

## CHAPTER VIII

# Population, Employment and Manpower Development

### I. INTRODUCTION

413. The development of human resources in accordance with the objectives of the New Economic Policy (NEP) is accorded high priority in the Third Malaysia Plan (TMP). The creation of employment opportunities as well as the productive use of labour are important elements of the manpower development strategy. Job expansion at a rapid rate is necessary if significant progress is to be made in reducing unemployment, redressing poverty, raising rural incomes and promoting the rapid absorption of the Malays and other indigenous people into the modern sector.

414. A principal constraint in accelerating socio-economic development is the shortage of trained manpower at all levels in the science and technical fields. The Plan's objective is to expand the supply of trained manpower in these fields through appropriate education and training policies and programmes. The education and training of the Malays and other indigenous people in science, technical and management disciplines will continue to be stepped up in line with the long-term objective of increasing their effective participation at all occupational levels in the modern sectors of the economy.

415. Increased efforts will be made to co-ordinate education and training policies and programmes to minimize duplication of facilities and resources. The curriculum and content of training will be improved to meet employment needs. Measures will also be taken for greater participation by the private sector in the development of skills. Labour market policies and programmes will be reviewed and strengthened to ensure proper matching of the demand and supply of manpower.

### II. GROWTH IN POPULATION, LABOUR FORCE AND EMPLOYMENT, 1971-75

416. *Population* The population of Malaysia in 1975 is estimated at 12,249,000. About 85% or 10,385,000 live in Peninsular Malaysia, 751,000 in Sabah and 1,113,000 in Sarawak. Of the total population in Malaysia, 54.7% are Malays and other indigenous people, 34.2% Chinese, 9.0%

Indians and 2.1% Others. In Peninsular Malaysia, 53.1% are Malays, 35.5% Chinese, 10.6% Indians and 0.8% Others. In Sarawak, 63.4% are Malays and other indigenous people, 31.0% Chinese and 5.6% Others. In Sabah, 64.1% are *Bumiputra*, 21.5% Chinese and 14.4% Others.

417. As a result of past demographic trends, Malaysia has inherited a very young population. More than 42% of the population are in the age group 0-14 years, as compared to 54.4% in the working age years of 15-64. This indicates a high age-dependency ratio of about 84% and implies a substantial demand for the basic necessities of life, as well as services such as education, health and housing.

418. *Mortality* continued to decline in Peninsular Malaysia during 1971-75 but at a less rapid pace than in past decades as mortality rates were already low. Life expectancy at birth for males increased from 59.8 years in 1970 to 61.6 years in 1975 and for females from 63.2 years to 64.9 years. By race, life expectancy is estimated to have increased by 3.2% for Malays, 1.6% for Chinese and 2.0% for Indians. The increase in life expectancy was mainly due to the expansion and improvement of health services which contributed particularly to declines in mortality among expectant mothers and children in their early years of life.

419. *Fertility* too is estimated to have declined at an average annual rate of about 2% from 4.91 in 1970 to 4.47 in 1975. This has been the result of late marriages. In addition, the National Family Planning Programme, coupled with increasing educational opportunities and female participation in the labour force have also contributed significantly to declines in fertility.

420. In the case of Sabah and Sarawak, recent data on mortality and fertility are not available. On the basis of past trends, it is estimated that life expectancies improved more rapidly than in Peninsular Malaysia during 1971-75, largely as a result of declines in childhood mortality. However, unlike in Peninsular Malaysia, there is no clear evidence of a corresponding fertility decline.

421. *Labour force* The above-mentioned demographic factors have brought about a gradual shift in the share of population in the age group 15-64. The share of those in the 15-64 age group in the total population increased from 52.3% in 1970 to 54.4% in 1975. The effect of this shift on labour force growth was particularly noticeable for the age group 15-29. During 1971-75, the labour force in this age group registered a faster rate of growth of 4.8% as compared to the overall labour force growth of 3.2%.

422. In part, the rapid growth of labour force reflects the maturing of persons born in the fifties into their prime working ages. In the case of males, this has completely outweighed the tendency for participation rates to decline between the ages 15-19 and 55-64 due to prolonged schooling and earlier retirements, respectively. The increase in participation rates in the early working years of females further accelerated the pace of labour

force growth. All these factors taken together have made heavy demands upon the economy to create a sufficient number of productive job opportunities.

423. *Employment* During the period under review, as shown in Table 8-1, the economy achieved an employment growth rate of 3.3% per annum resulting in a net increase of 588,000 new jobs, as compared to 618,200 new entrants to the labour force. Although the rate of job creation had the positive effect of reducing the unemployment rate of 7.4% in 1970 to 7.0% in 1975, the total unemployed in 1975 increased by about 30,000 as compared to 1970.

TABLE 8-1

MALAYSIA: ESTIMATED EMPLOYMENT GROWTH, 1970-75

|   | 1970                             |                             | 1975                             |                             | Increase<br>1971-75<br>(000) | Share<br>in job<br>creation<br>(%) | Average<br>annual<br>growth<br>rate (%)<br>1971-75 |
|---|----------------------------------|-----------------------------|----------------------------------|-----------------------------|------------------------------|------------------------------------|--|
|   | Estimated<br>employment<br>(000) | Share<br>of<br>total<br>(%) | Estimated<br>employment<br>(000) | Share<br>of<br>total<br>(%) |                              |                                    |  |
| Agriculture, forestry and fishing ..                            | 1,786.8                          | 53.5                        | 1,936.8                          | 49.3                        | 150.0                        | 25.5                               | 1.6  |
| Mining and quarrying .. ..                                      | 87.3                             | 2.6                         | 86.6                             | 2.2                         | - 0.7                        | - 0.1                              | - 0.2  |
| Manufacturing .. .. .   | 289.9                            | 8.7                         | 398.2                            | 10.1                        | 108.3                        | 18.4                               | 6.6  |
| Construction .. .. .  | 90.6                             | 2.7                         | 113.2                            | 2.9                         | 22.6                         | 3.9                                | 4.6  |
| Utilities .. .. .   | 18.6                             | 0.6                         | 23.9                             | 0.6                         | 5.3                          | 0.9                                | 5.1  |
| Transport, storage and communi-<br>cations .. .. .              | 133.4                            | 4.0                         | 179.4                            | 4.6                         | 46.0                         | 7.8                                | 6.1  |
| Wholesale and retail trade .. ..                                | 379.9                            | 11.4                        | 495.9                            | 12.6                        | 116.0                        | 19.7                               | 5.5  |
| Banking, insurance and real estate..                            | 26.8                             | 0.8                         | 32.7                             | 0.8                         | 5.9                          | 1.0                                | 4.1  |
| Public administration, education,<br>health and defence .. .. . | 403.9                            | 12.0                        | 508.8                            | 13.0                        | 104.9                        | 17.8                               | 4.7  |
| Other services .. .. .  | 122.3                            | 3.7                         | 152.3                            | 3.9                         | 30.0                         | 5.1                                | 4.5  |
| TOTAL ..  | 3,339.5                          | 100.0                       | 3,927.8                          | 100.0                       | 588.3                        | 100.0                              | 3.3  |
| POPULATION .. .. .  | 10,777.0                         |                             | 12,249.0                         |                             |                              |                                    |  |
| LABOUR FORCE .. .. .  | 3,606.8                          |                             | 4,225.0                          |                             |                              |                                    |  |
| UNEMPLOYMENT .. .. .  | 267.3                            |                             | 297.2                            |                             |                              |                                    |  |
| UNEMPLOYMENT (%) .. .. .  | 7.4                              |                             | 7.0                              |                             |                              |                                    |  |

424. The manufacturing sector set the pace for employment creation with a rate of 6.6% per annum. Pioneer industries alone generated on the average over 14,700 new jobs annually during the 1971-74 period. The construction, commercial and services sectors comprising wholesale and retail trade, banking and finance, public administration and defence, education and health and other services also showed rapid growth in employment of 4.6% and 5.0% respectively. The commercial and services sectors contributed 43.6% of total new employment, while the agriculture and the manufacturing sectors accounted for 25.5% and 18.4% respectively.

