

Report on the Survey of  
Urbanization and Development  
in Asian Countries  
—— Malaysia ——

March 2002

Asian Population and Development Association



CAMBODIA

VIET-NAM

BRUNEI

**MALAYSIA**

KUALA LUMPUR

SINGAPORE

INDONESIA



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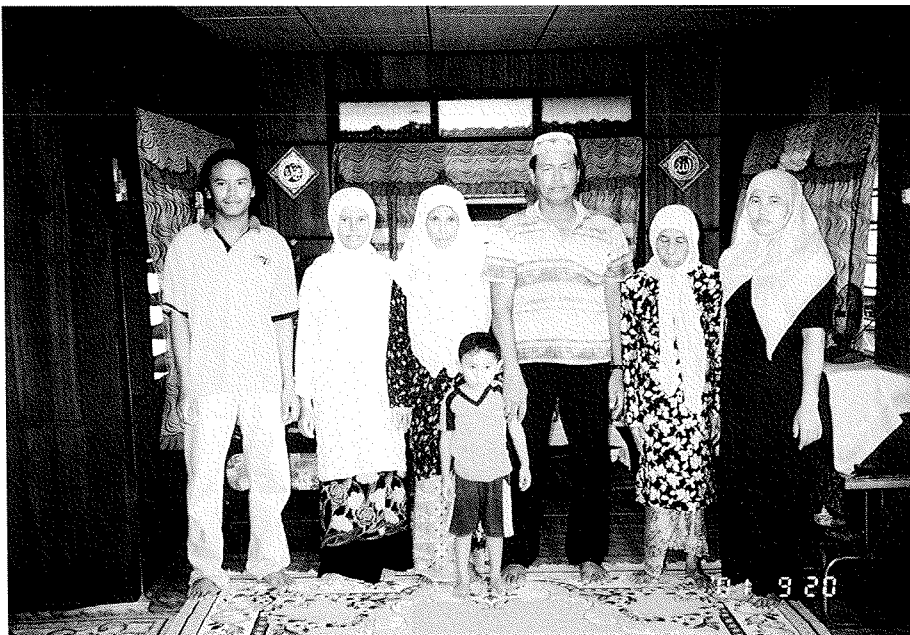


Old Person's Home,  
 Selangor State



Statistics Department,  
Malaysia

Leprosarium Hospital,  
Selangor state



Farmer's House with elder



## Foreword

This report comprises a compilation of results from a survey entitled "Survey of Urbanization and Development in Asian Countries" which was conducted in Malaysia in fiscal 2001 by the Asian Population and Development Association (APDA) under the entrusted by the Ministry of Health, Labour and Welfare and the Japan International Cooperation of Welfare Services (JICWELS). The survey and compilation were conducted by the survey committee (Chairperson: Dr. Toshio Kuroda, Professor Emeritus, Nihon University Population Research Institute) which was established in APDA.

Urbanization is progressing rapidly in Asian countries. Urbanization resulting from the sudden concentration of the population is causing a deterioration in health and medical services, family planning and maternal and child health services, and the living environment in cities. Because of this, there is a need to understand in detail the growth and distribution of the population, the health and medical situation, population estimates, the age composition, and the family planning and maternal and child health in these countries, and to study how these affect the population policies and development plans of the countries. The objective of this survey therefore was to research and analyze the population trends in Asian countries, and in particular the state of urbanization and health and medical services, so as to contribute to solving the problems of urbanization of the population and development of Asian countries.

In Malaysia, guidance and cooperation for the overall planning of this survey were offered by Datin Paduka Hj Rahmah Osman, Executive Director of AFPPD Malaysia, Mr. Yoshihiro Kakishita, First Secretary of Embassy of Japan in Malaysia.

In Japan, special guidance and assistance were offered by those concerned at the International Affairs Division of Minister's Secretariat and Office of Counsellor for Social Security Div. Director General for Policy Planning and Evaluation, Ministry of Health, Labour and Welfare and Second South-East Asia Division, Asia and Oceania Affairs Bureau, Ministry of Foreign Affairs. I would like to take this opportunity to express my sincere gratitude. I shall be happy if this report proves useful to the programs for coping with the Urbanization and Development Programs that will be worked out by the Asian countries, including Malaysia and contributes to effective international cooperation by the Japanese government.

In conclusion, I would like to add that this report has been prepared under the responsibility of APDA based on interviews with ministry officers, experts and private organization staffs, and that it does not reflect the views and policies of the Ministry of Health, Labour and Welfare nor the Japanese government in any way.

March 2002

Dr. Taro Nakayama  
Chairman  
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# Overview of Malaysia

## Introduction

Malaysia experienced negative economic growth owing to the financial crisis that started in Thailand in July 1997. Until that time, the Malaysian economy had been achieving high economic growth that exceeded 8% a year for the past decade. After the crisis, Prime Minister Mahathir rejected the introduction of IMF-led austerity measures for economic reconstruction and introduced the fixed exchange rate system in September 1998 in an effort to improve the fiscal and financial situation. The effect of this manifested in the second quarter of 1998 when GDP growth rate reached 4.1% and Malaysia was able to overcome the financial crisis through her own policy without replying on support from IMF.

To look at the ethnic composition of Malaysia, a treaty to divide the colony at the Strait of Malacca was signed between England and Netherlands in 1824. As a result, England acquired the ports for trade such as Penang, Singapore and Malacca. Migrants from India (Tamil), Arab, China, Sumatra and Java also arrived at these regions in addition to those from England. Division of labour emerged among ethnic groups as the Chinese worked as merchants and tax collectors, the Indians were engaged in construction of ports, railroads and roads, the Sumatrans and Javanese became farmers and fishermen. Among them, the Chinese tapped into tin mining which had been carried on by the Malays up to that time and took control of the tin mining industry by 1860.

## 1. Geography

Malaysia is comprised of the Peninsular Malaysia and the states Sabah and Sarawak on Borneo Island. Peninsular Malaysia is located between 6° 43' and 1° 16' north latitude and between 104° 17' and 119° 20' east longitude.



Malaysia has a total area of 330,434km<sup>2</sup>, which corresponds to about 87% of total area of Japan. Eighty percent of the land is covered with tropic virgin forest and marshland. Peninsular Malaysia borders Thailand to the north, Singapore to the south across the Johore Strait and Sumatra Island of Indonesia across the Strait of Malacca to the west. East Malaysia verges on Kalimantan of Indonesia to the south.

The name Kuala Lumpur is made up of “Kuala,” which signifies “a converging point of two rivers,” and “Lumpur,” which means “muddy.” The two rivers flowing through the city—Kelang River and Gombak River—are always muddy because of the tin extraction taking place upstream. In terms of vegetation, the eastern side of Peninsular Malaysia is a rice-producing area while the western side mainly produces rubber and oil palm.

## **2. Climate**

Peninsular Malaysia and East Malaysia are both located in low latitudes and therefore have maritime tropical rainforest climate characterised by high temperature, high humidity and high precipitation. Temperature fluctuates from the lowest of 24°C to the highest of 32°C throughout the year, and the range of daily fluctuations is greater than that of annual fluctuations. Peninsular Malaysia has a rainy season that lasts from October to February brought about by northeast monsoon. Annual precipitation ranges from 6,000mm in the wettest region to 1,600mm in the driest region. The period from June to September is a dry season originating from the southwest monsoon. Good weather continues particularly in the east coast region. Periods between the two monsoon seasons are characterised by breeze. In East Malaysia, Sabah has both the rainy season and dry season attributable to northeast and southwest monsoons. Meanwhile, Sarawak remains as a pluvial region throughout the year and has innumerable rivers.

## **3. Changes in Ethnic Composition**

A study of changes in ethnic composition in Malaysia reveals a decline in percentage of Chinese and Indian population and an increase in the percentage of Malay population and migrant workers between 1991 and 2000. Composition by ethnic group changed from Malays 57.8%, Chinese 27.1%, Indians 7.6%, others 3.2% and migrant workers 4.3% in 1991 to Malays 58.5%, Chinese 24%, Indians 6.9%, others 3% and migrant workers 7.5% in 2000.

## **4. Education System**

The modern schools were established in Malaysia during the British colonial period in the 19th Century. The system that existed prior to that was the religious education at Muslim mosques aimed at propagation of the Islamic religion.

The current education system consists of 6 years of primary school, secondary schools (which include 3 years of lower secondary school, 2 years of upper secondary school and 2 years of preliminary college course as well as professional schools) and higher education (colleges and graduate schools). In colleges, liberal arts departments, science departments and dental/medical department require 3 years, 4 years and 5-6 years, respectively, to graduate.

Signs of reconsidering the preferential treatment of Malays that had been implemented under the Bumiputeraism are starting to emerge. Prime Minister Mahathir has announced that the preferential allocation of entrance examination quota to the Malays would be replaced by selection based on grades. Until now, entrance quota for public universities in Malaysia gave preference to the Malay population by allotting 55% of the quota to Malays and 45% to non-Malays.

## **5. Politics**

Malaysia is a limited monarchy federal state comprised of 11 states in Peninsular Malaysia and 2 states Sabah and Sarawak on Borneo Island. Independence of Malaysia signified a difficult journey of departure from the British colonial rule. After being released from the Japanese occupation after the Second World War, Malaya was still under the reign of the British. On October 10, 1945, England reported the Malaya Federation Concept to the British parliament and the 9 sultans of Malaya also agreed to this concept. However, the concept was not realised owing to opposition from high-ranking officials who feared that the traditional political mechanism would be destroyed and that the Malay nation would vanish once the balance of population ratio is lost and the Chinese outnumber the Malays. For this reason, England abandoned this concept and created the Malaya Federation on February 1, 1948 by partially recognising the authority of the sultans, acknowledging the privileges of the Malays as “locals” and limiting the civil rights of the Chinese and Indian population. However, it was not until 12 years later on August 31, 1957 that England acknowledged the Malaya Federation and ended her colonial rule. On September 16, 1963, Malaysia was formed by unifying Malaya, Singapore, Sabah and Sarawak. However, Singapore separated from Malaysia on August 9, 1965.

Turning our attention to the politics of Malaysia after the independence, Prime Minister Tunku Abdul Rahman who had been in power since the 1957 independence transferred his authority to Prime Minister Tun Abdul Razak after the anti-Chinese riot that occurred in Kuala Lumpur on May 13, 1969. Prime Minister Razak formulated the New Economic Policy (1971-1990) in 1971 with the goal of eradicating poverty and reflecting the ethnic composition, and implemented the policy for the first 5 years. The greatest highlight of this policy was the Bumiputera Policy, which was a preferential policy for the Malays. While the goals of the policy were to improve the income level, increase employment opportunities and eradicate poverty, the policy was actually targeted towards the Malay population. Foreign capital introduction, industrialisation and establishment of public corporations were actively pursued

during the period of this policy. Prime Minister Razak died abroad in London in 1976. He is regarded as the person responsible for building the foundation of politics and economy that exists in Malaysia today. Hussein Onn took over the administration as the successor to Prime Minister Razak and implemented the Third Plan (1976-1986). However, Prime Minister Hussein resigned in July 1981 for health reasons and Deputy Prime Minister Mahathir bin Mohamad took over the administration. The first Mahathir administration was born on July 18, 1981. The first policy pursued by the Mahathir administration was the “Look East Policy.” In short, it was an effort to correct the attitude of looking towards the West (particularly to the former suzerain power England) and look in the direction of developed countries in East Asia such as Japan to obtain knowledge in the fields of technology and economics that would contribute to industrialisation of Malaysia.

## **6. Economy**

Malaysia had a monoculture economy centred around the production of crude rubber from the British colonial period to the 1970s. The majority of population was employed in agriculture with products from these industries accounting for 30% and 80% of GDP and export, respectively. The percentage of manufacturing and commerce in employed population and GDP during the same period was merely 10%.

Poverty rate among ethnic groups in the 1970s was 26% for Chinese, 39% for Indian and as high as 65% in Malay population. It was in view of these circumstances that Prime Minister Razak introduced the Bumiputera Policy. He formulated the Outline Perspective Plan: 1970-90) as an economic policy and implemented the New Economic Policy (NEP). This policy had two goals—eradication of poverty and dissolution of economic disparity among ethnic groups and between regions—and was intended to grow out of monoculture economy and foster manufacturing industry.

The industrial strategy that was started in the 1970s consisted of creating a district for production of electric and electronic equipment in addition to processing of monoculture products in the 1960s for export, creating a free trade zone and enabling a new industrial park to function. Textile industry, which is a typical import replacement industry, also demonstrated steady growth.

The GDP share of agriculture, forestry and fisheries industry and manufacturing industry in domestic industrial structure reached a turning point after 1985. A structural transition was achieved in 1990 when the GDP share of the manufacturing industry surpassed that of agriculture, forestry and fisheries industry. Structural transition in the area of employment is delayed with agriculture, forestry and fisheries industry accounting for 31.3% and manufacturing industry employing merely 15.1% in 1985. Although the figure for agriculture, forestry and fisheries industry dropped to 27.6% in 1990, manufacturing industry’s share amounted to 19.4%, suggesting that Malaysia is dependent on agriculture, forestry and fisheries industry and service industry for absorption of labour.

As for the status of employment in Malaysia, unemployment rate was high in 1990 at 5.1% but dropped to 3.1% in 1995 and to 2.5% in 1996 and 1997. Although the rate rose to 3.4% in 1999, one can regard the situation in Malaysia as full employment. Migrant workers in this period remained at about 8% to indicate the existence of labour shortage. However, Malaysia is expected to make a transition to capital- and technology-intensive industries by striving to transfer labour-intensive industries to other countries and introducing labour-saving technology.

According to an announcement made in September of this year by the Asian Development Bank concerning the economic condition of the Asia Pacific region, the real GDP growth rate for the region will remain at 3.4% which is a considerable decline from 7.0% in the previous year. The GDP growth rate for Malaysia in particular was lowest among the ASEAN countries at 0.8%, which was about half of Thai's 1.5%. This was attributable to the slump in export to the U.S., which was aggravated by the terrorist attack that occurred in the U.S. in September.



# Chapter 1

## Demographic Transition in Multiethnic Nation: Malaysia

### Malaysia as seen from demographic indicators

The results of comparison of population trends of Malaysia—a nation with remarkable characteristics of a multiethnic nation—with those of the major countries of ASEAN are as shown in Table 1. The country's current population of 23 million is far smaller compared to 246 million of Indonesia, 80 million of Thailand, Philippines and Vietnam. However, the population increase rate in Malaysia remains still high at 2%, which is second in the region after 2.2% of the Philippines.

The high growth rate is attributable to the fertility rate that remains at high level despite the striking improvement in mortality rate. Crude death rate is significantly lower than other ASEAN countries and registers 4 per thousand population. In particular, infant mortality is as low as 8 for per thousand births. This is an amazingly low figure even when compared to 22 of Thailand, a country that has one of the lowest infant mortality rates among the ASEAN nations. The infant mortality rate of 8 per thousand births in Malaysia is worthy of special note in view of the fact that the infant mortality rate in a developed region like Europe is around 10.

However, attention must also be given to the high fertility rate of Malaysia in contrast to the success of this country's policy in reducing her mortality rate. Malaysia's fertility rate is still low compared to the Philippines and Myanmar but is higher than Thailand, Vietnam and Indonesia. Let us make a comparison using total fertility rate (TFR), which offers a more accurate index of fertility. (Refer to Table 1 and Figure 1.)

Figure 1 is a comparison with Thailand where fertility rate has been declining at a remarkable pace. It shows the results from 1950 until today and the estimates up to the year 2050. Fertility rate was at high level in both countries until the end of the 1970s and was slowly declining alongside one another. However, rapid changes started taking place by the

end of the 1970s when TFR in Thailand shifted to rapid decline while that of Malaysia remained at high level and did not start declining until much later. While Thailand made a major turnaround of reducing her TFR to below replacement level after 1990, Malaysia barely managed to reduce her TFR from more than 4.0 in the 1980s to 3.2 today. Present TFR in Malaysia is comparable to that in the Philippines and Myanmar.

The point worthy of note here is the large gap that exists between high level of TFR and very low infant mortality rate, which is used as an general indicator of health. This is influenced by the shift in the population policy of Malaysia that placed greater emphasis on “quality of family,” as represented by replacement of National Family Planning Board by National Population and Family Development Board. At the backdrop of this was significantly slower decline in fertility among the ethnically predominant Malay population compared to the second largest Chinese population. This can be seen as the outcome of successful population policy in Malaysia.

The characteristics of demographic transition in Malaysia were examined above by using two indices of TFR and infant mortality. Let us now take a look at changes in age structure of population, which is the outcome of these changes in population dynamics.

The characteristics as seen from three age groups, i.e. ages 0 through 14 years, ages 15 through 64 years and ages 65 years and above, are as shown in Table 3. The percentage of young population is high in ASEAN countries and exceeds 30 with the exception of Thailand. Meanwhile, the percentage of population aged 65 years and above, which is one of the indicators of aging population, is more or less low at 4% level with the exception of Thailand. Thailand on the other hand is already showing signs of aging population with low percentage of young population at 24% and high percentage of elderly population at 6%.

Table 4 looks at these age structure coefficient-based characteristics from the standpoints of dependency ratio and potential support ratio. At 59, dependency ratio of Malaysia can be found halfway between the Philippines where TFR remains high at 3.5 (dependency ratio 69) and Indonesia where TFR has declined considerably to 2.7 (dependency ratio 54). Thailand is in a class of her own and boasts a low dependency ratio of 43 by reflecting her TFR that has fallen below the replacement level.

To calculate the number of productive age population for every elderly person (potential support ratio), the figure for Malaysia is 16, which is on the same level as other ASEAN countries except for Thailand. The figure suggests that the burden placed by the elderly is small with 16 working age population supporting 1 elderly aged 65 years and over.

Anticipated changes in demographic burden from the viewpoint of age structure as calculated based on UN statistics are shown in Table 5. A comparison has been made with Thailand because of the conspicuous changes demonstrated by this country among ASEAN countries.

In 1990, Thailand marked dependency ratio of 57, which is significantly lower than 67 of Malaysia, by reflecting the rapid decline of TFR in the recent years. Thailand has accelerated its declining trend from the year 2000 onward and is expected to reach the level between 40 and 50 by 2030. On the other hand, Malaysia has also succeeded in reducing her dependency ratio after entering the 21st Century and is estimated to come very close to the level of Thailand in the 2020s and 2030s.

Such decline in dependency ratio is also likely to reflect on potential support ratio. Until 1980, productive age population for every elderly person in Malaysia was 15 in contrast to 10 in Thailand. After entering the 21st Century, however, potential support ratio is also expected to show rapid decline and is expected to approach the level of Thailand.

The characteristics of demographic transition and aging population in Malaysia can be brought into light through comparison with Thailand, which is an ASEAN country that succeeded in rapidly reducing her fertility rate (see Figure 1).

The first characteristic is the timing and speed of fertility decline. The gap between the two countries expanded as Thailand demonstrated rapid decline of TFR in the second half of the 1970s while that of Malaysia maintained at a high level. It will not be until the 2010s onward that TFR of these two countries will balance each other at low level. The second characteristic is the improvement of mortality rate, particularly that of infants, which is taking place in Malaysia concurrently with the retention of TFR at high level. The third characteristic is the fact that such noteworthy gap in demographic transition between Malaysia and Thailand lies in the difference in the percentage of young population. The percentage of population in ages 0 through 14 was higher in Thailand than in Malaysia until around 1980. However, the percentage of young population in Malaysia has surpassed that of Thailand by a considerable margin as the impact of the aforementioned trends started to manifest from 1990 onward. In the year 2000, for instance, the percentage in Malaysia was 34.0% as opposed to 25.3% in Thailand. Such high level of young population in Malaysia will give rise to “population bonus” in the form of increase in young labour force in the near future, which is expected to contribute to high economic growth.

The fourth characteristic is the trend of population aging. The gap between Malaysia and Thailand is predicted to expand for some time owing to the complex relationship between demographic transition and age structure discussed above. For instance, potential support ratio of Malaysia is currently around 15 in contrast to 10 in Thailand. However, a declining trend will occur in both countries in the first half of this century that would rapidly reduce the rate to 2.6 in Thailand and 4.1 in Malaysia by 2050 as they enter into a serious phase of aging issues. It is necessary to take notice of the fact that not much difference exists between developed and developing countries in terms of the level of aging that would ultimately be reached while giving full consideration to the differences that do exist in the transitional period.

Note: The statistics in this chapter mainly rely on data from the United Nations for the sake of convenience of international comparison.

Table 1 Population Index of ASEAN Countries

| Population Index        | Malaysia | Indonesia | Myanmar | Philippines | Thailand | Vietnam |
|-------------------------|----------|-----------|---------|-------------|----------|---------|
| Population (million)    | 22.7     | 206.1     | 47.8    | 77.2        | 62.4     | 78.7    |
| Fertility rate          | 25       | 23        | 28      | 29          | 14       | 20      |
| Mortality rate          | 4        | 6         | 12      | 6           | 6        | 6       |
| Natural increase rate   | 2.0      | 1.7       | 1.6     | 2.2         | 0.8      | 1.4     |
| Infant mortality rate   | 8        | 46        | 92      | 31          | 22       | 37      |
| Total fertility rate    | 3.2      | 2.7       | 3.3     | 3.5         | 1.8      | 2.3     |
| Distribution 0-14 (%)   | 33       | 31        | 33      | 37          | 24       | 33      |
| 65+ (%)                 | 4        | 4         | 5       | 4           | 6        | 6       |
| Average life expectancy | 73       | 67        | 56      | 67          | 72       | 66      |
| Population in 2050      | 43.9     | 304.8     | 68.5    | 129.2       | 71.9     | 107.2   |

Source : 2001 World Population Data Sheet of the Population Reference Bureau, 2001

Remarks: Population for the year 2001 in the unit of million; fertility rate and mortality rate are for every thousand persons; natural increase rate is in percentage; infant mortality rate is for every thousand births; total fertility rate refers to the number of births a woman gives in her lifetime; "0-14" and "65+" refer to the percentage of population in these age groups in the entire population; average life expectancy combines the figures for both men and women; and population in 2050 is in the unit of million.

Table 2 Total Fertility Rate in Malaysia—A Comparison with Thailand

| Period    | Malaysia | Thailand | Period    | Malaysia | Thailand |
|-----------|----------|----------|-----------|----------|----------|
| 1950-1955 | 6.83     | 6.59     | 1995-2000 | 3.18     | 1.74     |
| 1955-1960 | 6.94     | 6.39     | 2000-2005 | 2.75     | 1.74     |
| 1960-1965 | 6.72     | 6.39     | 2005-2010 | 2.32     | 1.78     |
| 1965-1970 | 5.94     | 6.11     | 2010-2015 | 2.10     | 1.85     |
| 1970-1975 | 5.15     | 4.99     | 2015-2020 | 2.10     | 1.90     |
| 1975-1980 | 4.16     | 4.25     | 2020-2025 | 2.10     | 1.90     |
| 1980-1985 | 4.24     | 2.96     | 2025-2030 | 2.10     | 1.90     |
| 1985-1990 | 4.00     | 2.57     | 2030-2040 | 2.10     | 1.90     |
| 1990-1995 | 3.62     | 1.94     | 2040-2050 | 2.10     | 1.90     |

Source: World Population Prospects the 1998 Revision Volume II, Comprehensive Tables, United Nations, New York, 1999

Table 3 Comparison of Age Structure Coefficient

| Country     | Young population (0-14) | Productive age population (15-64) | Elderly population (65+) |
|-------------|-------------------------|-----------------------------------|--------------------------|
| Malaysia    | 33                      | 63                                | 4                        |
| Indonesia   | 31                      | 65                                | 4                        |
| Myanmar     | 33                      | 62                                | 5                        |
| Philippines | 37                      | 59                                | 4                        |
| Thailand    | 24                      | 70                                | 6                        |
| Vietnam     | 33                      | 61                                | 6                        |

Source: 2001 World Population Data Sheet of the Population Reference Bureau, 2001



Table 4 Dependency Ratio and Potential Support Ratio

| Country     | Dependent Population Index | Potential Dependency Index |
|-------------|----------------------------|----------------------------|
| Malaysia    | 59                         | 16                         |
| Indonesia   | 54                         | 16                         |
| Myanmar     | 61                         | 12                         |
| Philippines | 69                         | 15                         |
| Thailand    | 43                         | 12                         |
| Vietnam     | 64                         | 10                         |

Source : Calculated from Table 3

Remarks: Potential dependency index refers to working age population per elderly person.

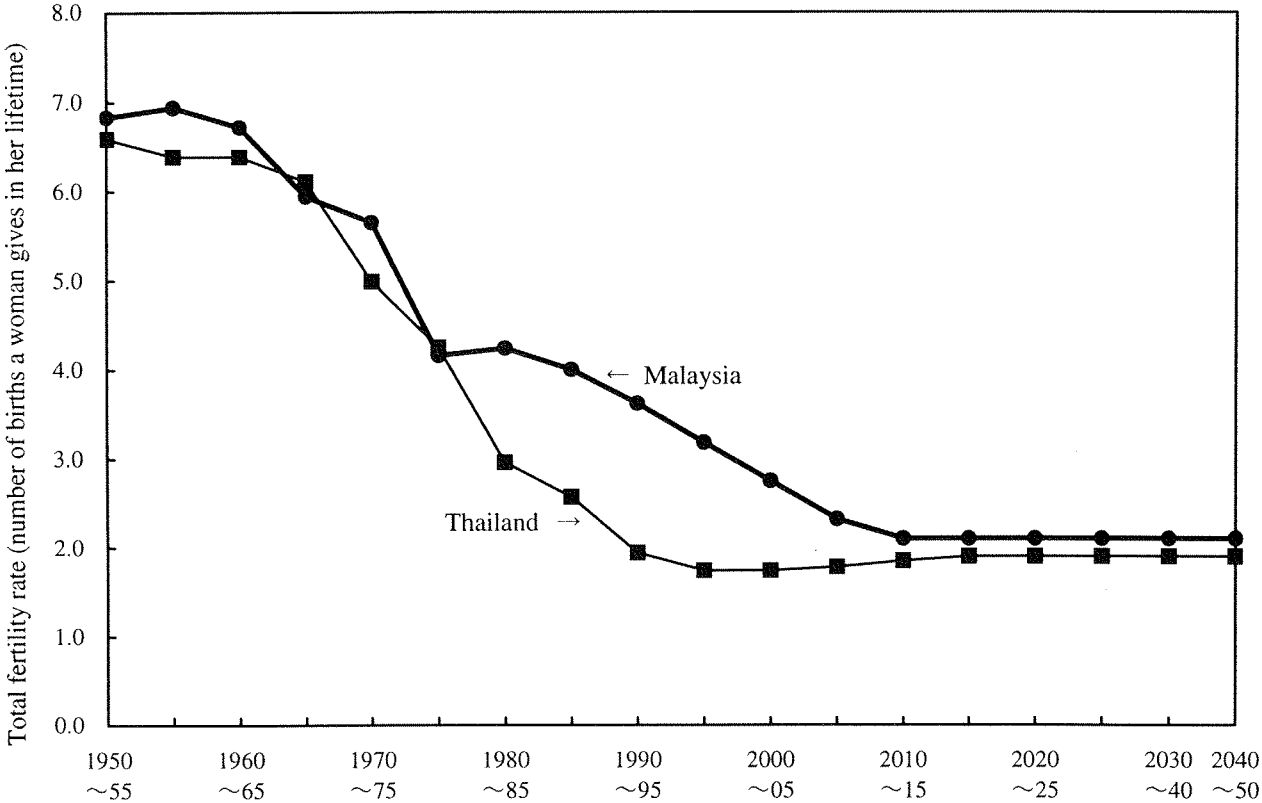
Table 5 Changes in Dependency Ratio and Potential Support Ratio  
—Comparison of Malaysia and Thailand—

| Year | Dependency ratio |          | Potential support ratio |              |
|------|------------------|----------|-------------------------|--------------|
|      | Malaysia         | Thailand | Malaysia                | Thailand     |
| 1950 | 85%              | 83%      | 10.6 persons            | 11.0 persons |
| 1960 | 95               | 90       | 15.0                    | 11.3         |
| 1970 | 92               | 97       | 15.3                    | 10.2         |
| 1980 | 76               | 77       | 15.4                    | 10.1         |
| 1990 | 67               | 57       | 16.2                    | 9.1          |
| 2000 | 62               | 45       | 15.1                    | 11.9         |
| 2010 | 51               | 41       | 12.5                    | 9.6          |
| 2020 | 46               | 43       | 8.9                     | 6.9          |
| 2030 | 51               | 49       | 6.2                     | 4.6          |
| 2040 | 52               | 59       | 5.0                     | 3.1          |
| 2050 | 55               | 66       | 4.1                     | 2.6          |

Source : World Population Prospects the 1998 Revision Volume II, Comprehensive Tables, United Nations, New York, 1999

Remarks: Dependency ratio is obtained by  $[(0-14) + (65+)] \div (15-64) \times 100$ ; Potential support ratio obtained by  $(15-64) \div (65+) =$  Productive age population per one person aged 65 years and above

Figure 1 Total Fertility Rate in Malaysia and Thailand (1950-55—2040-50)



# Chapter 2

## 1. Outline of the Health Care System

### (1) Outline of the medical system

Like in many other countries, the medical system in Malaysia is delivered through public and private medical institutions. The Ministry of Health, a government institution, plays a central role in the execution of disease prevention and health promotion. The budget allocated to the Ministry of Health in Malaysia from 1996 to 1998 is shown in Table 1.<sup>1</sup> The national budget for 1998 amounted to 64,124,392,000 ringgit (1,842,731,760,000 yen, converted at 1 ringgit = 30 yen). At 6.61%, its percentage in the national budget is increasing. It also accounts for 3.37% of gross national product.

