, wider coverage of the population and better supervision of staff.

In Peninsular Malaysia, the number of main health centres increased from 44 in 1970 to 77 in 1980, while that of health sub-centres and midwife clinics increased from 180 and 943 in 1970 to 252 and 1,465 in 1980, respectively. In Sabah, the number of health centres increased from 14 to 17, rural dispensaries from 60 to 70 and village group

sub-centres from 83 to 202 from 1970 to 1980. In Sarawak, five health centres and 51 kelinik desa were completed.

Rural environmental sanitation. The Rural Environmental Sanitation Programme played a vital role in raising the health standard among rural communities and in the control of a wide range of water-borne diseases through the provision of safe water supply and sanitary latrines. Under the programme, 7,632 wells and 162 gravity water supply systems were completed in Peninsular Malaysia, while in Sabah and Sarawak, 870 wells, 2,169 gravity water supply systems and 1,070 rain water storage cisterns were installed. The coverage of safe water supply system to the total rural population outside the area served by the Public Works Department (PWD) in Peninsular Malaysia increased from 3.2% in 1970 to 11.3% in 1980, in Sabah from none to 14.5% in 1980 and in Sarawak from 4.4% in 1970 to 44% in 1980. The coverage of sanitary latrines to the rural population increased from 25% in 1970 to 44.7% in 1980 in Peninsular Malaysia, from none to 15% in Sabah and from 3.5% to 45% in Sarawak.

Applied nutrition. The Applied Food and Nutrition Programme (AFNP) launched with the objective of raising nutritional standard among the rural people, was expanded during the decade. The programme involved a coordination of efforts in specific food production, nutrition education, teaching of home economics, promotion of sanitary environment, detection and correction of malnutrition status and provision of supplementary feeding to school children. By 1980, a total of 46 districts in Peninsular Malaysia were incorporated under this programme covering a population of 3.5 million. In Sarawak, a pilot project was launched in the Serian district. In the AFNP areas, toddler mortality rates showed a decrease from 4.2% in 1970 to 2% in 1980. The daily calorie intake per capita in these areas improved from 2,453 in 1970 to 2,700 in 1980.

Occupational health services and food quality control. An Occupational Health Unit was established in the Ministry of Health in 1971 to undertake investigative and consultative services in various areas of occupational health in order to provide guidelines to industries to minimise the incidence of occupational diseases. To further strengthen the food sanitation and quality control services aimed at consumer protection against health hazards, a National Food Quality Control Unit was formed in 1974 to coordinate, monitor and evaluate activities of the service and to establish standards for food quality control.

Control and eradication of communicable diseases. The decade witnessed satisfactory progress of the programmes for the control and eradication of communicable diseases such as malaria, tuberculosis (TB), leprosy, yaws and filariasis. The number of reported and confirmed malaria cases in Peninsular Malaysia reduced from 25,400 in 1970 to 10,000 in 1980, while the number of deaths caused by malaria in the various government hospitals reduced from 135 to 30 during the same period. The incidence of TB per 100,000 population decreased from 90.6 in 1970 to

73.5 in 1980. Under the leprosy control programme, the number of cases detected and registered for treatment totalled 5,070 in 1970 and 8,000 in 1980. A total of 317 cases of dengue haemorrhagic fever with 12 deaths were reported in 1980 compared with 1,482 and 104, respectively in 1970. Preventive measures to control other communicable diseases such as cholera, typhoid and poliomyelitis were also undertaken through immunization, environmental sanitation, food and water hygiene, health education and surveillance of areas at risk.

The main objective of dental programmes was to provide preventive services and dental treatment for the population, particularly to school children. Under preventive services, the Government undertook fluoridation of public water supply systems, promoted the use of fluoride compounds to teeth and fluoride mouth rinses for school children. Dental health education was expanded to school children through oral health instruction and practical demonstrations. Mobile dental squads for school children in the rural areas were introduced during the Third Malaysia Plan (TMP) period. This scheme established 41 mobile dental squads and benefitted 500,000 school children in Peninsular Malaysia.

The number of dental clinics increased from 444 in 1970 to 906 in 1980, with an increase in dental chairs from 659 to 1,401 respectively. These increases improved the ratio of dental chairs to population in Peninsular Malaysia from 1:5,500 in 1970 to 1:3,200 in 1980. The number of dental attendances increased from 2.3 million in 1970 to 3.4 million in 1980. In Sabah, dental health services were provided through main dental centres, school clinics, district health centres, dental clinics in hospitals and mobile dental units totalling 19 in 1970 to about 164,000 in 1980. In Sarawak, dental services in 1970 were delivered through dental clinics, schools dental clinics and mobile dental clinics which increased from 45 in 1970 to 130 in 1980. Dental attendances in Sarawak increased from 152,300 in 1970 to about 330,000 in 1980. The dentist-population ratio in Peninsular Malaysia improved from 1:31,760 in 1970 to 1:22,787 in 1980. The population health programme during the decade brought about a demographic change as well as improvement in family welfare. The rate of population growth which was 3% per annum during 1961-70 declined to 2.8% per annum during 1971-80.