425. The course of job creation reflected cyclical trends in the world economy during the period under review. The largest improvements to the unemployment situation occurred from late 1972 to the first quarter of 1974. In the latter part of 1974 and almost all of 1975, employment growth was not particularly buoyant. Only deliberate policy intervention by the Government prevented massive retrenchment which could have more than offset previous improvements to the unemployment situation.

426. *Unemployment and underemployment* It is encouraging to note that increasing employment has not been off-set by increasing underemployment. Successive rounds of the Labour Force Surveys showed considerable improvement in labour utilization measured in terms of the number of hours worked. Between October 1971 and October 1974, for example, the proportion of the labour force working less than 25 hours a week declined from 14.1% to 9.6%. Whilst the pattern of labour utilization remained fairly steady in urban areas, there were significant reductions in underemployment in rural areas. Underemployment in rural areas declined from 17.7% in October 1971 to 11.6% in October 1974. The largest decline was in the agricultural sector where the proportion of the labour force working less than 25 hours a week declined from about 20% to 15%.

427. Unemployment among youth between the ages 15-19 declined but still remains high. During October 1971 and October 1974, the unemployment rate for youth in the age group 15-19 declined from 22.8% to 16.6%. In terms of strata, the unemployment rate for youth in the age group 15-19 declined from 28.3% to 18.8% in urban areas, while in the rural areas the unemployment rate declined from 19.9% to 15.6%. There was also some improvement in the hard-core unemployment situation. The proportion unemployed for a duration of one to three years fell from 29.2% to 24.0%. The improvement in the labour market situation benefitted most job-seekers the majority of whom had lower secondary and middle secondary education, who together constituted over 55% of the total unemployed. The proportions of these two groups fell from 33.1% to 24.8% and 23.4% to 16.5% respectively.

428. Between 1970 and 1975, average real productivity is estimated to have increased by 3.8% for Peninsular Malaysia and 3.4% in Sabah and Sarawak. Agriculture, manufacturing, utilities, transport and communications showed higher than average rates of growth in real productivity.

429. Estimates of the racial composition of sectoral employment in Peninsular Malaysia for 1970 and 1975 are shown in Table 8-2. During 1971-75, all races experienced absolute increases in employment. Employment among Malays and other indigenous people grew by 4.0% per annum from 1.4 million in 1970 to 1.7 million in 1975. Employment among the Chinese grew by 3.1% per annum from 1.0 million in 1970 to 1.2 million in 1975 and among the Indians by 2.8% per annum from 297,600 in 1970 to 341,700 in 1975. The unemployment rate among the Malays declined from 8.1% in 1970 to 6.9% in 1975 but in absolute terms the number

TABLE 8-2

## PENINSULAR MALAYSIA: EMPLOYMENT BY RACE AND SECTOR, 1970 AND 1975

|   | Malay<br>(000) | Percentage<br>of sector<br>total | Chinese<br>(000) | Percentage<br>of sector<br>total | Indian<br>(000) | Percentage<br>of sector<br>total | Others<br>(000) | Percentage<br>of sector<br>total | Total<br>(000) | Percentage<br>of total<br>employment |
|---|----------------|----------------------------------|------------------|----------------------------------|-----------------|----------------------------------|-----------------|----------------------------------|----------------|--------------------------------------|
| 1970  |                |                                  |                  |                                  |                 |                                  |                 |                                  |                |                                      |
| Agriculture, forestry and fishing ..          | 951.1          | 67.6                             | 300.9            | 21.4                             | 142.0           | 10.1                             | 12.0            | 0.9                              | 1,406.0        | 50.3                                 |
| Mining and quarrying ..                       | 21.1           | 24.8                             | 56.3             | 66.0                             | 7.2             | 8.4                              | 0.7             | 0.8                              | 85.3           | 3.0                                  |
| Manufacturing ..                              | 76.3           | 28.9                             | 172.6            | 65.4                             | 14.0            | 5.3                              | 1.0             | 0.4                              | 263.9          | 9.4                                  |
| Construction ..                               | 16.8           | 21.6                             | 55.9             | 72.0                             | 4.7             | 6.1                              | 0.2             | 0.3                              | 77.6           | 2.8                                  |
| Utilities ..                                  | 8.0            | 48.2                             | 3.0              | 18.1                             | 5.4             | 32.5                             | 0.2             | 1.2                              | 16.6           | 0.6                                  |
| Transport, storage and communi-<br>cations .. | 50.9           | 42.6                             | 47.3             | 39.6                             | 20.4            | 17.1                             | 0.8             | 0.7                              | 119.4          | 4.3                                  |
| Commerce ..                                   | 82.5           | 23.5                             | 229.1            | 65.3                             | 37.5            | 10.7                             | 1.8             | 0.5                              | 350.9          | 12.6                                 |
| Services ..                                   | 229.9          | 48.5                             | 169.2            | 35.7                             | 66.4            | 14.0                             | 8.5             | 1.8                              | 474.0          | 17.0                                 |
| TOTAL ..                                      | 1,436.6        | 51.4                             | 1,034.3          | 37.0                             | 297.6           | 10.7                             | 25.2            | 0.9                              | 2,793.7        | 100.0                                |
| 1975  |                |                                  |                  |                                  |                 |                                  |                 |                                  |                |                                      |
| POPULATION ..                                 | 4,822.0        |                                  | 3,274.0          | 35.8                             | 978.0           | 10.7                             | 73.0            | 0.8                              | 9,147.0        | 100.0                                |
| LABOUR FORCE ..                               | 1,563.0        | 51.5                             | 1,111.6          | 36.6                             | 334.4           | 11.1                             | 26.0            | 0.8                              | 3,035.0        | 100.0                                |
| UNEMPLOYMENT ..                               | 126.4          |                                  | 77.3             |                                  | 36.8            |                                  | 0.8             |                                  | 241.3          |                                      |
| UNEMPLOYMENT (%)..                            | 8.1            |                                  | 7.0              |                                  | 11.0            |                                  | 3.1             |                                  | 8.0            |                                      |
| 1975  |                |                                  |                  |                                  |                 |                                  |                 |                                  |                |                                      |
| Agriculture, forestry and fishing ..          | 1,032.6        | 67.3                             | 317.6            | 20.7                             | 170.3           | 11.1                             | 13.8            | 0.9                              | 1,534.3        | 46.2                                 |
| Mining and quarrying ..                       | 27.7           | 33.1                             | 47.6             | 56.9                             | 8.0             | 9.5                              | 0.4             | 0.5                              | 83.7           | 2.5                                  |
| Manufacturing ..                              | 120.1          | 33.1                             | 217.3            | 59.9                             | 24.3            | 6.7                              | 1.1             | 0.3                              | 362.8          | 10.9                                 |
| Construction ..                               | 28.1           | 28.8                             | 58.6             | 60.2                             | 10.2            | 10.5                             | 0.5             | 0.5                              | 97.4           | 2.9                                  |
| Utilities ..                                  | 13.1           | 61.2                             | 3.0              | 14.0                             | 5.1             | 23.8                             | 0.2             | 1.0                              | 21.4           | 0.7                                  |
| Transport, storage and communi-<br>cations .. | 76.0           | 47.2                             | 60.4             | 37.5                             | 23.5            | 14.6                             | 1.1             | 0.7                              | 161.0          | 4.9                                  |
| Commerce ..                                   | 145.2          | 31.6                             | 281.8            | 61.3                             | 32.3            | 7.0                              | 0.5             | 0.1                              | 459.8          | 13.9                                 |
| Services ..                                   | 302.0          | 50.6                             | 217.8            | 36.5                             | 68.0            | 11.4                             | 9.0             | 1.5                              | 596.8          | 18.0                                 |
| TOTAL ..                                      | 1,744.8        | 52.6                             | 1,204.1          | 36.3                             | 341.7           | 10.3                             | 26.6            | 0.8                              | 3,317.2        | 100.0                                |
| 1975  |                |                                  |                  |                                  |                 |                                  |                 |                                  |                |                                      |
| POPULATION ..                                 | 5,510.0        | 53.1                             | 3,687.0          | 35.5                             | 1,105.0         | 10.6                             | 83.0            | 0.8                              | 10,385.0       | 100.0                                |
| LABOUR FORCE ..                               | 1,873.1        | 52.2                             | 1,297.9          | 36.2                             | 389.0           | 10.8                             | 30.0            | 0.8                              | 3,590.0        | 100.0                                |
| UNEMPLOYMENT ..                               | 122.3          |                                  | 93.8             |                                  | 47.3            |                                  | 3.4             |                                  | 272.8          |                                      |
| UNEMPLOYMENT (%)..                            | 6.9            |                                  | 7.2              |                                  | 12.2            |                                  | 11.3            |                                  | 7.6            |                                      |