Meanwhile, the budget for Japan's Ministry of Health, Labour and Welfare in FY2001 is shown in Table 2.<sup>2</sup> The Ministry's budget amounted to 18,039.6 billion yen out of the national budget 82,652.4 billion yen. Accounting for 21.8% of the national budget, its percentage has increased by 4.5% from the previous fiscal year.

### (2) Number of health care facilities

Institutions for delivering health care in Malaysia include federal hospitals, special medical facilities (mental hospitals, leprosy sanitariums, tuberculosis sanatoriums), health centres, rural clinics and private facilities (hospitals, nursing homes, maternity homes). Number of facilities and beds are shown in Table 3 through Table 8.<sup>3</sup> According to Table 5, the number of federal hospital facilities grew by 3 (2.7%) and the number of their beds increased by 1,117 (4.1%), while the number of facilities and beds for special medical facilities remained the same between 1998 and 1999. Table 7 shows that the number of health centre facilities increased by 1 (0.1%) and that the number of rural clinics decreased by 2 (0.1%) between 1998 and 1999. Table 8 reveals that the number of private facilities increased by 9 (4.2%) and that the number of their beds increased by 430 (4.8%) between 1998 and 1999.

Number of medical facilities in Japan is shown in Table 9.<sup>4</sup> Number of hospitals decreased by 47 facilities (0.5%) while that of clinics without beds and dental clinics increased by 1,854 facilities (2.6%) and 833 facilities (1.4%), respectively between 1998 and 1999. Table 10 shows the number of facilities and beds by establishing party. Medical corporation is the most common form among hospitals while private practice is the most common form among general clinics. Number of beds by type of hospital bed is shown in Table 11. The number increased by 825 beds (0.1%) for general patients and decreased by 710 beds (0.2%) for psychiatric patients (0.2%) while that of general clinics dropped by 11,396 beds (4.8%) between 1998 and 1999.

### **(3) Number of health care professionals**

Number of health care professionals and population for every health care professional in Malaysia and Japan are shown in Table 12.<sup>5,6,7</sup> Number of population for every health care professional is 1,465 in Malaysia and 509 in Japan for doctors. Number of population for every dental practitioner is 11,897 in Malaysia and 1,437 in Japan. Number of population for every pharmacist is 10,668 in Malaysia and 614 in Japan. Number of population for every nurse is 1,068 in Malaysia and 128 in Japan. Thus the number of population for every health care professional is smaller in Japan in these areas. On the other hand, the number of population for every midwife in Malaysia is 3,374, which is smaller than 5,236 in Japan.

### **(4) Standard of health care**

Infant mortality and maternal mortality are the indices used to measure the standard of health care and health. Infant death refers to death of infants in less than 1 year since their birth and expressed as number of infant deaths for every 1,000 or 100,000 live births. Infant mortality is strongly related to the sanitary conditions of the country and has been regarded as an important indicator in understanding the overall condition of health care in the country. Maternal mortality refers to death of pregnant women or puerperants during pregnancy or within 42 days from childbirth delivery and expressed as number of maternal deaths for every 1,000 or 100,000 live births (or childbirth delivery). Table 13 shows the changes in infant deaths in Malaysia from 1996 and 2000. No significant change exists in number of deaths while mortality is on the decrease.<sup>8</sup> By ethnic group, infant mortality is lowest among the Chinese population. Tables 14 and 15 illustrate the changes in infant mortality in urban and rural areas, respectively. Mortality is lower for both sexes in urban areas and lower among female children than among male children.<sup>9</sup> Table 16 shows the number of infant deaths by cause. "Certain conditions originating in the perinatal period" is the most common cause, followed by "congenital anomalies."<sup>9</sup> Table 17 portrays the changes in number of maternal deaths, which has been increasing since 1996.<sup>9</sup> Table 18 presents the changes in maternal deaths (for every 1,000 births) which has turned to increase in 1998.<sup>9</sup>

Meanwhile, infant mortality in Japan exceeded 150 (for every 1,000 births) until around 1925 but decreased thereafter and fell below the 100 mark in 1940. It continued to show rapid improvement by dropping to 76.7 in 1947, 30.7 in 1960 and 10.0 in 1975, reaching one of the highest levels in the world of 10.0 by 1999.<sup>10</sup> Infant deaths, infant mortality and causes of



death are shown in Table 19. The leading cause of death is “congenital malformations, deformations and chromosomal abnormalities,” with “respiratory and cardiovascular disorders specific to the perinatal period” ranking second. Number of maternal deaths in Japan in 1999 was 72.<sup>11</sup> Table 20 refers to changes in maternal mortality (for every 100,000 childbirth deliveries), which is showing a downward trend.<sup>11</sup>

## 2. Health Care Measures

### (1) Family planning/maternal and child health measures

Details of contraception methods based on the content of explanation from and materials presented by the Malaysia’s Ministry of Health with regard to family planning in Malaysia are shown in Table 21. Oral contraceptive pills (OCP) is the most common method accounting for 74.9%, followed by contraception using condoms that accounted for 10.5%.

Screening program for inborn errors of metabolism and immunisation in maternal and child health measures of Malaysia, based on the content of explanation from and materials presented by the Malaysian Health Ministry, are set forth below. The 2 diseases that have been designated for screening program for inborn errors of metabolism in Malaysia are as follows.

- G6PD deficiency (glucose 6-phosphate dehydrogenase deficiency)
- Congenital hypothyroidism (cretism)

As described in Table 22, there are 8 diseases that have been designated for immunisation.

- Polio (acute poliomyelitis, infant paralysis)
- Diphtheria
- Pertussis
- Tetanus
- Measles
- Rubella
- Tuberculosis
- Hepatitis B

Meanwhile, there are 7 diseases that have been designated for the mass screening program for inborn errors of metabolism in Japan, as shown in Table 23.<sup>12</sup>

- Phenylketonuria
- Homo-cystinuria
- Maple syrup urine disease
- Galactosemia
- Congenital adrenal hyperplasia
- Congenital hypothyroidism (cretism)
- Neuroblastoma

There are also 8 diseases that have been designated for regular immunisation in Japan, as presented in Figure 1.<sup>13</sup>

- Polio (acute poliomyelitis, infant paralysis)
- Diphtheria
- Pertussis
- Tetanus
- Measles
- Rubella
- Japanese encephalitis
- Tuberculosis

The difference between Malaysia and Japan is that Malaysia has immunisation for hepatitis B but not for Japanese encephalitis. Japan is implementing a prevention program against vertical transmission of hepatitis B in which only the children born from pregnant women who are hepatitis B virus carriers are tested for antigen/antibody and vaccinated. In addition, immunisation against hepatitis B is offered on a voluntary basis.<sup>13</sup>

## **(2) Nutrition measures**

Malaysia is encouraging nutrition improvement and breastfeeding as 18.6% of infants suffered from malnutrition in 1998.<sup>14</sup> In addition, addition of iodine to drinking water and internal application of iodine are taking place in Sabah and Sarawak States where iodine deficiency disorder has become a problem.<sup>14</sup>

Meanwhile, increase in lifestyle related diseases such as cancer, cerebral stroke, heart disease and diabetes mellitus has emerged as a serious health issue.<sup>15</sup> The close link between development of these diseases and lifestyle (particularly diet) has led to stress on promotion of “primary prevention” for preventing their development. Nutrition measures have also shifted their focus from undernutrition to overnutrition.<sup>15</sup>

## **(3) Communicable disease measures (tuberculosis, AIDS, malaria, dengue fever)**

Like in Japan, increase in tuberculosis and AIDS cases is becoming a problem in Malaysia. Incidence ratio of tuberculosis for every 100,000 population in Malaysia (1993 through 1997) is shown in Figure 2.<sup>16</sup> Although no change is observed in incidence ratio between 1997 and 1998, number of tuberculosis patients increased from 13,539 to 14,115.<sup>16</sup> Meanwhile, incidence ratio of tuberculosis for every 100,000 population in Japan (1992 through 1999) is described in Table 24.<sup>17</sup> Increase in incidence ratio is an indication of increase in tuberculosis patients. In 1998, incidence ratio of tuberculosis in Malaysia was 1.8 times higher than that in Japan.

Number of HIV infected patients and number of AIDS patients in Malaysia by infection route based on the content of explanation from and materials presented by the Malaysian Health Ministry are shown in Table 25. Moreover, number of HIV infected patients and number of AIDS patients in Japan by infection route are shown in Table 26.<sup>18</sup> In Malaysia, injection drug users (IDUs) account for the highest percentage followed by sexual transmission. Meanwhile, heterosexual transmission is most common in Japan, followed by clotting factor concentrate and homosexual transmission. AIDS prevention measures that are needed in

Malaysia include crackdown on drug abuse as well as preventive and educational campaigns against sexually transmitted diseases (STDs). Moreover, anti-HIV antibody screening of pregnant women is conducted as a prevention program against vertical transmission of AIDS.<sup>18</sup>

Tuberculosis is also increasing its importance as a re-emerging infectious disease. The causes that have been pointed out for the increasing trend of tuberculosis patients in Malaysia include possible increase in multiple drug-resistant tuberculosis and development of tuberculosis among AIDS patients.<sup>16</sup> Prevention measures against tuberculosis that need to be taken in Malaysia include immunisation, periodic medical examination, thorough treatment and AIDS prevention measures. Meanwhile, causes that have been indicated in Japan are discontinuation of treatment and possible increase in multiple drug-resistant tuberculosis.<sup>17</sup>

In connection with the increase in Japanese travelling overseas, the situation of malaria and dengue fever will be described here as examples of tropical communicable diseases.

Malaria is a protozoiasis carried by mosquito named *Anopheles*. In Malaysia, approximately 250,000 and 40,000 malaria patients were reported in 1956 in the states of Sabah and Sarawak, respectively. Another 20,000 malaria patients were reported in 1965 in the Malay Peninsula, although the number of patients plummeted as a result of malaria eradication campaign carried out in early 1960. Number of persons infected by malaria in Malaysia between 1985 and 1998 is shown in Figure 3.<sup>19</sup> Number of malaria patients has been decreasing for the last 5 years since 1994 thanks to strengthening of disease surveillance and widespread use of improved mosquito nets impregnated with insecticide. Number of persons infected by malaria in Japan was 153 in 2000. Majority of them were infected overseas and domestic infection is almost nonexistent.<sup>13</sup> Common regions of infection are Asia and Africa.<sup>13</sup>

Dengue fever is a dengue virus infection carried by mosquito named *Aedes aegypti* and clinically consists of dengue fever and dengue haemorrhagic fever. Incidence rate in Malaysia is shown in Figure 4.<sup>19</sup> Incidence rate of dengue fever rapidly increased from 1985 to 1998. Possible causes behind this are urbanisation and industrialisation. Mosquitoes carrying dengue virus breed in cities and propagate in water gathered in artificial containers such as empty cans and old tires. As they also propagate in vases at homes, getting rid of puddles is a preventive measure. There were 153 persons infected by dengue fever in Japan in the year 2000.

#### **(4) Health measure trends in Malaysia**

Measures that are taken in Malaysia consist of public health measures and social welfare measures.<sup>20</sup> Public health measures are carried out based on the budget from the Ministry of Health and implemented on the local level by health care centres and rural health care centres which serve as the base for offering maternal and child health services such as outpatient care, childbirth delivery, periodic medical examination and immunisation. Under the slogan "Health for All," public health measures in Malaysia aim to improve the health of the entire population by providing equal access to health care service among different ethnic groups and regions. Social welfare measures are practiced extensively and consist of child welfare, youth welfare, welfare for the elderly, welfare for the handicapped, women's welfare, family welfare,

community welfare and volunteer welfare. Other measures include measures for improvement of treatment service and lifestyle, measures for prevention of accidents at workplace, upgrading at respective areas of specialisation and sending medical schools students overseas for training.

According to the content of explanation from and materials presented by Malaysia's Ministry of Health, Malaysia has been running a campaign on healthy lifestyle since 1991 under a new theme every year. Themes selected from 1991 to 2001 are shown in Table 27. "Healthy Family" was the theme in 2001.

#### **(5) Health measure trends in Japan**

Health-related measures that are taken in Japan include health enhancement measures, measures against lifestyle related diseases and health measures.<sup>21</sup> With regard to the first agenda of health enhancement, "Healthy Japan 21" (National Campaign for Promoting Health in the 21st Century) was started in 2000. As for the second agenda of tackling lifestyle related diseases, disease prevention measures exist for diabetes, hypertension, hyperlipemia, obesity, cerebral stroke, heart disease and cancer. The third health agenda consist of maternal and child health, health care of the elderly, mental health, dental health, communicable diseases (including AIDS and tuberculosis), intractable diseases, medical cares of atomic diseases, disability, medical cares of renal failure, medical cares of cornea transplantation, medical cares of organ transplantations from brain dead donors and medical cares of blood stem cell transplantation.

#### **(6) Measures against narcotics**

It is said that narcotics concentrate in Malaysia from countries in the narcotics-producing regions and smuggled mainly to third countries via Kuala Lumpur. Malaysia has very strict regulations against narcotics that also place foreigners under strict punishment including life imprisonment and capital punishment. The number of habitual narcotics users amounted to 27,306 in the year 2000 (Table 28). Types of narcotics used consisted of heroin (47.3%), morphine (27.1%), cannabis (18.9%), methamphetamine (syabu) (3.7%), psychotropic pill (1.8%) and cough mixture containing codeine (1.01%).<sup>22</sup> The number of habitual narcotics users and volume of confiscated narcotics are on the decrease while news about arrests for smuggling, selling and possession of a pill called ecstasy have recently increased. On the other hand, measures against narcotics are also important from the viewpoint of reducing communicable disease because intravenously injected drug abuse is the most common source of infection for AIDS in Malaysia.

Japan has 4 laws for narcotics control, i.e. "Narcotic and Psychotropics Control Law," "Opium Law," "Cannabis Control Law" and "Stimulants Control Law."<sup>23</sup> Table 29 shows the annual changes in number of violations and violators for each law from 1975 to 1999. Number of narcotic and stimulant violations are showing an increasing trend at 16,873 cases and 20,129 persons, respectively.<sup>23</sup>

#### **(7) Health measures for the elderly**

According to the content of explanation from and materials presented by Malaysia's

Ministry of Health, the following health care programs are offered for the elderly in Malaysia.

- Health evaluation
  - Measurement of physical fitness
  - Measurement of vision
  - Measurement of hearing
- Dental hygiene
- Nutrition education
- Exercise
- Home care nursing

### **3. Status of Health and Treatment**

#### **(1) Death**

Data on causes of death in Malaysia from 1994 to 1998 are shown in Table 30.<sup>24</sup> Total deaths in 1998 declined from 1997 to 43,514. The order of causes of death in 1998 was as follows.

1. Cerebrovascular disease
2. Acute myocardial infarction
3. Septicemia
4. Motor vehicle traffic accidents
5. Pneumonia
6. Congenital anomalies
7. Nephritis, nephritic syndrome and nephrosis
8. Malignant neoplasms of trachea, bronchus and lung
9. Diabetes
10. Tuberculosis

Crude mortality rate in the Malay Peninsula Region are shown for urban and rural areas in Table 31 and Table 32, respectively.<sup>9</sup> A comparison of urban and rural areas reveals slightly higher figures in urban areas. In some states, the figures urban areas were nearly twice compared to rural areas. Detail data on causes of death and ethnic groups are needed to examine the cause.

Meanwhile, the order of causes of death in Japan is shown in Table 33.<sup>25</sup> Total number of deaths increased from 1998 to 982,031. Malignant neoplasm is the largest cause of death in Japan, with heart disease and cerebrovascular disease ranked at second and third places, respectively. These three comprise the three major causes of death. Annual changes in number of deaths from malignant neoplasm by sex and region are shown in Table 34.<sup>25</sup> Trachea, tracheal branches and lungs are common regions affected by this disease among men while large number of women develop this disease in their stomach. Stomach cancer cases are declining in both sexes while cancer of trachea, tracheal branch and lung as well as cancer of the colon and rectum are on the increase. These trends are believed to be the outcome of

changes in lifestyle of the Japanese people and early detection/treatment of stomach cancer realised by advancement in medical technology.

Malaysia used “International Statistical Classification of Diseases, 9th Revision: ICD-9” from WHO for classification of 1998 mortality statistics. Japan used ICD-10. Heart disease and cerebrovascular disease are ranked high in both Malaysia and Japan. As for malignant neoplasm, the situation in Malaysia is similar to that of Japan in that cancer of trachea, tracheal branch and lung accounts for the highest percentage.

## **(2) Situation of treatment**

Total number of outpatients at medical facilities that are under the jurisdiction of the Ministry of Health in one year in Malaysia is shown in Table 35. Total number of patients hospitalised at these facilities during the same period is shown in Table 36.<sup>26</sup> Number of outpatients is increasing and so is the number of inpatients. Table 37 shows the total number of outpatients and inpatients in one year at private hospitals. Similarly, number is increasing for both outpatients and inpatients.

## **4. Case Study**

### **(1) Kuala Lumpur Hospital**

We visited the Federal Kuala Lumpur Hospital in Kuala Lumpur and went on a tour of the hospital after receiving explanation about the hospital and treatments that are offered there. The following is a description of the Kuala Lumpur Hospital based on the content of explanation from and materials presented by the hospital. The hospital is located on a 150-acre site and is comprised of many buildings. It has 25 medical departments and 83 wards with a total of 2,502 beds. Figure 5 shows the number of outpatients over a one-year period, which has been declining since 1999. Figure 6 refers to the number of inpatients, which has been declining since 1998. Diseases that were common among patients that were discharged in 1999 are as follows.

1. Normal delivery
2. Malignant neoplasm
3. Fracture

Causes of death that were common in 1999 were as follows.

1. Septicaemia
2. Malignant neoplasm
3. Cerebrovascular disease
4. Ischemic heart disease
5. Renal failure

We also heard a presentation about AIDS. It has been indicated that some 4,000 to 4,500 persons have been infected with HIV every year since 1995 and that infection is prevalent

among youth with patients between ages 20 and 39 accounting for 83.4% of total. Increasing incidence of tuberculosis among AIDS patients is also becoming a problem.

## (2) National Leprosy Control Centre in Sungai Buloh

We visited the National Leprosy Control Centre in Sungai Buloh of Selangor State and received explanation about the outline, history and status of hospital admission at the centre followed by a tour of the centre. Founded in 1926, the centre has a lot area of 526 hectares and over 2,000 inpatients. Back then, the centre itself functioned like a village where people lived in houses called chalets. The centre also has its own school and church. However, the number of leprosy patients rapidly declined with the advancement in curative medicine and the number of inpatients in entire Malaysia has gone down to 473 by 2001. The centre currently has 447 inpatients (as of September 19, 2001) of whom 367 are men and 80 are women. The inpatients range from 60 to 91 years in age and, with an average age of 77.5 years, are mostly comprised of elderly persons. The centre has a research facility that is conducting a research using animals on drug resistance bacterium. AIDS patients were also admitted to this centre and several of them had been hospitalised for fever and pneumonia. Number of hospitalised AIDS patients is predicted to increase with the increase of AIDS patients in the future.

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- <sup>1</sup> Annual Report 1998, Ministry of Health, Malaysia, pp.20-25
  - <sup>2</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.19-20
  - <sup>3</sup> Social Statistics Bulletin Malaysia 2000, Department of Statistics, Malaysia, pp.155-164
  - <sup>4</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.187-191
  - <sup>5</sup> Social Statistics Bulletin Malaysia 2000, Department of Statistics, Malaysia, pp.165-166
  - <sup>6</sup> Annual Report 1998, Ministry of Health, Malaysia, pp.14-17
  - <sup>7</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.173-186
  - <sup>8</sup> Yearbook of Statistics Malaysia 2000, Department of Statistics, Malaysia, pp.17-41
  - <sup>9</sup> Vital Statistics Malaysia (Special Edition) 2000, Department of Statistics, Malaysia, pp.91-148
  - <sup>10</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.64-67
  - <sup>11</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.60-61
  - <sup>12</sup> Trends of National Hygiene, No. 9, Vol. 47, 2000, Health and Welfare Statistics Association, pp.105-112
  - <sup>13</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.129-144
  - <sup>14</sup> Annual Report 1998, Ministry of Health, Malaysia, pp.75-81
  - <sup>15</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.98-102
  - <sup>16</sup> Annual Report 1998, Ministry of Health, Malaysia, pp.127-131
  - <sup>17</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.147-150
  - <sup>18</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.144-147
  - <sup>19</sup> Annual Report 1998, Ministry of Health, Malaysia, pp.118-127
  - <sup>20</sup> Annual Report on Health and Welfare (2000 edition), Gyosei, pp.118-127
  - <sup>21</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.83-167
  - <sup>22</sup> The 16th Study Programme for Overseas Experts on Drug Abuse and Narcotics Control—Challenges for Promotion of the Countermeasures Against the Amphetamine Type Stimulants Abuse: Japan International Corporation of Welfare Services (JICWELS), June 19 through July 13, 2001, Tokyo, Japan
  - <sup>23</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.266-270
  - <sup>24</sup> Yearbook of Statistics Malaysia 2000, Department of Statistics, Malaysia, pp.17-45
  - <sup>25</sup> Trends of National Hygiene, No. 9, Vol. 48, 2001, Health and Welfare Statistics Association, pp.50-60
  - <sup>26</sup> Health in Malaysia—Achievements and Challenges, Ministry of Health, Malaysia, pp.83-116

Table 1 Annual Budget Allocation for Ministry of Health (MOH),1996-1998

| Year   | MOH Annual Budget |                  |                  | National Budget [RM] | %To National Budget | ** Gross National Product [GNP] [RM] | % To GNP | Per Capita Allocation [RM] |
|--------|-------------------|------------------|------------------|----------------------|---------------------|--------------------------------------|----------|----------------------------|
|        | Development       | Operating        | Total [RM]       |                      |                     |                                      |          |                            |
| * 1996 | 544, 644, 000     | 2, 491, 915, 000 | 3, 036, 559, 000 | 55, 467, 290, 400    | 5. 47               | 123, 138, 000, 000                   | 2. 47    | 143                        |
| * 1997 | 578, 538, 000     | 2, 868, 400, 000 | 3, 446, 938, 000 | 59, 982, 209, 600    | 5. 75               | 132, 811, 000, 000                   | 2. 60    | 159                        |
| * 1998 | 743, 186, 000     | 3, 494, 774, 000 | 4, 237, 960, 000 | 64, 124, 392, 000    | 6. 61               | 125, 925, 000, 000                   | 3. 37    | 191                        |

\* Original Allocation

\*\* GNP at 1978 constant prices

Source : Economic Report 1998/99,Ministry of Finance

Finance Division,Ministry of Health

Accounts Division,Ministry of Health

Table 2 Annual Budget for Ministry of Health,Labour and Welfare (100 million yen)

|  | National Budget | Ministry of Health Labour and Welfare Annual Budget |
|--|-----------------|---|
| (1) Budget for the Fiscal Year 2001-2002 | 826, 524        | 180, 396  |
| (2) Previous year' s budget              | 849, 871        | 172, 644  |
| (3) Ratio over previous Fiscal Year (%)  | 97. 3           | 104. 5  |

Source : Annual Budget for Ministry of Health, Labour and Welfare, 2001

Table 3 Number of government hospitals and special medical institutions by state,Malaysia,1999

| State                            | Hospital | Special medical institutions |         |               |       |
|----------------------------------|----------|------------------------------|---------|---------------|-------|
|                                  |          | Mental                       | Leprosy | Tuber-culosis | Total |
| Malaysia                         | 114      | 4                            | 2       | 1             | 7     |
| Johor                            | 10       | 1                            | —       | —             | 1     |
| Kedah                            | 9        | —                            | —       | —             | —     |
| Kelantan                         | 8        | —                            | —       | —             | —     |
| Melaka                           | 3        | —                            | —       | —             | —     |
| Negeri Sembilan                  | 5        | —                            | —       | —             | —     |
| Pahang                           | 9        | —                            | —       | —             | —     |
| Perak                            | 14       | 1                            | —       | —             | 1     |
| Perlis                           | 1        | —                            | —       | —             | —     |
| Pulau Pinang                     | 5        | —                            | —       | —             | —     |
| Sabah                            | 17       | 1                            | —       | —             | 1     |
| Sarawak                          | 19       | 1                            | 1       | —             | 2     |
| Selangor                         | 7        | —                            | 1       | —             | 1     |
| Terengganu                       | 5        | —                            | —       | —             | —     |
| Wilayah Persekutuan Kuala Lumpur | 1        | —                            | —       | 1             | 1     |
| Wilayah Persekutuan Labuan       | 1        | —                            | —       | —             | —     |

