

# 4

## Sectoral Performance

### Gross Domestic Product

**R**eal Gross Domestic Product (GDP) is envisaged to record a slower growth of 8% in 1997 (1996: 8.6%), due to moderation in the growth of all sectors of the economy, except agriculture. The agriculture sector is envisaged to record a stronger growth as a result of higher palm oil output and significant recovery in saw logs output. Growth in the manufacturing sector is expected to be sustained at double-digit rate, with production of export-oriented industries envisaged to pick up. Domestic-oriented industries, however, is likely to record a slower but double-digit rate of growth on account of a moderation in output increases of construction-related products and transport equipment. The pace of construction activities is expected to moderate due to slower construction starts, following the limit imposed on bank lending to the broad property sector as well as the more cautious stance of developers in view of increase in supply of some market segments of the property sector. Nevertheless, value-added in the construction industry is still expected to record double-digit growth due to engineering works on ongoing infrastructure projects as well as development of landed properties and industrial sites. The value-added of the services sector, although expected to remain strong as a result of expansion of output capacity by some services industries such as airlines, shipping and rail services, is envisaged to moderate slightly due to a moderation in domestic demand for services by the real sector of the economy. Likewise, output growth in the mining sector is also expected to slow down, following a smaller increase in crude oil and gas production while copper and tin output is expected to continue to decline.

### Manufacturing Sector

#### Overview

The **manufacturing sector** continues to be one of the leading growth sectors of the economy in 1997, despite intense global competition which has dampened prices of output. During the first seven months of 1997, the growth of the manufacturing sector accelerated to 13.3% from 11.4% during the corresponding period of 1996. The impetus to this growth was the strong recovery in the output of export-oriented industries which grew by 10.1% during the first seven months in 1997 compared with 7% during the corresponding period in 1996. Output growth of domestic-oriented industries remained strong, at 16.9%, during the first seven months of 1997 which is about the same rate recorded in the corresponding period of 1996.

The pick-up in the output growth of the **export-oriented industries** was attributed to a strong recovery in the output of semiconductors and other electronics products from 7.8% during the first seven months of 1996 to 23.9% during the same period in 1997. The output of cables and wires and knitting mills also recorded a modest to strong recovery in growth while output of synthetic textile mills continued to expand at a rate of more than 20%. However, output of audio-visual products contracted by 9.5% due to intense competition and high global inventory. Output growth of wood-based industry moderated significantly to 2% (January-July 1996: 11.6%) while that of rubber-based industry stagnated on account of lack of availability of raw materials. For the whole of 1997, the output of export-oriented industries is expected to expand by 10.6% underpinned by strong increases in the output of semiconductors due to strong export volume offtakes as well as production capacity expansion.

**Table 4.1**  
**Gross Domestic Product (GDP) by Sector**  
(%)

|                                                | 1996   |              |                        | 1997*  |              |                        |
|------------------------------------------------|--------|--------------|------------------------|--------|--------------|------------------------|
|                                                | Growth | Share of GDP | Contribution to Growth | Growth | Share of GDP | Contribution to Growth |
| Agriculture, forestry and fishing <sup>†</sup> | 2.2    | 12.7         | 3.4                    | 3.5    | 12.2         | 5.6                    |
| Mining                                         | 4.5    | 7.2          | 3.9                    | 2.8    | 6.8          | 2.5                    |
| (Of which petroleum)                           | 1.7    | 5.6          | 1.2                    | 0.5    | 5.2          | 0.3                    |
| Manufacturing                                  | 12.2   | 34.2         | 47.1                   | 12.0   | 35.5         | 51.0                   |
| Construction                                   | 14.2   | 4.7          | 7.4                    | 11.0   | 4.8          | 6.4                    |
| Services                                       | 9.7    | 44.8         | 50.0                   | 8.7    | 45.0         | 48.5                   |
| Less Imputed bank service charges              | 18.0   | 7.7          | 14.8                   | 16.5   | 8.3          | 15.7                   |
| Plus Import duties                             | 6.1    | 4.1          | 3.0                    | 3.5    | 4.0          | 1.8                    |
| GDP                                            | 8.6    | 100.0        | 100.0                  | 8.0    | 100.0        | 100.0                  |

<sup>†</sup> Includes livestock and horticulture

\* Estimate

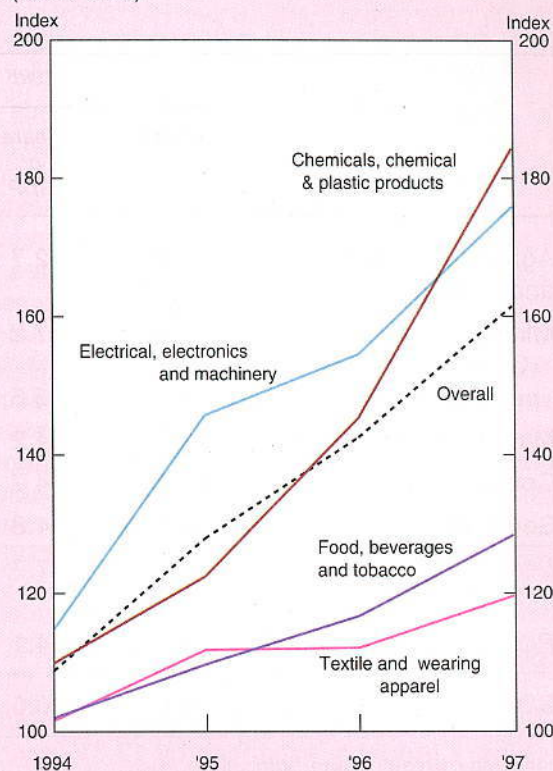
The strong growth of **domestic-oriented industries** during the first seven months of 1997 was attributed to a 26.8% increase in the output of plastics, chemicals and chemical products (January-July 1996: 18.8%) as a result of capacity expansion and strong demand. Domestic industries which recorded stronger growth during the first seven months of 1997 included industries producing food, beverages and tobacco products and paper and paper products. Industries which recorded strong albeit slower growth rates were those producing construction-related products, such as non-metallic mineral products and basic metal products as well as transport equipment. The slower output growth of construction-related manufacturing products reflected slower construction starts during the first half of 1997 and the near completion of several major projects, such as Kuala Lumpur International Airport (KLIA)

and Bukit Jalil sports complex, while the slower output growth of transport equipment reflected slower growth in demand. Output of domestic-oriented industries is expected to decelerate in the remaining five months of 1997 as output of construction-related manufacturing products is envisaged to be affected by further slowdown in construction activities while that of consumer goods, especially durables including motor vehicles, is expected to be affected by the deferment of spending on less essential goods by consumers whose wealth are affected by the fall in share prices. Consequently, for the whole of 1997, value-added of the manufacturing sector is expected to expand at 12% (1996: 12.2%), with export-oriented industries recording a stronger output growth while domestic-oriented industries a slower, albeit strong, output growth. (See Table 4.3).

Labour productivity or output per worker in the manufacturing sector increased by 10.8% during the first seven months of 1997. The increase in labour productivity, however, lagged behind real average wage, which increased by 20% during the same period of comparison. The strong increase in real average wage reflects the impact of a 11.6% increase in nominal average monthly wage and 7% drop in the selling price of products. With real average wage increasing at a faster rate than the gains in labour productivity, real unit labour cost, that is the real cost of labour per unit of output, rose by 8.3% during the first seven months of 1997. This is mainly due to the higher real unit labour cost in the electrical, electronics and machinery industry. The transport equipment industry also recorded higher real unit labour cost. However, the unit labour cost in the chemical & chemical products industries was lower. (See Table 4.2).

Despite stronger output growth, the sales value of the manufacturing sector increased at a slower rate of 5.3% during the first seven months of 1997 compared with 23.5% during the corresponding period of 1996. This is attributed to lower selling prices as a result of intense global competition. However, total wage bill of the

Chart 4.1  
Manufacturing Production Index 1994-1997  
(January-July)  
(1993 = 100)



**Table 4.2**  
**Manufacturing Sector:**  
**Labour Productivity, Real Average Wage and Real Unit Labour Cost By Industry (Annualised % Rate of Change During January-July 1997)**

| Industry                                 | Labour Productivity | Real Average Wage | Real Unit Labour Cost |
|------------------------------------------|---------------------|-------------------|-----------------------|
| All Manufacturing                        | 10.8                | 20.0              | 8.3                   |
| Electrical, electronics & machinery      | 12.5                | 28.3              | 14.0                  |
| Textiles, apparel and footwear           | 5.3                 | 7.4               | 1.9                   |
| Chemicals, chemical and plastic products | 22                  | 9.4               | -10.3                 |
| Transport equipment                      | -5.5                | 11.7              | 18.2                  |

Source: Computation based on data provided in the Monthly Manufacturing Survey of Department of Statistics.

manufacturing sector rose at a faster rate than the increase in sales value, that is at 14.1%. As a result, the cost of labour per RM100 of sales of output in the manufacturing sector increased by 8.3% from about RM6.38 per RM100 of sales during the first seven months of 1996 to RM6.91 per RM100 of sales during the same period in 1997. The cost of labour per RM100 of sales in the electrical, electronics and machinery industry increased by 14% to RM6.35 from RM5.57 during the corresponding period of 1996, while the textile and apparel industry registered a marginal increase of 1.9% in cost of labour per RM100 of sales to RM11.96 from RM11.73. In the transport equipment industry, the cost of labour per RM100 of sales increased by 18.2% to RM5.39 from RM4.56. However, in the chemical and chemical products industry, the cost of labour per RM100 of sales during the period declined by 10.3% to about RM6.32 from RM7.06, mainly as a result of sales value accelerating faster than the increase in total wage bill.