unemployed increased marginally from 126,400 to 128,300. The unemployment rate among the Chinese increased from 7.0% in 1970 to 7.2% in 1975 or in absolute terms from 77,300 to 93,800 and among the Indians from 11.0% to 12.2% or in absolute terms from 36,800 to 47,300.

430. There has been steady progress in restructuring the racial composition of employment. The share of Malay employment increased from 28.9% to 33.1% in manufacturing and 23.5% to 31.6% in commerce. Substantial increases in the share of Malay employment were also recorded in mining, construction, utilities and transport. However, the Malay share in agriculture declined slightly.

431. As regards employment of other Malaysians, the Chinese share of employment in agriculture and utilities has not grown in line with the long-term target of increasing their share in these sectors. The share of Indian employment in the commercial and services sectors has tended to fall more rapidly than envisaged resulting in increased unemployment among Indians.

432. *Data on pioneer industries*, which represent the more recent industries in the manufacturing sector, show that overall, Malays account for 50.6%, Chinese 37.0% and Indians 11.8% of the total employment of 93,668 in pioneer industries in 1974. During the 1971-74 period for which data are currently available, Malay employment grew by 33.1% per annum from 14,965 to 46,960, Chinese at 20.3% per annum from 16,400 to 34,350 and Indians at 46.1% per annum from 2,416 to 11,014.

433. The successive rounds of the Labour Force Surveys conducted during 1971-75 in Peninsular Malaysia indicate that the improvements achieved in the racial composition of employment were accompanied by increasing Malay representation in the professional, technical, administrative, managerial, clerical and sales occupations. This is also borne out by data on pioneer industries where the share of the Malays in the professional, technical, administrative and managerial occupations during 1971-74 increased from 17.0% to 22.0%, the Indians from 5.6% to 7.6% while the share of the Chinese declined from 75.6% to 69.2% although in absolute terms, Chinese employment in these occupations more than tripled during the period.

434. However, the Malays and Indians still predominate in agricultural and service occupations while the Malays are seriously under-represented in key scientific, technical and managerial occupations and are mainly found in the lower rungs of the occupational hierarchy. With the increased emphasis given to expanding Malay enrolment in science and technical education at all levels during the period under review, the occupational structure for Malays is expected to improve during 1976-80.

### III. POPULATION, LABOUR FORCE AND EMPLOYMENT FRAMEWORK, 1975-80

435. *Population* The future structure of the population depends upon the interaction of three demographic factors, namely mortality, fertility and migration. On the basis of past trends, Peninsular Malaysia is likely to experience a further decline in mortality, though of somewhat lesser magnitude in comparison to earlier years. Declines in mortality in Sarawak and Sabah are expected to be more substantial, in keeping with the accelerating pace of socio-economic development.

436. The pattern of fertility change is more difficult to predict. International experience indicates that once fertility begins to decline, the momentum of change is likely to be kept up, if not accelerated. In the case of Malaysia, postponement of marriages to later years will not have a significant effect as the average age of marriage is already relatively high at 23 years. Future declines of fertility will depend to a major extent upon changes in norms regarding desired family size.

TABLE 8-3

#### MALAYSIA: POPULATION SIZE AND AGE STRUCTURE, 1975-80

| Age-group                  | 1975   |       | 1980   |       | Average annual growth rate (%) 1976-80 |
|----------------------------|--------|-------|--------|-------|--|
|                            | (000)  | (%)   | (000)  | (%)   |  |
| <b>PENINSULAR MALAYSIA</b> |        |       |        |       |  |
| 0-14 .. .. .               | 4,297  | 41.4  | 4,635  | 39.2  | 1.5                                    |
| 15-64 .. .. .              | 5,707  | 54.9  | 6,747  | 57.1  | 3.4                                    |
| 65+ .. .. .                | 381    | 3.7   | 440    | 3.7   | 2.9                                    |
| Sub-total ..               | 10,385 | 100.0 | 11,822 | 100.0 | 2.6                                    |
| <b>SABAH</b>               |        |       |        |       |  |
| 0-14 .. .. .               | 348    | 46.3  | 390    | 44.5  | 2.3                                    |
| 15-64 .. .. .              | 388    | 51.7  | 466    | 53.2  | 3.7                                    |
| 65+ .. .. .                | 15     | 2.0   | 20     | 2.3   | 5.9                                    |
| Sub-total ..               | 751    | 100.0 | 876    | 100.0 | 3.1                                    |
| <b>SARAWAK</b>             |        |       |        |       |  |
| 0-14 .. .. .               | 510    | 45.8  | 559    | 43.7  | 1.9                                    |
| 15-64 .. .. .              | 570    | 51.2  | 682    | 53.4  | 3.7                                    |
| 65+ .. .. .                | 33     | 3.0   | 37     | 2.9   | 2.3                                    |
| Sub-total ..               | 1,113  | 100.0 | 1,278  | 100.0 | 2.8                                    |
| <b>MALAYSIA</b>            |        |       |        |       |  |
| 0-14 .. .. .               | 5,155  | 42.1  | 5,584  | 40.0  | 1.6                                    |
| 15-64 .. .. .              | 6,665  | 54.4  | 7,895  | 56.5  | 3.4                                    |
| 65+ .. .. .                | 429    | 3.5   | 497    | 3.5   | 3.0                                    |
| TOTAL .. .. .              | 12,249 | 100.0 | 13,976 | 100.0 | 2.7                                    |

437. The population of Malaysia, as shown in Table 8-3, is estimated to grow at 2.7% per annum during the Plan period from 12.25 million in 1975 to 13.98 million in 1980. The racial composition of the population in Peninsular Malaysia is expected to remain very much the same as in 1975. Malays will comprise 53.3% of the population, Chinese 35.3%, Indians 10.6% and Others 0.8%.