The increase in the number of new acceptors of family planning, from 56,000 in 1970 to 1,233,400 in 1980, was partly due to the integration of the family planning programme with rural health services. These integrated services were made available at 206 health centres, five community hospitals and 984 midwife clinics. During the decade, the National Family Planning Board established 76 static clinics, 383 satellite clinics and 40 estates' clinics, while the Federation of Family Planning Associations established 90 satellite and 73 estate clinics in order to further increase accessibility to family planning services.

Training programmes and facilities were expanded to meet the increasing demand for medical and health personnel at various levels. During the decade, the annual intake capacity of national tertiary institutions increased the training of medical professionals from an initial 120 medical, 32 dental and 20 pharmacy students to 340 medical, 48 dental and 75 pharmacy students in 1980 respectively. By the end of 1980, a total of 1,297 doctors, 147 dentists and 208 pharmacists graduated from local institutions. The training capacity for trainee nurses and trainee assistant nurses increased from 1,300 in 1970 to 3,000 in 1980. This was made possible with the completion of three new training schools as well as improvement to existing ones. The Dental Nurses Training School in Pulau Pinang was also expanded to increase the intake of trainees from 50 to 100.

In addition, efforts were also directed at the training of other categories of para-medical personnel such as radiographers, laboratory technicians, dispensers, public health inspectors, dental technicians, junior hospital and laboratory assistants. A total of 400 midwives were retrained as jururawat desa since the programmes began in 1973 at the two Rural Training Schools at Jitra and Rembau. The training of a new group of jururawat desa began in 1977 with the completion of the three new Rural Health Training Schools in Johor, Kelantan and Pahang. These latter two programmes were intensified so as to hasten the conversion of midwife clinics to klinik desa under the two-tier system.

During the decade, welfare programmes for the economically and socially handicapped as well as the physically and mentally disabled were expanded. These programmes which included material assistance, rehabilitation, counselling and vocational training designed primarily to place the disadvantaged into the mainstream of society, were carried out in conjunction with voluntary bodies.

Four rehabilitation centres for the physically handicapped, with a capacity to house approximately 640 inmates, were established. Financial assistance totalling \$7.3 million was extended to about 75,000 poor children during the decade to enable them to remain under the care of their own families or guardians. Eight homes established for the care and protection of the aged and destitute, were further equipped and improved. The number of remand homes, approved schools for juvenile offenders and women and girls' protection homes increased from 14 in 1970 to 20 in 1980 while the admissions to these homes totalled 850 and 1,607 respectively.

During the TMP, four drug rehabilitation centres with an annual intake capacity of about 1,200 were set up for drug addicts registered with the Ministry of Welfare Services. With the establishment of the placement unit in the Ministry of Welfare Services in 1977, the number of reformed juvenile offenders, rehabilitated wayward girls and women, and trained handicaps place in employment increased from 185 in 1977 to 645 in 1980.

During the second half of the decade, preventive and development orientated social welfare programmes were given emphasis as opposed to institutionalised care. These programmes consisted of a school welfare service with the aim of assisting parents to keep their children in schools and to enable children to overcome problems retarding their learning process. This service was started in 1975 in Negeri Sembilan, Perak, Selangor and the Federal Territory catering for a student population of 26,656. Family Counselling Services were merged with the legal aid programme in 1976 to further strengthen efforts at promoting family solidarity. This programme benefitted about 5,000 families during 1976-80.

### **III : PROGRAMMES, 1981-85**

During the FMP, the medical and health programmes will be expanded with continued emphasis on the:

- (i) development of health and health-related services for identified target groups and areas;
- (ii) provision of curative and rehabilitative services;
- (iii) prevention and promotion aspects of health and health-related activities;
- (iv) control and eradication of preventable communicable diseases;
- (v) use of appropriate technology to solve health and health-related problems;
- (vi) promotion of healthy living environment;
- (vii) provision of adequate training for health and allied personnel, both at basic and post-basic level; and
- (viii) management of the expanding health services and development of reliable information systems.

During the FMP, emphasis will continue to be given to the provision of easily accessible diagnostic, curative and rehabilitative services to the people both as inpatients and outpatients, including the early detection and treatment of diseases and illnesses. Measures will be taken to develop institutional facilities, particularly in areas which are still without them as well as in underserved areas, to improve existing amenities and to maintain the increased intake of medical personnel to staff these facilities. Hyperspeciality curative services will continue to be made available on a regional basis for optimum utilization of personnel and facilities. To achieve the