### Electrical, Electronics and Machinery

Output of the **electrical, electronics and machinery industry** expanded by 13.8% during the first seven months of 1997 (January-July 1996: 6.1%) on account of stronger output growth of semiconductors and other electronics products as well as cables and wire. The **semiconductor and other electronics** sub-sector registered a strong output growth of 23.9% (January-July 1996: 7.8%) due to capacity expansion and recovery in external demand from major industrial countries. Output of semiconductors rose by 29.5%, electronic transistors by 26.8% and integrated circuits by 26.4%. Output of **cables and wire** expanded at a faster rate of 14.4% (January-July 1996: 9%) underpinned by a significant increase in the production of insulated wires and cables of 28.4%, as well as in the production of telephone and telegraphic cables of 15.9%. Favourable external demand as well as sustained domestic demand arising from the development and upgrading of telecommunications and electricity infrastructure projects have contributed to the growth of this sub-sector.

In the face of stiffer competition from other low cost producing countries, the output of **radio and television sets, sound recording and reproducing equipment** as a group declined by

**Table 4.3**  
**Manufacturing Production**  
**Index of Malaysia**  
**1993 = 100**

|                                                                     | Weights | 1996<br>January-July<br>% change | 1997  |
|---------------------------------------------------------------------|---------|----------------------------------|-------|
| Food, beverages and tobacco                                         | 7.83    | 6.4                              | 10.1  |
| Textiles and wearing apparel                                        | 3.93    | 0.2                              | 6.7   |
| Footwear                                                            | 0.08    | -4.6                             | -16.5 |
| Petroleum refineries                                                | 0.96    | 11.7                             | 10.2  |
| Chemicals, chemical and plastic products                            | 10.89   | 18.8                             | 26.8  |
| Paper and paper products                                            | 1.19    | -5.0                             | 11.0  |
| Rubber-based products                                               | 3.71    | 15.9                             | -0.5  |
| Wood and wood-based products (except furniture)                     | 5.42    | 11.6                             | 2.0   |
| Non-metallic mineral & glass products                               | 3.43    | 24.2                             | 15.2  |
| Iron and steel                                                      | 2.23    | 16.4                             | 10.3  |
| Non-ferrous metal products                                          | 0.58    | 10.6                             | 33.2  |
| Fabricated metal products                                           | 3.19    | 29.3                             | 10.3  |
| Electrical and electronic products and machinery                    | 23.17   | 6.1                              | 13.8  |
| Professional and scientific and measuring and controlling equipment | 0.95    | 0.6                              | 3.9   |
| Transport equipment                                                 | 2.57    | 23.9                             | 12.6  |
| Miscellaneous products of coal and petrol                           | 0.29    | 24.2                             | 12.3  |
| Total                                                               | 70.41   | 11.4                             | 13.3  |

Source: Based on Index of Industrial Production, Department of Statistics

9.5% (January-July 1996: 7%). The number of television sets produced declined by 21.2% to 4.15 million units during the first seven months of 1997 as against a growth of 1.3% recorded during the corresponding period of 1996. The output of radio sets, however, increased by 10.8% to 19.1 million units (January-July 1996: -20.9%).

The output of the **non-electrical machinery industry**, which included office, accounting and computing machinery, refrigerating, exhaust, ventilating and air-conditioning machinery,

Table 4.4

### Production of Selected Electrical and Electronic Products (January-July)

|                                           | 1996   | 1997   | Annual<br>change<br>(%) |
|-------------------------------------------|--------|--------|-------------------------|
| Semiconductors<br>(million units)         | 3,122  | 4,044  | 29.5                    |
| Electronic transistors<br>(million units) | 5,957  | 7,551  | 26.8                    |
| Integrated circuits<br>(million units)    | 5,492  | 6,943  | 26.4                    |
| Television sets<br>(‘000 units)           | 5,267  | 4,151  | -21.2                   |
| Radios (‘000 units)                       | 17,222 | 19,087 | 10.8                    |
| Room air-conditioners<br>(‘000 units)     | 1,828  | 1,594  | -12.8                   |
| Household refrigerators<br>(‘000 units)   | 146    | 134    | -8.2                    |
| Insulated wires and<br>cables (tonnes)    | 54,255 | 69,656 | 28.4                    |

Source: Based on Monthly Manufacturing Survey,  
Department of Statistics

increased marginally by 1% after a decline of 4% in the corresponding period of 1996. This is attributed to 5.9% recovery in the production of refrigerating, exhaust, ventilating and air-conditioning machinery (January-July 1996: -7.4%). However, output of office, accounting and computing machinery which include personal computers, computer magnetic diskette, electronic calculators, typewriter parts, radio antenna, mobile and non-mobile telephones, declined by 11% (January-July 1996: 4.9%), as a result of excess global production capacity in the face of moderation in demand growth.

While the output performance of some electrical products has been affected by the moderation in demand growth and excess capacity, the prospect of the electronics industry remains promising. The rapid advancement in the field of information technology and the increasing usage of Internet would accelerate demand for PCs and other electronic products and this certainly augurs well

for the electronics industry. In addition, continued efforts by the government and the manufacturers of the industry in improving their capabilities in wafer design and fabrication technology will further enhance their competitive advantage. The Multi media Super Corridor (MSC) project will ensure the future growth of the industry and will help to shift the electronics sector from product-focus to technology-focus with higher value-added as a result of the collaborative research by participating companies in the MSC project. For the whole of 1997, the **electrical, electronics and machinery** sub-sector is anticipated to grow by 14.4% and will remain as the leading manufacturing industry.

### Textiles, Apparel and Footwear

Production of **textiles** is expected to expand strongly by 10.9% in 1997 after a marginal increase of 1.9% in 1996 due to strong growth in higher value added synthetic textiles in response to strong world demand. During the first seven months of 1997, output of textiles increased by 11.7%, (January-July 1996: 1.5%) largely on account of a 23% increase in synthetic textiles (January-July 1996: 28.9%). Output from the natural fibre spinning and weaving mills rose by 6.2% (January-July 1996: -0.3%) as prices of raw cotton stabilized making it more saleable while output of knitting mills increased by 13.3% (January-July 1996: -14.2%). However, output from activities such as dyeing, bleaching, printing and finishing of yarns and fabric declined by 2.3% (January-July 1996: -16.5%). This is due to high costs of operations especially in terms of pollution control and keen competition from low-cost producers such as China, the Philippines, Bangladesh and Vietnam.

The output performance of the wearing **apparel** sub-sector remained weak. During the first seven months of 1997, its output declined further by 2% (January-July 1996: -1.9%). Growth in the sub-sector, which is labour intensive was affected by tight labour market conditions and increasing wages. This has prompted manufacturers to relocate lower end products, such as blouses and shirts to low-cost countries such as Cambodia and Vietnam. At the same time, production has shifted towards higher quality up-market products using more automated production processes.

Output of **footwear** declined further by 16.5% during the first seven months of 1997 (January-July 1996: -4.6%). The main reason for the decline is lower production of leather footwear due to weaker external demand. Rising costs of domestic

production and intense competition from lower cost producers have also affected sales orders from overseas.

### Wood and Wood-based Products

During the first seven months of 1997, the production of wood-based products, excluding furniture, recorded a slower growth of 2% (January-July 1996: 11.6%) largely due to a decline in the production of sawn timber.

The production of **plywood and veneer, hard board and particle board** as a group increased by 8.4% during the first seven months of 1997 (January-July 1996: 20.1%) on account of the sharp increase in the production of block board by 27.4% to 105,208 cubic meters. The production of plywood and veneer expanded by 8.7% in tandem with the increase in the number of plywood/veneer mills to 123 establishments (January-July 1996: 111 establishments) which has resulted in the expansion of processing capacity by 10.8%.

Based on the annual allowable cut on sawlogs set by the government, the production of **sawn timber** continued its declining trend. For the first seven months of 1997, the production of sawn timber declined further by 6.3% to 4.03 million cubic metres after a decline of 46% in the corresponding period of 1996.

The ex-factory value of sales of **furniture and fixtures** increased marginally by 5.3 % to RM960 million during the first seven months of 1997 compared with a 42.2% recorded during the corresponding period of 1996. Prospect for the furniture industry remains bright, with strong demand emanating from steady expansion of the residential housing sector. Through greater diversification and development of downstream activities, an extensive range of Malaysian-made furniture is currently available, with products produced from tropical timber species, rubberwood, rattan, metal, plastics, and fabrics. The industry is in transition to upgrading its product quality from the lower/medium-end market range to the medium/higher-end products as it commits more

investment in R&D and market development activities to promote Malaysian-made furniture in the international market place.