Source : Ministry of Health,Malaysia



Table 4 Number of beds in government hospitals and special medical institutions by state, Malaysia, 1999

| State                            | Hospital | Special medical institutions |            |                   |        |
|----------------------------------|----------|------------------------------|------------|-------------------|--------|
|                                  |          | Mental                       | Leprosy(a) | Tuber-<br>culosis | Total  |
| Malaysia                         | 28, 163  | 5, 320                       | 856        | 116               | 6, 292 |
| Johor                            | 2, 668   | 2, 080                       | —          | —                 | 2, 080 |
| Kedah                            | 2, 050   | —                            | —          | —                 | —      |
| Kelantan                         | 1, 614   | —                            | —          | —                 | —      |
| Melaka                           | 835      | —                            | —          | —                 | —      |
| Negeri Sembilan                  | 1, 327   | —                            | —          | —                 | —      |
| Pahang                           | 1, 641   | —                            | —          | —                 | —      |
| Perak                            | 3, 442   | 2, 600                       | —          | —                 | 2, 600 |
| Perlis                           | 404      | —                            | —          | —                 | —      |
| Pulau Pinang                     | 2, 011   | —                            | —          | —                 | —      |
| Sabah                            | 2, 699   | 302                          | —          | —                 | 302    |
| Sarawak                          | 2, 997   | 338                          | 20         | —                 | 358    |
| Selangor                         | 2, 529   | —                            | 836        | —                 | 836    |
| Terengganu                       | 1, 182   | —                            | —          | —                 | —      |
| Wilayah Persekutuan Kuala Lumpur | 2, 655   | —                            | —          | 116               | 116    |
| Wilayah Persekutuan Labuan       | 109      | —                            | —          | —                 | —      |

Source : Ministry of Health, Malaysia

(a) Excluding beds that are placed in chalets within the vicinity of the National Leprosy Control Centre

Table 5 Number of government hospitals, special medical institutions and beds, Malaysia, 1995–1999

| Item                         | Year    |         |         |         |         |
|------------------------------|---------|---------|---------|---------|---------|
|                              | 1995    | 1996    | 1997    | 1998    | 1999    |
| Government hospitals         |         |         |         |         |         |
| Number                       | 111     | 111     | 111     | 111     | 114     |
| Beds                         | 26, 896 | 27, 126 | 27, 226 | 27, 046 | 28, 163 |
| Special medical institutions |         |         |         |         |         |
| Number                       | 7       | 7       | 7       | 7       | 7       |
| Beds                         | 6, 692  | 6, 692  | 6, 692  | 6, 292  | 6, 292  |

Source : Ministry of Health, Malaysia

Table 6 Number of health clinics and rural clinics by state, Malaysia, 1999

| State                            | Health clinics | rural clinics |
|----------------------------------|----------------|---------------|
| Malaysia                         | 773            | 1,990         |
| Johor                            | 87             | 271           |
| Kedah                            | 54             | 224           |
| Kelantan                         | 59             | 199           |
| Melaka                           | 27             | 63            |
| Negeri Sembilan                  | 39             | 105           |
| Pahang                           | 65             | 232           |
| Perak                            | 82             | 254           |
| Perlis                           | 9              | 29            |
| Pulau Pinang                     | 27             | 62            |
| Sabah                            | 91             | 191           |
| Sarawak                          | 120            | 92            |
| Selangor                         | 58             | 136           |
| Terengganu                       | 41             | 132           |
| Wilayah Persekutuan Kuala Lumpur | 14             | —             |

Source : Ministry of Health, Malaysia

Table 7 Number of health centres and rural clinics, Malaysia, 1995-1999

| Year | Health clinics | Rural clinics |
|------|----------------|---------------|
| 1995 | 772            | 1,987         |
| 1996 | 774            | 1,998         |
| 1997 | 772            | 1,989         |
| 1998 | 772            | 1,992         |
| 1999 | 773            | 1,990         |

Source : Ministry of Health, Malaysia

Table 8 Number of private hospitals, nursing and maternity homes and beds by state, Malaysia, 1995-1999(a)

| Year<br>State                       | 1995 |       | 1996 |       | 1997 |       | 1998 |       | 1999 |       |
|-------------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|
|                                     | No.  | Beds  | No.  | Beds  | No.  | Beds  | No.  | Beds  | No.  | Beds  |
| Malaysia                            | 197  | 7,192 | 203  | 7,471 | 219  | 8,963 | 216  | 9,060 | 225  | 9,490 |
| Johor                               | 30   | 600   | 35   | 637   | 39   | 766   | 36   | 772   | 34   | 769   |
| Kedah                               | 11   | 262   | 11   | 262   | 12   | 289   | 12   | 347   | 14   | 379   |
| Kelantan                            | 1    | 10    | 1    | 10    | 2    | 12    | 3    | 71    | 2    | 63    |
| Melaka                              | 7    | 603   | 7    | 614   | 7    | 668   | 9    | 685   | 8    | 677   |
| Negeri Sembilan                     | 6    | 78    | 6    | 120   | 7    | 123   | 7    | 123   | 9    | 193   |
| Pahang                              | 7    | 97    | 7    | 116   | 7    | 116   | 8    | 143   | 8    | 143   |
| Perak                               | 17   | 717   | 16   | 755   | 16   | 752   | 13   | 729   | 15   | 757   |
| Perlis                              | —    | —     | —    | —     | —    | —     | —    | —     | —    | —     |
| Pulau Pinang                        | 21   | 1,351 | 21   | 1,323 | 23   | 1,532 | 22   | 1,514 | 22   | 1,576 |
| Saban                               | 10   | 221   | 11   | 224   | 11   | 224   | 11   | 220   | 10   | 218   |
| Sarawak                             | 14   | 316   | 15   | 376   | 13   | 347   | 10   | 344   | 9    | 319   |
| Selangor                            | 30   | 1,047 | 29   | 1,078 | 35   | 1,587 | 40   | 1,774 | 49   | 2,021 |
| Terengganu                          | 2    | 21    | 2    | 21    | 2    | 21    | 2    | 17    | 2    | 17    |
| Wilayah Persekutuan<br>Kuala Lumpur | 41   | 1,869 | 42   | 1,935 | 45   | 2,526 | 43   | 2,321 | 43   | 2,358 |

Source : Ministry of Health, Malaysia

(a) Data refers to hospitals, nursing and maternity homes which are licensed in each particular year.

Table 9 Number of medical institutes by hospital, clinic and dental office. as of Oct 1, each year.

|  | 1984    | 1987    | 1990    | 1993    | 1996    | 1998    | 1999    |
|--|---------|---------|---------|---------|---------|---------|---------|
| Total  | 131,832 | 137,275 | 143,164 | 149,878 | 156,756 | 161,540 | 163,270 |
| Hospital   | 9,574   | 9,841   | 10,096  | 9,844   | 9,490   | 9,333   | 9,286   |
| Mental   | 1,015   | 1,044   | 1,049   | 1,059   | 1,057   | 1,057   | 1,060   |
| Contagious   | 12      | 13      | 10      | 7       | 5       | 5       | •       |
| Tuberculosis   | 31      | 19      | 15      | 11      | 7       | 5       | 4       |
| General  | 8,516   | 8,765   | 9,022   | 8,767   | 8,421   | 8,266   | 8,222   |
| Polyclinic(reprinted)  | 1,020   | 1,073   | 1,130   | 1,163   | 1,166   | •       | •       |
| Hospitals equipped with health facilities for recuperation (reprinted) | •       | •       | •       | 41      | 494     | 1,269   | 2,227   |
| General clinic   | 78,332  | 79,134  | 80,852  | 84,128  | 87,909  | 90,556  | 91,500  |
| with less than 20 beds   | 26,459  | 24,975  | 23,589  | 22,383  | 20,452  | 19,397  | 18,487  |
| Clinics equipped with health facilities for recuperation (reprinted)   | •       | •       | •       | •       | •       | 57      | 1,795   |
| no bed   | 51,873  | 54,159  | 57,263  | 61,745  | 67,457  | 71,159  | 73,013  |
| Dental office  | 43,926  | 48,300  | 52,216  | 55,906  | 59,357  | 61,651  | 62,484  |
| with less than 20 beds   | 65      | 57      | 51      | 49      | 47      | 42      | 47      |
| no bed   | 43,861  | 48,243  | 52,165  | 55,857  | 59,310  | 61,609  | 62,437  |

Note : 1) "Contagious hospital" was abolished, after "Law on Prevention of Communicable Diseases and Medical Care for Patients of Communicable Diseases" was enforced on April, 1999.

2) "Polyclinic hospital" was abolished on April 1, 1998.

Source : Report on Survey of Medical Institutions and Hospital Report for Ministry of Health, Labour and Welfare.

Table 10 Number of medical institution, and bed by establishment as of Oct. 1, each year

|                                  | Institution |       |         |        |               |        | Bed       |           |         |         |
|----------------------------------|-------------|-------|---------|--------|---------------|--------|-----------|-----------|---------|---------|
|                                  | Hospital    |       | Clinics |        | Dental office |        | Hospital  |           | Clinics |         |
|                                  | 1999        | 1998  | 1999    | 1998   | 1999          | 1998   | 1999      | 1998      | 1999    | 1998    |
| Total                            | 9,286       | 9,333 | 91,500  | 90,556 | 62,484        | 61,651 | 1,648,217 | 1,656,415 | 224,134 | 235,530 |
| nation                           | 370         | 375   | 578     | 574    | 1             | 1      | 148,663   | 151,277   | 2,347   | 2,393   |
| public medical facility          | 1,368       | 1,369 | 4,224   | 4,183  | 338           | 341    | 354,577   | 358,040   | 4,104   | 4,319   |
| social insurance                 | 131         | 133   | 848     | 856    | 19            | 22     | 38,543    | 39,084    | 38      | 36      |
| incorporated medical institution | 5,299       | 5,157 | 22,680  | 20,910 | 7,007         | 6,602  | 783,081   | 769,227   | 94,989  | 92,427  |
| private facility                 | 1,281       | 1,458 | 53,973  | 55,074 | 54,793        | 54,355 | 112,916   | 127,329   | 120,392 | 133,997 |
| others                           | 837         | 841   | 9,197   | 8,959  | 326           | 330    | 210,437   | 211,458   | 2,264   | 2,358   |

Source : Report on Survey of Medical Institutions and Hospital Report, Ministry of Health, Labour and Welfare

Table 11 Number of bed by hospital, clinic and dental office as of Oct. 1, each year

|  | 1984      | 1987      | 1990      | 1993      | 1996      | 1998      | 1999      |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Total  | 1,750,768 | 1,860,595 | 1,949,493 | 1,946,255 | 1,911,595 | 1,892,115 | 1,872,518 |
| Hospital                                       | 1,467,050 | 1,582,393 | 1,676,803 | 1,680,952 | 1,664,629 | 1,656,415 | 1,648,217 |
| Mental   | 331,099   | 347,196   | 359,087   | 362,436   | 360,896   | 359,159   | 358,449   |
| Communicable                                   | 15,042    | 13,772    | 12,199    | 11,061    | 9,716     | 9,210     | 3,321     |
| Tuberculosis                                   | 60,067    | 48,938    | 42,210    | 37,043    | 31,179    | 27,197    | 24,773    |
| General  | 1,060,842 | 1,172,487 | 1,263,307 | 1,270,412 | 1,262,838 | 1,260,849 | 1,261,674 |
| Health facilities for recuperation (reprinted) | .         | .         | .         | 2,823     | 37,872    | 99,171    | 167,106   |
| General hospital (reprinted)                   | 1,219,143 | 1,321,528 | 1,411,616 | 1,414,401 | 1,399,868 | 1,395,237 | 1,387,315 |
| Clinics  | 283,445   | 277,958   | 272,456   | 265,083   | 246,779   | 235,530   | 224,134   |
| Health facilities for recuperation             | .         | .         | .         | .         | .         | 599       | 16,452    |
| Dental office                                  | 273       | 244       | 234       | 220       | 187       | 170       | 167       |

Note : "Bed for communicable diseases" was changed from "Bed for contagious diseases", on April 1, 1998.

Source : Report on Survey of Medical Institutions and Hospital Report, Ministry of Health, Labour and Welfare

Table 12 Number of health personnels in Malaysia and japan

|            | Malaysia (1999) |                                    | Japan (1998) |                                    |
|------------|-----------------|------------------------------------|--------------|------------------------------------|
|            | Number          | Population per a health personnels | Number       | Population per a health personnels |
| Doctor     | 15,503          | 1,465                              | 248,611      | 509                                |
| Dentist    | 1,909           | 11,897                             | 88,061       | 1,437                              |
| Pharmacist | 2,129           | 10,668                             | 205,953      | 614                                |
| Nurse      | 20,944          | 1,086                              | 985,821      | 128                                |
| Midwife    | 6,731           | 3,374                              | 24,202       | 5,236                              |

Table13 INFANT DEATHS AND INFANT MORTALITY RATE BY ETHNIC GROUP

| Ethnic Group           | 1996          |      | 1997          |      | 1998          |      | 1999          |      | 2000          |      |
|------------------------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
|                        | Number ('000) | Rate | Number ('000) | Rate | Number ('000) | Rate | Number ('000) | Rate | Number ('000) | Rate |
| MALAYSIA               | 4.9           | 9.0  | 5.1           | 9.4  | 4.5           | 8.1  | 4.4           | 7.9  | 4.5           | 7.9  |
| Malaysian Citizens     |               |      |               |      |               |      |               |      |               |      |
| Bumiputera             | 3.5           | 9.7  | 3.7           | 10.4 | 3.4           | 9.2  | 3.1           | 8.5  | 3.2           | 8.7  |
| Malay                  | 2.8           | 9.3  | 3.0           | 10.3 | 2.8           | 9.1  | 2.5           | 8.0  | 2.5           | 8.2  |
| Other Bumiputera       | 0.7           | 11.4 | 0.7           | 11.2 | 0.6           | 9.8  | 0.7           | 10.9 | 0.7           | 11.5 |
| Chinese                | 0.6           | 5.4  | 0.6           | 5.5  | 0.5           | 4.4  | 0.5           | 4.6  | 0.6           | 4.4  |
| Indian                 | 0.3           | 9.0  | 0.3           | 9.7  | 0.2           | 7.0  | 0.3           | 8.4  | 0.3           | 8.5  |
| Others                 |               |      |               |      |               |      |               |      |               |      |
| Non-Malaysian Citizens | 0.5           | 13.3 | 0.4           | 10.9 | 0.3           | 8.6  | 0.4           | 10.9 | 0.4           | 10.1 |

Table 14 Infant mortality rate by state, stratum and sex, Peninsular Malaysia, 1991 — 1998

| State               | Urban |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |      |  |
|---------------------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|------|--|
|                     | 1991  |      |        | 1992  |      |        | 1993  |      |        | 1994  |      |        | 1995  |      |        | 1996  |      |        | 1997  |      |        | 1998  |      |        |      |  |
|                     | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |      |  |
| PENINSULAR MALAYSIA | 11.0  | 12.0 | 10.0   | 10.0  | 11.1 | 8.9    | 9.4   | 10.6 | 8.2    | 9.0   | 9.6  | 8.3    | 8.9   | 9.6  | 8.1    | 8.1   | 8.9  | 8.1    | 8.1   | 8.8  | 9.8    | 7.8   | 7.9  | 8.7    | 7.1  |  |
| Johor               | 11.6  | 12.7 | 10.5   | 10.5  | 11.3 | 9.5    | 8.6   | 10.4 | 6.7    | 8.9   | 9.8  | 7.9    | 8.3   | 8.7  | 7.9    | 6.4   | 7.6  | 5.2    | 6.2   | 7.5  | 8.3    | 6.6   | 6.7  | 5.6    | 5.6  |  |
| Kedah               | 10.7  | 10.9 | 10.6   | 6.9   | 7.8  | 6.0    | 9.5   | 11.1 | 7.7    | 9.7   | 10.1 | 9.4    | 6.8   | 8.0  | 5.4    | 8.3   | 8.6  | 7.9    | 12.1  | 12.1 | 13.4   | 10.7  | 11.0 | 10.4   | 10.4 |  |
| Kelantan            | 13.8  | 14.9 | 12.6   | 10.7  | 12.6 | 8.6    | 8.5   | 10.7 | 6.1    | 9.2   | 8.5  | 9.8    | 10.0  | 12.0 | 7.9    | 9.8   | 10.0 | 9.6    | 8.4   | 8.4  | 9.7    | 7.0   | 11.2 | 10.9   | 10.9 |  |
| Melaka              | 8.0   | 9.5  | 6.4    | 9.9   | 9.3  | 10.7   | 10.4  | 13.0 | 7.6    | 6.9   | 7.5  | 6.1    | 8.9   | 9.6  | 8.1    | 8.4   | 9.0  | 7.9    | 9.3   | 9.3  | 10.1   | 8.6   | 7.8  | 8.8    | 6.7  |  |
| Negeri Sembilan     | 9.2   | 7.6  | 11.1   | 7.4   | 9.0  | 5.7    | 7.0   | 7.7  | 6.3    | 8.4   | 9.8  | 6.8    | 7.6   | 6.7  | 8.6    | 8.2   | 8.5  | 7.8    | 6.9   | 6.9  | 7.9    | 5.9   | 6.8  | 6.8    | 6.8  |  |
| Pahang              | 11.7  | 15.8 | 7.3    | 8.5   | 8.2  | 8.9    | 10.7  | 11.6 | 9.8    | 7.4   | 8.4  | 6.2    | 7.5   | 8.4  | 6.6    | 7.1   | 7.0  | 7.2    | 8.3   | 8.3  | 9.1    | 7.5   | 8.5  | 9.0    | 7.9  |  |
| Perak               | 8.3   | 9.7  | 6.9    | 11.0  | 11.4 | 10.5   | 11.3  | 12.6 | 9.9    | 8.7   | 9.2  | 8.1    | 8.7   | 9.3  | 8.0    | 9.2   | 10.4 | 7.8    | 8.6   | 8.6  | 9.4    | 7.6   | 6.4  | 7.4    | 5.3  |  |
| Perlis              | 3.2   | 0.0  | 6.8    | 11.1  | 14.5 | 7.3    | 9.5   | 12.7 | 6.1    | 8.4   | 3.4  | 13.8   | 8.0   | 7.4  | 8.7    | 7.7   | 8.0  | 7.4    | 9.7   | 9.7  | 11.9   | 7.2   | 14.9 | 16.9   | 12.9 |  |
| Pulau Pinang        | 11.5  | 12.4 | 10.6   | 9.2   | 9.7  | 8.6    | 8.9   | 9.3  | 8.6    | 9.4   | 10.6 | 8.2    | 8.5   | 8.8  | 8.1    | 7.6   | 8.1  | 7.0    | 8.5   | 8.5  | 8.8    | 8.2   | 8.0  | 7.8    | 8.1  |  |
| Selangor            | 11.1  | 12.2 | 9.8    | 9.8   | 11.6 | 7.9    | 8.4   | 9.2  | 7.6    | 7.5   | 7.9  | 7.1    | 6.7   | 7.3  | 6.1    | 5.6   | 5.6  | 5.7    | 5.9   | 5.9  | 6.7    | 5.0   | 5.5  | 6.3    | 4.6  |  |
| Terengganu          | 14.9  | 14.9 | 14.9   | 16.2  | 17.6 | 14.7   | 12.4  | 13.3 | 11.4   | 13.1  | 16.1 | 9.8    | 13.3  | 15.3 | 11.3   | 11.4  | 13.8 | 8.8    | 11.8  | 11.8 | 13.1   | 10.3  | 10.2 | 12.6   | 7.7  |  |
| Wilayah Persekutuan |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |      |  |
| Kuala Lumpur        | 10.5  | 11.4 | 9.6    | 9.5   | 10.5 | 8.5    | 10.1  | 10.7 | 9.5    | 10.7  | 10.8 | 10.5   | 13.4  | 14.2 | 12.5   | 12.2  | 14.4 | 9.9    | 14.0  | 14.0 | 15.2   | 12.7  | 11.5 | 12.9   | 10.0 |  |

Table 15 Infant mortality rate by state, stratum and sex, Peninsular Malaysia, 1991 — 1998

| State               | Rural |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |   |
|---------------------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|---|
|                     | 1991  |      |        | 1992  |      |        | 1993  |      |        | 1994  |      |        | 1995  |      |        | 1996  |      |        | 1997  |      |        | 1998  |      |        |   |
|                     | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |   |
| PENINSULAR MALAYSIA | 12.7  | 13.6 | 11.7   | 13.2  | 15.0 | 11.4   | 12.2  | 13.5 | 10.7   | 12.1  | 13.4 | 10.8   | 10.9  | 12.0 | 9.8    | 9.6   | 10.5 | 8.7    | 10.4  | 11.7 | 9.1    | 9.2   | 9.9  | 8.5    |   |
| Johor               | 13.8  | 15.5 | 11.9   | 13.7  | 14.4 | 13.0   | 10.2  | 10.9 | 9.5    | 10.9  | 12.1 | 9.6    | 11.3  | 12.1 | 10.3   | 8.3   | 9.7  | 6.8    | 9.4   | 10.4 | 8.2    | 9.3   | 10.7 | 7.9    |   |
| Kedah               | 13.2  | 14.1 | 12.3   | 12.2  | 14.5 | 9.7    | 15.5  | 17.7 | 13.1   | 13.5  | 15.0 | 11.8   | 8.4   | 8.8  | 7.9    | 9.4   | 9.7  | 9.2    | 11.0  | 13.2 | 8.6    | 8.5   | 9.1  | 7.8    |   |
| Kelantan            | 16.0  | 16.1 | 15.8   | 13.9  | 16.3 | 11.3   | 11.9  | 12.9 | 10.8   | 11.8  | 12.8 | 10.7   | 12.1  | 13.3 | 10.7   | 10.5  | 10.7 | 10.2   | 10.6  | 11.9 | 9.2    | 8.9   | 9.8  | 7.9    |   |
| Melaka              | 10.6  | 12.3 | 8.7    | 11.4  | 13.7 | 9.0    | 11.0  | 12.5 | 9.3    | 11.2  | 12.7 | 9.6    | 10.3  | 11.5 | 9.0    | 10.1  | 12.2 | 7.9    | 10.9  | 11.2 | 10.6   | 10.8  | 12.1 | 9.3    |   |
| Negeri Sembilan     | 11.9  | 14.2 | 9.5    | 9.5   | 11.9 | 6.9    | 9.3   | 11.2 | 7.3    | 15.9  | 18.5 | 13.2   | 15.6  | 16.3 | 14.8   | 9.4   | 9.8  | 9.0    | 7.0   | 8.2  | 5.6    | 8.5   | 9.3  | 7.7    |   |
| Pahang              | 12.9  | 12.5 | 13.4   | 14.3  | 16.2 | 12.3   | 13.2  | 14.6 | 11.7   | 12.3  | 12.3 | 12.2   | 11.6  | 12.7 | 10.4   | 9.7   | 10.7 | 8.5    | 13.1  | 14.7 | 11.4   | 11.9  | 10.7 | 13.0   |   |
| Perak               | 9.4   | 9.6  | 9.2    | 13.9  | 15.9 | 11.8   | 12.7  | 14.5 | 10.7   | 14.0  | 15.3 | 12.7   | 12.3  | 14.1 | 10.4   | 10.1  | 10.6 | 9.7    | 12.1  | 13.1 | 10.9   | 8.1   | 8.4  | 7.7    |   |
| Perlis              | 11.5  | 13.8 | 9.0    | 11.4  | 14.0 | 8.5    | 10.2  | 11.7 | 8.6    | 10.5  | 12.2 | 8.7    | 8.8   | 11.9 | 5.4    | 12.6  | 14.9 | 10.2   | 12.1  | 11.2 | 13.0   | 4.4   | 5.8  | 2.9    |   |
| Pulau Pinang        | 9.3   | 11.3 | 7.2    | 11.8  | 12.9 | 10.5   | 10.5  | 11.9 | 9.1    | 12.3  | 12.7 | 12.0   | 12.1  | 13.6 | 10.5   | 10.3  | 11.5 | 9.0    | 8.6   | 10.5 | 6.6    | 7.5   | 8.8  | 6.3    |   |
| Selangor            | 11.7  | 13.2 | 10.0   | 13.6  | 14.3 | 12.8   | 11.1  | 11.4 | 10.7   | 9.7   | 11.5 | 7.8    | 6.9   | 7.1  | 6.7    | 7.3   | 8.6  | 6.0    | 7.7   | 9.1  | 6.2    | 7.4   | 7.7  | 7.0    |   |
| Terengganu          | 16.5  | 16.4 | 16.5   | 14.9  | 16.6 | 13.1   | 13.7  | 15.1 | 12.2   | 11.0  | 13.1 | 8.9    | 11.5  | 13.2 | 9.6    | 12.3  | 13.4 | 11.0   | 12.3  | 12.7 | 11.7   | 12.3  | 14.1 | 10.4   |   |
| Wilayah Persekutuan | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | : |
| Kuala Lumpur        | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | : |

Table16 Infant death by causes of deaths, Malaysia, 1991-1998

| Cause of death   | 1991         | 1992         | 1993         | 1994         | 1995         | 1996         | 1997         | 1998         |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 1. Congenital anomalies (740-759)  | 923          | 943          | 956          | 931          | 841          | 816          | 938          | 875          |
| 2. Certain conditions originating in the perinatal period (760-779)  | 2,645        | 2,619        | 2,706        | 2,513        | 2,530        | 2,145        | 2,326        | 1,997        |
| 3. Fever   |              |              |              |              |              |              |              |              |
| (a) Dengue and malaria (061,084)   | 7            | 12           | 8            | 9            | 6            | 3            | 9            | 6            |
| (b) Measles (055)  | 13           | 4            | 10           | 8            | 7            | 10           | 3            | 7            |
| (c) Fits and convulsions (780)   | 193          | 202          | 151          | 143          | 107          | 101          | 117          | 98           |
| (d) Other fever diseases (002,060,782)   | 618          | 565          | 463          | 417          | 417          | 334          | 327          | 310          |
| 4. Diarrhoea (009)   | 91           | 58           | 64           | 73           | 51           | 49           | 42           | 30           |
| 5. Infectious and parasitic diseases(001,003-008,010-054,056-059,062-083,085-139)  | 364          | 385          | 380          | 339          | 312          | 222          | 222          | 184          |
| 6. Other diseases (Remainder of 001-799)   | 1,443        | 1,507        | 1,316        | 1,288        | 1,178        | 1,102        | 1,026        | 908          |
| 7. Accidents, poisonings and violence(External cause) (E800-E845,E847-E901,E903-E949,E960-E978,E981,E982,E985,E986,E989) | 33           | 46           | 49           | 52           | 69           | 76           | 72           | 68           |
| 8. Other causes  | 46           | 65           | 45           | 64           | 55           | 56           | 4            | 0            |
| <b>TOTAL</b>   | <b>6,376</b> | <b>6,406</b> | <b>6,148</b> | <b>5,837</b> | <b>5,573</b> | <b>4,914</b> | <b>5,086</b> | <b>4,483</b> |

Note : The uncertified causes of deaths have been grouped together with the respective categories classified in 'International Classification of Diseases-Ninth Revision'.