targetted bed-population ratio of two acute beds per 1,000 population, the development of new and the expansion of existing hospitals in areas with low bed-population ratios will be intensified. Projects initiated during the TMP will be completed during 1981-85. These include the construction of 18 district hospitals and three general hospitals in Peninsular Malaysia, six district hospitals in Sabah and a district hospital in Sarawak. In addition, preparatory work will be carried out on one general hospital and seven district hospitals in Peninsular Malaysia, as well as four district hospitals each in Sabah and Sarawak. Land for ten new hospitals will also be purchased, five in Peninsular Malaysia, three in Sabah and two in Sarawak. During the Plan period, outpatient care services will be expanded through extension and improvements to existing outpatient departments in various established hospitals, in order to cope with the increasing demand which averages 65 admissions and 400 outpatient first attendances per day per 1,000 population compared with 53 admissions and 247 outpatient first attendances per 1,000 in 1970. Twenty polyclinics will be set up during the FMP to further decentralise medical and health services in high density population centres so as to lessen excessive demands made on outpatient departments. Other service components of existing hospitals such as intensive care and coronary care units, accident and emergency units, clinical laboratories, dispensaries, radiological support and ambulance services will be expanded and improved.

Family health services. The main objective of this programme is to promote the development of a healthy family, well-being of women in the reproductive age-groups and the optimum health and development of children from infancy to school-leaving age. During the FMP, the maternity and child health activities will be further intensified in underserved rural and urban areas as well as in estates and mines.

The Maternity and Child Health Services will be further strengthened through, inter alia the continued conversion of the three-tier to two-tier rural health care delivery system to ensure increased provision of better preventive and curative services, extension and intensification of the AFNP in areas of high toddler mortality, expansion of mobile health services to isolated population groups and the continuation of the delivery of population health services as an integral part of family health care. Increased interaction between health staff and the community will be encouraged in order to improve awareness and acceptability of health services.

In the endeavour to attain the long-term target envisaged under the two-tier system of one health centre for 15,000-20,000 and one kelinik desa for 4,000 rural population, a total of 22 new health centres and 43 phase I health centres and 212 new kelinik desa will be established in Peninsular Malaysia while 41 health sub-centres and 135 midwife clinics will be upgraded. In Sabah, 80 village group sub-centres and 30 rural dispensaries will be established while Sarawak will be provided with one new health centre and 30 kelinik desa. To expand the administrative support for these health services, 18 new health offices will be constructed in Peninsular Malaysia while

eight district health offices/area health offices and four health offices will be constructed in Sabah and Sarawak, respectively.

Rural environmental sanitation. The provision of a minimum level of social amenities by way of safe water supply and sanitary latrines under this programme forms part of the overall Government effort to improve the health and quality of life of the rural population. The programme will continue to be implemented extensively during the Plan period to enable more communities, especially in isolated areas to enjoy the modern amenities previously not available. It is anticipated that by the end of 1985, 75% of the rural population outside the area served by PWD rural water schemes, thereby reducing the incidence of water-borne diseases and other diseases related to poor sanitation.

Applied nutrition. As part of the social development package, the AFNP will be introduced in Sabah and accelerated to cover other areas in Peninsular Malaysia and Sarawak. It is targetted to cover 3.5 million population in Peninsular Malaysia and 600,000 each in Sabah and Sarawak by the end of 1985. It is projected that through this programme, the toddler mortality rate will decrease from 2% in 1980 to 1.5% in 1985 and the calories intaken per capita will be further improved from 2,700 to 2,800 by 1985. A sum of \$15.1 million is provided for the implementation of AFNP during the Plan period.

Occupational health and food quality control programme. During the FMP, the occupational health programme will be strengthened to promote optimum level of physical, mental and social well-being of industrial workers and to contribute towards increasing their productivity, through the minimization of occupational health hazards. This programme will continue with the investigation and identification of potential health hazards in the working environment; consultation, advisory and supervisory services to the private and public sectors; formulation of relevant legislation and curative measures as well as undertake surveillance and monitoring of occupational health problems.

Control and eradication of communicable diseases within the context of promoting and uplifting the social well being of the population, particularly in the rural areas, efforts to reduct further the incidence of communicable diseases such as malaria, TB, yaws and diptheria will be continued and consolidated during the FMP. These include the integration of the national TB, leprosy and yaws control programmes with the rural health services, the maintenance of the Malaria Eradication Programme and the intensification of the national environmental sanitation campaign. The National Tuberculosis Programme aimed at eliminating TB as a public health programme will continue to impart extensively its immunization, diagostic and curative services. The National Leprosy Control Programme to reduce the incidence and eventually eliminate the disease, will be expanded through activities such as improved accessibility to treatment and rehabilitation, follow-up management, health

education, research and surveillance. A number of new static and mobile skin clinics to facilitate coverage will be provided while improvement to the Sungai Buloh Leprosarium will be carried out. To effectively control the spread of dengue haemorrhagic fever and other vector-borne diseases, additional vector control units will be set up during the Plan period, as part of the two-tier rural health delivery system.