### Rubber-based Products

Due to supply constraints of raw materials following lower rubber production, output of the **rubber-based products industry** declined marginally by 0.5% during the first seven months of 1997, compared with an increase of 15.9% during the corresponding period of 1996. The decline was attributed to lower output of almost all sub-sectors of the industry, with the exception of **tyres and tubes**.

In tandem with the more moderate output growth of the domestic automobile industry, production of **tyres and tubes** expanded by 7.4% in the first seven months of 1997 compared with 14.6% recorded in the corresponding period of 1996. The production of tyres increased to 7.7 million units during the period under review compared with 6.7 million units during the same period of 1996.

The production of **other rubber products** which comprises mainly rubber gloves, catheters and rubber sheets declined marginally by 0.8% during the first seven months of 1997 (January-July 1996: 20%). Output of rubber gloves declined by 2.2% to 5.05 billion pairs during the period under review (January-July 1996: 5.17 billion pairs). Similarly, output of **rubber footwear** declined sharply by 28.4% against an increase of 5% registered during the first seven months of 1996, mainly due to rising cost of labour which has led to some manufacturers relocating their activities to lower-cost producing countries such as Indonesia, Vietnam and China. As a result of lower output of raw rubber, the output of **rubber remilling and latex processing** sub-sector declined further by 3% after a decline of 1.1% registered during the corresponding period of 1996.

### Food, Beverages And Tobacco

The output of **food, beverages and tobacco** expanded further by 10.1% during the first seven

**Table 4.5**  
**Growth Rates of Selected Food Manufacturing Sub-Sectors (%)**

|                                          | 1996       | 1996<br>January-July | 1997       |
|------------------------------------------|------------|----------------------|------------|
| Rice mills                               | -15.6      | -15.3                | -4.1       |
| Dairy products                           | 1.7        | -4.3                 | -5.5       |
| Biscuits factories                       | -0.1       | 0.0                  | 3.9        |
| Fish, crustacean and similar foods       | 17.5       | 4.0                  | 29.7       |
| Flour mills                              | -2.9       | -2.5                 | 3.0        |
| Sugar factories and refineries           | 6.8        | 7.7                  | -0.6       |
| Cocoa, chocolate and sugar confectionery | 15.2       | 12.1                 | -4.4       |
| Prepared animal feeds                    | -4.1       | -1.4                 | 1.9        |
| Other food products                      | 14.9       | 30.7                 | -1.9       |
| <b>TOTAL</b>                             | <b>8.2</b> | <b>4.7</b>           | <b>9.8</b> |

*Source: Department of Statistics*

months of 1997 compared with 6.4% registered during the corresponding period of 1996. The better performance of the industry was due to higher production in the tobacco and food sub-sectors.

**Manufactured food** (which constitutes about 81% of the total production of the food, beverages and tobacco industry) expanded by 9.8% during the first seven months of 1997 after registering a growth of 4.7% in the corresponding period of 1996. The expansion was due to the strong performance of some of the major sub-sectors including processing of fish, crustacea and similar food, palm oil and flour mills. Output of oil and fats sub-sector including processing of palm oil and palm kernel oil, margarine, and blended cooking oil registered higher output growth ranging from 4.9% to 28.8%. Production of processed fish, crustacean and similar food sub-sector surged by 29.7% during the first seven months of 1997 compared with a marginal increase of 4% during

the corresponding period of 1996, on account of favourable external demand. In contrast, the production of dairy products with the exception of milk drinks continued to decline. The output of dairy products sub-sector declined by 5.5% (January-July 1996: -4.3%) with production of the dairy infant milk declining sharply by 31% on account of competitive import substitutes. Chocolate and sugar confectionery sub-sectors also recorded lower production. However, production of milk drinks increased by 15.3% supported by rising demand from overseas market, apart from sustained domestic market.

The production of **beverages** rose by 1.5% during the first seven months of 1997 (January-July 1996: 20.8%). The slower growth was due to decline in the production of soft drinks and carbonated water by 3.5% (January-July 1996: 28.2%). However, the alcoholic beverage continued its growth albeit at a slower pace of 5.4% as against 12.5% registered during the same period last year.

The production of **tobacco products** increased sharply by 20.6% during the period under review (January-July 1996: 8.4%). Output of cigarettes rose strongly by 20.3% (January-July 1996: 8.4%) underpinned by strong external demand and a positive turnaround in domestic consumption after three years of decline as well as enforcement by the authority in curtailing contraband cigarettes.

## **Petroleum and Gas Products**

During the first seven months of 1997, output of petroleum products rose by 10.2%, after recording an increase of 11.7% during the corresponding period of 1996. The output increase of petroleum products is attributed to the expansion in crude oil throughput from 357,400 barrels per day (bpd) in 1996 to 372,600 bpd in 1997 with five refineries operating. The major products produced by the refineries are kerosene, fuel oil, diesel, liquefied petroleum gas, and gasoline. In the first seven months of 1997, output of kerosene, fuel oil, diesel and gasoline increased by 3.6%, 11%, 9% and 5.1%, respectively compared with increases of 17.4%, 28.6%, 7.2% and 7.3% registered during the same period of 1996. However production of liquefied petroleum gas fell by 5% during the period under review against an increase of 13.8% in the corresponding period of 1996.

The net production of **natural gas** is projected to increase by 14.3% to 3,899 million standard cubic feet per day (mmscfd) in 1997, after registering an increase of 22% in 1996. The demand for natural gas has expanded at a rapid rate as natural gas is fast emerging as a viable alternative fuel, especially in the power generation sector. Gas reserves is estimated at over 79.8 trillion standard cubic feet. Malaysia's gas reserves are located in three main areas, that is in the Central Luconia province offshore Sarawak, offshore Sabah and offshore the East Coast of Peninsular Malaysia. Gas mined offshore Sarawak is converted into **liquefied natural gas (LNG)** at the two LNG plants in Bintulu and is mainly exported to Japan and South Korea. Production of LNG is expected to increase by 16.3% to 16.1 million metric tonnes in 1997. Gas from Sabah is used as feedstock in the production of methanol. Gas extracted from the Duyong fields off the coast of Terengganu and piped to the four gas processing plants (GPP) in Kertih where it is processed to produce sales gas, ethane, propane, butane and condensates. Sales gas is used in power generation while the other products are used as feedstock in the petrochemical plants. Each of the four gas plants currently in operation has the capacity to process 250 mmscfd. With the commissioning of GPP5 and GPP6 by the end of 1998, the combined gas processing capacity will increase to 2,000 mmscfd, making it the single largest facility in the world.

The Peninsular Gas Utilisation Project which consists of 1,260 kilometers of pipe lines has made it possible for sales gas to be used as an alternative fuel for power generation, commercial as well as residential purposes. About 74% of the sales gas is channelled to Tenaga Nasional Berhad and the Independent Power Producers, while another 12% is for other commercial uses such as the steel and petrochemical plants in Kertih and residential uses, and the balance exported to the Public Utilities Board in Singapore.

### **Chemicals , Chemical and Plastic Products**

During the first seven months of 1997, output of the **chemicals, chemical and plastic products** industry increased by 26.8% compared with 18.8% in the corresponding period of 1996. The stronger expansion is attributed to 22% increase in the output of industrial gases (oxygen, nitrogen,

hydrogen, carbon dioxide and acetylene) 25.7% increase in the production of basic industrial chemicals and 19.4% increase in the production of synthetic resins. Output of paints, varnishes and lacquers increased moderately by 7.7%, while that of drugs and medicines rose by 7.6%. However, the production of fertilizers and pesticides declined by 8.1% while soap and other cleaning detergents declined by 11.3%. Output of **plastic products** surged by 55.9% on account of 78.9% increase in production of plastic bottles due to rising demand from the beverages industry. Underpinned by strong domestic and external demand especially from Japan, South Korea, and Taiwan, output growth of the chemicals , chemical and plastic products industry, for the whole of 1997, is expected to increase by 20% , on top of the 19.6% increase in 1996.

The expansion in the petroleum and gas industry augurs well for the **petrochemical** industry as the petrochemical clusters in Kertih, Gebeng and Pasir Gudang are ensured of feedstock in the form of butane and propane gas from the gas processing plants of Kertih. In 1997, 3.2 million metric tonnes of petrochemicals are expected to be produced, of which the major products are methanol, methyl tertiary butyl ether, propylene, polypropylene, ethylene, polyethylene, urea and ammonia.

Projects which will further expand petrochemical operations in Malaysia include the aromatic feedstock plant, a vinylchloride monomer plant, an acetic acid plant and a second ammonia plant which are expected to come on stream in Kertih by the end of the year 2000. A joint venture project between Petroliam Nasional Bhd (PETRONAS) and BASF of Germany to produce acrylic acid/esters and oxo-alcohols is also expected to start operations in the year 2000 with the final phase scheduled for completion in 2004. Thus, the petrochemical industry is expected to provide strong impetus to the nation's output growth in the medium term.