Table17 Maternal deaths by state, Malaysia, 1991-1998

| State               | 1991      | 1992       | 1993       | 1994       | 1995       | 1996      | 1997      | 1998       |
|---------------------|-----------|------------|------------|------------|------------|-----------|-----------|------------|
| <b>MALAYSIA</b>     | <b>98</b> | <b>103</b> | <b>106</b> | <b>103</b> | <b>104</b> | <b>85</b> | <b>91</b> | <b>146</b> |
| Johor               | 11        | 17         | 13         | 17         | 21         | 16        | 13        | 16         |
| Kedah               | 10        | 15         | 11         | 8          | 7          | 7         | 13        | 15         |
| Kelantan            | 8         | 8          | 12         | 7          | 3          | 5         | 9         | 11         |
| Melaka              | 2         | 0          | 4          | 1          | 2          | 2         | 2         | 7          |
| Negeri Sembilan     | 5         | 5          | 4          | 2          | 3          | 1         | 2         | 2          |
| Pahang              | 10        | 5          | 13         | 9          | 8          | 6         | 7         | 13         |
| Perak               | 6         | 20         | 9          | 14         | 13         | 9         | 7         | 8          |
| Perlis              | 0         | 0          | 0          | 1          | 0          | 1         | 0         | 1          |
| Pulau Pinang        | 4         | 4          | 4          | 7          | 5          | 8         | 6         | 8          |
| Sabah               | 20        | 4          | 6          | 9          | 11         | 8         | 5         | 19         |
| Sarawak             | 5         | 8          | 8          | 8          | 3          | 3         | 2         | 8          |
| Selangor            | 10        | 7          | 13         | 10         | 14         | 15        | 14        | 18         |
| Terengganu          | 2         | 6          | 6          | 3          | 5          | 3         | 3         | 4          |
| Wilayah Persekutuan |           |            |            |            |            |           |           |            |
| Kuala Lumpur        | 5         | 4          | 3          | 7          | 9          | 1         | 8         | 14         |
| Wilayah Persekutuan |           |            |            |            |            |           |           |            |
| Labuan              | 0         | 0          | 0          | 0          | 0          | 0         | 0         | 2          |

Table18 Maternal death rate by state, Malaysia, 1991-1998

| State               | 1991       | 1992       | 1993       | 1994       | 1995       | 1996       | 1997       | 1998       |
|---------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <b>MALAYSIA</b>     | <b>0.2</b> | <b>0.2</b> | <b>0.2</b> | <b>0.2</b> | <b>0.2</b> | <b>0.2</b> | <b>0.2</b> | <b>0.3</b> |
| Johor               | 0.2        | 0.3        | 0.2        | 0.3        | 0.3        | 0.2        | 0.2        | 0.3        |
| Kedah               | 0.3        | 0.4        | 0.3        | 0.2        | 0.2        | 0.2        | 0.3        | 0.4        |
| Kelantan            | 0.2        | 0.2        | 0.3        | 0.2        | 0.1        | 0.1        | 0.2        | 0.2        |
| Melaka              | 0.1        | 0.0        | 0.3        | 0.1        | 0.1        | 0.1        | 0.1        | 0.4        |
| Negeri Sembilan     | 0.3        | 0.3        | 0.2        | 0.1        | 0.2        | 0.1        | 0.1        | 0.1        |
| Pahang              | 0.3        | 0.2        | 0.4        | 0.3        | 0.3        | 0.2        | 0.2        | 0.4        |
| Perak               | 0.1        | 0.4        | 0.2        | 0.3        | 0.3        | 0.2        | 0.1        | 0.2        |
| Perlis              | 0.0        | 0.0        | 0.0        | 0.2        | 0.0        | 0.2        | 0.0        | 0.2        |
| Pulau Pinang        | 0.2        | 0.2        | 0.2        | 0.3        | 0.2        | 0.3        | 0.2        | 0.3        |
| Sabah               | 0.3        | 0.1        | 0.1        | 0.1        | 0.2        | 0.1        | 0.1        | 0.4        |
| Sarawak             | 0.1        | 0.2        | 0.2        | 0.2        | 0.1        | 0.1        | 0.0        | 0.2        |
| Selangor            | 0.2        | 0.1        | 0.2        | 0.1        | 0.2        | 0.2        | 0.2        | 0.2        |
| Terengganu          | 0.1        | 0.2        | 0.2        | 0.1        | 0.2        | 0.1        | 0.1        | 0.2        |
| Wilayah Persekutuan |            |            |            |            |            |            |            |            |
| Kuala Lumpur        | 0.2        | 0.1        | 0.1        | 0.2        | 0.3        | 0.0        | 0.2        | 0.4        |
| Wilayah Persekutuan |            |            |            |            |            |            |            |            |
| Labuan              | 0.0        | 0.0        | 0.0        | 0.0        | 0.0        | 0.0        | 0.0        | 1.4        |

Table19 Leading causes of infant death (1999)

| Order (1999) | cause of death  | Deaths | Rate  | Rate(per 100,000 live births) Percentage(%) |
|--------------|---|--------|-------|---|
|              | Total   | 4,010  | 340.5 | 100.0                                       |
| 1            | Congenital malformations, deformations and chromosomal abnormalities      | 1,411  | 119.8 | 35.2  |
| 2            | Respiratory and cardiovascular disorders specific to the perinatal period | 619    | 52.6  | 15.4  |
| 3            | Sudden infant death syndrome  | 365    | 31.0  | 9.1   |
| 4            | Accidents   | 215    | 18.3  | 5.4   |
| 5            | Haemorrhagic and haematological disorders of fetus and newborn            | 195    | 16.6  | 4.9   |
| 6            | Heart diseases (excludes:Hypertension)                                    | 130    | 11.0  | 3.2   |
| 7            | Infections specific to the perinatal period                               | 101    | 8.6   | 2.5   |
| 8            | Septicaemia   | 84     | 7.1   | 2.1   |
| 9            | Disorders related to length of gestation and fetal growth                 | 78     | 6.6   | 1.9   |
| 10           | Pneumonia   | 70     | 5.9   | 1.7   |

Note : Septicaemia (excludes Bacterial sepsis of newborn)

Heart disease (excludes hypertension)

Infections specific to the perinatal period (including bacterial sepsis of newborn)

Source : "Vital Statistics of Japan" , Ministry of Health, Labour and Welfare, Japan

Table20 Maternal mortality rate (per 100,000 total births)

|      | Rate  |      | Rate |
|------|-------|------|------|
| 1950 | 161.2 | 1983 | 14.8 |
| 1955 | 161.7 | 1984 | 14.6 |
| 1960 | 117.5 | 1985 | 15.1 |
| 1964 | 90.1  | 1986 | 12.9 |
| 1965 | 80.4  | 1987 | 11.5 |
| 1970 | 48.7  | 1988 | 9.2  |
| 1971 | 42.5  | 1989 | 10.4 |
| 1972 | 38.2  | 1990 | 8.2  |
| 1973 | 36.3  | 1991 | 8.6  |
| 1974 | 32.7  | 1992 | 8.8  |
| 1975 | 27.3  | 1993 | 7.4  |
| 1976 | 24.5  | 1994 | 5.9  |
| 1977 | 21.9  | 1995 | 6.9  |
| 1978 | 21.0  | 1996 | 5.8  |
| 1979 | 21.8  | 1997 | 6.3  |
| 1980 | 19.5  | 1998 | 6.9  |
| 1981 | 18.3  | 1999 | 5.9  |
| 1982 | 17.5  |      |      |

Source : "Vital Statistics of Japan" , Ministry of Health, Labour and Welfare, Japan



Table21 Percentage Contraceptive Use, Malaysia 1998

|               | %    |
|---------------|------|
| OCP           | 74.9 |
| condom        | 10.5 |
| sterilisation | 5.7  |
| IUD           | 4.1  |
| injectables   | 2.4  |
| others        | 2.4  |

OCP:oral contraceptive pill

IUD:intrauterine contraceptive device

Table22 IMMUNISATION SCHEDULE

| AGE          | IMMUNISATION  |
|--------------|---|
| AT BIRTH     | <ul style="list-style-type: none"> <li>• BCG</li> <li>• HEPATITIS B 1ST DOSE</li> </ul>     |
| 1 MONTH      | <ul style="list-style-type: none"> <li>• HEPATITIS B 2ND DOSE</li> </ul>                    |
| 3、4、5 MONTHS | <ul style="list-style-type: none"> <li>• DPT+OPV</li> <li>• HEPATITIS B 3RD DOSE</li> </ul> |
| 9 MONTHS     | <ul style="list-style-type: none"> <li>• MEASLES</li> </ul>                                 |
| 18 MONTHS    | <ul style="list-style-type: none"> <li>• BOOSTER DOSE (DT)</li> </ul>                       |
| STANDARD ONE | <ul style="list-style-type: none"> <li>• BCG (IF NO SCAR)</li> <li>• DT+OPV</li> </ul>      |
| STANDARD 6   | <ul style="list-style-type: none"> <li>• BCG</li> <li>• RUBELLA (FEMALE)</li> </ul>         |
| FORM 3       | <ul style="list-style-type: none"> <li>• ATT</li> </ul>                                     |

Table 23 Case discovery rate: Inborn errors of metabolism 1977~98

|         | phenyl ketonuria   | maple<br>syruurine<br>disease | homo-cystinuria     | galactosemia       | CAH                | cretism              | neuroblastoma        |
|---------|--------------------|-------------------------------|---------------------|--------------------|--------------------|----------------------|----------------------|
| Total   | 371<br>1 / 76, 700 | 59<br>1 / 482, 100            | 158<br>1 / 180, 000 | 802<br>1 / 35, 500 | 832<br>1 / 15, 000 | 5, 672<br>1 / 4, 400 | 2, 330<br>1 / 6, 200 |
| 1977~92 | 263<br>1 / 80, 300 | 49<br>1 / 431, 000            | 123<br>1 / 171, 700 | 494<br>1 / 42, 800 | 304<br>1 / 16, 900 | 3, 098<br>1 / 5, 700 | 1, 036<br>1 / 7, 900 |
| 1993    | 15<br>1 / 80, 400  | —<br>—                        | 9<br>1 / 134, 000   | 45<br>1 / 26, 800  | 89<br>1 / 13, 600  | 313<br>1 / 3, 900    | 202<br>1 / 5, 200    |
| 1994    | 13<br>1 / 96, 400  | 1<br>1 / 1, 253, 000          | 2<br>1 / 626, 600   | 49<br>1 / 25, 600  | 100<br>1 / 12, 500 | 378<br>1 / 3, 300    | 208<br>1 / 5, 000    |
| 1995    | 26<br>1 / 46, 000  | 5<br>1 / 239, 200             | 13<br>1 / 92, 000   | 59<br>1 / 20, 300  | 99<br>1 / 12, 100  | 425<br>1 / 2, 800    | 194<br>1 / 5, 400    |
| 1996    | 15<br>1 / 81, 500  | 3<br>1 / 407, 600             | 5<br>1 / 244, 600   | 60<br>1 / 20, 400  | 79<br>1 / 15, 500  | 471<br>1 / 2, 600    | 232<br>1 / 4, 400    |
| 1997    | 16<br>1 / 76, 000  | 1<br>1 / 1, 215, 600          | 3<br>1 / 405, 200   | 49<br>1 / 24, 800  | 77<br>1 / 15, 800  | 460<br>1 / 2, 600    | 252<br>1 / 4, 100    |
| 1998    | 23<br>1 / 53, 500  | —<br>—                        | 3<br>1 / 409, 900   | 46<br>1 / 26, 700  | 84<br>1 / 14, 600  | 527<br>1 / 2, 300    | 206<br>1 / 5, 100    |

NOTE : For 1988 and after, CAH are counted. In the fiscal years 1988~1992, 5 123 915 infants were tested for CAH. For 1979 and after, cretism are counted. For

1984 and after, neuroblastoma are counted.

SOURCE : Maternal and Child Health Division, Equal Employment, Children and Families Bureau, Ministry of Health Labour and Welfare.

Table24 Number of new registrants and incidence rate of TB

|      | all forms TB |                              |                                       |                              |
|------|--------------|------------------------------|---------------------------------------|------------------------------|
|      | number       |                              | incidence rate per 100,000 population |                              |
|      |              | differences of previous year |                                       | differences of previous year |
| 1992 | 48,956       |                              | 39.3                                  |                              |
| 1993 | 47,437       | △1,519                       | 38.0                                  | △1.3                         |
| 1994 | 44,590       | △2,847                       | 35.7                                  | △2.3                         |
| 1995 | 43,078       | △1,512                       | 34.3                                  | △1.4                         |
| 1996 | 42,472       | △606                         | 33.7                                  | △0.6                         |
| 1997 | 42,715       | 243                          | 33.9                                  | 0.2                          |
| 1998 | 44,016       | 1,301                        | 34.8                                  | 0.9                          |
| 1999 | 48,430       | 4,414                        | 38.2                                  | 3.4                          |

Source : Survey on trends of tuberculosis occurrence, Ministry of Health, Labour and Welfare

Table25 Number of HIV and AIDS by risk category in Malaysia

|                       | 1986—1999 |       | 2000  |      |
|-----------------------|-----------|-------|-------|------|
|                       | HIV       | AIDS  | HIV   | AIDS |
| IDUs                  | 25,380    | 2,070 | 2,133 | 434  |
| blood transmission    | 19        | 8     | 1     | 3    |
| sexually transmission | 3,522     | 853   | 606   | 215  |
| vertical transmission | 138       | 44    | 65    | 4    |
| unknown               | 4,174     | 579   | 245   | 48   |
| Total                 | 33,233    | 3,554 | 3,050 | 704  |

IDUs : injection drug users

Table26 Total of HIV and AIDS by nationality, sex and risk category. Dec, 31, 2001

|   | Total  |        |        | Japanese |        |        | Non-Japanese |      |        |
|---|--------|--------|--------|----------|--------|--------|--------------|------|--------|
|   | Total  | male   | female | Total    | male   | female | Total        | male | female |
| Total of HIV                              | 5, 313 | 3, 951 | 1, 362 | 3, 804   | 3, 453 | 351    | 1, 509       | 498  | 1, 011 |
| hetero sexually                           | 1, 762 | 919    | 843    | 1, 027   | 749    | 278    | 735          | 170  | 565    |
| homo sexually <sup>1)</sup>               | 1, 119 | 1, 119 | —      | 1, 007   | 1, 007 | —      | 112          | 112  | —      |
| IDUs                                      | 23     | 22     | 1      | 7        | 7      | —      | 16           | 15   | 1      |
| vertical                                  | 25     | 12     | 13     | 16       | 10     | 6      | 9            | 2    | 7      |
| others                                    | 72     | 43     | 29     | 51       | 30     | 21     | 21           | 13   | 8      |
| unknown <sup>2)</sup>                     | 880    | 421    | 459    | 264      | 235    | 29     | 616          | 186  | 430    |
| clottingfactor concentrates <sup>3)</sup> | 1, 432 | 1, 415 | 17     | 1, 432   | 1, 415 | 17     | ...          | ...  | ...    |
| Total of AIDS                             | 2, 542 | 2, 261 | 281    | 2, 039   | 1, 925 | 114    | 503          | 336  | 167    |
| hetero sexually                           | 879    | 725    | 154    | 672      | 604    | 68     | 207          | 121  | 86     |
| homo sexually <sup>1)</sup>               | 431    | 431    | —      | 383      | 383    | —      | 48           | 48   | —      |
| IDUs                                      | 15     | 15     | —      | 5        | 5      | —      | 10           | 10   | —      |
| vertical                                  | 14     | 9      | 5      | 11       | 8      | 3      | 3            | 1    | 2      |
| others                                    | 44     | 29     | 15     | 29       | 21     | 8      | 15           | 8    | 7      |
| unknown <sup>2)</sup>                     | 517    | 418    | 99     | 297      | 270    | 27     | 220          | 148  | 72     |
| clottingfactor concentrates <sup>3)</sup> | 642    | 634    | 8      | 642      | 634    | 8      | ...          | ...  | ...    |

Note : 1 ) including bi-sexually transmission

2 ) including plural risk categories

3 ) reports from the research group of Ministry of Health, at the end of May, 1998

Source : Ministry of Health, Labour and Welfare research division "Annual Report of AIDS Incidence Trends", AIDS Trend Committee, Ministry of Health, Labour and Welfare. Total number was the cummulation of cases of report due to Law on communicable diseases. The alteration of cases with changes of condition of disease was not performed.

Table27 HEALTHY LIFE STYLE CAMPAIGN

| PHASE ONE : 1991-1996 |                             |
|-----------------------|-----------------------------|
| 1991 :                | Cardiovascular Disease      |
| 1992 :                | HIV/AIDS                    |
| 1993 :                | Food Hygiene                |
| 1994 :                | Children Health Promotion   |
| 1995 :                | Cancer                      |
| 1996 :                | Diabetes Mellitus           |
| PHASE TWO : 1997-2001 |                             |
| 1997 :                | Healthy Eating              |
| 1998 :                | Exercise & Physical Fitness |
| 1999 :                | Safety Promotion            |
| 2000 :                | Mental Health               |
| 2001 :                | Healthy Family              |

Table28 NUMBER OF NEW AND RELAPSE CASES OF DRUG ADDICTS  
DETECTED 1990—2000

| YEAR | NEW    |      | RELAPSE |      | TOTAL  |     |
|------|--------|------|---------|------|--------|-----|
|      | NO     | %    | NO      | %    | NO     | %   |
| 1990 | 7,389  | 38.3 | 11,921  | 61.7 | 19,310 | 100 |
| 1991 | 8,083  | 38.3 | 12,258  | 60.3 | 20,341 | 100 |
| 1992 | 8,238  | 38.3 | 13,268  | 61.7 | 21,506 | 100 |
| 1993 | 10,383 | 40.8 | 15,074  | 59.2 | 25,457 | 100 |
| 1994 | 11,672 | 40.6 | 17,084  | 59.4 | 28,756 | 100 |
| 1995 | 13,140 | 38.5 | 20,964  | 61.5 | 34,104 | 100 |
| 1996 | 13,846 | 45.3 | 16,752  | 54.7 | 30,598 | 100 |
| 1997 | 17,342 | 47.8 | 18,942  | 52.2 | 36,284 | 100 |
| 1998 | 21,073 | 56.1 | 16,515  | 43.9 | 37,588 | 100 |
| 1999 | 17,915 | 50.7 | 17,444  | 49.3 | 35,359 | 100 |
| 2000 | 13,294 | 48.7 | 14,012  | 51.3 | 27,306 | 100 |

Table29 Number of narcotic and stimulant crime by law

|  |        | 1975   | 1980   | 1985   | 1990   | 1995   | 1996   | 1997   | 1998   | 1999   |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total                                  | case   | 14,987 | 36,063 | 38,329 | 22,630 | 26,846 | 29,775 | 29,699 | 25,617 | 26,873 |
|  | number | 9,703  | 22,055 | 25,198 | 17,238 | 19,425 | 21,388 | 21,511 | 18,811 | 20,129 |
| Narcotics and Psychotropic Control Law | case   | 268    | 241    | 168    | 331    | 572    | 528    | 451    | 563    | 522    |
|  | number | 232    | 158    | 138    | 240    | 334    | 275    | 238    | 277    | 286    |
| Opium Law                              | case   | 158    | 269    | 449    | 113    | 229    | 190    | 222    | 182    | 168    |
|  | number | 140    | 264    | 443    | 111    | 172    | 141    | 161    | 134    | 128    |
| Cannabis Control Law                   | case   | 971    | 1,745  | 1,597  | 2,091  | 2,314  | 2,098  | 1,874  | 2,119  | 1,764  |
|  | number | 909    | 1,433  | 1,273  | 1,620  | 1,555  | 1,306  | 1,175  | 1,316  | 1,224  |
| Stimulants Control Law                 | case   | 13,590 | 33,808 | 36,115 | 20,095 | 23,731 | 26,959 | 27,152 | 22,753 | 24,419 |
|  | number | 8,422  | 20,200 | 23,344 | 15,267 | 17,364 | 19,666 | 19,937 | 17,084 | 18,491 |

Source : the National Police Agency, Ministry of Health, Labour, and Welfare, and Japan Coast Guard.

Table30 MEDICALLY CERTIFIED AND INSPECTED DEATHS BY CAUSE

| CAUSE OF DEATH<br>Adapted from the Mortality Tabulation of the<br>Ninth(1975)Revision of the international<br>Classification of Diseases<br>(Numbers after causes or death are their ICD Codes) | 1994  | 1995  | 1996  | 1997  | 1998  |
|---|-------|-------|-------|-------|-------|
| Cholera(001)  | 23    | 28    | 10    | 14    | 20    |
| Typhoid and paratyphoid fevers(002)   | 16    | 15    | 20    | 8     | 20    |
| Other intestinal infections diseases(Remainder of 001-009)  | 122   | 112   | 122   | 76    | 116   |
| Tuberculosis(010-018)   | 525   | 528   | 573   | 566   | 573   |
| Whooping cough(033)   | -     | 1     | 1     | 1     | -     |
| Meningococcal infection(036)  | 9     | 4     | 3     | 5     | 3     |
| Tetanus(037)  | 18    | 17    | 12    | 6     | 10    |
| Septicaemia(038)  | 1,980 | 2,402 | 2,647 | 2,733 | 2,923 |
| Smallpox(050)   | -     | -     | -     | -     | -     |
| Measles(055)  | 11    | 12    | 13    | 1     | 3     |
| Malaria(084)  | 60    | 63    | 43    | 37    | 20    |
| All other infectious and parasitic diseases(Remainder of 001-139)   | 352   | 318   | 329   | 375   | 584   |
| Malignant neoplasm of stomach(151)  | 257   | 297   | 263   | 265   | 266   |
| Malignant neoplasm of colon(153)  | 164   | 231   | 215   | 235   | 239   |
| Malignant neoplasm of rectum,rectosigmoid junction and anus(154)  | 108   | 120   | 119   | 138   | 120   |
| Malignant neoplasm of trachea,bronchus and lung(162)  | 832   | 886   | 825   | 906   | 941   |
| Malignant neoplasm of female breast(174)  | 260   | 321   | 297   | 339   | 339   |
| Malignant neoplasm of cervix uteri(180)   | 165   | 142   | 146   | 127   | 177   |
| Leukaemia(204-208)  | 266   | 330   | 297   | 315   | 311   |
| All other malignant neoplasms(Remainder of 140-208)   | 1,877 | 1,938 | 2,047 | 2,035 | 2,105 |
| Benign and unspecified neoplasms,carcinoma in situ(210-239)   | 184   | 196   | 178   | 214   | 215   |
| Diabetes mellitus(250)  | 720   | 735   | 678   | 805   | 729   |
| Nutritional marasmus(261)   | 2     | -     | 1     | -     | 1     |
| Other protein-calorie malnutrition(262,263)   | 22    | 10    | 18    | 15    | 16    |
| Anaemias(280-285)   | 109   | 106   | 115   | 91    | 122   |
| Meningitis(320-322)   | 197   | 206   | 185   | 206   | 206   |
| Acute rheumatic fever(390-392)  | 2     | -     | 2     | -     | 4     |
| Chronic rheumatic heart disease(393-398)  | 127   | 148   | 107   | 111   | 101   |
| Hypertensive disease(401-405)   | 276   | 285   | 366   | 529   | 450   |

| CAUSE OF DEATH<br>Adapted from the Mortality Tabulation of the<br>Ninth(1975)Revision of the international<br>Classification of Diseases<br>(Numbers after causes or death are their ICD Codes) | 1994   | 1995   | 1996   | 1997   | 1998   |
|---|--------|--------|--------|--------|--------|
| Acute myocardial infarction(410)  | 3,166  | 3,393  | 3,314  | 3,420  | 3,328  |
| Other ischaemic heart disease(411-414)  | 899    | 932    | 933    | 1,037  | 1,062  |
| Cerebrovascular disease(430-438)  | 3,137  | 3,363  | 3,279  | 3,335  | 3,367  |
| Atherosclerosis(440)  | 5      | 5      | 2      | 1      | 1      |
| Other diseases of circulatory-system(Remainder of 390-459)  | 3,275  | 3,684  | 3,628  | 3,817  | 3,902  |
| Pneumonia(480-486)  | 1,245  | 1,492  | 1,434  | 1,669  | 1,865  |
| Influenza(487)  | -      | 3      | 4      | 2      | 1      |
| Bronchitis,emphysema and asthma(490-493)  | 341    | 406    | 410    | 416    | 412    |
| Ulcer of stomach and duodenum(531-533)  | 142    | 143    | 145    | 165    | 117    |
| Appendicitis(540-543)   | 12     | 11     | 21     | 17     | 16     |
| Chronic liver disease and cirrhosis(571)  | 344    | 365    | 341    | 366    | 363    |
| Nephritis,nephrotic syndrome and nephrosis(580-589)   | 1,018  | 996    | 1,175  | 1,169  | 1,011  |
| Hyperplasia of prostate(600)  | 2      | 1      | 0      | -      | 1      |
| Abortion(630-639)   | 8      | 10     | 13     | 9      | 22     |
| Direct obstetric cause(640-646,650-676)   | 73     | 71     | 57     | 66     | 94     |
| Indirect obstetric causes(647-648)  | -      | 2      | 0      | 1      | 2      |
| Congenital anomalies(740-759)   | 1,058  | 983    | 958    | 1,095  | 1,027  |
| Birth trauma(767)   | 11     | 14     | 28     | 17     | 22     |
| Other conditions originating in the perinatal period(760-766,768-779)   | 2,572  | 2,590  | 2,168  | 2,326  | 1,980  |
| Signs,symptoms and ill-defined conditions(780-799)  | 2,185  | 2,389  | 2,570  | 2,748  | 2,273  |
| All other diseases(Remainder of 001-799)  | 4,205  | 4,745  | 4,773  | 5,046  | 5,470  |
| Motor vehicle traffic accidents(E810-E819)  | 2,041  | 2,293  | 2,698  | 2,972  | 2,577  |
| Accidental falls(E880-E888)   | 596    | 430    | 347    | 437    | 355    |
| All other accidents and adverse effects(Remainder of E800-E949)   | 830    | 1,087  | 1,256  | 1,148  | 1,176  |
| Suicide and Self-inflicted injury(E950-E959)  | 36     | 52     | 92     | 176    | 200    |
| Homicide and injury purposely inflicted by other persons(E960-E969)   | 47     | 44     | 74     | 117    | 141    |
| Other violence(E970-E978,E980-E999)   | 2,303  | 2,540  | 2,436  | 2,268  | 2,115  |
| Total   | 38,234 | 41,495 | 41,788 | 44,013 | 43,514 |

