



REPUBLIC OF KENYA

# ECONOMIC SURVEY 1991

# *ECONOMIC SURVEY*

*1991*

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Ministry of Planning and National Development*

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#### UNITS AND SYMBOLS USED

1. K£ (Kenya Pound) = 20 Kenya Shillings
2. Tonnes are metric tons = 1,000 kg.
3. 1 hectare = 2.47 acres
4. Totals may not add up due to rounding
5. "-" means nil or negligible
6. ".." means figures not available
7. mn = million

## **SUMMARY AND OUTLOOK**

### **Overview**

During 1990, the world experienced low economic growth rate of 2 per cent, a sharp rise in oil prices, renewed decline in coffee prices, rises in prices of non-food commodities and the onset of recession in some developed countries. Consequently, world trade grew by about 5.1 per cent compared with 7 per cent in 1989.

Against an international background of sluggish economic growth marked by high oil and machinery import prices and low coffee export prices, Kenya's economic performance declined moderately. The country's real GDP growth rate slowed down slightly from 5.0 per cent in 1989 to 4.5 per cent in 1990. The slowdown was registered generally in the major sectors of the economy. Real GDP for agricultural and manufacturing sectors grew by 3.4 per cent and 5.2 per cent, respectively, compared with 3.9 per cent and 5.9 per cent registered in 1989. Gross fixed investment fell by 7 per cent. Inflation rose from 10.5 per cent in 1989 to 12.6 per cent in 1990. Average wage earnings in modern sector rose by 9 per cent, while employment grew by 5 per cent.

Despite the low world coffee prices, domestic exports increased by about 22.5 per cent, while imports grew by 13.7 per cent. As a result, current account deficit fell by 9.9 per cent from K£ 604 million in 1989 to K£ 544 million in 1990. However, the overall balance of payments worsened by about K£ 250 million from a surplus of K£ 81 million in 1989 to a deficit of K£ 169 million in 1990. This deterioration was mainly due to reduced foreign capital inflow during the year.

### **International Scene**

After several years of reasonable expansion, the world economy grew only moderately by 2 per cent in 1990. This global contraction in growth was experienced worldwide. Inflationary pressures were strong, intensifying after August, 1990 in the wake of higher oil prices resulting from the Gulf Crisis.

The GATT Uruguay Round negotiations in December, 1990, stalled with dimming prospects for relaxation of world trade barriers in the near future. Prices of tropical commodities fell, with coffee being 18 per cent lower than in 1989.

The African situation remained critical with large and increasing external debt, continued low commodity prices, and food deficits in many countries. African GDP grew by 3 per cent in 1990, but real GDP per capita fell by 0.2 per cent due to the continent's rapidly growing population.

### **Domestic Economy**

The growth rate of real Gross Domestic Product (GDP) is estimated to have slowed down to around 4.5 per cent in 1990. Overall export and private consumption rose appreciably, the latter being a consequence of higher inflation which led to a lower level of domestic savings. Investment, in both fixed capital and inventories, weakened significantly; while inflation rose from 10.5 per cent in 1989 to 12.6 per cent in 1990. Terms-of-trade worsened, due mainly to the fall in world coffee prices. Import volume expanded but at a slower rate than exports. The current account deficit is estimated to have narrowed to about K£ 544 million, compared with K£ 604 million in 1989.

## **The 1989 Population Census Provisional Results**

The 1989 Population Census was carried out between the night of 24<sup>th</sup>/25<sup>th</sup> August and 2nd September, 1989 as per Legal Notice No. 466 of 4<sup>th</sup> November, 1988. This was the most complex and comprehensive census.

The provisional results indicate a population size of 21.4 million in August, 1989 giving an inter-censal growth rate of 3.34 per cent per annum since 1979. The population distribution by district portrays gains for districts which have received significant numbers of immigrants and losses for those districts which have experienced declines in fertility rates and significant out-migration.

The urban population, with a growth rate of 4.8 per cent, has continued to grow much faster than the total population. The total population in urban areas has increased from 2.3 million in 1979 to 3.8 million in 1989. In 1989, therefore, 19 per cent of total population were living in urban areas.

The census reported about 252,000 disabled persons, a majority of whom were those with no education. The major disabilities reported relate to vision, hearing, physical (particularly, lower limbs) and mental disability.