With palm oil and palm kernel oil becoming increasingly more important as raw materials, the production of **oleochemicals** is increasing rapidly. In 1997, output of basic oleochemicals is envisaged to increase to over 600,000 tonnes from 262,000 tonnes produced in 1990. There are 15 companies in the industry, producing mainly fatty acids, esters, fatty alcohols, fatty nitrogen compound and glycerol

using palm kernel oil as the main feedstock. Some of these companies have ventured into more value added products such as soap noodles, metallic soaps, mono and diglycerides and cosmetic esters. Research and Development (R&D) undertaken by the Advanced Oleochemical Technology Centre (AOTC) in PORIM is providing the impetus to the oleochemical industry for greater involvement in value-added downstream activities. Among the AOTC achievements are the pure palm moisture hand cream, hand and body lotion containing palm Vitamin E, and production of base oil for printing ink.

## Non-Metallic Mineral Products

The output of the **non-metallic mineral products** industry which include cement, concrete, hydraulic cement, structural clay products and glass products expanded further by 15.2% in the first seven months of 1997 (January-July 1996:24.2%). All major component products of the industry registered increases in production.

The output of **cement of all types** increased by 5.8% to 7.3 million tonnes in the first seven months of 1997 compared with 12.6% (6.9 million tonnes) in the corresponding period of 1996, largely on account of the continued expansion of construction activities. Following recent cement shortage problem, many manufacturers have stepped up their production capacities. A new cement plant with a capacity of producing one million tonnes per year in Bukit Sagu, Pahang started operation in August 1997. In response to the strong demand for construction materials, the output of **cement and concrete products** which included roofing sheets, pipes and ready mixed concrete, increased in terms of ex-factory value by 35% to RM1.6 billion (January-July 1996: 71.3%). The production of ready mixed concrete remained strong with a growth of 39.2%, while cement roofing tiles grew by 26.6% to 83.8 million pieces.

The production of **structural clay products** increased by 13.4% as reflected in the increased production of ceramic tiles and earthen bricks. The production of ceramic tiles increased by 21.7% to 31.7 million sq. meters compared with 26.1 million sq. meters produced in the corresponding

period of 1996, while that of earthen bricks increased by 9.8% to 551.1 million pieces from 501.8 million pieces in 1996. Likewise, the **glass and glass products** industry which include primarily glass, glass containers and tableware, recorded a double digit growth rate of 12.1% compared with 11% recorded in the corresponding period of 1996.

For the whole of 1997, the non-metallic mineral industry is expected to sustain an output growth of 10.7%. With abundant and vast reserve of non-metallic minerals such as ball clays, silica sand, and limestone, the industry has the potential to move to higher value-added products.

## Iron and Steel And Metal Products

The production of **basic metal products** rose further albeit at a less rapid pace. The output of basic metal products increased by 12.3% in the first seven months of 1997 compared with an increase of 22.6% during the same period of 1996. Much of this increase in production was accounted for by the higher output of non-ferrous basic metal industry. For the whole of 1997, the industry's outlook is expected to be generally favourable with growth envisaged at 9.4% (1996: 20.3%).

The output growth of **iron and steel sub-sector** decelerated to 10.3 % during the period under review (January-July 1996: 16.4%) The slower pace of output expansion growth was due to the slower increase in output by the **other iron and steel basic industries** which include industries producing galvanized iron sheets, welded iron, steel pipes and tubes and fittings, to 5.8% (January-July 1996: 14.6%). The production expansion of **primary iron and steel products** such as billets, iron and steel bars and rods was moderately lower at 12.7% (January-July 1996: 17.3%). While the completion of some major construction projects may slow down the demand for iron and steel products, demand from related sub-sectors such as foundry and engineering sector is still strong. Moreover, some major steel manufacturers have taken steps to increase their capacities in view of steady demand. In view of the problem of shortage of cement, steel manufacturers are anticipating a greater use of steel structures as

alternative to reinforce concrete building works. In this regard, Perwaja has commenced production of the country's first beam and section mill at its plant in Gurun. The RM1.15 billion mill is capable of producing 700,000 tonnes of high quality beams, angles and channels annually.

Despite the declining trend of tin smelting industry, the output of **non-ferrous basic metal industries** as a group surged by 33.3% in the first seven months of 1997, from 10.6% in the corresponding period of 1996. While the tin smelting sub-sector declined by 10.2% on account of poor production of tin, **other non-ferrous metal industries** such as manufacturing of aluminium, lead, copper and zinc products recorded an impressive growth of 37.9% during the period under review (January-July 1996: 11.7%), attributable to the favourable demand for these metal products.

During the first seven months of 1997, the production of **fabricated metal products industry** expanded by 10.3% compared with 29.3% growth during the corresponding period of 1996. The slower growth was due to a decline in the structural metal products sub-sector of 2.2% as against the robust growth experienced during the same period last year (49.5%). The slow down was partly due to the near completion of major structural built-up of major construction projects such as Kuala Lumpur International Airport (KLIA) and the Bukit Jalil sports complex. In contrast, the increased demand for **brass, copper, pewter and aluminium fabricated products** has resulted in a significant increase in output of this sub-sector. The sub-sector expanded by 32% in the first seven months of 1997 compared with 17.2% recorded in the same period of 1996. In the case of **tin cans and metal boxes** sub-sector, the growth in the food processing and beverages sub-sector has supported the expansion of output by 18.1% in the first seven months of 1997 compared with 12.4% registered last year.

## Transport Equipment

Output of the **transport equipment** industry comprising the manufacture and assembly of motor vehicles and component parts manufacturing grew at a slower rate of 12.6% during the first seven

months of 1997 (January-July 1996: 23.9%) as output growth of passenger cars decelerated. Nevertheless, a near doubling of the output of **commercial vehicles** to 73,883 units helped the transport equipment industry to continue to record double digit growth.

Output of **passenger cars** below 1600 cc increased by 19.3% during the period under review, on top of the 30.6% growth recorded during the corresponding period of 1996. However, output of passenger cars 1600 cc and above dipped by 13.3%, a sharp reversal from the 58.5% growth recorded in the corresponding period of 1996. Currently, there are 17 motor vehicle assembly plants in operation in Malaysia. Five of these plants produce only motorcycles, eight of the plants produce both passenger and commercial vehicles, three produce only commercial vehicles while PROTON manufactures passenger cars only. The local content of national cars varies between 50% to 86%. During the first seven months of 1997, output of national cars increased by 19.6% to 161,668 units. 118,862 units of PROTON cars were produced while PERODUA rolled out 42,806 units.

PROTON currently has two plants. Its Shah Alam plant has an installed capacity of producing 230,000 units annually. The second plant in PROTON City at Tanjung Malim, which was originally set to produce 500,000 units annually, has planned to increase capacity to one million units by the year 2010, in view of strong local and foreign demand. Phase one of PROTON City is expected to be completed by 2000 with capacity to produce 250,000 units a year. Phase two, when completed by 2003, would increase production to 500,000 units. Abroad, PROTON has established an assembly plant in the Philippines and plans to open an auto parts factory in Indonesia. It is also looking into the possibility of setting up a plant in India. With the completion of a new assembly line for its RUSA models in April 1997, PERODUA's production capacity at the plant in Serendah has increased to 120,000 units. The company has also earmarked another 46,500 hectares of land behind its current plant for further expansion. With the expansion, research and development will be given greater emphasis. It plans to introduce three new models in the next three years and to achieve 100% local content by the year 2001.

Production of **motorcycles and scooters** increased by 36.5% to 253,360 units during the period under review underpinned by strong demand and expansion of production capacity. The industry has a total production capacity of 400,000 units with an average local content of 56.6%. Output of the national motorcycle, Kriss, which was launched by MODENAS in November 1996, was 63,599 units during the first seven months of 1997, capturing 30.3% of the market.

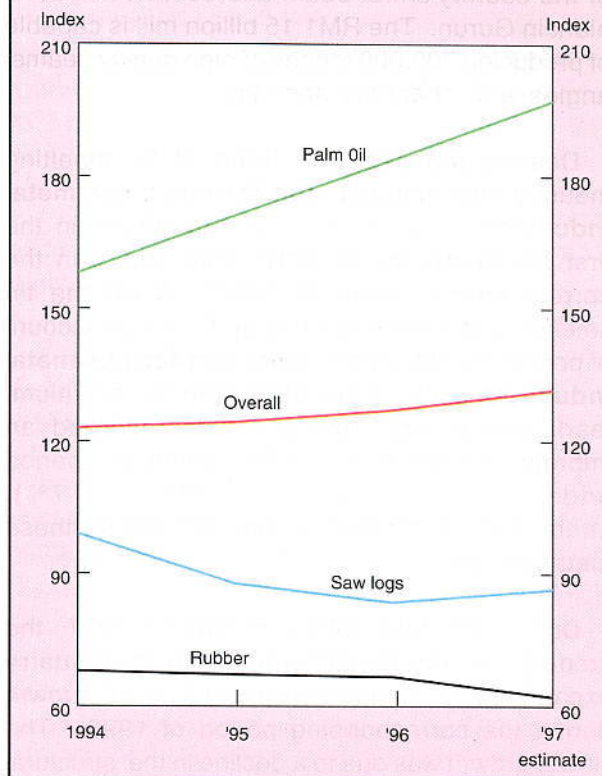
Demand for motor vehicles as well motor vehicles parts and accessories remained strong during the first seven months of 1997. The number of **motor vehicles** sold during the first seven months of 1997 increased by 24.5% to 467,055 units (January-July 1996: 9.3%). Sales of national cars increased by 23.3% and accounted for 80.3% of the passenger car market. PROTON dominated 63.6% of the market share, while PERODUA captured 17%. Sales of non-national cars increased by 14.9% to 33,470 units. Of these, Honda, Toyota and Nissan recorded relatively better sales turnover. Sales of commercial vehicles continued to be strong, registering a growth of 25.8% with 44,813 units sold, reflecting the buoyant domestic economic activities. Sales of four-wheel drive vehicles soared by 40.3% to reach 14,800 units, boosted by demand for use in recreational and commercial activities. Sales of motorcycles increased by 25.6% to 237,455 units.