Table 31 Crude death rate by state, stratum and sex, Peninsular Malaysia, 1991-1998-

| State               | Urban |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |  |
|---------------------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|--|
|                     | 1991  |      |        | 1992  |      |        | 1993  |      |        | 1994  |      |        | 1995  |      |        | 1996  |      |        | 1997  |      |        | 1998  |      |        |  |
|                     | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |  |
| PENINSULAR MALAYSIA | 4.4   | 5.0  | 3.9    | 4.5   | 5.0  | 3.9    | 4.6   | 5.2  | 4.0    | 4.5   | 5.1  | 3.9    | 4.8   | 5.5  | 4.2    | 5.0   | 5.8  | 4.3    | 5.1   | 5.9  | 4.4    | 5.0   | 5.6  | 4.3    |  |
| Johor               | 4.6   | 5.2  | 3.9    | 4.6   | 5.3  | 3.8    | 4.7   | 5.5  | 3.9    | 4.4   | 5.0  | 3.8    | 5.1   | 5.8  | 4.3    | 4.4   | 5.1  | 3.7    | 4.7   | 5.6  | 3.8    | 4.5   | 5.2  | 3.8    |  |
| Kedah               | 4.8   | 5.4  | 4.1    | 4.5   | 5.2  | 3.9    | 4.9   | 5.6  | 4.2    | 5.0   | 5.8  | 4.2    | 5.4   | 6.1  | 4.7    | 8.1   | 9.1  | 7.1    | 8.1   | 9.4  | 6.9    | 8.2   | 9.5  | 7.0    |  |
| Kelantan            | 4.6   | 5.0  | 4.2    | 4.5   | 4.9  | 4.2    | 4.9   | 5.4  | 4.4    | 4.5   | 5.1  | 4.0    | 5.5   | 6.3  | 4.7    | 5.1   | 5.7  | 4.6    | 5.5   | 6.2  | 4.8    | 5.8   | 6.5  | 5.2    |  |
| Melaka              | 5.2   | 5.7  | 4.8    | 5.3   | 5.7  | 4.9    | 5.8   | 6.4  | 5.3    | 5.5   | 5.8  | 5.1    | 6.6   | 7.3  | 5.9    | 6.5   | 7.1  | 5.8    | 6.7   | 7.2  | 6.2    | 6.4   | 7.0  | 5.8    |  |
| Negeri Sembilan     | 4.5   | 5.2  | 3.9    | 4.4   | 4.9  | 4.0    | 4.6   | 5.2  | 4.0    | 4.5   | 5.3  | 3.8    | 4.3   | 4.7  | 3.8    | 4.2   | 4.9  | 3.5    | 4.6   | 5.3  | 3.9    | 4.7   | 5.4  | 4.1    |  |
| Pahang              | 3.9   | 4.3  | 3.5    | 3.7   | 4.1  | 3.4    | 3.9   | 6.4  | 3.4    | 3.9   | 4.3  | 3.5    | 4.2   | 4.9  | 3.6    | 4.6   | 5.4  | 3.8    | 4.6   | 5.4  | 3.8    | 4.3   | 4.9  | 3.5    |  |
| Perak               | 5.2   | 6.0  | 4.5    | 5.4   | 6.1  | 4.7    | 5.7   | 6.4  | 5.1    | 5.5   | 6.2  | 4.8    | 5.4   | 6.2  | 4.6    | 5.8   | 6.8  | 4.9    | 6.1   | 7.0  | 5.3    | 5.9   | 6.7  | 5.1    |  |
| Pertis              | 5.2   | 5.6  | 4.9    | 4.8   | 5.3  | 4.4    | 4.6   | 5.5  | 3.8    | 5.1   | 5.2  | 5.1    | 5.3   | 5.5  | 5.1    | 10.9  | 12.0 | 9.8    | 9.7   | 10.6 | 8.8    | 9.7   | 10.1 | 9.2    |  |
| Pulau Pinang        | 5.2   | 5.8  | 4.7    | 5.7   | 6.4  | 5.0    | 5.4   | 6.0  | 4.7    | 5.4   | 6.0  | 4.9    | 5.8   | 6.6  | 5.0    | 6.1   | 7.0  | 5.3    | 6.3   | 7.1  | 5.5    | 6.2   | 7.0  | 5.5    |  |
| Selangor            | 3.6   | 4.1  | 3.0    | 3.7   | 4.2  | 3.1    | 3.8   | 4.4  | 3.2    | 3.5   | 4.1  | 3.0    | 3.8   | 4.4  | 3.1    | 3.9   | 4.6  | 3.3    | 3.9   | 4.5  | 3.2    | 3.6   | 4.1  | 3.0    |  |
| Terengganu          | 4.5   | 4.7  | 4.3    | 4.6   | 4.9  | 4.4    | 4.7   | 5.1  | 4.3    | 5.0   | 5.3  | 4.6    | 5.1   | 5.6  | 4.7    | 5.0   | 5.9  | 4.2    | 4.6   | 5.2  | 4.1    | 4.8   | 5.4  | 4.1    |  |
| Wilayah Persekutuan |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |  |
| Kuala Lumpur        | 4.1   | 4.5  | 3.6    | 4.1   | 4.5  | 3.6    | 4.2   | 4.6  | 3.7    | 4.2   | 4.8  | 3.6    | 4.5   | 5.0  | 4.0    | 4.4   | 5.1  | 3.7    | 4.3   | 5.0  | 3.7    | 4.2   | 4.8  | 3.5    |  |

Note : Rates calculated using the population estimates based on natural increase



Table 32 Crude death rate by state, stratum and sex, Peninsular Malaysia, 1991-1998

| State               | Rural |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |       |      |        |   |
|---------------------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|---|
|                     | 1991  |      |        | 1992  |      |        | 1993  |      |        | 1994  |      |        | 1995  |      |        | 1996  |      |        | 1997  |      |        | 1998  |      |        |   |
|                     | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |   |
| PENINSULAR MALAYSIA | 5.3   | 6.0  | 4.7    | 5.3   | 5.9  | 4.7    | 5.0   | 5.6  | 4.4    | 5.2   | 5.9  | 4.5    | 5.2   | 5.9  | 4.5    | 4.8   | 5.5  | 4.1    | 4.8   | 5.5  | 4.0    | 4.8   | 5.5  | 4.1    |   |
| Johor               | 4.8   | 5.3  | 4.3    | 4.3   | 5.4  | 4.2    | 4.3   | 4.7  | 3.8    | 4.0   | 4.6  | 3.4    | 4.8   | 5.5  | 4.1    | 4.5   | 5.3  | 3.8    | 4.8   | 5.6  | 4.0    | 4.7   | 5.5  | 3.8    |   |
| Kedah               | 5.6   | 6.1  | 5.1    | 5.3   | 5.9  | 4.7    | 5.4   | 6.0  | 4.7    | 5.6   | 6.4  | 4.9    | 4.4   | 6.1  | 4.7    | 4.4   | 4.9  | 3.9    | 4.4   | 5.0  | 3.8    | 4.5   | 5.1  | 4.0    |   |
| Kelantan            | 5.5   | 6.1  | 5.0    | 5.5   | 5.9  | 5.0    | 5.3   | 5.7  | 4.8    | 5.3   | 5.8  | 4.8    | 5.0   | 5.4  | 4.6    | 4.8   | 5.4  | 4.3    | 4.3   | 4.9  | 3.7    | 4.7   | 5.3  | 4.1    |   |
| Melaka              | 6.3   | 7.2  | 5.4    | 6.4   | 7.2  | 5.6    | 5.8   | 6.5  | 5.1    | 6.2   | 7.0  | 5.4    | 5.9   | 6.6  | 5.2    | 5.5   | 6.4  | 4.6    | 5.9   | 6.8  | 4.9    | 5.6   | 6.6  | 4.7    |   |
| Negeri Sembilan     | 5.6   | 6.5  | 4.7    | 5.5   | 6.1  | 4.9    | 5.3   | 6.2  | 4.4    | 5.9   | 6.6  | 5.1    | 6.4   | 7.4  | 5.4    | 6.4   | 7.4  | 5.4    | 5.6   | 6.5  | 4.7    | 5.8   | 6.7  | 5.0    |   |
| Pahang              | 4.1   | 4.5  | 3.5    | 3.9   | 4.3  | 3.5    | 3.7   | 4.1  | 3.3    | 4.1   | 4.6  | 3.7    | 3.8   | 4.2  | 3.3    | 3.7   | 4.2  | 3.2    | 4.2   | 4.9  | 3.5    | 4.5   | 5.0  | 3.9    |   |
| Perak               | 6.4   | 7.3  | 5.5    | 6.5   | 7.4  | 5.7    | 6.3   | 7.0  | 5.5    | 6.5   | 7.5  | 5.4    | 6.5   | 7.6  | 5.5    | 5.4   | 6.3  | 4.6    | 5.4   | 6.2  | 4.7    | 5.7   | 6.5  | 4.9    |   |
| Perlis              | 5.6   | 5.9  | 5.4    | 5.2   | 5.6  | 4.8    | 5.2   | 5.8  | 4.6    | 5.9   | 6.7  | 5.0    | 5.7   | 6.1  | 5.2    | 3.9   | 4.4  | 3.3    | 4.2   | 4.9  | 3.4    | 4.2   | 4.9  | 3.6    |   |
| Pulau Pinang        | 6.0   | 6.5  | 5.4    | 6.4   | 7.1  | 5.8    | 6.0   | 6.7  | 5.3    | 5.9   | 6.6  | 5.2    | 6.0   | 7.0  | 5.0    | 5.1   | 5.8  | 4.4    | 4.6   | 5.3  | 4.0    | 5.2   | 5.8  | 4.5    |   |
| Selangor            | 5.3   | 6.1  | 4.4    | 5.4   | 6.2  | 4.6    | 5.0   | 5.8  | 4.1    | 5.3   | 6.2  | 4.4    | 4.9   | 5.8  | 4.0    | 5.2   | 6.1  | 4.2    | 4.6   | 5.4  | 3.7    | 3.4   | 4.1  | 2.7    |   |
| Terengganu          | 4.5   | 5.0  | 4.1    | 4.6   | 5.1  | 4.2    | 4.3   | 4.6  | 4.0    | 4.2   | 4.7  | 3.7    | 4.4   | 5.0  | 3.8    | 4.6   | 5.2  | 4.0    | 4.6   | 5.1  | 4.1    | 4.7   | 5.1  | 4.2    |   |
| Wilayah Persekutuan | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | : |
| Kuala Lumpur        | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | :     | :    | :      | : |

Note : Rates calculated using the population estimates based on natural increase

Table33 Number of death and crude death rate by cause of death

| order | cause of death          | death   |         |                             | rate  |       |  | Ratio of total(%) |       |
|-------|-------------------------|---------|---------|-----------------------------|-------|-------|--|-------------------|-------|
|       |                         | 1999    | 1998    | Increases from 1998 to 1999 | 1999  | 1998  | Ratio over previous Fiscal Year(1998=100%) | 1999              | 1998  |
|       |                         |         |         |                             |       |       |  |                   |       |
|       | Total                   | 982,031 | 936,484 | 45,547                      | 782.9 | 747.7 | 104.7                                      | 100.0             | 100.0 |
| 1     | malignant neoplasma     | 290,556 | 283,921 | 6,635                       | 231.6 | 226.7 | 102.2                                      | 29.6              | 30.3  |
| 2     | heart disease           | 151,079 | 143,120 | 7,959                       | 120.4 | 114.3 | 105.3                                      | 15.4              | 15.3  |
| 3     | cerebrovascular disease | 138,989 | 137,819 | 1,170                       | 110.8 | 110.0 | 100.7                                      | 14.2              | 14.7  |
| 4     | pneumonia               | 93,994  | 79,952  | 14,042                      | 74.9  | 63.8  | 117.4                                      | 9.6               | 8.5   |
| 5     | accident                | 40,079  | 38,925  | 1,154                       | 32.0  | 31.1  | 102.9                                      | 4.1               | 4.2   |
| 6     | suicide                 | 31,413  | 31,755  | △342                        | 25.0  | 25.4  | 98.4                                       | 3.2               | 3.4   |
| 7     | senility                | 22,829  | 21,374  | 1,455                       | 18.2  | 17.1  | 106.4                                      | 2.3               | 2.3   |
| 8     | renal failure           | 17,704  | 16,638  | 1,066                       | 14.1  | 13.3  | 106.0                                      | 1.8               | 1.8   |
| 9     | liver disease           | 16,585  | 16,133  | 452                         | 13.2  | 12.9  | 102.3                                      | 1.7               | 1.7   |
| 10    | diabetes mellitis       | 12,814  | 12,537  | 277                         | 10.2  | 10.0  | 102.0                                      | 1.3               | 1.3   |

Source : Vital Statistics, Ministry of Health, Labour and Welfare

Table34 Number of malignant neoplasma death by sex and region

|                           | 1950    | 1960    | 1970    | 1980    | 1985     | 1990     | 1995     | 1999     |
|---------------------------|---------|---------|---------|---------|----------|----------|----------|----------|
| <b>Male</b>               |         |         |         |         |          |          |          |          |
| malignant neoplasma       | 32, 670 | 50, 898 | 67, 074 | 93, 501 | 110, 660 | 130, 395 | 159, 623 | 175, 817 |
| Stomach                   | 19, 023 | 26, 283 | 29, 653 | 30, 845 | 30, 146  | 29, 909  | 32, 015  | 32, 788  |
| Colon <sup>1)</sup>       | 1, 819  | 2, 390  | 4, 303  | 7, 724  | 10, 112  | 13, 286  | 17, 312  | 19, 418  |
| Liver <sup>2)</sup>       | 3, 601  | 5, 204  | 5, 868  | 9, 741  | 13, 780  | 17, 786  | 22, 773  | 23, 492  |
| Gallbladder <sup>3)</sup> |         | 556     | 1, 340  | 2, 791  | 3, 949   | 5, 069   | 6, 189   | 6, 748   |
| Lung <sup>4)</sup>        | 789     | 3, 638  | 7, 502  | 15, 438 | 20, 837  | 26, 872  | 33, 389  | 37, 934  |
| Other                     | 7, 438  | 12, 827 | 18, 408 | 26, 962 | 31, 836  | 37, 473  | 47, 945  | 55, 437  |
| <b>Female</b>             |         |         |         |         |          |          |          |          |
| malignant neoplasma       | 31, 758 | 42, 785 | 52, 903 | 68, 263 | 77, 054  | 87, 018  | 103, 399 | 114, 739 |
| Stomach                   | 12, 188 | 16, 467 | 19, 170 | 19, 598 | 18, 756  | 17, 562  | 18, 061  | 17, 888  |
| Colon <sup>1)</sup>       | 1, 909  | 2, 647  | 4, 196  | 7, 015  | 8, 926   | 11, 346  | 13, 962  | 15, 945  |
| Liver <sup>2)</sup>       | 2, 578  | 3, 614  | 3, 574  | 4, 227  | 5, 192   | 6, 447   | 8, 934   | 10, 324  |
| Gallbladder <sup>3)</sup> |         | 588     | 1, 764  | 3, 808  | 5, 521   | 6, 802   | 7, 557   | 8, 149   |
| Lung <sup>4)</sup>        | 330     | 1, 533  | 2, 987  | 5, 856  | 7, 753   | 9, 614   | 12, 356  | 14, 243  |
| breast                    | 1, 419  | 1, 683  | 2, 486  | 4, 141  | 4, 922   | 5, 848   | 7, 763   | 8, 882   |
| uterus                    | 8, 356  | 7, 068  | 6, 373  | 5, 465  | 4, 912   | 4, 600   | 4, 865   | 5, 142   |
| Other                     | 4, 978  | 9, 185  | 12, 353 | 18, 153 | 21, 072  | 24, 799  | 29, 901  | 34, 166  |

Note 1) indicating colon, reciosigmoid junction and rectum, and before 1965 including anus

2) indicating liver and intrahepatic bile duct

3) indicating gallbladder and other bile duct

4) indicating trachea, bronchus and lung

Source : Vital Statistics, Ministry of Health, Labour, and Welfare

Table35 Outpatient Attendance in Ministry Of Health Facilities

| Year  | Hospital & Satellite Clinics |                     | Rural Health Clinics & Dispensaries* |                     | Total             |                       |
|-------|------------------------------|---------------------|--------------------------------------|---------------------|-------------------|-----------------------|
|       | Number (millions)            | Percentage of Total | Number (millions)                    | Percentage of Total | Number (millions) | Attendance per person |
| 1960+ | 3. 029                       | 73. 9               | 1. 067                               | 26. 1               | 4. 097            | 0. 5                  |
| 1970+ | 6. 000                       | 74. 2               | 2. 083                               | 25. 8               | 8. 083            | 0. 8                  |
| 1980  | 10. 751                      | 57. 1               | 8. 064                               | 42. 9               | 18. 815           | 1. 4                  |
| 1985  | 11. 846                      | 58. 2               | 8. 513                               | 41. 8               | 20. 359           | 1. 2                  |
| 1990  | 13. 367                      | 56. 1               | 10. 440                              | 43. 9               | 23. 807           | 1. 2                  |
| 1996  | 13. 627                      | 53. 9               | 11. 648                              | 46. 1               | 25. 275           | 1. 2                  |

+ Peninsular Malaysia only

\* Outpatient attendance in hospitals includes specialist clinic outpatients and emergency department outpatients.

Satellite clinics refer to outpatient or polyclinics in the urban areas.

Source : Report of the Medical Department, 1960, Federation of Malaya, Annual Reports, Ministry of Health, 1971/72, 1980, 1990, 1996

Table36 Admissions to Ministry Of Health Hospitals,1960–1996

| Year  | No. of Hospitals(Include Special Institutions) | Admission Numbers | Admission Rate(per 1000pop) |
|-------|--|-------------------|-----------------------------|
| 1960* | 65   | 311, 791          | 45. 1                       |
| 1970* | 62   | 569, 066          | 54. 5                       |
| 1980  | 95   | 909, 394          | 67. 4                       |
| 1985  | 101  | 1, 068, 788       | 68. 2                       |
| 1990  | 102  | 1, 307, 609       | 73. 6                       |
| 1995  | 117  | 1, 447, 582       | 70. 0                       |
| 1996  | 117  | 1, 517, 744       | 71. 7                       |

\* Peninsular Maiaysia only

Source : Data for computation of admission rate is derived from the Ministry Of Health Annual Report 1971/72,1980,1985,1990,1995,1996 and the Report of the Medical Department for the year 1960,Federation of Malaya.

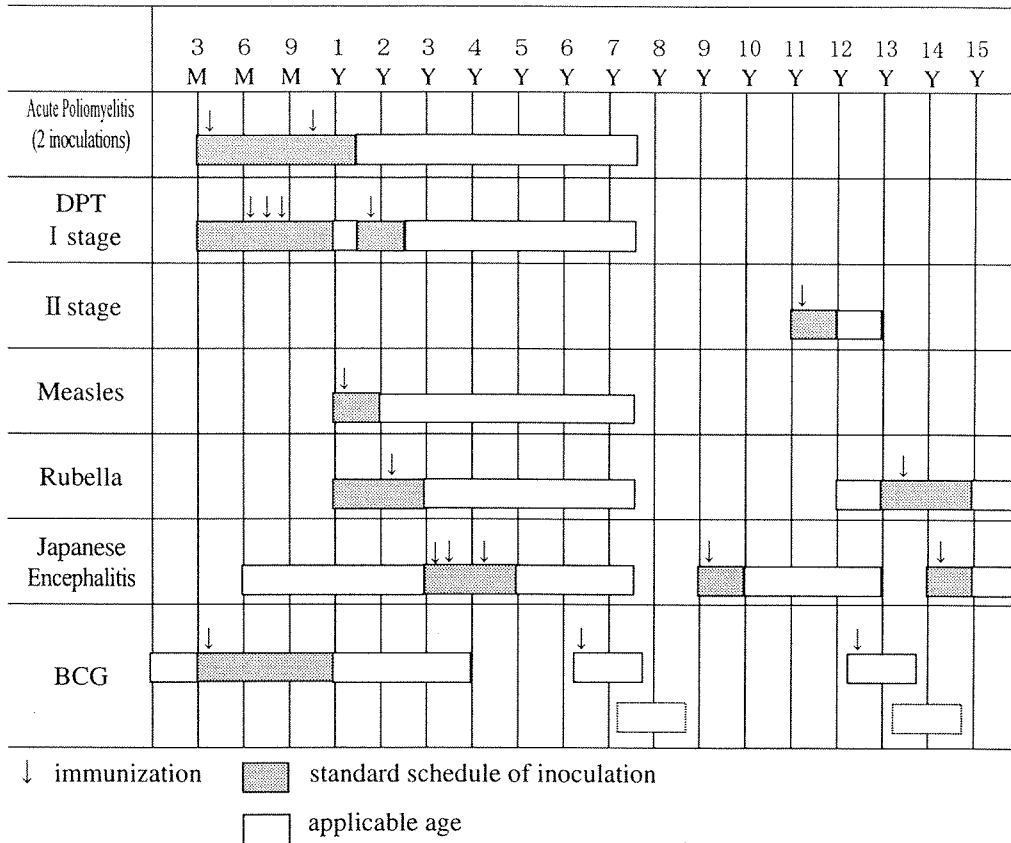
Table37 Outpatient Attendance and Admission to Hospitals in Malaysia

| YEAR | NO.OF HOSPITALS | NO.OF BEDS      | Proportion Against Total in Country* |                   |
|------|-----------------|-----------------|--------------------------------------|-------------------|
|      |                 |                 | Outpatient Attendance                | Admissions        |
| 1980 | 50              | 1, 173 ( 4. 3%) | Not Available                        | Not Available     |
| 1985 | 133             | 3, 559 (11. 5%) | 973, 225 (4. 5%)                     | 153, 535 (12. 0%) |
| 1990 | 174             | 4, 675 (14. 1%) | 2, 131, 374 (8. 0%)                  | 226, 633 (14. 1%) |
| 1996 | 203             | 7, 474 (20. 4%) | 2, 836, 321 (9. 8%)                  | 331, 889 (17. 2%) |

Source:Annual Reports,Ministry of Health,1981,1985,1990,1996

\* Total includes MOH Hospitals,Non-MOH Public Hospitals and Private Hospitals.

Figure1 Regular immunization



Note) 1 st year elementary school student and 1 st year junior high school students that were tuberculin test negative will have BCG. And, after moving up to the 2 nd year, have another tuberculin test. If found to be negative, they will have BCG again.

Figure2 Incidence Rate of TB(all forms)in Malaysia, 1993-1998

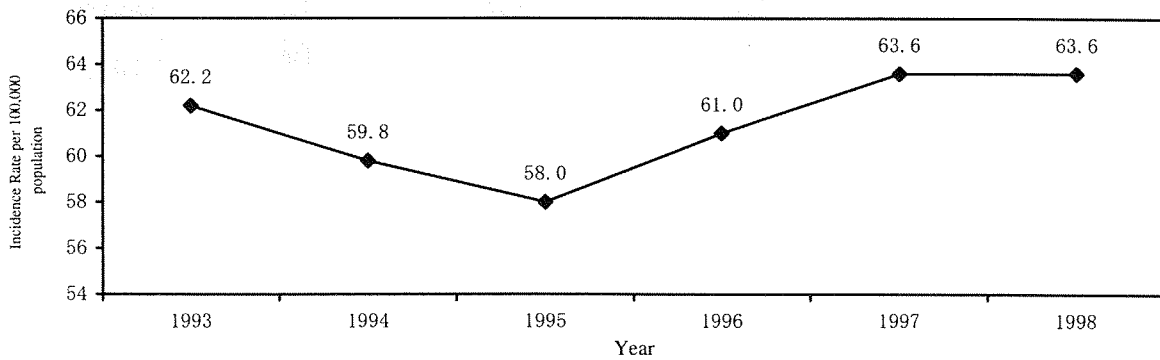


Figure3 The Incidence of Malaria in Malaysia, 1985-1998

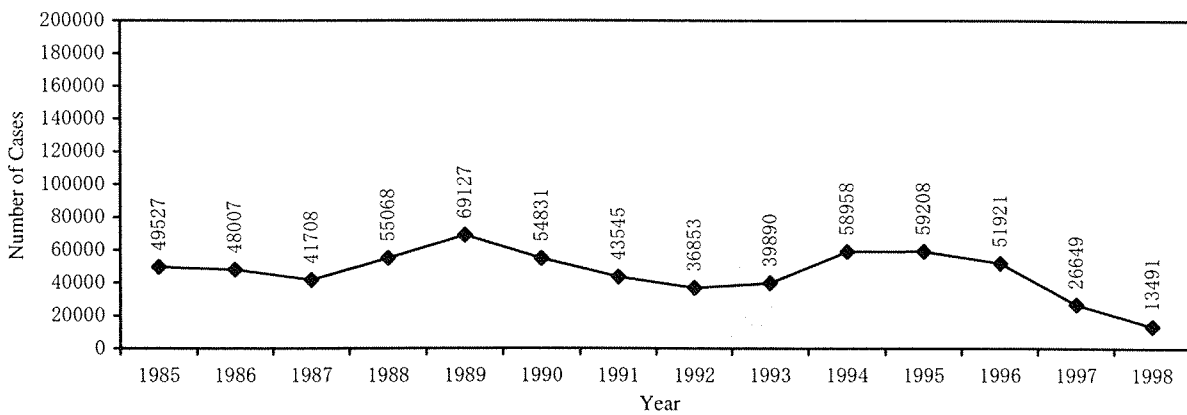


Figure4 Incidence Rate of Reported Dengue in Malaysia, 1984-1998

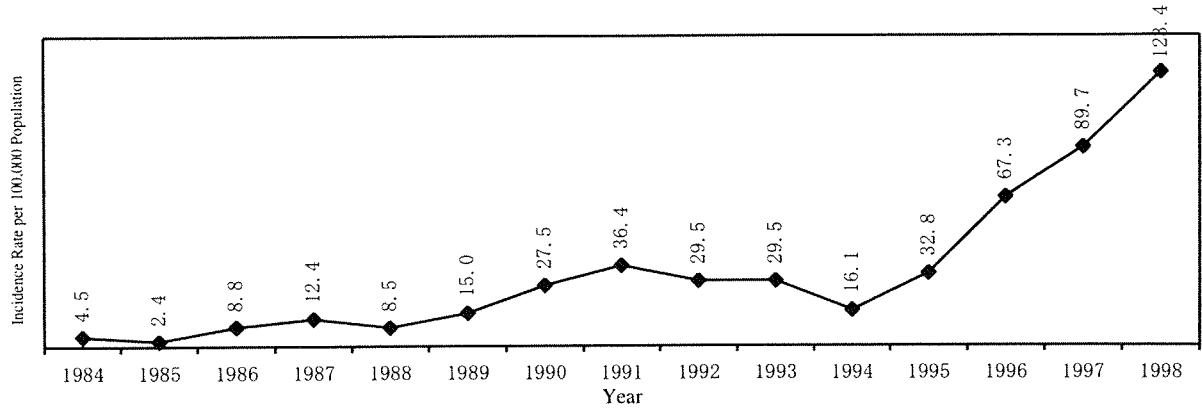


Figure5 Outpatient attendance in KL hospital

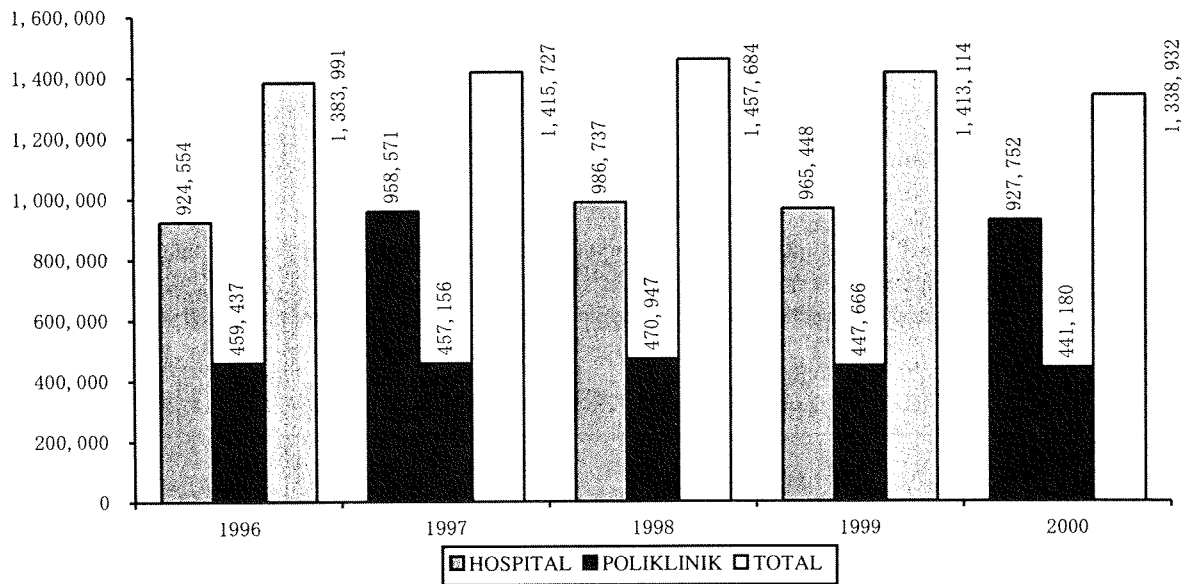
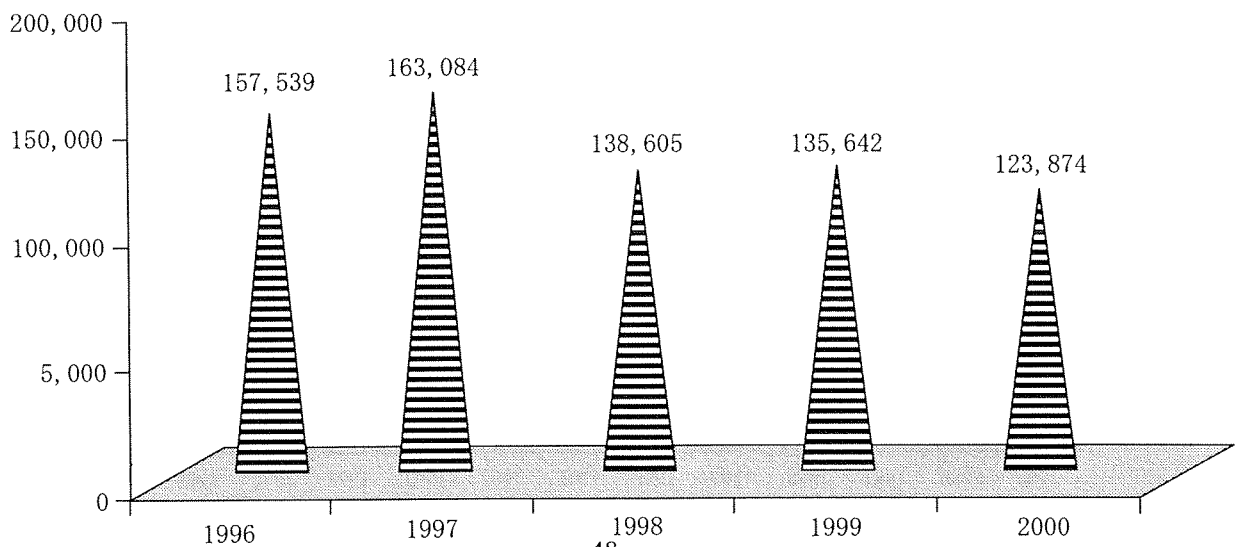


Figure6 Admissions to KL hospital



# Chapter 3

## Social Security for Elderly in Malaysia

### 1. Outline

Aging of population is gradually advancing in Malaysia. The main reason behind this phenomenon is longer life expectancy.<sup>1</sup> Elderly persons of ages 60 and above are currently 1.4 million in number and account for about 6.5% of the population. These figures are predicted to increase to 1.7 million and 7.2%, respectively, by 2005 and to 3.8 million and 11.3%, respectively, by 2020.<sup>2</sup>

The aging problem in Malaysia goes beyond a simple quantitative issue of increase in population ratio. Attention must also be given when formulating future support programs for the elderly to the loss of functions played by families—the central player in supporting the elderly until now—amidst the trend toward nuclear family that followed urbanisation.