438. As a result of fertility declines, some shifts in the age composition of population are to be expected. In Peninsular Malaysia, the 0-14 age group, which accounted for 41.4% of total population in 1975, is expected to decline to 39.2% by 1980. On the other hand, the population in the age group 15-64 is expected to increase from 54.9% to 57.1%.

439. In the case of Sabah and Sarawak, the proportion of youth in the 0-14 age group will decline while the proportion in the 15-64 age group is expected to increase from 51.7% to 53.2% in Sabah and from 51.2% to 53.4% in Sarawak. The population of Sabah is estimated to grow by 3.1% per annum to reach 876,000 in 1980 while that of Sarawak is estimated to grow by 2.8% per annum to reach 1.28 million.

440. These estimated increases in population pose a number of socio-economic problems. They imply the need for expansion of public expenditure on social services which could otherwise be diverted to expanding the productive capacity of the economy.

441. *Education* The quantitative implications of the population increase on the size of the school-going population and expected enrolments are shown in Table 8-4 below. Primary school enrolment will increase by 1.2% per annum over the five-year period. Lower secondary enrolment will also grow despite a decrease in school-going population because of increases in survival rates from primary to lower secondary education. Upper and post secondary enrolment is expected to grow at 3.4% per annum with the most dramatic increase occurring at Form VI.

TABLE 8-4  
PENINSULAR MALAYSIA: SCHOOL-GOING POPULATION  
AND ENROLMENT, 1975-80  
(000)

|                         |     |     |     | <i>Primary</i><br>(Age-group<br>6+ to 11+) | <i>Lower<br/>secondary</i><br>(Age-group<br>12+ to 14+) | <i>Upper<br/>secondary</i><br>(Age-group<br>15+ to 16+) | <i>Post<br/>secondary</i><br>(Age-group<br>17+ to 18+) |
|-------------------------|-----|-----|-----|--|---|---|--|
| School-going population |     |     |     |  |   |   |  |
| 1975                    | ... | ... | ... | 1,645.2                                    | 910.0   | 512.2   | 411.4  |
| 1980                    | ... | ... | ... | 1,747.7                                    | 888.3   | 557.6   | 474.1  |
| Enrolment               |     |     |     |  |   |   |  |
| 1975                    | ... | ... | ... | 1,586.9                                    | 561.5   | 164.7   | 16.2   |
| 1980 <sup>1</sup>       | ... | ... | ... | 1,682.9                                    | 603.5   | 181.3   | 32.9   |

<sup>1</sup> Based on projected trends in survival rates.



442. *Household formation* The shift in the age structure of the population will accelerate the rate of household formation during the Plan period and thus increase the potential demand for housing and other consumer durables associated with household formation. The number of households is projected to expand by 3.2% per annum along with increases in the average age of heads of households. Thus, between 1975 and 1980, the gross number of new households will increase annually from 70,500 in 1975 to 90,400 in 1980, a gross accession rate of 5.1% per annum. Net of deaths and dissolutions, the number of new households will increase annually from 30,300 in 1975 to 46,000 in 1980.

443. On top of the backlog of existing demand and the need to improve the stock of existing dwellings, increases in household formation as shown in Table 8-5 will lead to sizeable growth in the demand for housing and other household services. The emergence of the nuclear family system in place of the extended family will further increase pressures on the projected supply of housing during the Plan period.

TABLE 8-5

PENINSULAR MALAYSIA: HOUSEHOLD FORMATION, 1975-80  
(000)

|                   | 1975    | 1980    |
|-------------------|---------|---------|
| Household         | 1,937.9 | 2,268.9 |
| Accession         | 70.5    | 90.4    |
| Death             | 23.4    | 25.5    |
| Dissolution       | 16.8    | 18.9    |
| Turnover rate (%) | 1.75    | 2.04    |

444. *Family planning* As more young women enter their child-bearing years and as the propensity for smaller families increases, the demand for family planning services is expected to expand. To achieve its target of 2% rate of population growth by 1985, the National Family Planning Board will have to cater for some 569,000 acceptors by 1980, as compared to 360,000 in 1975.

445. *Labour force* The increase in labour force, as shown in Table 8-6, is estimated to average 3.3% per annum, thus adding some 748,000 new entrants to the labour force during the Plan period. The rate of growth of the male labour force is estimated at 3.5% as against 3.1% for females.

446. The overall participation rate for both males and females is projected to increase as a result of changes in the age structure of the working population. By 1980, some 38.0% of the labour force in Peninsular Malaysia will comprise workers in the 25-39 age group, as compared to 36.5% in 1975. The need, therefore, to step up significantly the promotion of new job opportunities is evident.

TABLE 8-6

## MALAYSIA: LABOUR FORCE GROWTH, 1975-80

| Age-group                  | 1975  |       | 1980  |       | Average annual growth rate (%) 1976-80 |
|----------------------------|-------|-------|-------|-------|--|
|                            | (000) | (%)   | (000) | (%)   |  |
| <b>PENINSULAR MALAYSIA</b> |       |       |       |       |  |
| 15-24 .. .. .              | 1,245 | 34.7  | 1,483 | 34.9  | 3.6                                    |
| 25-39 .. .. .              | 1,310 | 36.5  | 1,613 | 38.0  | 4.2                                    |
| 40-59 .. .. .              | 930   | 25.9  | 1,040 | 24.5  | 2.3                                    |
| 60-64 .. .. .              | 105   | 2.9   | 111   | 2.6   | 1.1                                    |
| Sub-total ..               | 3,590 | 100.0 | 4,247 | 100.0 | 3.4                                    |
| <b>SABAH</b>               |       |       |       |       |  |
| 15-24 .. .. .              | 76    | 30.2  | 95    | 33.1  | 4.6                                    |
| 25-29 .. .. .              | 94    | 37.5  | 100   | 34.8  | 1.2                                    |
| 40-59 .. .. .              | 74    | 29.5  | 84    | 29.3  | 2.6                                    |
| 60-64 .. .. .              | 7     | 2.8   | 8     | 2.8   | 2.7                                    |
| Sub-total ..               | 251   | 100.0 | 287   | 100.0 | 2.7                                    |
| <b>SARAWAK</b>             |       |       |       |       |  |
| 15-24 .. .. .              | 130   | 33.8  | 158   | 36.0  | 4.0                                    |
| 25-39 .. .. .              | 137   | 35.7  | 157   | 35.8  | 2.8                                    |
| 40-59 .. .. .              | 106   | 27.6  | 110   | 25.0  | 0.7                                    |
| 60-64 .. .. .              | 11    | 2.9   | 14    | 3.2   | 4.9                                    |
| Sub-total ..               | 384   | 100.0 | 439   | 100.0 | 2.7                                    |
| <b>MALAYSIA</b>            |       |       |       |       |  |
| 15-24 .. .. .              | 1,451 | 34.3  | 1,736 | 34.9  | 3.7                                    |
| 25-39 .. .. .              | 1,541 | 36.5  | 1,870 | 37.6  | 3.9                                    |
| 40-59 .. .. .              | 1,110 | 26.3  | 1,234 | 24.8  | 2.1                                    |
| 60-64 .. .. .              | 123   | 2.9   | 133   | 2.7   | 1.6                                    |
| TOTAL ..                   | 4,225 | 100.0 | 4,973 | 100.0 | 3.3                                    |

447. Working-life expectancy will also increase over the Plan period by some 0.4 years despite the projected decline in participation rates among the older age groups. This increase in working life implies a larger labour force in terms of man-years. Job creation policies will therefore have to be oriented towards generating productive life-time rather than short-term job opportunities through make-work projects which are only a temporary palliative.

448. Annual turnover in the labour market for males is shown in Table 8-7 which also provides estimates of accessions to the labour force, deaths and retirements.