In consonance with the expansion in the motor vehicle industry and the utilisation of more local content for original equipment and replacement parts, the **motor vehicle parts and accessories** sub-sector recorded an increase of 26.7% in sales value during the period under review, after an increase of 60.4% achieved during the same period of 1996.

## Agriculture Sector

The output from the agriculture sector is expected to increase by 3.5 % in 1997 (1996: 2.2%) largely due to a 7.3% increase in palm oil output and 3.4% recovery in sawlogs output. Rubber output, however, is envisaged to decline by 6.7% for the third consecutive year while that of cocoa is expected to decline by 6% in 1997. Due to the relatively slower output growth of the agriculture

Chart 4.2  
Agricultural Production Index  
(1978 = 100)



sector compared to other sectors of the economy, its share to overall GDP is expected to decline further from 12.7% in 1996 to 12.2% in 1997.

### Palm Oil and Palm Kernel Oil

In the first eight months of 1997, **crude palm oil** production increased by 10.4% to 5.78 million tonnes (January-August 1996: 7.5 %). For 1997 as a whole, palm oil production is forecast to expand by 7.3% to 9 million tonnes with production growth expected to peak in September/October. The increase in matured areas by 106,000 hectares, particularly in Sabah and Sarawak, the higher oil extraction rate of 19% in comparison to 18.71% in 1996 and the bumper crop at the end of the biological yield cycle which started in 1994 are factors contributing to higher output growth in 1997. Improvement in the average yield per hectare of fresh fruit bunch from 18.95 tonnes per hectare in 1996 to 19.00 tonnes per hectare also contributed to the increase in crude palm oil production.

The bulk of crude palm oil production comes from Peninsular Malaysia, accounting for 75.7% or 6.81 million tonnes. Sarawak is envisaged to produce 1.93 million tonnes or 21.4% of the total while Sabah is expected to produce 0.26 million tonnes or 2.9% of the total in 1997. Total hectareage planted with oil palm in 1997 is estimated at 2.68 million hectares, of which 2.33 million hectares are matured holdings.

**Palm kernel oil** production increased by 5.6% to 0.74 million tonnes in the first eight months of 1997 (January-August 1996: 6.8%). In tandem with the higher crude palm oil production and greater demand from oleochemical products, production for the whole of 1997 is envisaged to increase by 6% to 1.2 million tonnes.

To promote demand for palm oil products, the palm oil industry through Palm Oil Research Institute of Malaysia (PORIM) has undertaken research and development to diversify end-uses of palm oil and recycling oil palm trees. As at end of 1996, 43 technologies have been developed, of which 26 technologies had been commercialised. Among the technologies developed by PORIM were palm oil-based reduced fat spread, pulp and paper from oil palm fibres, palm oil-based anionic surfactants, pulp oil-based trans-free vanaspati and formulated palm oil-based santan powder.

## Timber

The production of **sawlogs** in the first six months of 1997 increased by 8% to 16.2 million cubic metres, a strong recovery compared to a 9.1% drop in output in the corresponding period of 1996. For 1997 as a whole, production is expected to increase by 3.4% to 31.16 million cubic metres. Sarawak is envisaged to contribute to most of the output, that is 55.6 % or 17.33 million cubic metres, followed by Peninsular Malaysia with 24.1% or 7.50 million cubic metres and Sabah 20.3% or 6.33 million cubic metres. Sawlogs output from Sarawak is expected to increase by 7.8% in 1997 (1996: -0.1%) due to clearing of trees for the Bakun Hydroelectric Power Plant while output from Sabah is expected to increase by 12.2% (1996: -2.9%). However, output from Peninsular Malaysia is expected to decline by 10.9% (1996:-

**Table 4.6**  
**Oil Palm Area and Palm Oil Production**

|                                  | 1996  | %<br>change | 1997 <sup>o</sup> | %<br>change |
|----------------------------------|-------|-------------|-------------------|-------------|
| Planted areas<br>('000 hectares) | 2,615 | 3.0         | 2,675             | 2.3         |
| Matured areas<br>('000 hectares) | 2,326 | 4.1         | 2,413             | 3.7         |
| Production<br>('000 tonnes)      |       |             |                   |             |
| Crude palm oil                   | 8,386 | 7.4         | 9,000             | 7.3         |
| Palm kernel oil                  | 1,107 | 7.1         | 1,173             | 6.0         |
| Yield<br>(kg/hectare)            | 3,550 | 1.7         | 3,610             | 1.7         |

<sup>o</sup> estimates

Source: Ministry of Primary Industry

6.8%) due to adherence to the annual allowable cut.

Malaysia adheres strictly to the policy of sustainable forest management by committing to maintain 50% of her land area under forest cover. Of Malaysia's total land area of 32.9 million hectares, 18.9 million hectares are under natural forest cover. Of this, 14.1 million hectares have been designated as Permanent Forest Estate. An additional 3.39 million hectares have been allocated for protection forests in the form of national parks, wildlife sanctuaries and nature reserves. To augment timber resources from natural forest, 171,060 hectares have been developed as forest plantations, of which 61.6% is in Sabah and the remainder in Peninsular Malaysia. A further 200,000 hectares is earmarked in Sarawak to plant fast-growing timber species *acacia mangium* for use as pulp. These trees are to be planted over seven years at 28,000 hectares annually. Another measure to increase the supply of timber resources is through reforestation. In 1996, 15,985 hectares have been reforested with some 13,000 hectares earmarked each year for 1997 and 1998.

## Rubber

During the first seven months of 1997, **rubber** production fell by 7.7% to 558,574 tonnes, with declines in both the estate and smallholder sectors. Smallholders contributed towards 79.7% of total production during the period, while the remainder was from the estate sector. The lower production was attributed to the continued conversion of rubber land for other uses. Labour shortages and less attractive rubber prices also discouraged tapping. In the light of this, total production of rubber for 1997 is expected to decline further by 6.7% to 1.01 million tonnes (1996: -0.6%), despite 2.2% improvement in yield from 980 kg/hectare in 1996 to 1,002 kg/hectare in 1997 for crops in Peninsular Malaysia.

Total rubber planted area in 1997 is expected to decline by 0.5 % to 1.66 million hectares. The decline in rubber hectareage is expected to come mainly from Peninsular Malaysia with a reduction of 0.8%, while Sabah and Sarawak is expected to record an increase of 1% and 0.3%, respectively. In Peninsular Malaysia, the decline in hectareage is envisaged in both the estate and smallholding sectors by 2.9% and 0.3%, respectively. In Sabah and Sarawak, the increase in rubber hectareage is expected to come from the smallholding sector.

The Rubber Research Institute of Malaysia (RRIM) has identified some practices that can boost productivity. These are the rate of fertilizer usage, use of high quality clones as well as tapping techniques and technologies. Realising that fertilizing the young rubber tree is crucial for high yield, a Slow Release Fertilizer Programme has been introduced for use in areas where labour constraint is critical, to reduce frequency of fertilizing. As for high quality clones, the Monitored Development Project is recommended by RRIM where high quality rubber clones are used, especially in the smallholding sector. Through this project, RRIM will make available high quality source budwood rubber trees to smallholders with the cooperation of RISDA, FELDA and FELCRA. To ease the labour shortage, RRIM has also improved various techniques and technologies in rubber tapping such as REACTORRIM and RRIMFLOW which have proven successful in improving productivity of rubber tapping.

## Other Agriculture, Livestock and Fisheries.

The production of **cocoa** is expected at 112,800 tonnes in 1997, a decline of 6% compared to 120,071 tonnes produced in 1996. The lower production is attributed to the decline in hectareage, less attractive cocoa prices and unfavorable weather. Total hectareage planted with cocoa is envisaged to decline by 1.7% to 205,600 hectares in 1997(1996: 209,177 hectares). Declining cocoa prices has encouraged estates to switch to other more lucrative crops.