Malaysia does not have universal pension or welfare for the elderly in place because the country has been relying primarily on families for supporting the elderly.<sup>3</sup> While 77% of the senior population are healthy and capable of looking after themselves, 1.3% are bedridden. In addition, 70% of the elderly claim that their health condition is “good,” although 81% have some kind of chronic disease and 12.7% are suffering from 3 or more chronic diseases.<sup>4</sup> The present living conditions of the elderly and social security system will be analysed in the following.

### 2. Social Security System in Malaysia

Social security in Malaysia had mainly relied on volunteers and charity from the private sector until the 1970s. However, social security system was gradually improved with the economic development of the country.

Malaysia's social policy has the following characteristics when divided into social security, medical security and welfare for the elderly.

No systematic program offering comprehensive coverage for the entire population exists with regard to social security.<sup>5</sup> Those qualifying for social security in Malaysia are mainly employed persons, and social security is offered in accordance with; 1) EPF (Employees Provident Fund), 2) Employees Social Security Act, 3) Workmen Compensation Act, 4) Employment Act, 5) Pension Act for Public Workers, and 6) Welfare Social Assistance Programmes<sup>6</sup> which is intended for low-income persons in the population.

As for medical security, the national health service, which has been continuing since the period of British rule, is at the centre of the system that offers medical security to all people. It is funded by general-account budget and offers people access to public medical service for small payment. In addition, public hospitals and clinics that have been systematised according to technical level are located throughout the country. Furthermore, there are private hospitals and clinics aside from the public medical security system for those seeking more speedy, comfortable and effective treatment. Medical security in Malaysia therefore has a double structure consisting of national health service and private health care.

With regard to welfare for the elderly, community and family are playing the central role in looking after the elderly based on the concept of "caring society" and the government's role is limited to certain impoverished elderly and to geriatrics-related research and development. There is also a need to train the personnel specialising in caring of the elderly and disabled persons as there is qualitative and quantitative shortage of such personnel.<sup>7</sup>

### **3. System of Income Security**

Social security systems intended for general employed persons include the Employees Pension Fund Act (1951), Workers' Accident Compensation Insurance Act (1952) and Employees Social Security Act (1969, revised in 1984). Among them, the Employees Social Security Act offers cash and medical benefits towards occupational injuries, occupational diseases and physical disabilities to employees working in business establishments hiring 5 or more workers.<sup>8</sup>

#### **(1) Pension**

Malaysia does not have a pension system that covers the entire population. Creation of public pension plan started from civil servants and EPF (Employees Provident Fund), which started in 1951, has taken root as employee pension program.

While the employee pension programs that currently exist include EPF, Social Security Organisation (SOCSO) Army Fund, Teachers' Fund and Pension Fund, EPF accounts for 85% of the balance of the entire pension fund.



## **(2) Pension for Government Servants (Pension Act of 1980)**

### 1) Outline of the system

Pension funds for government servants<sup>9</sup> are based on the Pension Act of 1976. Those qualifying for civil servant pension are civil servants such as central government personnel, local government personnel, police personnel and military personnel that amount to approximately 800,000 persons in number. Civil servant pension is a noncontributory plan whose payment starts at the retirement age of 55 years (45 years for women). Minimum of 10 years of service is required to qualify and 50% of the final wage is paid. The government contributes 17.5% of the wages as the premium while workers make no contribution. Premium is managed under the integrated pension fund account.

### 2) Content of benefits

#### - Qualifications for retirement pension

Workers qualify as a result of retirement from their jobs. Compulsory retirement age for civil servants is 55 years (60 years for judges). Reasons of retirement that qualify for benefits include health reasons, abolishment of workplace, abolishment of position, abandonment of citizenship, public request, selective retirement<sup>10</sup> and transfer to state enterprises. Pension right is lost in the event there is gross violation of the law.

#### - Calculation of the benefit

$1/600 \times \text{last wages} \times \text{months of service}$  (between 20% minimum and 50% maximum)

Multiplication will become  $1/500$  when retirement is attributable to administrative reorganisation.

#### - Survivor's pension

The following survivor's pension is paid in the event of the insured's death.

- a) The pension is paid to his wife and children if he is married and to his parents otherwise in the event the insured dies during his tenure.
- b) Full amount is paid for 12.5 years towards deaths that occur on official duties. The amount is reduced to 70% thereafter.
- c) The pension is paid to the spouse for the spouse's life or until the spouse remarries.
- d) The pension is paid to the child until the child reaches the age of 21 years.
- e) Disability allowance is added in the event the child has disability.
- f) In cases where there are more than one surviving family members, benefits are divided to  $3/5$  for the wife and  $2/5$  for children.

## **(3) Employee's Provident Fund (EPF)**

The Employee's Pension Fund Act of 1951 provides for compulsory contribution provident fund which is paid in full when an employee reaches the age of 55 years and requires all employers and employees to pay 12% and 11%, respectively, of the employee's monthly wage towards the Employee's Pension Fund (EPF).<sup>11</sup>

EPF, along with CPF of Singapore, is the oldest public funded pension in the world. Introduced in 1951, EPF played the leading role in domestic savings.<sup>12</sup> The percentage of the

fund in domestic savings increased from 10 to 11% in the 1970s to 16% in the 1980s and to 18% in the 1990s.<sup>13</sup> The fund also played an extremely important role from the viewpoint of securing the development capital for Malaysia.<sup>14</sup>

#### 1) Outline of EPF

Cumulative enrolment of EPF is 9.45 million in 1999 and has increased 11% from the previous year. Meanwhile, 321,321 persons have withdrawn their assets for a total of 8,549 million ringgit in 1998. As a result, EPF's total asset has amounted to 155,625 million ringgit which corresponds to more than 50% of Malaysia's GDP. Figure 1 shows the status of enrolment in EPF.

#### 2) EPF organisation

EPF is a special company that has been established by law under the supervision of the Ministry of Finance and is required to report its activities to the parliament.<sup>15</sup> It is engaged in three operations, namely collection, investment and payment.

#### 3) Contributions

Contributions is covered by labour and management. The percentages have been gradually raised after starting with 5% from both labour and management and have now reached 11% for employees and 12% for employers.<sup>16</sup>

#### 4) Benefits and account

EPF is comprised of; 1) retirement benefit account (first account), 2) housing, education and individual investment account (second account), and 3) health account (third account), and are allocated at the ration of 6: 3: 1.

##### - Retirement benefit account (first account),

The first account is retirement benefit account. Full amount can be withdrawn after the retirement at age of 55 years. One-third of the amount can also be withdrawn at age 50. Figure 2 shows the status of withdrawal from the accounts

##### - Housing, education and individual investment account (second account)<sup>17</sup>

The second account was created in the year 2000, enabling use for purposes such as higher education and purchase of personal computer.

##### - Health account (third account)<sup>18</sup>

Created in 1995 and can be used for medical expenses of the beneficiary, beneficiary's spouse and beneficiary's children.<sup>19</sup>

Status of health account is shown in Figure 3.

#### 5) Investment of the accumulated fund

Investment of the accumulated fund is performed in accordance with the policy of; 1) observance of commitment to faithfulness, 2) restrictions with regard to investment, and 3)

minimum guarantee of 2.5% yield rate.<sup>20</sup> The fund is channelled into policy-oriented long-term investments in addition to internal investment management and consignment to external investment institutions. It offers loans to statutory companies such as motorways on one hand and invests in selected blue chip firms by setting interest rates according to their rating on the other. As a result, the fund has experienced negative yield only twice (one of which was in 1982). In addition, the investment trust unit has started in 1996 and opened the way for individuals with instalment savings account balance to invest up to 10% of their balance exceeding 50,000 ringgit in investment trusts approved by the government.<sup>21</sup> EPF also reviews its financial plan once every 5 years. EPF's yield results are shown in Figure 4.

#### **(4) Employees Social Security Act (SSA)**

In contrast to EPF which is responsible for long-term income security through pension, the Employees Social Security Act of 1969 (SSA)<sup>22</sup> covers the insurance for short-term income security against industrial injury and disability in the form of worker's accident compensation insurance system and permanent disability pension fund.<sup>23</sup>

The Employees Social Security Act of 1969 was actually enforced in 1971 and prescribed the security related to industrial injury for labourers and their families. It pays benefits for industrial injuries, physical disabilities, dependent family, medical care and rehabilitation as well as invalidity pension and survivor benefit. Qualification for benefits can be obtained after 24 months of payment.<sup>24</sup>

SSA's projects are managed by a committee created under the Ministry of Human Resources. The committee is comprised of government officials and representatives from labour and management. Social Security Organisation (SOCSO) became a statutory organisation in 1985 as an administrative structure for employee social security.

##### **1) Outline of Social Security Organisation**

Social Security Organisation (SOCSO) is an organisation that offers income security for labourers (worker's accident compensation and permanent disability pension) in connection with risks from industrial accidents, industrial disabilities, invalidity and death in accordance with the principles of social security based on the Employees Social Security Act of 1969.<sup>25</sup> It has a purchase payment fund of 7.9 billion ringgit and paid a total of 501.6 million ringgit to 228,000 recipients in 1999.

##### **2) Composition of SOCSO**

SOCSO is comprised of two schemes, i.e. worker's accident compensation insurance (Type 1) and permanent disability insurance (Type 2). Type 1 corresponds to Employment Injury Insurance Scheme (EIIS), which compensates against injuries, disabilities and deaths caused by contingent job-related accidents. Type 2 corresponds to Invalidity Pension that pays pension to persons that have become invalid (unable to work) as a result of accident and sickness for some reason or another.

- SOCSO organisation

SOCSSO is a statutory organisation responsible for managing the employee social security system. Its board of directors is comprised of government officials and representatives from labour and management, i.e. 5 government officials, 4 management representatives and 4 labour representatives.

- Qualifications for enrolment

Business owners hiring 5 or more employees and labourers/probationary labourers working for a monthly compulsory enrolment of 2,000 M\$ or less<sup>26</sup> are required to enrol in the program<sup>27</sup> and applies to Malaysian labourers and permanent residents of Malaysia.<sup>28</sup> Enrolment is 8.5 million of which 4.3 million are paying their premium.

- Contributions

Earnings related premium is the program's financial source. Wages are divided into 24 scales and the program is not subsidised by the government. Type 1 (workers' accident compensation insurance system) is covered by the premium paid by the employer while Type 2 (permanent disability insurance system) is financed by the premium collected from employers and employees on a 50-50 basis. Premium rate is 1.25% of each employee's monthly salary for Type 1 and is paid by the employer. The rate for Type 2 is 1.00% and is split between labour and management. In other words, employers pay 1.75% and employees pay 0.50% of the total rate of 2.25%. Premium is paid to SOCSSO. Composition of the share for the premium rate is shown in Figure 5.

- Content of benefits

Workers' accident compensation insurance system offers cash benefits, medical care and nursing to employees in the event they become disabled or are killed due to injuries inflicted on the job. It also offers medical care and regular financial benefits for nonworking dependents of those killed as a result of injuries inflicted on the job, in addition to delivery of artificial limbs to amputees, regular financial benefits for injured persons that became handicapped with high degree of disability and payment of burial expenses. Permanent disability pension system covers injuries and deaths from all causes until the insured reaches the age of 55 years.

Actual content of workers' accident compensation insurance system is as follows. For temporary disability, permanent disability and permanent partial disability, medical benefits include medical service fees, nursing care expenses, medical treatment expenses and hospital visit expenses. Meanwhile, financial benefits consist of 80% of average monthly wage over a 6-months period prior to accident on a prorated daily basis offered towards temporary disability, 90% of average monthly wage over a 6-months period prior to accident on a prorated daily basis offered towards permanent disability (lifelong care allowance) and income security according to decline in earning ability. Nonworking dependent benefits<sup>29</sup> and funeral expenses<sup>30</sup> are also paid to the surviving family.

Determination by a doctor that working ability has been lost by more than one-third is the condition in qualifying for benefits offered by the permanent disability pension system. The benefits include disability pension<sup>31</sup>, caregiver allowance, disability allowance<sup>32</sup>, survivor's

family responsibility pension (survivors pension offered to wife and children or to parents), rehabilitation benefits and education loan.

#### **4. Health Care System**

The health care system in Malaysia is a blend of national health service that started during the period of British rule and private medical insurance. All public hospitals under national health service are federal hospitals. In urban areas, hospital system from the British rule era still remain, and state general hospitals and district hospitals are playing the central role. Medical service offered by public hospitals and clinics in Malaysia is at the highest level in Southeast Asia. There are also many private hospitals and clinics in cities for those who prefer to buy medical service at their own expense in full amount. Figure 6 shows the number of medical institutions by management.

##### **(1) National health service system playing the central role and complemented by private medical service**

Since the national health service system funded by general-account budget exists at the core, Malaysian nationals and foreigners can receive outpatient medical service for 1 M\$ and 2 M\$, respectively.<sup>33</sup> The basic charge for hospitalisation is 3 M\$, although difference in the amount of payment exists depending on the grade of rooms, which are graded into first class, second class and third class. Medication cost is fully subsidised by the government while inspections and CT costs are to be paid separately.

Meanwhile, those seeking higher skills and service, high quality medication and prompt treatment can utilise the private medical institutions that require full individual payment. Private medical institutions are registered with the Ministry of Health for monitoring of fees and quality.

##### **(2) Fiscal condition of health care**

Health care expenses amount of 4.5 billion M\$ and accounts for about 7% of government expenditures.

##### **(3) Health care reform**

Concerning medical insurance, establishment of National Health Finance Fund intended for the entire population is being studied since 1984 but has yet to be realised.

While national hospitals are equipped with adequate facilities, excessive size of public sector has become an issue. Privatisation has advanced in certain operations but has not made any progress after 1997 owing to strong oppositions.

Measures for preventing excessive increase in medical expenses are also being considered. In the field of private medical services, high cost of medical care is becoming a problem at private hospitals. In particular, some charity hospitals are charging high medical cost despite

the exemption of corporate tax by the government for charity hospitals.

## **5. Realities of Life for the Elderly**

The elderly people in Malaysia are usually supported by their family (particularly children). However, the number of elderly persons living on their savings and social security benefits (e.g. social security benefits, EPF, SOCSO, individual life insurance) is increasing amidst the rapid changes in social structure. No national data is available for identifying the living conditions of the elderly in Malaysia. However, information about elderly households can be obtained from a sample study conducted in a limited region by Tan (1999). Twenty-nine percent of respondents are receiving some kind of social security benefit or another. To look at the details of these benefits, 18% were contributing to EPF, 18% were beneficiaries, 13% were covered by SOCSO and 5% were enrolled in personal pension programs. When these elderly people receiving these insurance benefits are seen by gender, there were 3.3 more men than women (Figure 8). By ethnic group, the number of Indian population receiving social security benefits was twice as large compared to Malay population. In addition, the percentage covered by social security system is generally higher among younger generations because the range of planholders expanded only recently even though programs such as EPF was started relatively early in the 1950s.

Social security for the elderly has become a pressing issue owing to rapid social changes including disintegration of nuclear family and shortage of planholders among the elderly.

### **(1) Status of household economy**

#### **1) Average income of the elderly**

Income is 4,009 M\$, suggesting that income decreases with age.<sup>34</sup> By gender, income of men is about 1.5 times larger than that of women (Figures 9 and 10).

As regards to source of income, 97% of men and 89% of women have some kind of stable income source, and 62% of elderly population are receiving money from their children (Figure 11). Gender difference is significant in employment income and pension income (Figure 11). Men have high employment rate until the age of 69 years and the rate drops rapidly thereafter while only 40% of women are employed even in their early fifties (Figure 12). For this reason, 59.1% of men have employment income as opposed to 25.4% of women. As for pension, the percentage of those receiving pension is 25.7% for men and only 7.8% for women. As indicated in Figures 8 and 9, men are showing far greater figures representing involvement with pension and insurance compared to women even though these figures decrease with age.

It is therefore possible to conclude with regard to the income of elderly population in Malaysia that:

1) Money sent from children plays an essential role. Only 10% are able to support themselves on pension alone and the remaining 90% are dependent on money sent from their

children to some extent or another.

2) Pension benefits from EPF and other schemes play an important role for men but women's pension is very limited as they are involved in the labour market for short period of time.

3) Withdrawals from EPF only last for about 10 years after retirement.<sup>35</sup>

## **(2) Living conditions of the elderly**

Figure 13 shows the marital status, household type and educational background of the elderly.<sup>36</sup> Fifty percent of elderly households are extended families.<sup>37</sup> Households comprised of only husband and wife (only spouse) decrease with age as increasing number of elderly people choose to live with their children (Figure 14). Increase in single households with age also requires attention. Table 15 shows the number of household members by ethnic group, by age, by gender and by urban/rural areas. Surprisingly, average number of household members is smaller in rural areas than in urban areas.<sup>38</sup> By ethnic group, Chinese (Chinese descent) have the highest average number of household members.

## **(3) Living conditions and health of the elderly**

Problems confronted by the elderly are mostly related to their health. One-third of the elderly responded that their health was "good." Forty-nine percent said that their health was "average" and 18% said that their health was "not good." (Figures 16 and 17). However, the percentage of those in "good" health decreases with age. Thirty-nine percent of the elderly are suffering from some kind of chronic disease or another and their percentage increases with age. Main diseases include hypertension, heart disorders, diabetes and kidney diseases.<sup>39</sup> Public medical institutions play the central role in treating these diseases. (Figure 18)

Most of them seek assistance from their children in the event a problem occurs. No preference exists between sons and daughters when seeking such assistance. Children and family play the central role in securing the livelihood of the elderly in Malaysia.<sup>40</sup> (Figures 19 and 20)

## **6. Poverty Among and Welfare for the Elderly**

Historically, large income disparity has existed in Malaysia particularly between different ethnic groups. However, the Malaysian Government did not adopt a minimum wage system and limited the role of public assistance.<sup>41</sup> The Government sought to reduce the gap by giving priority to bumiputraisim, a policy for interracial allocation of resources, as industrial policy over redistribution policy through social security system. In other words, the Government opted for a policy that would increase the share for the Malay population while making the pie bigger instead of redistributing the pie that already exists. For this reason, the [Ginnie?] coefficient, an indicator of income disparity, went down from the 1970s to the 1980s. However, the [Ginnie?] coefficient went up after entering the 1990s as income disparity started

to increase. The present figures are 0.46 for [Ginnie?] coefficient and 16% for poverty rate. Some indicate that increasing income disparity among the Malay population is at the backdrop of such new expansion of income disparity.

### **(1) Security for destitute elderly**

Since families play the central role in supporting the elderly, welfare policy for the elderly offered by the Government is limited to those living in poverty. Actual measures for destitute elderly consist of welfare homes (old persons homes), 2 facilities for patients of chronic diseases and a centre for destitute persons that are run by the Ministry of Social Welfare.

As shown in Table 21, there are 9 welfare homes with combined capacity of 2,150 persons in the country. Ethnic component ratio is much the same although the Indian population hold a slightly higher percentage, followed by Chinese and Malay (Figure 22). Economic condition as well as difference in family tradition between ethnic groups are affecting the situation.

Qualifications for acceptance include; 1) a destitute elderly person of ages 60 years and above, 2) free of infectious and mental diseases, 3) has no relative, 4) has no home, and 5) physically independent and can look after oneself. Examination of candidates' qualifications is performed by the Social Welfare Bureau via state welfare bureaus. The Management of Old Persons Home 1983 is at the base of these measures. There are also cases where destitute elderly are admitted by force under the court order (The Vagrants Act 1977).

Welfare facility for the elderly offers; 1) care and protection, 2) consultation and advice, 3) rehabilitation (light duties), 4) religious facilities, 5) recreation and 6) medical service.

Inmates will leave the facility when they become capable of supporting themselves.<sup>42</sup>

### **(2) National welfare measures for the elderly**

In Malaysia, support for the elderly is centred around families.<sup>43</sup> The Government started promoting the utilisation of individuals, groups, volunteer groups, communities, government-related organisations and private organisations in 1996 based on the National Policy for the Elderly.<sup>44</sup> The measures include; 1) education, 2) continuation of employment, 3) community participation, 4) recreation, 5) improvement of means of transportation, 6) guarantee of comfortable living environment, 7) family support, 8) guarantee of access to adequate medical service, 9) media and public relations, and 10) study and research.<sup>45</sup>

In addition, the Government has started equipping the personnel and facilities for elderly support and is promoting health improvement, education, screening, medical examination, treatment, home care/nursing, consultation, physical therapy, welfare activities and recreation. At present, 351 health centres and 55,534 expert staff are taking part in such programs.

In addition, some private volunteer organizations are engaged in effective activities while volunteer organizations such as NGOs are increasing their importance. Link with local



communities is also important in preventing physical, psychological and social isolation of elderly people. It is becoming necessary to raise the level of welfare for the elderly and disabled people.<sup>46</sup>

### **(3) Facilities related to the elderly**

Institution facilities that are admitting the elderly are run by the Social Welfare Bureau, local governments, religious organizations and private sector. Some facilities run by religious organizations have a waiting list for admission.<sup>47</sup>

Institutions run by local governments are few in number and lacking in facilities. As care centres for chronically-ill patients are also in short supply, kinless elderly persons in need of nursing care are occasionally admitted to hospitals with open capacity.<sup>48</sup> Private nursing homes are increasing to make up for such shortage of public facilities, although many of such private facilities are expensive.

Insufficiency of care for the elderly population and the shortage of elderly-related facilities with the advancement of aging society explained above has been recognised since 1990.<sup>49</sup>

#### **1) Homes for the chronically ill**

Ministry of National Unity and Welfare has installed facilities for the elderly with chronic illness. The base law is the Rules for the Management of Home for the Chronically Ill 1978. The purpose of these facilities is to offer comfort to those requiring medical treatment, disease prevention and long-term care.

Elderly persons requiring long-term care are eligible for admission. The facilities are located in Kubu Bharu and Selangor and have a capacity of 100 persons..

In order to be admitted, a person must be; 1) certified from the government as chronically-ill patient, 2) free of infectious diseases, 3) has no relative or next of kin that can offer care, 4) has no income and cannot support him/herself, and 5) aged 60 years and above. Services offer by the facility include; 1) care and protection, 2) medical treatment and health care, 3) protection and consultation, 4) physical therapy, 5) religious guidance and 6) recreation. Applications are filed at local welfare bureaus and the facilities are run by state welfare bureaus and social welfare bureaus.

#### **2) Old folks homes**

Elderly persons with no relatives are admitted to old folks homes that are run by volunteer and charity organizations. Many old folks homes have inadequate facilities as they are not receiving sufficient support from the government.<sup>50</sup>

#### **3) Hospitals**

Elderly persons suffering from diseases are hospitalised. Hospitals also offer nursing care and hospital bills are not charged to persons aged 55 years and above.

4) Nursing homes

Nursing homes admit elderly persons requiring care.

5) Welfare homes

Destitute and solitary persons are admitted to welfare homes explained in Section (1).<sup>51</sup>

## 7. Case Study

### (1) Life of Farm Household in Selangor State

A hearing study was conducted on the life of a rural elderly household of Malay descent. The male householder is making a living by cultivating the farmland owned by his wife's parents. He is sending money to his parents whose home is located at a distance of about 1 hour by car. They are living with their eldest daughter and her husband, and have built the house for them in the premises. Their source of income is sales of farm crops, and their children help them with farm work except for those going to school in the city. They have no taxable income as their income is offset by the cost of materials and labour. Wife's mother is not employed and therefore not enrolled in any pension program but uses public services such as medical service. The household's expectations for the government is stabilisation of farm crop prices.

#### Outline of the farm household

1) Household composition: 8 member family (50 year-old householder, 46 year-old wife, wife's mother, 5 children (26 year-old eldest daughter, 24 year-old eldest son, 22 year-old second son, 18 year-old third son, 15 year-old second daughter), 1 son-in-law and 1 grandchild)

2) Owns a 10 hectare farm and producing rice. Yield is 10 ton per hectare.