TABLE 8-7

PENINSULAR MALAYSIA: MALE LABOUR FORCE TURNOVER,  
1975-80  
(000)

|      |     |     | <i>Labour<br/>force</i> | <i>Accession</i> | <i>Death</i> | <i>Retirement</i> | <i>Turnover<br/>rate (%)</i> |
|------|-----|-----|-------------------------|------------------|--------------|-------------------|------------------------------|
| 1975 | ... | ... | 2,422                   | 52.5             | 14.4         | 12.4              | 1.96                         |
| 1980 | ... | ... | 2,877                   | 62.9             | 15.4         | 14.2              | 2.13                         |

The number of annual accessions to the labour market increases from 52,500 annually in 1975 to 62,900 in 1980 or by some 19.8%. The turnover rate defined as the number of accessions to separations (due to death and retirement), also increases over the period, largely owing to increasingly earlier retirements.

449. Supply pressures on the labour market will be sustained during the Plan period pointing to the need for accelerated creation of job opportunities. On the other hand, the increase in the turnover of the labour force ensures an ever increasing supply of younger people into the labour force, who are increasingly better qualified thereby progressively improving the supply of skills in the economy.

450. Projections of educational output as shown in Table 8-8 provide some indication of the changing composition of new entrants into the labour force.

TABLE 8-8

PENINSULAR MALAYSIA: EDUCATIONAL OUTPUT<sup>2</sup> BY  
HIGHEST LEVEL OF EDUCATIONAL ATTAINMENT, 1975-80  
(000)

|      |     |     | <i>Primary</i> | <i>Some<br/>secondary</i> | <i>SRP/LCE</i> | <i>SPM/MCE</i> | <i>STP/HSC</i> | <i>Diploma/<br/>Degree</i> |
|------|-----|-----|----------------|---------------------------|----------------|----------------|----------------|----------------------------|
| 1975 | ... | ... | 52.9           | 80.3                      | 76.9           | 41.6           | 6.5            | 5.9                        |
| 1980 | ... | ... | 52.8           | 74.3                      | 80.4           | 49.9           | 5.9            | 10.7                       |

<sup>2</sup> Based on projected trends in pass rates.

The output of primary school leavers and non-certificate holders of secondary schools will decline. On the other hand, the output of youth with SRP/LCE and SPM/MCE qualifications will expand significantly. The decline in STP/HSC leavers merely indicates expanded entries into college and university levels of education.

#### **IV. POPULATION DISTRIBUTION AND URBANIZATION**

451. Malaysia on the whole is characterized by a highly uneven pattern of population distribution. This is observed between Peninsular Malaysia on the one hand and Sabah and Sarawak on the other and between the East and West Coasts of Peninsular Malaysia. The uneven pattern of population distribution reflects geographical, historical and economic factors that have accounted for more rapid rates of economic development in areas of higher population concentration.

452. Taking urban centres as gazetted areas of population of 10,000 and above, the percentage of urban population in Peninsular Malaysia in 1970 was only 28.7%, representing an increase of 2.1% over 1957. With the exception of the Klang Valley, and to a lesser extent, Kuantan, natural increase rather than rural-urban migration was the main source of urban growth.

453. The slow rate of rural-urban movement may be explained by two factors. The Government's efforts at rural development by improving living conditions have lessened relatively the attractions of rural-urban migration. Second, the bulk of modern-sector development has been located in the metropolitan areas of the Klang Valley. The high level of skills required for employment have made it difficult for migrants from rural areas to find suitable occupations.

454. A more rapid rate of urbanization is expected during the Plan period. The growth of the manufacturing and services sectors will offer an increasing number of new job opportunities. Furthermore, through regional development and the establishment of new growth centres, smaller towns of the 10,000 to 75,000 size class are expected to grow more rapidly. The hierarchy of skills demanded in these areas will be considerably less complex thus encouraging greater migration from rural areas. The higher rates of average real productivity growth which will be effected in agriculture will permit such occupational mobility out of traditional agriculture without losses in real output having to be sustained.

455. As shown in Table 8-9, urban population as a percentage of total population in Peninsular Malaysia is estimated to increase from 32.0% in 1975 to 35.1% in 1980, an annual growth rate of 4.6%, of which one-half is likely to be the result of rural-urban migration.

456. The racial composition of the urban population will also change, given the increased involvement of Malays in the manufacturing and commercial sectors of the economy. While in 1975, 18.0% of Malays are estimated to have lived in urban areas, by 1980, the percentage is estimated to increase to 21.3%. The rate of growth of the urban population among the Chinese and Indians is likely to be slower than that of the Malays.

TABLE 8-9

**PENINSULAR MALAYSIA: POPULATION COMPOSITION BY  
STRATUM AND RACE, 1975-80**  
(000)

|                     | 1975         |              |               | 1980         |              |               |
|---------------------|--------------|--------------|---------------|--------------|--------------|---------------|
|                     | Urban        | Rural        | Total         | Urban        | Rural        | Total         |
| Malay ... ..        | 994          | 4,516        | 5,510         | 1,342        | 4,963        | 6,305         |
| (%) ... ..          | 18.0         | 82.0         | 100.0         | 21.3         | 78.7         | 100.0         |
| Chinese ... ..      | 1,872        | 1,817        | 3,689         | 2,251        | 1,919        | 4,170         |
| (%) ... ..          | 50.7         | 49.3         | 100.0         | 54.0         | 46.0         | 100.0         |
| Indian ... ..       | 417          | 688          | 1,105         | 515          | 742          | 1,257         |
| (%) ... ..          | 37.7         | 62.3         | 100.0         | 41.0         | 59.0         | 100.0         |
| Others ... ..       | 38           | 43           | 81            | 47           | 43           | 90            |
| (%) ... ..          | 46.9         | 53.1         | 100.0         | 52.2         | 47.8         | 100.0         |
| <b>TOTAL ... ..</b> | <b>3,321</b> | <b>7,064</b> | <b>10,385</b> | <b>4,155</b> | <b>7,667</b> | <b>11,822</b> |
| <b>(%) ... ..</b>   | <b>32.0</b>  | <b>68.0</b>  | <b>100.0</b>  | <b>35.1</b>  | <b>64.9</b>  | <b>100.0</b>  |

#### V. MANPOWER OBJECTIVES, 1976-80

457. Full employment of the labour force by 1990 requires that the creation of job opportunities be stepped up considerably. With the existing backlog of 297,000 unemployed and the need to provide for 748,000 new entrants to the labour force, the task of employment creation during the Plan period will be considerable.

458. The manpower objectives of the Plan are not only to expand job opportunities but also to reduce under-utilization of labour, especially in the rural areas, through the provision of productive employment opportunities for those engaged in low income activities. As shown in Table 8-10, the target is to create 743,000 jobs during the Plan period. This will reduce the unemployment rate from 7.0% of the labour force in 1975 to 6.1% in 1980. The Plan's emphasis on programmes geared to poverty eradication and land development will have a substantial impact in reducing under-employment. In addition, the Plan aims at upgrading and increasing the supply of skilled manpower at all levels, improving the productivity of the work force and accelerating the pace of participation of the Malays and other indigenous people in the modern sectors of the economy and at the higher levels of the job hierarchy.

459. Four sectors are expected to account for about 82% of the increase in new job opportunities. Employment in the manufacturing sector is projected to grow at 7.4% per annum to account for nearly 23% of the total increase. Wholesale and retail trade and public administration including health, education and defence are estimated to generate some 312,000 jobs or 42.0% of all new employment opportunities. The agriculture sector is expected to contribute nearly 126,000 jobs or 17.0% of all new employment.