**Pepper** output is expected to increase by 33.3% in 1997 to 16,075 tonnes due to newly planted areas coming into production, better management and more attractive prices. The hectareage under pepper is expected to increase from 10,620 hectares in 1996 to 11,215 hectares in 1997 attributed to attractive prices as well as the "Pepper Subsidy Scheme" which was first introduced in 1972 by the Sarawak state government to assist

**Table 4.7**  
**Rubber Area, Yield and Production**

|                                         | 1996    | %<br>change | 1997 <sup>e</sup> | %<br>change |
|-----------------------------------------|---------|-------------|-------------------|-------------|
| Total area<br>('000 hectares)           |         |             |                   |             |
| Smallholding                            | 1,424.7 | -2.2        | 1,422.6           | -0.1        |
| Estate                                  | 247.8   | -7.4        | 240.8             | -2.8        |
| Yield <sup>1</sup><br>(kg. per hectare) |         |             |                   |             |
| Smallholding                            | 942     | 0.1         | 967               | 2.7         |
| Estate                                  | 1,146   | 1.0         | 1,164             | 1.6         |
| Total Production<br>('000 tonnes)       | 1,082   | -0.6        | 1,010             | -6.7        |
| Smallholding                            | 844     | -0.4        | 788               | -6.6        |
| Estate                                  | 238     | -2.1        | 222               | -6.7        |
| % of world<br>production                | 17.1    |             | 15.9              |             |

<sup>1</sup> Refers to Peninsular Malaysia only

<sup>e</sup> Estimate

Source: Ministry of Primary Industries and Department of Statistics

**Table 4.8**  
**Production Of Other Agriculture,  
Livestock and Fishery**  
(‘000 tonnes)

|                        | 1996  | %<br>change | 1997 <sup>e</sup>  | %<br>change |
|------------------------|-------|-------------|--------------------|-------------|
| Paddy                  | 2,227 | 4.7         | 2,253 <sup>p</sup> | 1.2         |
| Cocoa                  | 120.0 | -8.7        | 112.8              | -6.0        |
| Pepper                 | 12.0  | -7.7        | 16.0               | 33.3        |
| Pineapple              | 121.9 | -13.2       | 123.1              | 1.0         |
| Tobacco <sup>1</sup>   | 97.8  | 10.6        | 114.3              | 16.9        |
| Fruits <sup>2</sup>    | 1,145 | 9.9         | 1,173              | 2.4         |
| Fishery <sup>3</sup>   | 1,236 | -0.4        | 1,255              | 1.5         |
| Livestock <sup>4</sup> | 924.1 | 3.5         | 966.6              | 4.6         |

<sup>1</sup> Green tobacco leaves

<sup>2</sup> Consists of seven major fruits namely durian, carambola, guava, rambutan, mangosteen, banana and papaya

<sup>3</sup> Marine fish landing only

<sup>4</sup> Including beef, poultry, pork and mutton

<sup>e</sup> Estimate

<sup>p</sup> Preliminary

Source: Ministry of Agriculture and Ministry of Primary Industries.

smallholders in new planting and maintenance of mature farms. With regard to marketing, the Malaysian Pepper Board plans to introduce a physical forward pepper market in 1997 to encourage trading in Physical Delivery Contracts. This will give farmers more options to sell their produce and, at the same time, exporters can hedge their forward sales.

The production of **major local fruits** such as durians, rambutans, carambolas, guavas, mangosteen, bananas and papaya is expected to expand at 2.4% to 1.17 million tonnes in 1997 compared to 1.15 million tonnes recorded in 1996. Likewise, the cultivated area of local fruits is also expected to expand at 2.1% to 269,490 hectares from 264,074 hectares in 1996.

In 1997, the ex-farm value of the **livestock** industry is expected to expand by 4.6% to RM4,544 million (1996: RM4,346 million). The swine breeding and poultry farming industries which apply higher farming technology are expected to increase output by 5% and 4.5% respectively. The combined ex-farm value of these two sectors is estimated at RM4,327 million (RM1,256.9 million and RM 3,070.1 million respectively) or 95.2% of total value from livestock output. The output from **marine fishing** and **aquaculture** is expected to increase by 1.5% to 1.255 million tonnes. To increase fish supply as part of the efforts to contain inflationary pressures, the Government has launched the Fisherman's Initiative Fund in June 1997. Through this Fund, fishermen could have access to interest-free loans to finance their fishing activities. Some 25,000 fishermen nationwide are expected to benefit from this Fund.

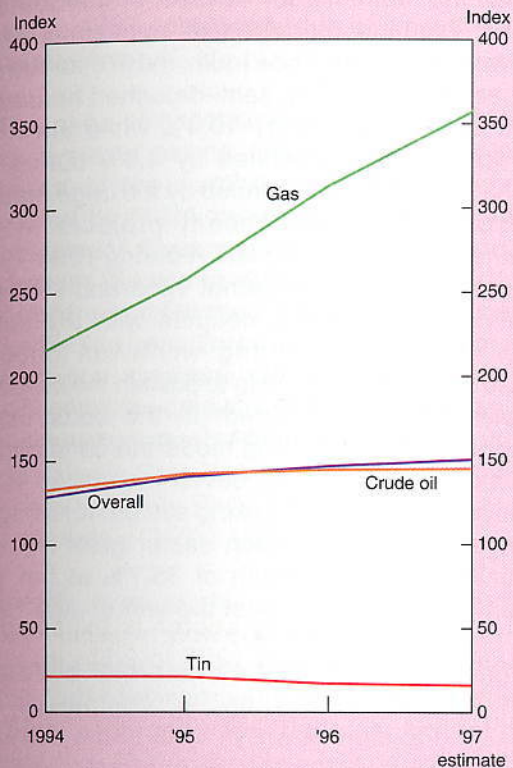
## Mining Sector

Growth in the **mining sector** is expected to decelerate from 4.5% in 1996 to 2.8% in 1997. The deceleration is due to slowdown in the output growth of quarrying activities and crude petroleum. Tin output and copper produce from the Mamut Copper Mine in Sabah are anticipated to decline further in 1997. With slower growth in value-added, the share of the mining sector to real GDP is expected to decline to 6.8% in 1997 (1996:7.2%).

## Crude Oil and Gas

**Crude petroleum** production (including condensates) is expected to increase by 0.5% to average 720,700 barrels per day (bpd) in 1997, compared with an increase of 1.7% in 1996. The higher output is attributed to the additional 20,000 bpd produced by Petronas from September 1997. Of the anticipated production, the output of condensates is expected to contribute an estimated 84,000 bpd. Of the total output, Peninsular Malaysia, with 14 oil fields accounts for 59.5% of the total output, while Sabah, with 7 oil fields, 8.3% and Sarawak, with 13 oil fields, 32.2%. During the first seven months of 1997, the production of crude oil declined by 4.2% to 699,700 bpd compared to 730,109 bpd during the same period in 1996. The lower production is attributed to the temporary shutdown of two oil fields in Peninsular Malaysia and the cleaning up of Labuan terminal in Sabah.

Chart 4.3  
Mining Production Index  
(1987 = 100)



A total of 50,422 kilometres of seismic data had been acquired for five exploration fields and 92,843 kilometres for 11 fields of the production and development to be drilled in 1997. A total of seven Production Sharing Contracts were signed during 1996 and the first half of 1997. Overseas, PETRONAS Carigali (Overseas) Sdn Bhd. has acquired a total of 22,332 kilometres of seismic data for exploration.

In the first seven months of 1997, the output from **natural gas** expanded by 15.7% to 3,836 million standard cubic feet per day (mmscfd) compared to 3,316 mmscfd in 1996. Spurred by rising demand from both the domestic and international market, total net production of natural gas in 1997 is expected to increase by 14.3% to 3,899 mmscfd (1996: 21.4%). The expected completion of the final phase of Peninsula Gas Utilisation project (PGU III) by the end of 1997 is envisaged to provide additional impetus to domestic demand for gas. With the network fully completed, the gas pipeline would be able to serve the East Coast from Kertih, Terengganu to

Table 4.9

### Production of Crude Oil and Gas

|                                   | 1996    |          | 1997 <sup>a</sup> |          |
|-----------------------------------|---------|----------|-------------------|----------|
|                                   | Volume  | % Change | Volume            | % Change |
| Crude oil (bpd) <sup>1</sup>      | 717,200 | 1.7      | 720,700           | 0.5      |
| Natural gas (mmscfd) <sup>2</sup> | 3,411   | 21.4     | 3,899             | 14.3     |

<sup>1</sup> Including condensates.

<sup>2</sup> Excludes flaring and reinjection

<sup>a</sup> Estimate.

Source: PETRONAS

Johor Bahru in the South, and the West Coast all the way to Pauh, Perlis in the North. Domestic usage of gas is, therefore, expected to increase by 16.8% to 1,156 mmscfd. (1996: 990 mmscfd). Similarly, the completion of both LNG Satu and LNG Dua in Bintulu at the end of 1996 has increased the supply of LNG to meet the increasing demand, in particular from Japan, South Korea and Taiwan.