The development of the dental programme will be stepped up through increased provision of preventive services and better dental component to further effect the Government's policy to integrate major health components with the rural health programme. In addition, five dental clinics, 64 school dental clinics, 38 mobile squads as well as improvements and extensions to existing clinics are planned for Peninsular Malaysia. Eight dental clinics, 33 school dental clinics and 11 mobile squads are proposed for Sabah while Sarawak will be provided with four dental clinics, 22 school dental clinics and eight mobile squads. During the FMP, 12 periodontal centres to look into the curative and preventive aspects of gum diseases will be established, 11 in Peninsular Malaysia and one in Sarawak. The proposed expansion programme is expected to increase the number of dental chairs to 1,800 by 1985. Fluoridation of water supplies will be carried out in 17 public water supply schemes benefitting two million people.

The rapid development of patient care services will be complemented by appropriate expansions in auxiliary facilities including inter alia, the pharmaceutical laboratory and radiological support services. These will include the construction of new and renovations to present laboratories and stores as well as the provision of new extensions to existing X-ray and other related facilities.

The integrated approach of providing population health services through a package of health services including family planning services, family health care, nutrition, maternal and child health services will be continued during the FMP. This comprehensive integrated family health programme will be extended to all health districts. To further enhance the quality and standard of family health services, a national specialist centre at Kuala Lumpur and Pulau Pinang to provide specialised and more extensive services will be completed during the Plan period. In addition, 36 urban clinics will be constructed to improve the urban family planning services.

Continued emphasis will be placed on expanding and improving training programmes and facilities with a view to further developing adequate professional and para-medical personnel to meet the projected manpower requirements of the health sector. The overall demand for doctors, taking into account present deficits, is estimated at 1,230. To overcome this shortage and to attain the long-term objective of one doctor per 2,200 population by 1990, the output of doctors will be stepped-up with the increased intake capacity of local training institutions as well as through recruitment of doctors on contract. Post-graduate medical centres set up in the



general hospitals at Johor Bahru, Kota Bharu, Kuala Lumpur and Pulau Pinang will provide improved facilities for post-basic training of doctors and other professionals.

Considerable efforts will also be made to increase and upgrade the number of new and existing para-medical personnel such as dentists, pharmacists, nurses, radiographers, medical laboratory technologists, dispensers and public health inspectors. It is estimated that a total of 600 nurses, 600 assistant nurses and 250 retrained midwives will complete their courses at the various training institutions in the country annually. The five regional training centres for assistant nurses, with a yearly intake capacity of 600 trainees, will be completed during the Plan period. In addition, the training of jururawat desa will be accelerated at the Rural Health Training Schools in line with the development of the two-tier rural health programme. A total of five such schools with an annual intake of 180 will be completed during the FMP, three in Peninsular Malaysia, one in Sabah and a combined training complex for junior hospital assistants cum jururawat desa in Sarawak. The Dental Nurses Training School in Pulau Pinang will be further expanded to provide training for 50 dental surgery assistants annually. The training school for medical laboratory technologists and junior laboratory assistants will train 750 personnel by the end of 1985.

With the completion of the expansion programme of the Institute of Medical Research (IMR), which included the school for medical laboratory technologists and additional laboratories, the research capacity of the Institute will be further enhanced. During the Plan, the research programmes of the IMR will continue to focus on ecology and control of endemic diseases, investigation of new diseases previously thought not to exist in the country namely schistosomiasis, development of new diagnostic procedures for treatment and control of diseases. The National Leprosy Control Centre at Sungai Buloh will consolidate and further intensify its research efforts in combating the disease.

Due to the increasing need for welfare and community services for the disadvantaged groups in society, the Government will continue to expand and improve existing social welfare programmes and facilities. With regard to rehabilitation services to the handicapped, seven new centres, in addition to three continuation projects, will be established to provide treatment, aftercare, supervision and vocational training facilities. Apart from completing three projects carried over from the TMP for the aged and destitute, an additional old persons' home at Kangar and a vagrants' centre at Ulu Langat will be implemented. Under the rehabilitation and reformatory programmes, the completion of two women and girls' protection homes and the establishment of ten remand and probation homes will also be undertaken.

During the Plan period, programmes and activities to alleviate drug abuse are aimed at providing additional services as well as consolidating and making further

improvements to existing facilities and services. As part of the normal treatment and rehabilitation of drug addicts, the Ministry of Welfare Services proposes to set up half-way houses and day-care centres in order to provide regular follow-up supervision and consultation. Community-based services, initiated in the latter half of the TMP, to assist individuals and local communities to adjust to social developmental changes will be further pursued. Additional community base centres in high density population areas for the urban youth, working women and girls and local communities will be set up. A residential training centre at Sungai Buloh for in-service training of personnel from the Ministry of Welfare Services as well as those from voluntary welfare bodies, will be completed within the Plan period. For this project, a sum of \$2.7 million is provided.

#### **IV : ALLOCATION FOR HEALTH, FAMILY HEALTH AND WELFARE PROGRAMMES**

Table 23-2 shows the FMP allocation for health, family health services and welfare programmes.