TABLE 8-10

## MALAYSIA: EMPLOYMENT GROWTH, 1975-80

|   | 1975                             |                          | 1980                             |                          | Increase<br>1976-80<br>(000) | Share<br>in job<br>creation<br>(%) | Average<br>annual<br>growth rate<br>of employment,<br>1976-80<br>(%) | Average<br>annual<br>growth rate<br>of real<br>productivity,<br>1976-80<br>(%) |
|---|----------------------------------|--------------------------|----------------------------------|--------------------------|------------------------------|------------------------------------|--|--|
|   | Estimated<br>employment<br>(000) | Share<br>of total<br>(%) | Estimated<br>employment<br>(000) | Share<br>of total<br>(%) |                              |                                    |  |  |
| Agriculture, forestry and fishing                       | 1,936.8                          | 49.3                     | 2,062.7                          | 44.2                     | 125.9                        | 17.0                               | 1.3  | 4.7  |
| Mining and quarrying                                    | 86.6                             | 2.2                      | 88.5                             | 1.9                      | 1.9                          | 0.3                                | 0.4  | 5.2  |
| Manufacturing   | 398.2                            | 10.1                     | 568.1                            | 12.2                     | 169.9                        | 22.9                               | 7.4  | 4.3  |
| Construction  | 113.2                            | 2.9                      | 144.3                            | 3.1                      | 31.1                         | 4.2                                | 5.0  | 3.7  |
| Utilities   | 23.9                             | 0.6                      | 29.8                             | 0.6                      | 5.9                          | 0.8                                | 4.5  | 4.5  |
| Transport, storage and commu-<br>nications              | 179.4                            | 4.6                      | 216.6                            | 4.6                      | 37.2                         | 5.0                                | 3.8  | 4.3  |
| Wholesale and retail trade                              | 495.9                            | 12.6                     | 648.6                            | 13.9                     | 152.7                        | 20.6                               | 5.5  | 2.7  |
| Banking, insurance and real estate                      | 32.7                             | 0.8                      | 42.8                             | 0.9                      | 10.1                         | 1.3                                | 5.5  | 2.7  |
| Public administration, education,<br>health and defence | 508.8                            | 13.0                     | 667.8                            | 14.3                     | 159.0                        | 21.4                               | 5.6  | 3.8  |
| Other services  | 152.3                            | 3.9                      | 201.3                            | 4.3                      | 49.0                         | 6.5                                | 5.7  | 3.6  |
| <b>TOTAL</b>  | <b>3,927.8</b>                   | <b>100.0</b>             | <b>4,670.5</b>                   | <b>100.0</b>             | <b>742.7</b>                 | <b>100.0</b>                       | <b>3.5</b>   | <b>4.8</b>   |
| POPULATION  | 12,249.0                         |                          | 13,976.0                         |                          |                              |                                    |  |  |
| LABOUR FORCE  | 4,225.0                          |                          | 4,972.8                          |                          |                              |                                    |  |  |
| UNEMPLOYMENT  | 297.2                            |                          | 302.3                            |                          |                              |                                    |  |  |
| UNEMPLOYMENT (%)  | 7.0                              |                          | 6.1                              |                          |                              |                                    |  |  |

460. Within the manufacturing sector in Peninsular Malaysia, the electrical machinery, textiles and clothing, oils and fats and chemical product industries are expected to achieve rates of employment creation above the average for the sector as a whole, reflecting the high rates of growth of value added and their relatively higher labour absorptive capacity. Employment in the mining and the construction sectors is estimated to account for 4.5% of all new jobs. Employment growth in public services will reflect the continuing commitment of the Government to improve the quality and scope of services to the public.

461. Employment in wholesale and retail trade will be largely the result of the effects of growth in other sectors of the economy. Given the high labour absorptive capacity of the sector, the growth of employment will be rapid although it will continue to contain a substantial degree of under-employment.

462. Employment growth in the agricultural sector is estimated to be 1.3% per annum. New land development will account for the major part of job creation in this sector. By crops, the fastest rate of employment growth will continue to be provided by oil palm cultivation. In Peninsular Malaysia, it is expected that employment in oil palm will grow by 5.9% per annum over the Plan period. The rubber growing industry is expected to show a rate of employment increase of 1.6% per annum. Investments in padi, coconut and fishing are mainly geared to increasing income levels of the presently employed. Therefore these sub-sectors are not expected to show significant increases in employment.

463. Overall output growth in the economy is expected to average 8.5% per annum, with some 41.2% of this growth arising from new employment and 56.5% reflecting increases in labour productivity. The primary producing sector, agriculture, and mining are likely to experience very high rates of growth of real productivity. Agricultural productivity is estimated to increase at 4.9% per annum in Peninsular Malaysia and 3.4% per annum in Sabah and Sarawak. This implies increasing outflows of labour from traditional low productivity activities as well as the more intensive use of complementary inputs in existing agriculture. Productivity in the mining sector is estimated to grow at 7.2% per annum in Sabah and Sarawak, as compared to 3.8% per annum in Peninsular Malaysia. The manufacturing sector is expected to show a relatively high rate of productivity growth of 4.3% per annum, while the wholesale and retail trade and the public services sectors are calculated to show productivity growth of 2.7% and 3.8% per annum respectively.