### Tin

Reflecting hardly any new investment in the tin mining industry due to the depletion of tin reserves, the production of tin-in-concentrate is anticipated to decline further by 5.3% to 4,900 tonnes in 1997 (1996: -19.2% or 5,174 tonnes). In the first six months of 1997, tin output declined by 9.4% to 2,579 tonnes (January-June 1996: -9.4%). As at the end of June 1997, the total number of tin mines in operation was 35 mines with a production of 2,100 tonnes compared with 43 mines with a production of 2,453 tonnes.

### Other Minerals

The production of other minerals namely, copper, bauxite and iron ore is expected to show a mixed performance. Copper is expected to register a further decline of 14% in output (1996: -2.3%) due to depleting copper ore reserves. Similarly,

**Table 4.10****Production, Number of Mines and Employment in the Tin Mining Industry**

|                               | 1996  | %<br>change | 1997 <sup>a</sup> | %<br>change |
|-------------------------------|-------|-------------|-------------------|-------------|
| Production<br>(‘000 tonnes)   | 5.2   | -19.2       | 4.9               | -5.3        |
| Number of mines*              | 43    | 7.5         | 35                | -18.6       |
| Dredges*                      | 5     | 25.0        | 3                 | -40.0       |
| Gravel pumps*                 | 19    | -5.0        | 19                | 0.0         |
| Open cast and<br>underground* | 19    | 6.3         | 13                | -31.6       |
| Workers<br>employed*          | 2,073 | 7.5         | 1,870             | -9.8        |

\* As at end of June 1996 and June 1997.

<sup>a</sup> Estimate

Source: Ministry of Primary Industries and the Department of Statistics.

the output of iron ore minerals is expected to decline by 32.3% from 325,114 tonnes in 1996 to 220,000 tonnes in 1997. However, the output of bauxite is expected to increase by 14.3% to 250,000 tonnes in 1997 (1996: 218,680 tonnes).

## Construction Sector

Growth in the **construction sector** is expected to moderate to 11% in 1997 (1996: 14.2%). The expected moderation is attributed to a slowdown in construction starts of high rise buildings related to office space and retail outlets as well as high-end condominiums. The slowdown reflects a more cautious stance of developers in view of increasing supply in the face of the slower growth in demand following the imposition of the RM100,000 levy for purchases of properties by foreign interests costing more than RM250,000 in 1996. The RM100,000 levy has, however, been lifted since 28 August 1997. The guideline issued by Bank Negara Malaysia to financial institutions to limit their credit exposure to the broad property sector has also discouraged new construction starts of commercial and high-end residential buildings.

Construction starts for landed properties, particularly for lower and medium-priced residential properties, however, remain strong. Reflecting the strong demand for landed properties and weaker demand for high-rise residential units, the National House Price Index (NHPI) for terrace houses rose by 11.2%, semi-detached houses by 8.5% and bungalows by 10.4% while the NHPI for high-rise units declined by 4.6% during the first half of 1997. Underpinned by the large number of approvals of investment projects in the manufacturing sector by MIDA during 1994-1996, the construction of industrial sites and factories remains active. These, coupled with the active pace of civil engineering works on ongoing infrastructural projects, help to sustain the expected double-digit rate of growth in the construction sector in 1997. Reflecting moderate construction activities during the first seven months of 1997, loans provided by the banking system for bridging finance in the construction sector grew from an annualised rate of growth of 35.7% at the end of July 1996 to 47.7% as at the end of July 1997.

Construction starts of **commercial buildings** such as office and shopping complexes are envisaged to slow down, in view of the increase in supply. About 792,853 square metre (sq. m) of office space is expected to be added in 1997 to the existing supply of 3.4 million sq. m in 1996 in the Klang Valley with close to 60% of the new supply in the Golden Triangle and Central Business District in Kuala Lumpur. Nevertheless, during the first half of the year, the take-up rate was high in prime localities, such as in the Central Business District and Golden Triangle as well as growth areas outside the city centre at more than 90%. Prime monthly rental rates within these areas remained at between RM46 and RM70 per sq. m.

Investments in local hotels and tourism projects continue to grow, encouraged in part by the tax incentives provided in the 1997 Budget in the form of Investment Tax Allowance and Pioneer Status to develop Malaysia as a conference and exhibition centre. As of June 1997, the capital investment approved by the government stood at about RM16.9 billion for 199 hotel and tourism projects. In 1997, a total of 115 hotels with 24,646 rooms is expected to come on stream throughout the country. Currently more than 15 hotels with over 8,000 rooms are at various stages of construction in Kuala Lumpur to cater to the

expected higher demand for accommodation during the Commonwealth Games in September 1998. The number of hotels and resorts in the country is expected to increase to 1,404 with 110,160 rooms in 1997 compared with 1,289 and 85,514 respectively in 1996.

The pace of construction starts in **industrial sites** remains strong following the substantial increase in the number of industrial projects approved by MIDA during 1994-1996. Some of the industrial sites currently under construction are in Bukit Beruntung, Selangor; Seri Alam, Johor; Pedas, Nilai and Rembau areas in Negri Sembilan; Jaya Gading and Telok Kalong in Terengganu and Kuala Kangsar, Perak. In Kedah, the implementation of the Kulim High Technology Park is expected to attract RM15 billion in investment. Meanwhile in East Malaysia, work is ongoing on the Kota Kinabalu Park, which covers an area of approximately 3,700 hectares.

Construction starts of **residential buildings** remain active, in view of strong demand for landed properties and the more affordable low and medium priced high-rise apartments. However, construction of high-end high rise units is expected to consolidate. During the first eight months of 1997, the number of units of houses to be built by the private developers increased by 125.5% with 135,983 units compared with 65,945 units built during the same period of 1996. Of the total number of houses approved for construction, 23.5% were for low-cost units, 30.1% for medium-cost units and 46.4% for high-cost units (Jan-August 1996: 21.4%, 35.6% and 43% respectively). In the case of flats/condominiums units above RM100,000, the number approved by the Ministry of Housing and Local Government more than doubled to 24,678 units during the first eight months of 1997 compared with 9,529 units in the same period of 1996. Reflecting strong construction starts, advertising permits issued by the Ministry of Housing and Local Government increased by 34.7% while the number of new licenses issued to private developers increased by 48.6% during the first eight months of 1997.

The construction of low-cost houses for the lower income groups remains strong, especially projects that are being funded by the three special funds administered by Bank Negara Malaysia. Under the **Fund For Hard Core Poor**, during the first eight months of 1997, eight projects (3,239

units) have been completed, of which three projects, i.e. in Jalan Jelatek in the Federal Territory, Peringgit in Malacca and Paya Nahu, Sungai Petani in Kedah had already been occupied. Seventeen other projects (10,320 units) were under various stages of construction at end of August 1997. Under the **Fund to Accelerate the Construction of Low-Cost Housing**, of the 76 projects approved for implementation, out of which 26 projects were completed and 36 projects (16,524 units) were under construction as at the end of August 1997. A total of RM 272.4 million had been disbursed from the fund by the end of August 1997. Under the **Revolving Fund for Low-Cost Housing**, as at end of August 1997, the number of units of houses to be built in 1997 and 1998 totalled 98,800 units. This programme entails the building of 45,709 units of low-cost houses, 10,521 units of low medium-cost houses and 25,450 units of high medium-cost houses, while the rest comprise high cost and commercial units. Up to August 1997, RM696.9 million has been disbursed for the purchase of land and construction. A total of six projects (9,820 units of houses) are under construction. Four of the projects are located in Selangor (7,380 units) and one each in Penang (1,284 units) and Sabah (1,156 units). A special allocation of RM 60 million was also made available to provide 766 units of houses for the personnel in the essential services such as the police and armed forces. As of August 1997, 460 units under this special allocation have been completed, while 306 units were at various stages of construction. A sum of RM 30 million has been allocated to a total of 1,055 small infrastructure projects to upgrade infrastructural facilities in traditional and new villages throughout the country.

Under the **Public Low-cost Housing Programme** implemented by State Governments, of the 44,000 units targeted to be built during the Seventh Malaysia Plan (SMP) period, 7,436 units have been completed as at the end of August 1997, and another 19,926 units were under various stages of construction. About RM570.4 million has been allocated for the programme under SMP, whereas withdrawal at the end of August 1997 totalled RM80 million.

Construction in the **civil engineering sub-sector** remained strong during 1997, underpinned by infrastructural developments. The first phase of the Kuala Lumpur International Airport is at the final stage of completion and will be ready for

operation by the first quarter of 1998. Work on the Light Rail Transit Phase 2 is in progress for completion by Commonwealth Games in September 1998. Several road projects are at various stages of implementation. These include the Second Link to Singapore, the Middle Ring Road II (phase 2) in Kuala Lumpur, the upgrading of the Kuala Lumpur-Karak Highway and Simpang Pulai-Lojing-Gua Musang-Kuala Brang Highway.

Construction starts related to new public sector projects approved under the Seventh Malaysia Plan picked up in 1997 with allocation for development expenditure increasing to RM15.8 billion (1996: RM14.6 billion). Out of this allocation, development projects valued at RM3.4 billion are to be implemented by the Public Works Department in 1997. They include the improvement of 445 roads and bridges, construction of 72 buildings and 79 projects relating to water supply.