## **CHAPTER 24 : CULTURE, COMMUNITY DEVELOPMENT, SECURITY & GENERAL ADMINISTRATION**

### **I : PROGRESS, 1971-80**

Cultural activities. Impetus for the development of a national culture was provided by the National Congress on Culture held in 1971. The Congress resolved that the basis of a national culture was the indigenous culture as well as elements of other cultures which could be woven into the national culture. Research was carried out into various aspects of culture, including history and tradition, as a method of understanding the various racial traits so that their best features could be woven into the fabric of a national culture. Courses and workshops on activities relating to culture, which included performing arts, continued to be conducted. The number of participants increased from about 4,000 in 1970 to about 20,000 in 1980. In addition, various cultural shows and exhibitions were held. At state and district levels, cultural activities were coordinated through the Majlis Kebudayaan Negeri and Majlis Kebudayaan Daerah. At national level, 25 cultural organisations were formed with a membership of about 250,000. With these activities, there were greater interaction and understanding among ethnic groups.

Museum. Muzium Negara, the official repository of the country's cultural and natural history, helped to inculcate a sense of belonging and awareness of the country's heritage among the general public. This was made possible through research on and display of various items of interest relating to the country's history, culture and flora and fauna. The museum undertook control and preservation of historical monuments, archaeological sites and remains, antiquities and historical objects. During the decade, it excavated 12 and restored 8 historical sites in the Lembah Bujang area in Kedah. In 1979, a site museum, Muzium Arkeologi Lembah Bujang was constructed to display artefacts excavated in the area. Excavation and restoration works on historical sites were also carried out in Dengkil, Ulu Kelantan, Ulu Tembeling and Ulu Trengganu. Under the Antiquities Act, 1976, Fort Cornwallis in Pulau Pinang, Istana Lama Sri Menanti in Negri Sembilan, as well as 169 graves of warriors and of well known personalities were preserved and restored. Ninety monuments, including Kota Kuala Kedah in Kedah, Kota Malawati in Selangor and the Stadhuys building in Melaka, were gazetted as national monuments. Various collections such as traditional musical instruments, weapons, ceramics, textiles, jewellery, pottery, cultural materials and specimens of natural history were acquired by Muzium Negara. In 1980, about 1,933,917 people visited Muzium Negara compared with about 1,610,620 in 1970. During the decade, an average of 2,931,134 people visited Muzium Negara annually.

Public Libraries and archives. During the decade, public libraries were established by state governments in every state capital, in addition to 61 branch libraries in smaller towns and 18 mobile libraries in rural areas. The site for the National Library building in Kuala Lumpur was acquired in 1979 and planning for the construction of public libraries in Alor Setar, Kangar, Kota Bharu and Melaka was started. The construction of a permanent building for the National Archives in Kuala Lumpur began in 1977. The design for Tun Abdul Razak Memorial Library (PINTAR) in Kuantan was completed.

The main objective of community development programme was to inculcate in society values oriented towards development and self-reliance. The programme was carried out by a number of agencies such as the Community Development Division of the Ministry of Agriculture(KEMAS), Federal Land Development Authority(FELDA), Rubber Industry Smallholders' Development Authority(RISDA) and Farmers' Organisation Authority(FOA). The activities carried out by KEMAS included organising classes in basic and functional literacy and teaching of vocational skills. During the decade, 11,393 literacy classes and 2,596 work-oriented classes for 47,157 students in tailoring, auto-mechanics, radio repair and other skills were held. In addition, the programme included family development classes to impart knowledge on home economics, nutrition, health education, family health and hygiene as well as the establishment of rural libraries. A total of 1,020 pre-school centres for 26,201 children were established.

FELDA, under its community development programme, established 154 Gerakan Persatuan Wanita, 103 Persatuan Belia, 287 Taman Didikan Kanak-kanak(TADIKA) and 7 mobile libraries. In addition, FELDA set up two hostels, one in Kuala Lumpur and one in Kuantan, to accommodate children of settlers studying in secondary schools. RISDA set up 43 Taman Bimbingan Kanak-kanak(TABIKA) and 33 Perkumpulan Wanita Pekebun Kecil as well as 31 hostels for children of rubber smallholders in the smaller towns of Peninsular Malaysia. The FOA initiated its community development programme through the women members of farmers' cooperatives. The projects under this programme included tailoring, cottage industries and livestock rearing. At the end of 1980, 3,252 cooperative members were engaged in these projects.

Youth. During the decade, various programmes were provided to help youth to be disciplined, productive and self-reliant. The youth training centres at Dusun Tua and Pertak emphasised vocational and technical training, motivation, discipline, leadership and entrepreneurship. During the decade, a total of 5,503 completed training in various vocational trades, while 3,455 others were trained through on-the-job training schemes. The youth leadership course also provided training in club management and administration at district, state and national levels. At the end of 1980, more than 18,000 youth participated in this programme. In terms of economic development programme for youth, 1,207 youth-in-business projects were undertaken by 1,420 young entrepreneurs and 2,585 youth farm projects by 14,400 young farmers.