TABLE 8-11

MALAYSIA: MANPOWER SURVEY RESULTS, 1973 AND ESTIMATED<sup>3</sup> REQUIREMENTS, 1976-80

|  | MANPOWER SURVEY, 1973   |                                   |         |        |        |       |               |  |
|--|-------------------------|-----------------------------------|---------|--------|--------|-------|---------------|--|
|  | Racial distribution (%) |                                   |         |        |        | Total | Vacancies (%) | Estimated <sup>4</sup> requirements, 1976-80 |
|  | Total Employed          | Malay and other indigenous people | Chinese | Indian | Others |       |               |  |
| (1)  | (2)                     | (3)                               | (4)     | (5)    | (6)    | (7)   | (8)           |  |
| PROFESSIONAL AND TECHNICAL...                  | 145,517                 | 48.9                              | 39.3    | 10.5   | 1.3    | 100.0 | 10.4          | 65,309                                       |
| Chemists and Physical Scientists .. .. .       | 354                     | 11.6                              | 76.8    | 11.3   | 0.3    | 100.0 | 20.6          | 327  |
| Laboratory and Science Technician .. .. .      | 3,824                   | 48.2                              | 37.3    | 13.9   | 0.6    | 100.0 | 27.8          | 2,137  |
| Architects and Town Planners                   | 353                     | 21.0                              | 71.4    | 2.5    | 5.1    | 100.0 | 22.4          | 180  |
| Engineers .. .. .                              | 2,244                   | 13.5                              | 69.9    | 12.8   | 3.8    | 100.0 | 22.4          | 2,764  |
| Engineering Assistants and Technicians .. .. . | 11,824                  | 46.1                              | 34.9    | 16.4   | 2.6    | 100.0 | 24.0          | 5,538  |
| Surveyors .. .. .                              | 168                     | 19.1                              | 58.0    | 13.7   | 9.2    | 100.0 | 19.6          | 346  |
| Draughtsmen .. .. .                            | 2,979                   | 39.0                              | 53.4    | 6.6    | 1.0    | 100.0 | 9.1           | 2,041  |
| Agronomists .. .. .                            | 652                     | 39.1                              | 49.7    | 8.7    | 2.5    | 100.0 | 38.0          | 540  |
| Life Science Technicians .. .. .               | 2,070                   | 76.9                              | 20.6    | 2.0    | 0.5    | 100.0 | 29.1          | 1,396  |
| Veterinarians .. .. .                          | 162                     | 30.8                              | 24.1    | 42.6   | 2.5    | 100.0 | 19.8          | 95   |
| Veterinary Assistants .. .. .                  | 352                     | 62.7                              | 27.6    | 8.8    | 0.9    | 100.0 | 15.6          | 127  |
| Medical Doctors .. .. .                        | 1,915                   | 7.6                               | 49.5    | 36.7   | 6.2    | 100.0 | 24.0          | 728  |
| Medical Assistants .. .. .                     | 2,323                   | 35.3                              | 34.6    | 28.1   | 2.0    | 100.0 | 16.4          | 2,414  |
| Professional Nurses .. .. .                    | 5,623                   | 33.7                              | 55.1    | 9.0    | 2.2    | 100.0 | 19.4          | 5,297  |
| Dentists .. .. .                               | 379                     | 8.4                               | 66.8    | 16.1   | 8.7    | 100.0 | 20.1          | 205  |
| Dental Assistants .. .. .                      | 1,030                   | 24.4                              | 72.1    | 3.0    | 0.5    | 100.0 | 10.1          | 578  |
| Accountants .. .. .                            | 1,774                   | 17.9                              | 70.3    | 11.0   | 0.8    | 100.0 | 19.1          | 1,971  |
| Lawyers .. .. .                                | 809                     | 20.3                              | 46.8    | 29.9   | 3.0    | 100.0 | 5.2           | 284  |
| Higher Education Teachers..                    | 1,844                   | 37.5                              | 34.8    | 16.2   | 11.5   | 100.0 | 50.9          | 286  |
| Primary and Secondary Teachers .. .. .         | 79,527                  | 49.5                              | 40.4    | 9.4    | 0.7    | 100.0 | 3.1           | 19,872                                       |
| Other Professional and Technical .. .. .       | 20,353                  | 68.0                              | 24.6    | 6.4    | 1.0    | 100.0 | 16.7          | 18,183                                       |
| ADMINISTRATIVE AND MANAGERIAL .. .. .          | 22,605                  | 35.4                              | 55.5    | 7.3    | 1.8    | 100.0 | 8.6           | 12,264                                       |
| Managers .. .. .                               | 12,535                  | 13.0                              | 81.5    | 3.7    | 1.8    | 100.0 | 3.3           | 10,472                                       |
| CLERICAL .. .. .                               | 129,374                 | 39.9                              | 48.6    | 10.4   | 1.1    | 100.0 | 7.1           | 58,755                                       |
| SALES .. .. .                                  | 54,041                  | 10.5                              | 82.9    | 5.9    | 0.7    | 100.0 | 1.7           | 31,776                                       |
| SERVICE .. .. .                                | 64,917                  | 70.4                              | 20.2    | 8.0    | 1.4    | 100.0 | 6.3           | 145,300                                      |
| AGRICULTURAL .. .. .                           | 105,742                 | 37.9                              | 18.0    | 43.5   | 0.6    | 100.0 | 3.1           | 142,309                                      |
| Farm Managers and Supervisors .. .. .          | 7,238                   | 30.4                              | 29.2    | 38.8   | 1.6    | 100.0 | 3.2           | 13,701                                       |
| PRODUCTION .. .. .                             | 210,331                 | 39.2                              | 47.7    | 12.4   | 0.7    | 100.0 | 4.4           | 190,123                                      |

<sup>3</sup> Data refer to Survey results and therefore are not adjusted for undercoverage and exclusions.

<sup>4</sup> Estimated from output and employment targets of the Plan and adjusted for undercoverage and exclusions.



## **VI. MANPOWER DEMAND AND SUPPLY, 1976-80**

464. The Government conducted a Manpower Survey in 1973 covering the private and public sectors of the economy to assess the extent of the shortages experienced and the requirements for skilled manpower in the country. Some of the results of the Survey together with estimated requirements of skilled manpower for the period 1976-80 are summarized in Table 8-11. Columns 1 to 7 in the Table are Survey results while column 8 shows the requirements estimated from the output and employment targets of the Plan.

465. While the overall vacancy rate was low, the Table shows that vacancies for specific occupations, especially at the professional and technical levels, are high. The vacancy rate in the public sector was higher than that in the private sector for high level manpower. It is also seen that the share of the Malays and other indigenous people in scientific, technical and managerial occupations though improving as compared to earlier years, is still low. Under-representation in occupations such as chemists and physical scientists, engineers, architects and town planners, doctors and dentists, managers, production supervisors, foremen and other skilled occupations at the production level call for enlarged participation on the part of the Malays and other indigenous people.

466. The Survey also showed considerable dispersion in educational attainments between most occupations. This in part reflects the existence of alternative paths to the development of skills including formal education, on-the-job training programmes, self-instruction, experience as well as upward mobility on the basis of demonstrated ability, all of which substitute in varying degrees for the job requirements of each occupational category. While the expansion of formal education and training opportunities during the Plan period will lead to further upgrading of new entrants in various occupations, the opportunities available for acquiring skills through informal means will continue to be an important factor in the labour market adjustment process. Thus in matching the demand for manpower, education and training programmes will have to provide expanding opportunities for on-the-job training in industry. This will also facilitate the more rapid absorption of the Malays and other indigenous people into skilled occupations and their upgrading to higher levels of the job hierarchy. Considerable scope exists in expanding the private sector's role in this regard. During the Plan period, as outlined in paragraphs 476 and 477 below, measures will be taken in consultation with industry to actively pursue this objective.

467. The growth of the economy during the Plan period will call for sizeable increases in the availability of qualified manpower. Projected estimates of demand indicate that Malaysia will require about 65,300 professional and technical workers, 12,300 administrative and managerial workers, 59,000 clerical workers, 32,000 sales workers and 190,000 production workers. The demand for specific skills in engineering, agricultural, health, education and business fields will be significant. Table 8-12 indicates the extent of the demand for diploma and degree graduates in major fields of education for the Plan period relative to expected supply.

TABLE 8-12

## MALAYSIA: DEMAND AND SUPPLY OF DIPLOMA AND DEGREE GRADUATES BY TYPE OF EDUCATION, 1976-80

| Course   | Demand, 1976-80 |        | Supply, 1976-80 <sup>5</sup> |        | Excess (+) or shortage (-) |            |
|--|-----------------|--------|------------------------------|--------|----------------------------|------------|
|  | Diploma         | Degree | Diploma                      | Degree | Diploma (%)                | Degree (%) |
| Arts and Humanities including Business .. .. . | 11,205          | 7,518  | 6,383                        | 10,575 | - 43                       | + 41       |
| Science .. .. .                                | 9,474           | 8,330  | 6,337                        | 7,565  | - 33                       | - 9        |
| Medicine and Dentistry .. ..                   | —               | 1,050  | —                            | 800    | —                          | - 24       |
| Agriculture and Related Sciences               | 3,200           | 1,150  | 2,421                        | 674    | - 24                       | - 41       |
| Other Sciences .. .. .                         | 6,274           | 6,130  | 3,916                        | 6,091  | - 38                       | - 1        |
| Technical .. .. .                              | 8,177           | 3,432  | 5,316                        | 1,793  | - 35                       | - 48       |
| Engineering .. .. .                            | 4,965           | 2,122  | 3,909                        | 1,296  | - 21                       | - 39       |
| Architecture and Town Planning..               | 635             | 250    | 881                          | 208    | + 39                       | - 17       |
| Surveying .. .. .                              | 252             | 150    | 233                          | 37     | - 8                        | - 75       |
| Other Technical .. .. .                        | 2,325           | 910    | 293                          | 252    | - 87                       | - 72       |
| TOTAL .. .. .                                  | 28,856          | 19,280 | 18,036                       | 19,933 | - 37                       | + 3        |

<sup>5</sup> From local colleges and universities only.