3) Number of rooms: Traditional Malay stilt house (6 rooms), owns 2 cars and a tractor

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- <sup>1</sup> Life expectancy grew rapidly owing to improvements in areas such as social economy, living environment, medical service and public health from 55.8 years for men and 58.2 years for women in 1957 to 69.6 years for men and 74.5 years for women in 1997.
- <sup>2</sup> In 1999, dependent population ratio (ratio of the sum of population aged 15 years and under and 65 years and over against the remainder of the population) is 60.7.
- <sup>3</sup> Lum (1992) p.277.
- <sup>4</sup> According to a study by the Ministry of Welfare, the elderly are suffering from chronic diseases such as arthritic pain (50.1%), eye disease (40%), hearing loss (21%), hypertension (26%) and heart disease (16.3%).
- <sup>5</sup> Zaharah Awang (1992) p.7.
- <sup>6</sup> The form of welfare is monetary benefits instead of food stamps.
- <sup>7</sup> Zaharah Awang (1992) p.5.
- <sup>8</sup> States such as Trengganu and Sabah are implementing their independent social security systems.
- <sup>9</sup> The percentage of Malays is high among public officials.
- <sup>10</sup> Payment of benefits start at ages 50 years for men and 45 years for women.
- <sup>11</sup> As of August 1, 1998, foreign workers with monthly salary of 2,500 M\$ or less and their employers are required to pay 11% of their monthly wage and 5 M\$ every month, respectively, towards the Employee's Pension Fund. All employers are required to register their employees with EPF within 7 days from hiring. However, self-employed individuals, foreign workers earning more than 2,500 M\$ a month and household employees, i.e. those working at private homes (such as servants and gardeners) or engaged in related work and having their wages paid from the private account of the employer, are excluded from the this enrolment requirement, although they can enrol at their desire.
- <sup>12</sup> Large English-affiliated companies had set their own contribution rate for their company's reserve funds for severance allowances in the 1950s. However, the request from the Federal Labour Bureau to introduce a pension system with uniform contribution rate to secure the rights of planholders led to creation of EPF. See Chiu Jim Eng (2001). EPF started with 10% contribution rate to in the beginning and the rate has been raised 5 times.
- <sup>13</sup> With regard to the argument that such compulsory saving by EPF is obstructing other private savings, it has been confirmed that such obstructing effect does not exist. Lee (2001), p.138.
- <sup>14</sup> Government was able to use the pension fund that was created by EPF for provision of social overhead capital. EPF is required to invest 70% of its fund to government bonds. In the 1980s, 80% of the fund was actually funnelled into government bonds and served as the base in the government's efforts to secure fluidity.
- <sup>15</sup> EPF is managed under the decisions made by its council. The council consists of 5 management representatives, 5 labour representatives (2 each from the major labour unions MTUC and CEUPAS), 5 government representatives and 3 experts. An investment committee comprised of members from the Central Bank, Ministry of Finance and experts (Investment Panel) and consigns the investment to fund managers inside and outside of EPF has been created under the council.
- <sup>16</sup> The percentage of EPF employee contributions was reduced to 9% in April 2001 as a part of the emergency economic measures that were implemented in accordance with the policy target of generating demand by diverting the 2% towards consumption. In reality, however, the people did not agree to the 2% reduction because of their concern for security after old age. For this reason, each person can select the percentage of their contribution between 9% and 11%. Meanwhile, employer's percentage remains at 12%.
- <sup>17</sup> Introduced through revision of the EPF Law in 1991.
- <sup>18</sup> Health account was introduced in 1994. The third account of this health account (medical account) is said to have two serious defects as listed in the following:
- 1) The size of medical account is too small and cannot cover the medical cost of serious diseases. For this reason, some are of the opinion that it should be combined with compulsory medical insurance as in the case of Singapore.
  - 2) Medical account cannot be used after the age of 55 years but the risks of becoming seriously ill will still exist after that age.
- <sup>19</sup> EPF's medical account covers 36 diseases. The percentage of average medical expenditure in household expenditure has increased from 1.5% in 1973 to 2% in 1999. However, it is not possible to judge the medical cost from average expenditure percentage as it is incurred in a concentrated manner.
- <sup>20</sup> Active investment is being pursued in the recent years following the enhancement of the treasury market and capital market. Investment choices have been expanded in the recent years to corporate bonds, securities, financial products and real estate. The percentage of investment in securities was initially limited to 10% but has now been expanded to 25%. Overseas investment has been cancelled owing to currency crisis. In addition, the weight of government bonds in EPF's portfolio (which currently consists of 32% government bonds, 19% securities, 24% short deposit and 25% loan) is decreasing partly due to reduction in issuance of government bonds by the government following the advancement of privatisation. Nevertheless, EPF is still the largest owner of Malaysian government bonds owing 57.5% of outstanding government bonds as of 1997 (percentage owned by SOCSO is 3%). Average yield of government bonds is 6.3% (10-year bond). Japanese-affiliated investment companies that are associated with Nikko Securities, Daiwa Securities and Nomura Securities also have been contracted for fund management.
- <sup>21</sup> This also has the purpose of fostering the fiducial market.
- <sup>22</sup> Place under the jurisdiction of the Ministry of Labour and Manpower.
- <sup>23</sup> Unemployment insurance does not exist in Malaysia (there are no provisions in SOSCO). According to the Labour Law in Malaysia, allowance is paid according to one's service years when an employee is dismissed at the request of company. Taking the place of unemployment insurance, it pays 1 to 1.5 months wages for every year of service. While labour unions are arguing that unemployment insurance could be established by 1 M\$ contribution from every worker, the government is opposing this on the grounds of increase in labour cost.
- <sup>24</sup> Migrant workers are not covered by this law but are covered by Workmen's Compensation Act.
- <sup>25</sup> Although the range of application is small, workers of small enterprises that are not covered by SOCSO are eligible for compensation by the Workers' Accident Compensation Insurance Act of 1952 for injuries incurred during employment. Compensation is also paid to the dependents of the worker killed in such accident. The Act applies to workers in the

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private sector receiving 500 M\$ or less in monthly wages and to all manual workers regardless of their wages.

<sup>26</sup> Once a worker qualifies in this scheme for receiving less than 2,000 M\$ a month, the worker cannot withdraw after his or her wage is increased. This system is referred to as "Once in, always in" rule.

<sup>27</sup> Exceptions to eligibility for disability pension include those aged 50 years and above and did not contribute to the disability pension before reaching 50 years of age, those aged 55 years and above and those who are already receiving workmen's compensation pension and permanent disability pension. Aside from the private sector employees, the employees of incorporated institutions that are not qualified for pension can also enrol in SOCSO. The Government of Malaysia is also looking into expanding the system to include enrolment to family-operated businesses and professionals (e.g. self-employed persons such as agricultural and fishery workers, taxi drivers, peddlers, medical practitioners, lawyers, architects, surveyors, engineers, accountants). Once expanded, more than 1.7 million self-employed persons will benefit from such expansion. In addition, creation of a new fund to support pregnant workers, housing loan, family allowance, medical plans are being considered. Benefits for pregnant women are intended to encourage pregnant workers to remain in workplace. About 40% of women in Malaysia have jobs. See *Overseas Labour Reporter*, April 2000, and *Overseas Labour Reporter*, June 2000.

<sup>28</sup> A surcharge of 10,000 ringgit is charged if not enrolled. See *Overseas Labour Reporter*, April 2000, and *Overseas Labour Reporter*, June 2000.

<sup>29</sup> Nonworking dependents receive income indemnity corresponding to 90% of wages (8 ringgit/day minimum). Spouse receives 3/5 for life or until remarriage and children receive 2/5 until they reach the age of 21 years or marry. Siblings receive 3/10 (until they reach the age of 21 years or marry). Grandparents receive 4/10 if parents are deceased.

<sup>30</sup> 1,500 M\$

<sup>31</sup> Period until death. Amount corresponding to 50–55% of average wage over the past 24 months.

<sup>32</sup> Will not qualify for disability allowance if the period of enrolment is less than 2 years and the amount corresponding to the sum of paid premium and its interest must be paid.

<sup>33</sup> It is currently available to foreign workers, although the amount of their individual payment is larger in the case of hospitalisation.

<sup>34</sup> Average disposable income in Malaysia is 2,472 M\$ per month. *Statistics Handbook*, Department of Statistics

<sup>35</sup> Lum Kim Tuck, (1992), p.277.

<sup>36</sup> Place of residence for the elderly include their home, their children's home, old folks homes, hospitals, nursing homes and welfare homes. However, national data could not be obtained.

<sup>37</sup> Supporting family is an important obligation in Islamic law. Lum Kim Tuck (1992), p.274. Some elderly persons move from one child's house to another.

<sup>38</sup> Tan (1999), p.15.

<sup>39</sup> Tan (1999), p.15.

<sup>40</sup> According to Zainal Kling ed., (1981) p.104–108, Malay villages follow matriarchal inheritance with males (sons) only use and look after the properties and properties are inherited from a female offspring to another. For this reason, a son-in-law will not inherit the properties of his wife's family. Husbands and fathers are given the role of being a caretaker of their wives and children but do not have the inheritance right as a member of the household. However, some documents argue that individualism is prevalent in property ownership of the Malays and that there is little relationship between inheritance and family support. Institute of Asian Culture, Sophia University (1999). Meanwhile, a difference exists among ethnic groups as to the person responsible for care within the family. Biological daughters assume this responsibility in Malay and Indian families while the daughters-in-law play the central role in Chinese families.

<sup>41</sup> Public assistance is offered under the responsibility of local governments. Poverty line is 500 M\$/month per family.

<sup>42</sup> Social relief of 30 to 50 M\$/ week is also offered to the poor. As of 1989, the number of persons benefiting from this program is limited to 9,324

<sup>43</sup> National Social Welfare Policy was formulated in 1990 with the targets of human resource development, equal opportunity and caring society. In particular, "Caring Society" is a concept devised with expectations for good will of individuals, mutual assistance among family and relatives and mutual assistance in the community.

<sup>44</sup> At the same time, National Advisory and Consultative Council for the Elderly was created under the Ministry of National Unity and Social Development. Ministry of Health also created a centre for national promotion of welfare for the elderly.

<sup>45</sup> Data from Ministry of National Unity and Social Development

<sup>46</sup> Zaharah (1992), p.11.

<sup>47</sup> Zaharah (1992), p.10.

<sup>48</sup> Zaharah (1992), p.10.

<sup>49</sup> Zaharah (1992), p.10.

<sup>50</sup> Lum (1992), p.281. Old folks homes are registered with the government and receive government subsidy of about 50 to 100 M\$ per month.

<sup>51</sup> However, welfare homes are limited to the elderly. Destitute persons can also be admitted according to the judgment of the district office.

Table 1 Employees Provident Fund : Contributors to the Fund

| Year | No of Members (1000) |          |           | No of Employer Contributors (1000) |          |           |
|------|----------------------|----------|-----------|------------------------------------|----------|-----------|
|      | At End of Year       | Increase | Change(%) | At End of Year                     | Increase | Change(%) |
| 1953 | 653                  |          |           | 12                                 |          |           |
| 1954 | 731                  | 78       | 11.9      | 12                                 | —        | —         |
| 1955 | 840                  | 109      | 14.9      | 13                                 | 1        | 8.3       |
| 1956 | 850                  | 10       | 1.2       | 14                                 | 1        | 7.7       |
| 1957 | 867                  | 17       | 2.0       | 14                                 | —        | —         |
| 1958 | 922                  | 55       | 6.3       | 14                                 | —        | —         |
| 1959 | 993                  | 71       | 7.7       | 15                                 | 1        | 7.1       |
| 1960 | 1,143                | 150      | 15.1      | 16                                 | 1        | 6.7       |
| 1961 | 1,232                | 89       | 7.8       | 17                                 | 1        | 6.3       |
| 1962 | 1,250                | 18       | 1.5       | 20                                 | 3        | 17.6      |
| 1963 | 1,430                | 180      | 14.4      | 27                                 | 7        | 35.0      |
| 1964 | 1,488                | 58       | 4.1       | 43                                 | 16       | 59.2      |
| 1965 | 1,554                | 66       | 4.4       | 49                                 | 6        | 14.0      |
| 1966 | 1,631                | 77       | 5.0       | 50                                 | 1        | 2.0       |
| 1967 | 1,717                | 86       | 5.3       | 51                                 | 1        | 2.0       |
| 1968 | 1,830                | 113      | 6.6       | 53                                 | 2        | 3.9       |
| 1969 | 1,949                | 119      | 6.5       | 64                                 | 11       | 20.8      |
| 1970 | 2,104                | 155      | 8.0       | 67                                 | 3        | 4.7       |
| 1971 | 2,217                | 113      | 5.4       | 68                                 | 1        | 1.5       |
| 1972 | 2,365                | 148      | 6.7       | 71                                 | 3        | 4.4       |
| 1973 | 2,545                | 180      | 7.6       | 75                                 | 4        | 5.6       |
| 1974 | 2,711                | 166      | 6.5       | 80                                 | 5        | 6.7       |
| 1975 | 2,883                | 172      | 6.3       | 85                                 | 5        | 6.3       |
| 1976 | 2,987                | 104      | 3.6       | 91                                 | 6        | 7.1       |
| 1977 | 3,124                | 137      | 4.6       | 95                                 | 4        | 4.4       |
| 1978 | 3,316                | 192      | 6.1       | 99                                 | 4        | 4.2       |
| 1979 | 3,540                | 224      | 6.8       | 104                                | 5        | 5.1       |
| 1980 | 3,758                | 218      | 6.2       | 110                                | 6        | 5.8       |
| 1981 | 3,834                | 76       | 2.0       | 115                                | 5        | 4.5       |
| 1982 | 4,194                | 360      | 9.4       | 119                                | 4        | 3.5       |
| 1983 | 4,378                | 184      | 4.4       | 124                                | 5        | 4.2       |
| 1984 | 4,639                | 261      | 6.0       | 133                                | 9        | 7.3       |
| 1985 | 4,797                | 158      | 3.4       | 138                                | 5        | 3.8       |
| 1986 | 4,843                | 46       | 1.0       | 140                                | 2        | 1.4       |
| 1987 | 5,042                | 199      | 4.1       | 144                                | 4        | 2.9       |
| 1988 | 5,278                | 236      | 4.7       | 149                                | 5        | 3.5       |
| 1989 | 5,572                | 294      | 5.6       | 161                                | 12       | 8.1       |
| 1990 | 5,936                | 364      | 6.5       | 175                                | 14       | 8.7       |
| 1991 | 6,342                | 406      | 6.8       | 191                                | 16       | 9.1       |
| 1992 | 6,619                | 277      | 4.4       | 208                                | 17       | 8.9       |
| 1993 | 6,939                | 320      | 4.8       | 223                                | 15       | 7.2       |
| 1994 | 7,277                | 338      | 4.9       | 236                                | 13       | 5.8       |
| 1995 | 7,756                | 479      | 6.6       | 256                                | 20       | 8.5       |
| 1996 | 8,051                | 295      | 3.8       | 276                                | 20       | 7.8       |
| 1997 | 8,275                | 224      | 2.8       | 296                                | 20       | 7.2       |
| 1998 | 9,160                | 885      | 10.7      | 298                                | 2        | 0.7       |

Source : Compiled from Employees Provident Fund, Chairman's Report and Accounts, 1952-81  
Employees Provident Fund, Annual Report, Various Years; Negara Malaysia, Quarterly Economic  
Bulletin, various issues; Bank Negara Malaysia, Money and Banking in Malaysia, 35th Anniversary  
Edition, 1959-1994, Kuala Lumpur, 1994, pp.552-553

Table 2 Employees Provident Fund : Pre-retirement Withdrawals

| Year | Withdrawals on Reaching 55 Years or more |                             | Withdrawals on Death of Members |                             | Withdrawals on Permanent In incapacitation |                             | Withdrawals on Permanent Emigration |                             | Death/Incapacitation Benefits Paid Out |                             | Withdrawals for Members Own Investments |                             | Total    |                             | All EPF Withdrawals (mil) |
|------|--|-----------------------------|---------------------------------|-----------------------------|--|-----------------------------|-------------------------------------|-----------------------------|--|-----------------------------|---|-----------------------------|----------|-----------------------------|---------------------------|
|      | RM (mil)                                 | As % of All EPF Withdrawals | RM (mil)                        | As % of All EPF Withdrawals | RM (mil)                                   | As % of All EPF Withdrawals | RM (mil)                            | As % of All EPF Withdrawals | RM (mil)                               | As % of All EPF Withdrawals | RM (mil)                                | As % of All EPF Withdrawals | RM (mil) | As % of All EPF Withdrawals |                           |
| 1980 | 109                                      | 53.7                        | 19                              | 9.4                         | 5  | 2.5                         | 15                                  | 7.4                         | n.a.                                   | n.a.                        | -                                       | -                           | 148      | 73.0                        | 203                       |
| 1981 | 136                                      | 24.2                        | 23                              | 9.2                         | 6  | 2.4                         | 21                                  | 8.3                         | n.a.                                   | n.a.                        | -                                       | -                           | 186      | 74.1                        | 251                       |
| 1982 | 159                                      | 42.3                        | 31                              | 8.2                         | 6  | 1.6                         | 26                                  | 6.9                         | n.a.                                   | n.a.                        | -                                       | -                           | 222      | 59.0                        | 376                       |
| 1983 | 205                                      | 40.7                        | 35                              | 6.9                         | 8  | 1.6                         | 26                                  | 5.2                         | n.a.                                   | n.a.                        | -                                       | -                           | 274      | 54.4                        | 504                       |
| 1984 | 240                                      | 38.3                        | 43                              | 6.9                         | 9  | 1.4                         | 29                                  | 4.6                         | 9                                      | 1.4                         | -                                       | -                           | 330      | 52.6                        | 627                       |
| 1985 | 273                                      | 34.9                        | 47                              | 6.0                         | 25   | 3.2                         | 32                                  | 4.1                         | 15                                     | 1.9                         | -                                       | -                           | 392      | 50.1                        | 783                       |
| 1986 | 344                                      | 27.7                        | 60                              | 4.8                         | 18   | 1.4                         | 56                                  | 4.5                         | 25                                     | 2.0                         | -                                       | -                           | 503      | 40.4                        | 1,244                     |
| 1987 | 331                                      | 21.3                        | 60                              | 3.9                         | 24   | 1.5                         | 90                                  | 5.8                         | 32                                     | 2.1                         | -                                       | -                           | 537      | 34.6                        | 1,553                     |
| 1988 | 337                                      | 21.2                        | 54                              | 3.4                         | 20   | 1.3                         | 127                                 | 8.0                         | 29                                     | 1.8                         | -                                       | -                           | 567      | 35.7                        | 1,589                     |
| 1989 | 401                                      | 25.3                        | 63                              | 4.0                         | 16   | 1.0                         | 130                                 | 8.2                         | 26                                     | 1.7                         | -                                       | -                           | 636      | 40.2                        | 1,584                     |
| 1990 | 523                                      | 30.1                        | 78                              | 4.5                         | 17   | 1.0                         | 105                                 | 6.0                         | 33                                     | 1.9                         | -                                       | -                           | 756      | 43.5                        | 1,738                     |
| 1991 | 667                                      | 33.9                        | 83                              | 4.2                         | 24   | 1.2                         | 73                                  | 3.7                         | 35                                     | 1.8                         | -                                       | -                           | 882      | 44.8                        | 1,970                     |
| 1992 | 744                                      | 42.8                        | 96                              | 5.5                         | 27   | 1.6                         | 57                                  | 3.3                         | 33                                     | 1.9                         | -                                       | -                           | 957      | 55.1                        | 1,738                     |
| 1993 | 881                                      | 40.6                        | 118                             | 5.4                         | 42   | 1.9                         | 56                                  | 2.6                         | 65                                     | 3.0                         | -                                       | -                           | 1,162    | 53.5                        | 2,170                     |
| 1994 | 1,058                                    | 41.9                        | 130                             | 5.1                         | 50   | 2.0                         | 67                                  | 2.7                         | 65                                     | 2.6                         | -                                       | -                           | 1,370    | 54.3                        | 2,525                     |
| 1995 | 1,133                                    | 36.6                        | 156                             | 5.0                         | 56   | 1.8                         | 66                                  | 2.1                         | 74                                     | 2.4                         | -                                       | -                           | 1,485    | 47.9                        | 3,100                     |
| 1996 | 1,507                                    | 42.2                        | 180                             | 5.0                         | 50   | 1.4                         | 51                                  | 1.4                         | 85                                     | 2.4                         | 34                                      | 1.0                         | 1,907    | 53.4                        | 3,570                     |
| 1997 | 2,271                                    | 41.1                        | 210                             | 3.8                         | 67   | 1.2                         | 63                                  | 1.2                         | 100                                    | 1.8                         | 627                                     | 11.4                        | 3,338    | 60.5                        | 5,526                     |
| 1998 | 3,589                                    | 42.0                        | 256                             | 3.0                         | 106  | 1.2                         | 128                                 | 1.5                         | 115                                    | 1.3                         | 621                                     | 7.3                         | 4,815    | 56.3                        | 8,549                     |

note : n.a.

Data for 1980-84 include only withdrawals at age 55 and withdrawals of dividends only. Data for 1985-98 include also withdrawals in the form of installment payments and of balances of those who subsequently rejoined the fund after 55 years of age.

Source : Compiled from Employees Provident Fund, Annual Report, 1987-98

Table 3 EPF : Pre-retirement Withdrawals

|      | Withdrawals on Reaching 50 years |                             | Withdrawals for Medical Expenses |                             | Total   |                             | All EPF Withdrawals |
|------|----------------------------------|-----------------------------|----------------------------------|-----------------------------|---------|-----------------------------|---------------------|
|      | RM(mil)                          | As % of All EPF Withdrawals | RM(mil)                          | As % of All EPF Withdrawals | RM(mil) | As % of All EPF Withdrawals | RM(mil)             |
| 1980 | 48                               | 23.6                        | —                                | —                           | 55      | 27.0                        | 203                 |
| 1981 | 61                               | 24.3                        | —                                | —                           | 65      | 25.9                        | 251                 |
| 1982 | 69                               | 18.4                        | —                                | —                           | 154     | 41.0                        | 376                 |
| 1983 | 85                               | 16.8                        | —                                | —                           | 230     | 45.6                        | 504                 |
| 1984 | 106                              | 16.9                        | —                                | —                           | 297     | 47.4                        | 627                 |
| 1985 | 134                              | 17.1                        | —                                | —                           | 391     | 49.9                        | 783                 |
| 1986 | 191                              | 15.4                        | —                                | —                           | 741     | 59.6                        | 1,244               |
| 1987 | 180                              | 11.6                        | —                                | —                           | 1,016   | 65.4                        | 1,553               |
| 1988 | 198                              | 12.5                        | —                                | —                           | 1,022   | 64.3                        | 1,589               |
| 1989 | 228                              | 14.4                        | —                                | —                           | 948     | 59.8                        | 1,584               |
| 1990 | 259                              | 14.9                        | —                                | —                           | 982     | 56.5                        | 1,738               |
| 1991 | 284                              | 14.4                        | —                                | —                           | 1,088   | 55.2                        | 1,970               |
| 1992 | 327                              | 18.8                        | —                                | —                           | 781     | 44.9                        | 1,738               |
| 1993 | 372                              | 17.2                        | —                                | —                           | 1,008   | 46.5                        | 2,170               |
| 1994 | 444                              | 17.6                        | *                                | —                           | 1,155   | 45.7                        | 2,525               |
| 1995 | 387                              | 12.5                        | 3                                | 0.1                         | 1,615   | 52.1                        | 3,100               |
| 1996 | 557                              | 15.6                        | 5                                | 0.2                         | 1,663   | 46.6                        | 3,570               |
| 1997 | 842                              | 15.2                        | 7                                | 0.1                         | 2,188   | 39.6                        | 5,526               |
| 1998 | 1,287                            | 15.0                        | 15                               | 0.2                         | 3,734   | 43.7                        | 8,549               |

note : \*Less than RM 1 million

Source : Compiled from Employees Provident Fund, Annual Report, 1987-98

Figure 4 EPF : Real Rate of Interest

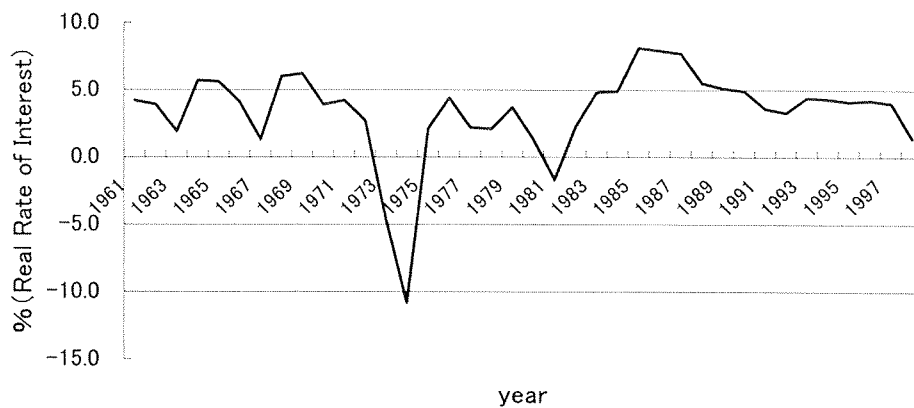




Table 5 Contribution (%)

|        | Employee | Employer | Total |
|--------|----------|----------|-------|
| Type 1 | 1.25     | 0        | 1.25  |
| Type 2 | 0.5      | 0.5      | 1     |

Table 6 Health Clinics

| MoH  | Non-MoH | NGO | Private Hospitals | Total |
|------|---------|-----|-------------------|-------|
| 2539 | 63      | 45  | 2,854             | 5,501 |

Table 7 Health Budget

|  |               |
|--|---------------|
| Total MoH Budget(1999)                                   | 4,512,258,219 |
| Operating Budget   | 3,612,258,209 |
| management   | 320,422,483   |
| Medical care   | 1,948,454,650 |
| Supportive Technical and Professional Service Management | 605,483,420   |
| Public Health  | 737,387,656   |
| Development  | 900,000,010   |
| % of Total MoH Allocation to National Budget             | 6.93%         |

Ministry of Finance Malaysia

Table 8 Per Cent of Respondents who had Contributed to or Received Specific Security Assistance by Age and Sex (%)

| Type of Social Security | Male  |       |      |       | Female |       |     |       |
|-------------------------|-------|-------|------|-------|--------|-------|-----|-------|
|                         | 50-59 | 60-69 | 70+  | Total | 50-59  | 60-69 | 70+ | Total |
| EPF                     | 41.8  | 32.1  | 14.9 | 30.3  | 20.8   | 4.7   | 2.2 | 9.4   |
| Pension                 | 33.6  | 22.9  | 12.9 | 23.5  | 16.9   | 2.9   | 0   | 6.7   |
| SOCSSO                  | 20.9  | 38.2  | 32.7 | 30.9  | 9.1    | 8.8   | 3.7 | 7.4   |
| Insurance               | 10.9  | 8.4   | 2    | 7.3   | 7.8    | 1.2   | 0.1 | 3.3   |

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (2000) "Evaluating Programme Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.45