Sports. The development of sports was directed towards building a healthy community and promotion of national unity. It also enhances national image through high standard of performance by Malaysians at national and international meets. Sports facilities were expanded during the decade. National sports organisations were provided with financial assistance for training programmes and holding of major national and international tournaments.

Orang Asli. In order to promote the welfare of Orang Asli and permit their integration into the mainstream of development, various measures were undertaken during the decade. These included the provision of land and basic facilities such as education, health, water supply and electricity. An estimated 5,951 hectares of land were developed for agriculture benefitting 1,270 Orang Asli families mainly in Banun, Betau, Betis, Dala and Kemar. Eight cooperative shops, two processing centres and three handicraft workshops were established by Jabatan Orang Asli.

Armed Forces and police. During the decade, the armed forces and police were expanded to upgrade their capability to safeguard the security of the nation. Apart from acquiring modern equipment, the capability of both forces were improved through the provision of better training facilities, including joint exercises. Ikatan Relawan Raayat (RELA) was established in 1972 to assist the security forces to safeguard the nation. Its main function was to provide area security surveillance particularly at strategic locations. The Rukun Tetangga was launched in 1972 to foster a sense of peaceful living among the multi-racial residents in gazetted areas by maintaining order and friendly atmosphere as well as to provide security surveillance on a sector basis. By the end of 1980, about 800 Rukun Tetangga sectors were established involving a force of 800,000.

The prisons at Air Kroh, Alor Setar, George Town, Johor Bahru, Kota Bharu, Melaka and Taiping were expanded to relieve congestion. In addition, new prisons at Miri, Sibul, Simanggang and detention camps at Kuching and Taiping were completed, while renovation works to the prison at Seremban and Protective Custody Centre in Taiping were also undertaken.

The Immigration Department was expanded to improve its services and to enable it to control and regulate the entry of foreigners more effectively through the establishment of additional entry points and purchases of more launches.

Fire Services. By 1980, the construction of three fire stations in Kuala Lumpur and one in Pulau Pangkor was completed. A total of 72 fire engines were purchased including 43 water tenders, 14 emergency water tenders, 14 skylifts and one turntable ladder. A Central Fire Training School with the objective of increasing the capability and efficiency of the fire services personnel and capable of training 140 fire services personnel a year was completed in 1975 at Kuala Kubu Baru. Fire safety regulations

were tightened with the enactment of the Uniform Building By-laws and Local Government Act in 1976 in which necessary fire prevention requirements were upgraded, particularly for high-rise buildings.

Government buildings. During the decade, Government machinery at federal, state and district levels expanded, leading for a greater demand for office accommodation. An extensive buildings programme to cater for this expansion was launched. Large complexes which include Wisma Tani, Wisma Keramat, and Jalan Duta Complex were completed during the period. New buildings to house the lower, sessions and high courts were constructed to replace old buildings. Court buildings which had inadequate facilities were renovated. In addition, preliminary work for the renovation of Bangunan Sultan Abdul Samad to house the Federal Court was started. The Customs Department was provided with 39 new offices at various points namely airports, ports and other gazetted entry points. Institutional quarters for the uniformed staff were also constructed. Four new Road Transport Department offices were constructed at Alor Setar, Ipoh, Muar and Petaling Jaya. The construction of a new office at Kuala Trengganu was also started. A total of 19 buildings were acquired for our embassies and official residencies. In addition, renovation works on 12 other missions were also undertaken.

Information and broadcasting. The mass media programmes were designed primarily to inform, educate and entertain people. Major broadcasting service projects completed during the decade include Radio House Complex, Tun Abdul Razak Institute of Broadcasting (IPTAR) to train various information and broadcasting personnel, regional centres and the inauguration of simultaneous telecast services in 1975 linking Peninsular Malaysia with Sabah and Sarawak. The Department of Information, through its local and state offices, conducted civic courses as part of its function to disseminate information and educate the people. The participants in these courses increased from 157,787 to about 944,748 in 1980.

The coverage of radio transmission to the rural population increased from 85% in 1970 to 90% in 1980 in Peninsular Malaysia, from 75% to 95% in Sabah and from 30% to 55% in Sarawak. Television transmission to rural areas increased from 80% in 1970 to 85% in 1980 in Peninsular Malaysia, from 0% to 95% in Sabah and from 0% to 65% in Sarawak. A major development was the introduction of colour television in 1978. Filem Negara specialised in producing documentary films, a number of which won international acclaim. Steps were already taken to expand its technical facilities such as colour film laboratory and sound recording system for colour productions.

Berita Nasional Malaysia (BERNAMA), the national news agency established in 1967, provided wide coverage of domestic and international news in the country. It acquired permanent premises in Ipoh, Johor Bahru, Kota Bharu, Miri and Manila during the latter part of the TMP period.