## Services Sector

The growth of the services sector in 1997 is expected to be affected by moderation of domestic demand for its services by the real sector of the economy. Nevertheless, underpinned by capacity expansion especially in the transport, storage and communications sub-sector, its value-added is expected to expand at 8.7%, above the average GDP growth but slightly lower than the 9.7% recorded in 1996. Its contribution to GDP is expected to increase further from 44.8% of GDP in 1996 to 45% in 1997. The increasing share reflects in part the impact of the continuous efforts taken by the Government to further develop the services sector as the new catalyst for growth as well as a more vibrant generator of foreign exchange earnings. These efforts include the promotion of the country's shipping and reinsurance industries, improvement and expansion of port facilities, expansion of air transportation capacity, the development of the travel industry such as tourism and education as well as the export of professional services. Past efforts to develop the capacity of the services sector to export services and substitute imported services have borne results. In 1997, the export of tradeable services (excluding investment income receipts) is expected to increase by 13.3%, following a 25.7% increase in 1996. Due to import substitution effect, the growth of import of tradeable services (excluding investment

income payments) is expected to slow down from 16.9% in 1996 to 9.1% in 1997.

The value-added of **transport, storage and communications sub-sector** is expected to expand at a stronger pace of 10.5% in 1997 (1996: 9.8%) to account for 7.6% of overall GDP. The stronger growth is attributed to expansion of delivery capacities in rail, air transportation and shipping industries. Reflecting stronger growth in rail transportation services, passenger revenue of commuter train services increased by 63.5% to RM22.4 million during the first eight months of 1997 from RM13.7 million in the corresponding period of 1996. The value-added of the commuter train services industry is also boosted by the introduction of Light Rail Transit (LRT) within the Kuala Lumpur city centre since 1996. Due to expansion of its fleet and increase in the flight frequency to more destinations, the revenue collected by MAS from its passengers increased by 8.2% (January-July 1996: 12.9%) while revenue from cargo increased by 13.2% (January-July 1996: 15.6%). The acquisition of ships and tankers valued at RM546.7 million by local shipping industry during the first seven months of 1997 is also expected to contribute to higher value-added for the transportation industry. The revenue generated by Malaysian International Shipping Corporation (MISC) is expected to rise by 36.7% in 1997, against an increase of 37.3% in 1996. Reflecting the impact of the continuous efforts to promote the usage of local port facilities and services, the cargo throughput handled by the country's eight major ports increased by 11.7% to 86.1 million freight weight tonnes (fwt) during the first seven months of 1997 (January-July 1996: 14.2% to 77.9 million fwt). Meanwhile, container throughput increased by 19.8% to 1.6 million twenty-foot equivalent units (TEUs) (January-July 1996: 17.3% to 1.4 million TEUs).

Value-added of telecommunications services continues to expand strongly in 1997. Applications for new telephone lines increased by 14.1% at the end of July 1997. During the same period, the number of business subscribers increased by 14.4% to reach 1.1 million while residential subscribers increased by 14% to total 2.9 million subscribers. With the drop in prices and enhancement in features, cellular phone usage has also increased. The total number of cellular phone subscribers increased by 27.7% to 1.5 million subscribers as at end of July 1997.

Table 4.11

### Services Sector Performance in Constant 1978 Prices

|                                                       | Share of GDP |                   | Annual Growth Rate |                   |
|-------------------------------------------------------|--------------|-------------------|--------------------|-------------------|
|                                                       | 1996         | 1997 <sup>a</sup> | 1996               | 1997 <sup>a</sup> |
| Electricity, gas and water                            | 2.4          | 2.5               | 12.0               | 12.0              |
| Transport, storage and communications                 | 7.4          | 7.6               | 9.8                | 10.5              |
| Wholesale and retail trade, hotel and restaurants     | 12.4         | 12.4              | 9.3                | 8.4               |
| Finance, insurance, real estate and business services | 11.3         | 11.7              | 14.6               | 11.5              |
| Government Services                                   | 9.1          | 8.8               | 4.2                | 4.0               |
| Other services                                        | 2.1          | 2.0               | 8.4                | 5.7               |
| TOTAL                                                 | 44.8         | 45.0              | 9.7                | 8.7               |
| e estimate                                            |              |                   |                    |                   |

Moderation in income growth as well as the drop in share prices during the third quarter of 1997 are expected to affect business activities in the **wholesale and retail trade, hotels and restaurants sub-sector**. Value-added in this sub-sector is, therefore, expected to increase at a slower rate of 8.4% in 1997 (1996: 9.3%). Reflecting slower growth in domestic wholesale and retail trade, the sales value of domestic-oriented industries increased by 13.5% during the first seven months of 1997 as against an increase of 31.9% during the corresponding period of 1996. Likewise sales and service tax also declined by 5.7% and 1% respectively during the first seven months of 1997 (January-July 1996: 30.3% and 46.2% respectively).

Value-added in the **finance, insurance, real estate and business services sub-sector** is expected to moderate to 11.5 % in 1997 (1996: 14.6%), reflecting in part the impact of the imposition of limit on banks lending to the broad

property sector and for purchasing shares as well as slower increase in the volume of transactions in the property sector. While recent measures introduced by Bank Negara Malaysia to contain loan growth are likely to be more fully felt in the second half of 1997, the strong growth in credit extended by the banking sector during the first half of 1997 provided the impetus to the sub-sector to continue to record double-digit growth. Total loans and advances extended by the banking system grew moderately by 28.7% to RM369.3 billion at the end of July 1997 (end of July 1996: 27.4% to RM286.9 billion). The insurance sector also performed well, both in terms of premium collected as well as new business growth. During the first six months of 1997, combined premium

Table 4.12

### Growth Performance Indicators for Transport, Storage, Telecommunications, Electricity and Water Supply (% annual change)

|                                          | Jan-July 1996 | Jan-July 1997 |
|------------------------------------------|---------------|---------------|
| Malaysia Airlines                        |               |               |
| Revenue from cargo                       | 15.6          | 13.2          |
| Revenue from passengers                  | 12.9          | 8.2           |
| KTM Berhad                               |               |               |
| Revenue from cargo                       | 6.1           | -10.6         |
| Revenue from passengers                  | 30.7          | 25.3          |
| Eight major ports                        |               |               |
| Cargo throughput                         | 14.2          | 11.7          |
| Containerised cargo                      | 17.3          | 19.8          |
| Telekom Malaysia Berhad <sup>1</sup>     |               |               |
| Total subscribers                        | 13.4          | 14.1          |
| Cellular phones subscribers <sup>2</sup> | 37.0          | 27.7          |
| Tenaga Nasional Berhad                   |               |               |
| Electricity consumption                  | 11.5          | 14.9          |
| Installed capacity <sup>3</sup>          | 3.9           | 14.0          |
| Public Works Department                  |               |               |
| Water consumption                        | -8.0          | 9.6           |
| Total production <sup>3</sup>            | -2.9          | 8.0           |

Note: <sup>1</sup> end of period

<sup>2</sup> include Telekom, Celcom, Mobikom, Binariang and Mutiara Telecommunication.

<sup>3</sup> for whole year.

Source: MAS, KTM, various ports, TMB, TNB and PWD.

for both the life and general insurance increased by 19.3% to RM4,999.7 million (January-June 1996: RM4,191.2 million). As for new business growth, based on new business premiums and sums insured, it was estimated to increase by 21.9% (January-June 1996: -2.4%) and 29.7% (January-June 1996: 20%) respectively.

Underpinned by strong demand by the industrial and commercial sectors as well as by households, value-added in the **electricity, gas and water sub-sector** is envisaged to expand by 12%, that is at the same rate as in 1996. Demand for electricity in Peninsular Malaysia grew by 14.9%, amounting to 25,346 gigawatt hour during the first seven months of 1997 (Jan. - July 1996: 11.5%). The industrial sector consumed 55.8% of the total amount of electricity consumed while the commercial sector utilised 26.7%. In 1997, Tenaga Nasional Berhad (TNB) and the Independent Power Producers (IPPs) are envisaged to increase production by 14% compared to an increase of 3.9% in 1996, with additional 12,330 megawatt expected to be supplied through expansion of

capacity of TNB Pergau, Paka, Melaka and Segari, Lumut. For the gas sector, gas supply from Petronas Gas recorded an increase of 231,554 gigajoule during January-July 1997 compared to 187,178 gigajoule in the same period of 1996. For 1997 as a whole, the growth of gas output by Petronas Gas is projected at 19.1% (1996: 11.7%). Meanwhile water consumption in Peninsular Malaysia increased by 9.6% during the first seven months of 1997 (January - July 1996: -8%) with daily water production at 9,900 million litres per day in 1997. With 89% of households estimated to be equipped with piped water by the end of 1997, average water consumption is expected to increase by 3.3% in 1997 (1996: -0.5%).

In line with efforts to further improve the quality of delivery of **government services**, growth in value-added in this sector is expected to increase by 4% in 1997. The main impetus to this growth is the enhancement of education and health services, particularly through the creation of an additional 15,336 posts in 1997.