Table 9 Per Cent of Respondents who had contributed to or Received any Social Security Assistance by Sex and Selected Variables (%)

|                  | Male | Female | Total |
|------------------|------|--------|-------|
| Total            | 47.7 | 14.4   | 28.6  |
| Ethnic group     |      |        |       |
| Malays           | 45.7 | 10.4   | 25.4  |
| Chinese          | 44.8 | 25.5   | 32.9  |
| Indians & others | 65.7 | 39.5   | 52.1  |
| Education        |      |        |       |
| No schooling     | 18.8 | 9      | 11.3  |
| With schooling   | 53.5 | 18.8   | 38.3  |
| Age group        |      |        |       |
| 50-54            | 55.3 | 23.1   | 35.2  |
| 55-59            | 49.2 | 30.3   | 38.9  |
| 60-64            | 60   | 8.7    | 29.9  |
| 65-69            | 45.5 | 12.7   | 27.6  |
| 70-74            | 36.6 | 9.7    | 19.5  |
| 75+              | 36.7 | 0      | 17.9  |
| Marital status   |      |        |       |
| Married          | 49.4 | 11     | 32.7  |
| Not Married      | 32.4 | 17.9   | 19.8  |
| Sector*          |      |        |       |
| Agriculture      | 27.4 | 8.8    | 20.1  |
| Non-Agriculture  | 70.5 | 42.9   | 61.5  |

\* : based on 304 respondent who were currently working

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (2000) "Evaluating Programme Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.44

Table10 Mean Annual Income from Respondent's Main Job by Selected Variables

|                 | Mean (RM) |
|-----------------|-----------|
| Total           | 4, 009    |
| Education       |           |
| No schooling    | 2, 790    |
| Schooling       | 11, 968   |
| Ethnic group    |           |
| Malays          | 3, 663    |
| Non-Malays      | 5, 803    |
| Age group       |           |
| 50-54           | 5, 190    |
| 55-59           | 4, 827    |
| 60-64           | 3, 572    |
| 65-69           | 3, 045    |
| 70+             | *         |
| Sex             |           |
| Male            | 4, 588    |
| Female          | 3, 000    |
| Type of work    |           |
| Non-Agriculture | 6, 078    |
| Agriculture     | 2, 601    |

\* : not calculated because less than 30 cases

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (2000) "Evaluating Programme Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.40

Table11 Per Cent of Respondent by Sex who had Income from Various Sources and Mean Annual Amount Received

|   | Male   | Female | Total  |
|---|--------|--------|--------|
| Percent with any income source              | 96. 8  | 88. 7  | 92. 1  |
| Mean annual income(RM)                      | 5, 577 | 3, 213 | 4, 272 |
| Percent with employment incom               | 59. 1  | 25. 4  | 39. 8  |
| Mean annual amount(RM)                      | 5, 076 | 3, 164 | 4, 375 |
| Percent with pension                        | 25. 7  | 7. 8   | 15. 5  |
| Mean annual amount(RM)                      | 4, 075 | 3, 075 | 3, 785 |
| Percent receiving remittances from children | 54. 7  | 67. 4  | 62     |
| Mean annual amount(RM)                      | 2, 019 | 1, 962 | 1, 983 |
| Percent receiving from other source         | 17. 8  | 17. 8  | 17. 8  |
| Mean annual amount(RM)                      | 1, 155 | 1, 605 | 1, 413 |
| Number of cases                             | 342    | 460    | 802    |

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (2000) "Evaluating Programme Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.42

Table12 Per Cent of Currently Working Respondents by Sex and Selected Variables

|                     | Male |     | Female |     | Total |     |
|---------------------|------|-----|--------|-----|-------|-----|
|                     | %    | n   | %      | n   | %     | n   |
| Total               | 56.7 | 342 | 23.9   | 460 | 42.1  | 802 |
| <b>Ethnic group</b> |      |     |        |     |       |     |
| Malays              | 57.6 | 278 | 24.5   | 375 | 42.9  | 653 |
| Chinese             | *    | 29  | 21.3   | 47  | 35.5  | 76  |
| Indians and others  | 51.4 | 35  | 21.1   | 38  | 42.5  | 73  |
| <b>Age group</b>    |      |     |        |     |       |     |
| 50-54               | 93.6 | 47  | 39.7   | 78  | 66.4  | 125 |
| 55-59               | 81   | 63  | 35.5   | 76  | 59    | 139 |
| 60-64               | 55.4 | 65  | 28.1   | 93  | 44.3  | 158 |
| 65-69               | 56.1 | 66  | 15.2   | 79  | 36.6  | 145 |
| 70-74               | 26.8 | 41  | 16.9   | 71  | 25.9  | 112 |
| 75+                 | 25   | 60  | 3.2    | 63  | 17.1  | 123 |

\*not calculated because less than 30 cases

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (2000) "Evaluating Programme Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.13

Table13 Percentage Distribution of Respondents by Sex and Selected Characteristics

|                        | Male  | Female | Total |
|------------------------|-------|--------|-------|
| <b>Marital Status</b>  | 100.0 | 100.0  | 100.0 |
| Never married          | 2.6   | 1.3    | 1.9   |
| Currently married      | 90.1  | 51.3   | 67.8  |
| Widowed                | 6.1   | 44.6   | 28.2  |
| Divorced/Separated     | 2.1   | 2.8    | 2.1   |
| <b>Family Type</b>     | 100.0 | 100.0  | 100.0 |
| Nuclea                 | 48.0  | 35.7   | 40.9  |
| Extended               | 48.5  | 51.7   | 50.4  |
| Single                 | 3.5   | 12.6   | 8.7   |
| <b>Number of cases</b> | (342) | (460)  | (802) |

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (2000) "Evaluating Programme Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.15

Table14 Paecentage Distribution of Respondents by Living Arrangement by Age Group (%)

|                            | 50-59 | 60-69 | 70+   |
|----------------------------|-------|-------|-------|
| Spouse only                | 10.2  | 20.9  | 19.5  |
| Spouse and Children        | 39.0  | 22.2  | 14.0  |
| Spouse and others          | 4.2   | 3.6   | 4.7   |
| Spouse,children and others | 25.8  | 22.8  | 12.7  |
| Children only              | 6.4   | 4.3   | 7.2   |
| Children and others        | 7.6   | 13.2  | 22.9  |
| Alone                      | 3.4   | 9.3   | 14.0  |
| Others only                | 3.4   | 3.6   | 5.1   |
| Total                      | 100.0 | 100.0 | 100.0 |
| Number of cases            | (264) | (302) | (236) |
| With spouse present        | 79.2  | 69.5  | 50.9  |
| With children present      | 78.8  | 62.5  | 56.5  |

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng,  
and Halimah Awang (2000) "Evaluating Programme  
Needs of Older Persons in Malaysia" Faculty of  
Economic and Administration, University of Malaya  
Kuala Lumpur Malaysia p.50

Table15 Percentage Distribution of Respondents by Households Size and Various Characteristics and Place of Residence

|                     | Household Size |      |      |       |       |      |       |      |      |       |       |      |
|---------------------|----------------|------|------|-------|-------|------|-------|------|------|-------|-------|------|
|                     | Rural          |      |      |       |       |      | Urban |      |      |       |       |      |
|                     | 1-2            | 3-4  | 5+   | Total | n     | Mean | 1-2   | 3-4  | 5+   | Total | n     | Mean |
| <b>Ethnic group</b> |                |      |      |       |       |      |       |      |      |       |       |      |
| Malays              | 45.0           | 24.1 | 30.9 | 100.0 | (369) | 3.6  | 23.6  | 20.4 | 56.0 | 100.0 | (284) | 5.1  |
| Chinese             | 21.2           | 33.2 | 44.5 | 100.0 | (33)  | 4.8  | 10.3  | 24.1 | 65.5 | 100.0 | (58)  | 6.8  |
| Indians             |                |      |      |       |       |      | 5.2   | 19.0 | 75.9 | 100.0 | (58)  | 6.1  |
| <b>Age group</b>    |                |      |      |       |       |      |       |      |      |       |       |      |
| 50-54               | 13.7           | 25.5 | 60.8 | 100.0 | (51)  | 5.2  | 14.9  | 18.9 | 66.2 | 100.0 | (74)  | 5.8  |
| 55-59               | 31.9           | 18.8 | 49.3 | 100.0 | (69)  | 4.2  | 10.0  | 24.3 | 65.7 | 100.0 | (70)  | 5.5  |
| 60-64               | 53.4           | 26.1 | 20.5 | 100.0 | (88)  | 3.3  | 20.0  | 24.3 | 55.7 | 100.0 | (70)  | 5.3  |
| 65-69               | 4.6            | 31.1 | 24.3 | 100.0 | (74)  | 3.6  | 18.3  | 19.7 | 62.0 | 100.0 | (71)  | 5.6  |
| 70+                 | 53.3           | 23.3 | 23.3 | 100.0 | (120) | 3.2  | 27.0  | 18.3 | 54.8 | 100.0 | (115) | 5.4  |
| <b>Sex</b>          |                |      |      |       |       |      |       |      |      |       |       |      |
| Male                | 35.4           | 29.2 | 35.4 | 100.0 | (161) | 4.1  | 14.4  | 20.4 | 65.2 | 100.0 | (181) | 5.7  |
| Female              | 48.1           | 22.0 | 25.9 | 100.0 | (241) | 3.5  | 22.8  | 21.0 | 56.2 | 100.0 | (219) | 5.3  |
| Total               | 43.0           | 24.9 | 32.1 | 100.0 | (402) | 3.7  | 19.0  | 20.8 | 60.3 | 100.0 | (400) | 5.5  |

Programme

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (1999) "Evaluating Programme Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.17

Table16 Percentage Distribution of Health Status of Male and Female Respondents by Age Group

|               | Age group |       |       |       |       |       | Total |
|---------------|-----------|-------|-------|-------|-------|-------|-------|
|               | 50-54     | 55-59 | 60-64 | 65-69 | 70-74 | 75+   |       |
| <b>Total</b>  | 100.0     | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Good          | 53.2      | 50.0  | 35.4  | 28.3  | 17.0  | 11.4  | 33.2  |
| Fair          | 37.1      | 45.0  | 56.3  | 50.3  | 56.3  | 48.8  | 49.1  |
| Poor          | 9.7       | 5.0   | 8.2   | 21.4  | 26.8  | 39.8  | 17.7  |
| <b>Male</b>   | 100.0     | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Good          | 66.0      | 52.4  | 46.2  | 27.3  | 22.0  | 13.3  | 37.7  |
| Fair          | 27.7      | 47.6  | 47.7  | 56.1  | 51.2  | 58.3  | 48.8  |
| Poor          | 6.4       | 0.0   | 6.2   | 16.7  | 26.8  | 28.3  | 13.5  |
| <b>Female</b> | 100.0     | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Good          | 45.5      | 48.1  | 28.0  | 29.1  | 14.1  | 9.5   | 29.8  |
| Fair          | 42.9      | 42.9  | 62.4  | 45.6  | 59.2  | 39.7  | 49.3  |
| Poor          | 11.7      | 9.1   | 9.7   | 25.3  | 26.8  | 50.8  | 20.9  |

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (1999) "Evaluating Programme Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.20

Table17 Per Cent of Respondents who are able to carry out the Listed Activities by Sex and Age Group

| Activities  | Age group |       |      | Total |
|---|-----------|-------|------|-------|
|   | 50-59     | 60-69 | 70+  |       |
| <b>Male</b>   |           |       |      |       |
| Vigorous activity (Lifting goods and doing heavy work)            | 67.3      | 22.9  | 7.9  | 32.7  |
| Moderate Activity (Shifting tables or doing repairs in the house) | 97.3      | 82.4  | 59.4 | 80.4  |
| Walking uphill or going upstairs                                  | 99.1      | 80.9  | 66.3 | 82.5  |
| Bending or stooping   | 99.1      | 93.1  | 85.2 | 92.7  |
| Walking to neighbour's house                                      | 100.0     | 96.2  | 89.1 | 95.3  |
| Eating, dressing, bathing and using the toilets                   | 99.1      | 99.2  | 96.0 | 98.2  |
| Cutting fingernails and toenail                                   | 100.0     | 100.0 | 94.1 | 98.2  |
| <b>Female</b>   |           |       |      |       |
| Vigorous activity (Lifting goods and doing heavy work)            | 26.6      | 11.6  | 2.2  | 13.9  |
| Moderate Activity (Shifting tables or doing repairs in the house) | 88.3      | 73.8  | 35.8 | 67.6  |
| Walking uphill or going upstairs                                  | 83.8      | 73.8  | 40.3 | 67.4  |
| Bending or stooping   | 96.8      | 90.7  | 69.4 | 86.5  |
| Walking to neighbour's house                                      | 97.4      | 95.4  | 81.3 | 92.0  |
| Eating, dressing, bathing and using the toilets                   | 100.0     | 97.1  | 93.3 | 97.0  |
| Cutting fingernails and toenail                                   | 94.4      | 96.5  | 90.3 | 95.7  |

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (1999) "Evaluating Programme Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.18

Table 18 Percentage Distribution by whether Male and Female Respondents Have Been Ill During the Last Six Months by Age Group, Whether Seek Treatment and Place of Treatment

| Health status                | Age group |        |       |       |        |       |
|------------------------------|-----------|--------|-------|-------|--------|-------|
|                              | 50-59     |        |       | 60-69 |        |       |
|                              | Male      | Female | Total | Male  | Female | Total |
| Ill during the last 6 months |           |        |       |       |        |       |
| No                           | 68.2      | 57.8   | 62.1  | 55.7  | 45.9   | 50.2  |
| Yes                          | 31.8      | 42.2   | 37.9  | 44.3  | 54.1   | 49.8  |
| Without treatment            | 2.9       | 1.4    | 2.0   | 1.7   | 0.0    | 0.7   |
| With treatment               | 97.1      | 98.6   | 98.0  | 98.3  | 100.0  | 99.3  |
| Source of treatment          |           |        |       |       |        |       |
| Government                   | 70.6      | 76.6   | 74.5  | 84.8  | 70.1   | 76.0  |
| Private                      | 47.1      | 56.3   | 53.1  | 43.9  | 58.1   | 52.7  |
| Traditional healer           | 5.9       | 12.5   | 10.2  | 5.3   | 14.0   | 10.7  |
|                              | 70+       |        |       | 50+   |        |       |
|                              | Male      | Female | Total | Male  | Female | Total |
|                              |           |        |       |       |        |       |
| Ill during the last 6 months |           |        |       |       |        |       |
| No                           | 40.6      | 35.8   | 37.9  | 55.3  | 47.0   | 50.5  |
| Yes                          | 59.4      | 64.2   | 62.1  | 44.7  | 53.0   | 49.5  |
| Without treatment            | 3.3       | 2.3    | 2.7   | 2.6   | 1.2    | 1.8   |
| With treatment               | 96.7      | 97.4   | 97.3  | 97.4  | 98.8   | 98.2  |
| Source of treatment          |           |        |       |       |        |       |
| Government                   | 79.3      | 70.2   | 73.9  | 79.2  | 72.2   | 74.9  |
| Private                      | 41.1      | 54.8   | 49.3  | 43.6  | 56.4   | 51.5  |
| Traditional healer           | 8.6       | 16.7   | 13.4  | 6.7   | 14.5   | 11.5  |

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (1999) "Evaluating Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.23

Table19 Percent of Respondents Who Have Encountered Major Unforeseen Problems During the Last One Year and by Type of Problem by Sex and Place of Residence (%)

|                                       | Sex  |        | Place of residence |       | Total |
|---------------------------------------|------|--------|--------------------|-------|-------|
|                                       | Male | Female | Rural              | Urban |       |
| Encountered problem                   | 21.6 | 22.4   | 22.9               | 21.3  | 22.1  |
| Type of problems*                     |      |        |                    |       |       |
| Housing                               | 1.8  | 0.9    | 0.0                | 2.5   | 1.2   |
| Food (Shortage)                       | 1.5  | 1.1    | 1.2                | 1.3   | 1.2   |
| Transportation                        | 1.2  | 2.6    | 3.2                | 0.8   | 2.0   |
| Work                                  | 0.9  | 0.7    | 0.5                | 1.0   | 0.7   |
| Financial problem                     | 8.8  | 9.3    | 10.4               | 7.8   | 9.1   |
| Health problem                        | 13.2 | 14.8   | 15.4               | 12.8  | 14.1  |
| Emotional problem                     | 0.3  | 0.9    | 0.2                | 1.0   | 0.6   |
| Domestic violence                     | 0.6  | 0.2    | 0.7                | 0.0   | 0.4   |
| Problem with spouse/household members | 0.6  | 1.7    | 1.2                | 1.3   | 1.2   |
| Problem with kin outside household    | 0.3  | 0.9    | 0.2                | 1.0   | 0.6   |
| Quarrel/violence with neighbours      | 0.3  | 1.1    | 0.2                | 1.3   | 0.7   |
| Others                                | 1.5  | 0.2    | 0.7                | 0.7   | 0.7   |
| Number of cases                       | 342  | 460    | 402                | 400   | 802   |

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (2000) "Evaluating Programme Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.52

Table20 Percent of Respondents Who Would Ask for Support from the Following Persons when They Face Various Crises by Sex and Place of Residence ; Financial problems

|                 | Sex  |        | Place of residence |       | Total |
|-----------------|------|--------|--------------------|-------|-------|
|                 | Male | Female | Rural              | Urban |       |
| Number of cases | 342  | 460    | 402                | 400   | 8.2   |
| No one          | 18.4 | 13.0   | 27.1               | 3.5   | 15.3  |
| Spouse          | 25.2 | 21.7   | 16.2               | 30.3  | 23.2  |
| Sons            | 61.7 | 67.8   | 59.0               | 71.5  | 65.2  |
| Daughters       | 55.3 | 68.9   | 55.2               | 71.0  | 63.1  |
| Siblings        | 6.4  | 2.2    | 3.0                | 5.3   | 47.1  |
| Other relatives | 12.6 | 16.1   | 8.2                | 21.0  | 14.6  |
| Friends         | 1.2  | 0.4    | 0.5                | 1.0   | 0.7   |
| Others          | 1.2  | 1.1    | 0.0                | 2.3   | 1.1   |

Source : Tan Poo Chang, Ng Sor Tho, Tey Nai Peng, and Halimah Awang (2000) "Evaluating Programme Needs of Older Persons in Malaysia" Faculty of Economic and Administration, University of Malaya Kuala Lumpur Malaysia p.53



Table21 Each Capacity of the Welfare Homes

| Home                     | Capacity | Year |
|--------------------------|----------|------|
| Bedong Kedah             | 250      | 1952 |
| Taiping Perak            | 250      | 1950 |
| Tanjong Rambutan,Perak   | 250      | 1952 |
| Cheras Selangor          | 250      | 1964 |
| Seremban Negeri Sembilan | 250      | 1958 |
| Chen Melaka              | 250      | 1971 |
| Johor Bahru,Johor        | 250      | 1969 |
| Taman Kemumin            | 250      | 1951 |
| Kander Pelis             | 150      | 1997 |

Table22 Inmates According to Sex and Ethnic Group in the Welfare Homes

| Year | Male  |         |        |        | Female |         |        |        | Total |
|------|-------|---------|--------|--------|--------|---------|--------|--------|-------|
|      | Malay | Chinese | Indian | Others | Malay  | Chinese | Indian | Others |       |
| 1995 | 281   | 394     | 553    | 13     | 213    | 198     | 166    | 7      | 1825  |
| 1996 | 280   | 369     | 494    | 12     | 216    | 193     | 155    | 4      | 1723  |
| 1997 | 286   | 368     | 501    | 11     | 234    | 189     | 173    | 4      | 1766  |
| 1998 | 302   | 353     | 505    | 11     | 235    | 174     | 179    | 5      | 1764  |
| 1999 | 302   | 380     | 501    | 11     | 244    | 171     | 161    | 6      | 1776  |
| 2000 | 321   | 363     | 436    | 11     | 257    | 173     | 177    | 7      | 1745  |

# Chapter 4

## Survey Members and Itinerary

### 1. Survey Members

#### Committee in Japan

|                  |   |
|------------------|---|
| Toshio Kuroda    | Director Emeritus, Nihon University Population Research Institute   |
| Hidesuke Shimizu | Professor and Chairman, Dept. of Public Health and Environmental Medicine, Jikei University School of Medicine                                |
| Kohei Komamura   | Assistant Professor, Faculty of Economics of Toyo University (Leader of the field survey team)  |
| Yuichi Miyakoshi | Visiting Researcher, Dept. of Public Health and Environmental Medicine, Jikei University School of Medicine (member of the field survey team) |
| Tsuguo Hirose    | Executive Director and Secretary General, Asian Population and Development Association (APDA)   |
| Osamu Kusumoto   | Assistant Secretary General, Senior Researcher, APDA  |
| Masaaki Endo     | Project Manager, APDA (member of the field survey team)   |
| Yuko Kato        | Manager of International Affairs, APDA  |

### 2. Cooperators (Survey in Malaysia; September 16 - 22, 2001)

#### Embassy of Japan in Malaysia

Yoshihiro Kakishita      First Secretary

#### Asian Forum of Parliamentarians on Population and Development of Malaysia

Datin Paduka Hjh                      Executive Director  
Rahmah Osman  
Ms.Normah Bt.Nek                      Aassistant to Executive Director

#### **Kuala Lumpur Hospital**

Dr.Ne Thien Kim                      Principal Assistant Director  
Dr.Kuppusamy Iyawoo                Head and Consultant,Institute of Respiratory Medicine  
Dr.Charistopher Lee                    Infectious Diseases Physician

#### **U.M. Specialist Centre**

Dr.Philip Poi Jun Hua                Consultant Physician Elderly Div.Geriatrics University of  
Malaya

#### **University of Malaya**

Dr.Tan Poo Chang                      Professor,Faculty of Economics and Administration

#### **Old Person's Home**

Mr.Mohd Yosof bin Abdoulah        Super Intendent

#### **Department of Statistics**

Ms.Normah Mohd. Aris                Director,Communication and Operation Div.  
Mr.Abdollah Bin Talib                Director,Demographic Statistics Div.  
Ms.Omi Kelson Elias                Senior Statistician,Demographic Statistics Div.  
Mr.Azizah Nooroiy                    Statistician,Demographic Statistics Div.  
Ms.Wan Roolida Othman              Statistician,Demographic Statistics Div.  
Ms.Faridan H.Rahman                Statistician,Demographic Statistics Div.

#### **Ministry of Health**

Mr.Mohmad Bin Sallah                Principle Assistant Director, Div. Family Health Dept.  
Dr.Nor F.Boizhan                      Assistant Director

#### **Leprosarium Sungai Buloh**

Dr.S. Kalyani                            Director, Leprosarium of Sungai Buloh

#### **Selangor State Health Department**

Dr.G. Thavamalar                      Principal Assistant Director

Dr.Eileen S. Nadarajah Deputy State Director

**Selangor Pertubuhan Keselamatan Sosial**

Mr.Mohd Ghazali Muda Director

**Ministry of National Unity and Social Development**

Dr.P. Manogran Secretary General

**The Japanese Chamber of Trade & Industry, Malaysia**

Mr.Kenji Sato Secretary General

**National Population and Family Development Board**

Ms.Khoo Swee Kheng Deputy Director General  
Ms.Rohani AB.Razak Director of Population Division  
Mr.Rozi Muda Family Development and Parenting Div.

### Study schedule: September 16 (Sun) through September 22 (Sat), 2001

| Date           | Outline of study  |
|----------------|---|
| Sept. 16 (Sun) | <ul style="list-style-type: none"> <li>▪ Departed from Narita at 12:55 and arrived in Kuala Lumpur at 19:00 by JAL723 (Mr. Kohei Komamura, Dr. Yuichi Miyakoshi, Mr. Masaaki Endo)</li> </ul>   |
| Sept. 17 (Mon) | <ul style="list-style-type: none"> <li>▪ Visited AFPPD Malaysia, Discussed the outline of the study with Datin Paduka Hj Rahamah Osman</li> <li>▪ Visited Embassy of Japan, Was explained about Social Welfare in Malaysia from Mr. Yoshihiro Kakishita, First Secretary</li> <li>▪ Visited Kuala Lumpur Hospital. Was explained Medical Services of the Hospital from Dr. Ne Thien Kim, Principal Assistant Director and visited wards</li> </ul>  |
| Sept. 18 (Tue) | <ul style="list-style-type: none"> <li>▪ Visited Specialist Center of University of Malaya. Was explained about Medical Services for aged of the center from Dr. Philip Jun Hua, Consultant Physician</li> <li>▪ Visited University of Malaya. Was explained study of old persons from Professor Tan Poo Chan</li> <li>▪ Visited Old Person's Home. Was explained about the activities of the Home from Mr. Mohd Yosof bin Abdoulah, Super Intendant and visited the facilities</li> </ul>  |
| Sept. 19 (Wed) | <ul style="list-style-type: none"> <li>▪ Visited Department of Statistics. Was explained about Health and Population Statistics from Ms. Normah Moha. Aris, Director of Communication and Operations Div. and collected data</li> <li>▪ Visited Ministry of Health. Was explained about Health in Malaysia from Dr. Mohamad bin Salleh, Principle Director, Div. Family Health Department</li> </ul>  |
| Sept. 20 (Thu) | <ul style="list-style-type: none"> <li>▪ Moved from Kuala Lumpur to Selangor.</li> <li>▪ Visited Leprosium, Sungai Buloh, Was explained about activities of the Hospital from Dr. S. Kalyani, Director and visited wards</li> <li>▪ Visited State Health Department. Was explained about Ageing of the State from Dr. G. Thavamalar, Principal Assistant Director</li> <li>▪ Visited PERKESO. Was explained about Welfare Services of the State from Mr. M. G. Muda, Director</li> <li>▪ Visited Farmer's House living with elder. Interviewed for care of elder and agricultural production</li> </ul> |

- |                |   |
|----------------|---|
| Sept. 21 (Fri) | <ul style="list-style-type: none"> <li>▪ Visited National Unity and Social Development. Was explained about Welfare for the elder in Malaysia from Dr. P. Manogran, Secretary General</li> <li>▪ Visited Japanese Chamber of Trade and Industry of Malaysia. Collected data</li> <li>▪ Visited National Population and Family Development Board. Was explained about Population and Family Development Policy of Malaysia from Ms. K. S. Kheng, Deputy Director General</li> <li>▪ Departed from Kuala Lumpur at 23:00 by JAL724. (Mr. Kohei Komamura, Dr. Yuichi Miyakoshi, Mr. Masaaki Endo)</li> </ul> |
| Sept. 22 (Sat) | <ul style="list-style-type: none"> <li>▪ Arrived at Narita at 06:45</li> </ul>  |

### **List of Collected Documents**

- 1 . 「Handbook of Malaysia '98/'99」 1998, Japanese Chamber of Trade and Industry
- 2 . 「Social Statistics Bulletin Malaysia 2000」 2000, Department of Statistics, Malaysia
- 3 . 「Vital Statistics Malaysia 2000」 2000, Department of Statistics, Malaysia
- 4 . 「State/District Data Bank Malaysia 2000」 2000, Department of Statistics, Malaysia
- 5 . 「Population and Housing Census of Malaysia 2000」 2001, Department of Statistics, Malaysia
- 6 . 「Evaluating Programme Needs of Older Persons in Malaysia」 1999, Tan Poo Chang, Ng Sor Tho. Faculty of Economics and Administration, University of Malaya
- 7 . 「Abridged Life Tables - Preliminary Release - 1998-2000」 2001, Department of Statistics, Malaysia
- 8 . 「Yearbook of Statistics, Malaysia 2000」 2000, Department of Statistics, Malaysia