468. These projections of demand relative to supply indicate that:—

- (i) there will be a growing surplus of graduates in the non-technical disciplines with supply exceeding requirements by about 41%. This projected over-supply does not pertain to graduates in business administration given anticipated growth in economic activity. In fact, at the diploma level, a deficit of 43.0% reflects largely the shortfalls in the supply of business and accounting diplomates;
- (ii) significant shortages will continue to exist for scientific personnel at both the diploma and degree levels. The most acute shortages are expected to arise in the case of specialized personnel in agriculture and the physical sciences; and
- (iii) there will be critical shortages of technical personnel at the degree and diploma levels. Of most pressing concern will be shortages in the engineering fields.

469. In line with the above requirements, priority will be given to the expansion of opportunities for science, technical and vocational education and training. A reduced intake of students into the liberal Arts and Humanities courses at the universities appears necessary in view of the anticipated surplus of such graduates during the Plan period. Accordingly, the output of graduates of the Arts and Humanities disciplines will decline in proportion to the total from 54.5% in 1975 to 45.6% in 1980, while the share in science and technical courses will increase from 45.5% to 54.4%. Although the return of qualified Malaysians from abroad will help to bridge the gap between the demand for and supply of scientific and technical manpower, shortages in crucial skills will continue to exist in view of the time required for the production of these skills.

## **VII. EMPLOYMENT STRATEGY—POLICIES AND PROGRAMMES**

470. The provision of employment opportunities on the scale projected requires concerted efforts not only to increase the productive capacity of the economy but also to implement policies and programmes which facilitate employment creation. The major elements of the employment strategy of the Plan are outlined below.

### **Expansion of the economy**

471. Continuing emphasis will be placed on expanding the overall pace of economic activity to generate productive employment opportunities. The details with respect to the macro targets of the TMP are discussed in Chapter VI. In addition, efforts will be made to encourage the growth of industries that have high labour absorptive capacity. To this end, the provision of fiscal incentives to industry will be kept under review to ensure that they encourage greater labour utilization. The development of small-scale industries will also be promoted for the same reason.

### **Land development**

472. Within the agricultural sector, land development will be the major vehicle for the Plan's objective of eradicating poverty, increasing rural incomes and expanding job opportunities. The development of about one million acres of land is estimated to create about 105,000 jobs. Land development projects such as fringe alienation schemes and the rehabilitation and consolidation of uneconomic holdings will have direct and immediate impact in improving the utilization of farm labour. The size of land holdings provided in public land development schemes will be kept under review to ensure that it conduces towards an optimal rate of labour absorption which is at the same time consistent with the earning of reasonable incomes.

### **Expanding the supply of skills**

473. The education and training programmes outlined in Chapter XXII have been designed to enhance educational opportunities for the poor, increase the supply of trained manpower to meet the skill demands of the economy and accelerate the production of trained manpower among the Malays and other indigenous people to meet the employment targets for racial balance.

474. The scientific, technical and vocational content of education at the secondary level will be increased as teacher resources expand. Total enrolment in tertiary educational institutions in the country is expected to increase by 58% from 31,500 in 1975 to 49,800 in 1980. Significant efforts will be made to increase the output of engineering, medical and agricultural manpower at all levels. Existing programmes of the National Productivity Centre, *Majlis Amanah Rakyat* (MARA) and the National Institute of Public Administration as well as the tertiary institutions in management development and training will be considerably strengthened.

475. In addition to education and training programmes to meet the needs of the employment market, the training programmes of agencies such as that of the Public Works Department, the Ministry of Defence, the Police, the Telecommunications Department, the Public Services Department and others will continue to be important. They will directly contribute towards increasing the professional and managerial capability of staff in the public sector.

476. Skill formation requires close co-operation between the public and private sectors in the formulation and implementation of the required training programmes. A more active role by the private sector is necessary to ensure that training is directly related to the needs of employment. During the Plan period, industrial training as provided by the Government will undergo major changes. This is designed to improve the content and relevance of training as well as provide for the positive involvement of the private sector. In addition to the expansion of training programmes within the public sector, opportunities for on-the-job training in industry for youth will be considerably expanded in consultation with the private sector.

477. In order to effect closer co-ordination between the public and private sectors, a National Industrial Training Council, with representation from both sectors, will be established under the Ministry of Labour and Manpower. It will be the responsibility of the Council, among its other functions, to formulate recommendations for the financing of industrial training with a view to increasing private sector participation and involvement at all levels of the training process. The work of the National Industrial Training and Trade Certification Board in the establishment of trade standards and the formulation of national training syllabi for the various industrial trades will also be intensified. Specific studies on the employment experience of graduates from training institutions will be undertaken to improve the quality of training programmes.

478. Significant progress has been made in increasing the enrolment of the Malays and other indigenous people in tertiary education. Their share in tertiary education increased from 50% in 1970 to 65% in 1975. Continuing efforts will be made to further increase their supply in the scientific and technical fields at the tertiary level. To ensure a continuous supply of candidates, science facilities for rural students, most of whom are the Malays and other indigenous people, will be expanded. A further seven special science residential schools and two MARA Junior Science Colleges will be constructed during the Plan period.

#### **Labour market policies and programmes**

479. The effective matching of manpower demand and supply is essential for the fuller utilization of the country's human resources. The vast expansion in education and training programmes and the rapid changes taking place in the labour market as a result of the growth and modernization of the economy call for dynamic labour market policies and programmes

designed for optimum utilization of manpower resources. Market signals with respect to the demand for specific types of labour need to be closely monitored to minimize the malallocation of manpower resources. Information on shortages and surpluses of trained manpower, patterns and allocation of labour demand in relation to supply, changes in wages, recruitment policies and practices are essential elements in this regard.

480. Current approaches to the monitoring of labour market developments warrant improvement. During the Plan period, the Ministry of Labour and Manpower would intensify its efforts to develop such monitoring devices and programmes for influencing labour market developments in the desired direction.

481. In collaboration with other agencies, the Ministry of Labour and Manpower will review and evaluate all available labour market information to improve the coverage and relevance of the information assembled for planning. In addition to its traditional role of job registration and placement, the Employment Service of the Ministry will expand its activities in the fields of job analysis, job specification and aptitude testing to assist industries and training institutions in the recruitment and training of personnel. In the light of the recent expansion of university and tertiary education, and the increasing numbers of Malaysian students returning from overseas, the employment service will play an active role in matching high level manpower with employment opportunities in the context of the NEP. Efforts will also be made by the Ministry to channel the flow of labour to new areas of activity. The establishment of institutional machinery as well as the design of appropriate incentives to facilitate such mobility will be effected so that planned development at new growth centres is not impeded by lack of appropriate manpower.

#### **Labour laws and industrial relations**

482. Industrial harmony is basic to the maintenance of a favourable climate for accelerated socio-economic development. The labour laws of the country, although already comprehensive, will be kept under review so as to ensure that they facilitate employment promotion and provide the legal framework for productive industrial relations. Recognizing that the resolution of human problems in the context of an expanding industrialization programme calls for closer co-operation between employers, employees and the Government, a Code of Conduct for Industrial Harmony was signed in 1975. During the Plan period, the Ministry will be strengthened to ensure effective implementation of the provisions of the Code for the mutual benefit of employers and employees.