Social Security. The Social Security Organization (SOCSO), established in January 1971, administered the Employment Injury and the Invalidity Pension Schemes. By the end of 1980, the two schemes had covered 31 centres in Peninsular Malaysia and one each in Sabah and Sarawak, providing protection to about 1.8 million employees compared with 226,394 in 1972. During the decade, cash benefits amounting to about \$16.7 million were paid to 78,549 beneficiaries, while about 338,000 employees received medical benefits amounting to nearly \$6 million. In 1980, the schemes were extended to workers in estates and mines and other rural workers in Peninsular Malaysia and the two existing centres in Sabah and Sarawak.

Services to kampung and New Villages. In 1979, a Kampung Rehabilitation Programme was launched to provide material assistance for improvement of houses and coordinate the provision of basic amenities. By the end of 1980, an estimated 83.4% of houses in New Villages were served with piped water, 19.9% with electricity and 45.6% with modern sanitation.

Zoo and wildlife protection. The protection of wildlife which previously rested with state governments, came under the responsibility of the Federal Government with the enactment of the Wildlife Protection Act, 1976. Jabatan Perhilitan established 65 acres of wildlife feeding areas mainly in the Krau Game Reserve and in Taman Negara, deer farms in the Krau and Sungkai Game Reserves and a seladang management project at the Krau Game Reserve. Facilities at Taman Negara to educate the public on the purpose and need for the conservation of wildlife. Zoo Negara was given financial assistance to extend the lion and deer parks, elephant enclosure, and to establish a quarantine area.

Local Government. In 1970, there were 327 local authorities governed by separate by-laws and regulations. To ensure uniformity of law and policy, three local government legislations, namely the Street, Drainage and Building Act, 1974, the Local Government Act, 1976, and the Town and Country Planning Act, 1976, were promulgated. The restructuring of local authorities into more viable and effective units was started in 1978. The target of the restructuring exercise was to reduce the number of local authorities from 327 to 100, consisting of 14 municipal councils and 86 district councils. By the end of 1980, a total of 14 municipal councils and 68 district councils were formed. Launching and annual grants were provided to enable the restructured local authorities to service their enlarged areas more effectively.

## II : PROGRAMME, 1981-85

Cultural activities. During the Fourth Malaysia Plan (FMP), efforts will be intensified for further consolidation and enrichment of the national culture. Such efforts include research into indigenous culture and other cultures prevailing in the country to enrich the national culture. For new projects namely the Museum of Arts, the National Academy of Fine Arts, the National Culture Complex and the National Theatre will be implemented. The National Academy of Fine Arts will offer courses in music, dances, literature and cinematography. The National Theatre will provide the venue for performances such as dramas, concerts and music. The National Culture Complex will be the centre for group activities on various aspects of national culture, including performing arts.

Museum. Muzium Negara will continue to restore, preserve and conduct research on historical monuments and carry out excavation works in Lembah Bujang in Kedah, Ulu Tembeling in Pahang, Dengkil in Selangor and other archeological sites which are of historical importance. A National Historical Museum will be established in Kuala Lumpur to facilitate research into the historical development of the nation as well as to exhibit items of historical interest. Facilities at Muzium Negara will be expanded to include a planetarium. The allocation provided for these projects is \$14 million.

Public Libraries and archives. An allocation of \$29.5 million is provided for the National Library in Kuala Lumpur, public libraries in Kedah, Kelantan, Melaka and Perlis, 11 branches in the districts and 20 mobile libraries. An allocation of \$12.2 million is provided for construction of PINTAR, establishment of a microfilm centre at the National Archives Headquarters, construction of a branch archives in Alor Setar and acquisition of two more sites for archives in Kota Kinabalu and Kuching.

Under the FMP, a sum of \$22 million is allocated for community development programmes under KEMAS for the completion of three Family Development Training Centres at Lumut, Kuching and Kuantan and 13 district community service centers. Construction works for the Institute for Rural Development at Bangi to provide training in leadership and community development for about 300 participants per year will begin in 1981. KEMAS will also expand its programme for the rural population by providing more rural libraries and pre-school centres. A new programme, Karyanika, will be launched to encourage the production of handicraft among rural women. A sum of \$10 million is allocated to RISDA under FMP for training and skill upgrading of rubber smallholders, including the setting up of 215 TABIKA and 215 community development centres for women. In addition, allocations of \$12.5 million and \$23 million are provided for the construction of 27 student hostels and scholarships, respectively.



Youth. During the FMP, programmes for youth will continue its emphasis on training in technical and vocational fields, agriculture and small businesses as well as in motivation, discipline and leadership. Facilities at the youth training centres in Dusun Tua and Pertak will be expanded and additional youth training centres will be established at Sepang, the Federal Territory and the east coast of Peninsular Malaysia. Under the farm youth programme, a total of 1,200 projects will be implemented involving about 5,000 youth, while under the youth-in-business programme about 2,000 projects will be established, providing employment to about 5,00 youth. The allocation for the programmes amounts to \$49 million.

Sports. A comprehensive sports programme is planned under the FMP. The Government will continue to encourage the participation of all sections of society in regular sports and exercises. This will be carried out not only in urban and semi-urban areas but particularly in rural areas. The National Sports Council will intensify its activities during the period. A sum of \$9.1 million is allocated for the expansion and improvement of existing facilities at the Kampung Pandan Multi-Purpose Centre, Stadium Negara, and Stadium Merdeka in Kuala Lumpur and to meet the cost of preliminary works for the establishment of a National Sports Institute. An allocation of \$19 million is provided to assist state governments to expand sports facilities in state capitals and \$33 million for sports facilities in smaller towns. The construction of multi-purpose complexes to cater for both sports and cultural activities will be continued in the FMP for which an allocation of \$9.3 million is provided.

Orang Asli. Efforts will be intensified to upgrade the socio-economic well-being of Orang Asli community and to accelerate their integration into the mainstream of society. A sum \$40.1 million is provided for the opening up of new lands for agriculture, setting up of process centres and handicraft workshops for the settlement schemes in the Titiwangsa region. Armed forces and police. To upgrade the security capability of the nation, a sum of \$9,225 million is provided for the expansion and modernization of the armed forces and police. The programme includes purchase of equipment, construction of office and staff accommodation and provision of training facilities.

Prisons. An allocation of \$106.4 million is provided for the construction of additional facilities to relieve congestion at existing prisons as well as to provide staff quarters. New prisons at Kuantan, Kuala Trengganu and Tapah will be constructed. The construction of major projects at Kajang, Pokok Sena and Simpang Rengam, started under the TMP, will be continued.

Immigration. A sum of \$36.2 million is provided for the construction of new offices at gazetted entry points in Johor, Kelantan, Negri Sembilan and Perak, as well as the provision of staff quarters at remote border posts. Fire services. A sum of \$67.5 million is provided to complete the construction of 14 fire stations started during the TMP, as well as to build 11 new fire stations at Air Kroh, Damansara Utama, Jengka,

Kroh, Kuala Nerang, Laka Temin, Langkawi, Mantin, Padang Besar, Serdang and Sik. In addition, 100 fire engines and other fire-fighting equipment will be acquired.

Government buildings. A sum of \$252.2 million is provided for Federal buildings programme. The state governments will reconstruct new district and land offices for which a sum of \$28.2 million is provided. A sum of \$59.5 million is provided for construction of new court houses and quarters for judges as well as to complete the renovation of Bangunan Sultan Abdul Samad. A sum of \$127.7 million is provided for the construction of a staff training centre at Johor Bahru, office buildings, staff quarters and for purchase of launches and other equipment for the Royal Customs and Excise Department. The Road Transport Department is provided a sum of \$44.2 million for the construction of a training centre at Bangi, state, branch and sub-offices as well as purchase of equipment. A sum of \$80 million is provided for the purpose of acquisition and renovation of chancery buildings and official residencies abroad Information and broadcasting. During the FMP, the coverage of information and broadcasting services, particularly to smaller towns and remote areas will be expanded. In addition, the project to redress the imbalance of the transmission coverage between Peninsula Malaysia and Sabah and Sarawak by extending Channel Two to the two states, will be implemented. General accessibility to radio and television media is expected to increase by 95% by the end of 1985. An allocation of \$142.6 million is provided for the expansion programmes. The TMP continuation projects including television colour transmission stations in Peninsula Malaysia and Sabah, BERNAMA headquarters and its states offices, Filem Negara's colour film laboratory and a number of broadcasting and transmission stations will be completed. New projects to be implemented under the FMP include the construction of eight radio and television studios in Johor Bahru, Kuching and Pulau Pinang, projects incorporating products units and purchase of 120 mobile information units, five outside broadcast vans, five electronic field production units and other equipment.

Social security. In addition to the existing schemes, new schemes covering sickness, maternity, old age and survivorship will be considered for implementation. The proposed schemes, together with the two existing schemes, are expected to cover 4.74 million workers throughout the country.

Services to kampung and New Villages. In addition to the allocation provided for Kampung and New Villages, to be undertaken by the various agencies, a sum of \$130 million is allocated for kampung rehabilitation and New Villages development programmes.

Zoo and wildlife protection. A sum of \$13 million is provided for wildlife management and conservation activities. Two new national parks the Endau-Rompin National Park and the Kuala Koh National Park will be developed. In addition, a sum of \$2 million is allocated to Zoo Negara for improving its facilities.

Local government .Local authorities will be provided with annual grants for maintenance purposes and for providing facilities such as roads drainage,water supply, electricity ,playgrounds, markets and stalls. A sum of \$199.8 million is allocated for the purpose.

### **III : ALLOCATION FOR CULTURE, COMMUNITY DEVELOPMENT, SECURITY AND GENERAL ADMINISTRATION**

The allocation and expenditure for culture, community development, security, and general administration during 1971-1980 and for the FMP period are shown in Table 24-1.