## **Employment, Earnings and Consumer Prices**

An improvement in the employment scenario was recorded, with the economy expanding employment by 5.1 per cent and generating 91,900 new jobs. Modern sector wage employment increased by 2.5 per cent, creating 38,800 new jobs; while the informal sector, *Jua Kali*, accelerated its growth of employment impressively by 13.6 per cent and accounted for 53,100 of the new jobs created. Job creation in the public sector increased marginally by 1.2 per cent, generating 8,300 new jobs. A general decline and contraction of employment was recorded for many public sector industries. Private sector wage employment recorded a significant growth of 3.9 per cent.

Nominal average wage earnings for all workers in the modern sector increased by 9.1 per cent with increases of 10.2 per cent and 8.1 per cent recorded for private and public sectors, respectively. In real terms, average wage earnings eroded by 3.1 per cent with a higher decline of 4.0 per cent recorded in the public sector compared with 2.2 per cent registered in the private sector.

Inflationary pressures were accelerated by the Gulf Crisis and its immediate impact on domestic oil prices, the continuous depreciation of the Kenya Shilling arising from balance of payments gap. Inflation rate, as measured by Nairobi Consumer Prices indices, was 12.6 per cent in 1990 compared with 10.5 per cent in 1989.

## **Money, Banking and Finance**

Money supply recorded a sharp growth of 20 per cent in 1990 compared with 8 per cent in 1988 and 13 per cent in 1989. The significant growth was occasioned by an expansion in total domestic credit which rose by 27 per cent in the year compared to a growth of 7 per cent recorded in the previous year. The high growth in domestic credit was due to Government borrowing to finance the budget deficit. Government borrowing from the banking system increased by 59 per cent compared with 3 per cent drop in 1989.

As a result of the noted growth in money supply, the liquidity ratio of commercial banks rose from 26 per cent in December, 1989 to 30 per cent in December, 1990. The

Government used monthly floatation of Ksh. 1 billion worth of Treasury bonds and weekly 90 days Treasury bills to mop-up excess liquidity.

There were two interest rate reviews in April and August 1990 which adjusted most interest rates upwards while allowing banks to raise variable charges on loans. Other developments in the financial sector during the year included steps taken to dilute Government ownership in Kenya Commercial Bank. The Deposit Protection Fund invested KShs. 400 million in Consolidated Bank of Kenya to enable it acquire nine weak financial institutions. The year also saw the establishment of the Capital Market Authority and the introduction of Bearer Certificates of Deposits.

### **Public Finance**

Provisional results indicate that current expenditure will have grown faster than current receipts in 1990/91. The high increase in current expenditure means that the current account deficit will worsen from K£ 73 million in 1989/90 to K£ 238 in 1990/91 leaving no available funds to finance development. Consequently, the overall deficit is projected to reach K£ 444 million in 1990/91 from K£ 396 million in 1989/90. Although marshalling of internal resources through floatation of Treasury Bonds and Bearer Bonds has been well received, the high cost of internal debt has greatly offset the net resources available to finance the overall deficit. The trend indicates that net external resources will remain the major source of funds to finance the overall deficit.

The financial base of Local Authorities is expected to improve further into the 1990s as a result of the Local Service Charge introduced in 1989. Despite their shortcomings in public accountability, Local Authorities will continue to play a vital role in supplementing the Central Government's efforts in the provision of essential services to the public. Among the major projects being undertaken is the Third Nairobi water project by the Nairobi City Commission, Housing Schemes and the rehabilitation of existing public utilities by various other Local Authorities.

### **External Trade and Balance of Payments**

Key indicators of the performance of external trade in 1990 were discouraging. The balance of trade deficit grew by 6.8 per cent. Exports for the year in succession, financed less than half the import bill. On the other hand, balance of payments turned around from a surplus of K£ 81 million in 1989 to a deficit of K£ 169 million in 1990. Despite this poor performance, total exports expanded by 22.5 per cent to reach K£ 1,244 million while imports grew by a slower 13.7 per cent to reach K£ 2,546 million. Higher quantities of agricultural exports and rising prices of minerals were responsible for the rise in export earnings. Export price index rose by 8.3 per cent while import price index grew faster by 20.2 per cent contributing to a worsening of the terms of trade index.

Kenya recorded an adverse balance of trade against most areas of the world except Africa. At the same time there was a depreciation of the Kenya Shilling against major world currencies which would have controlled the growth of the trade gap somewhat. The overall trade weighted index shows that the Shilling depreciated by 19 per cent in 1990 compared with 18 per cent in 1989.

### **Agriculture**

The aggregate effect of rising costs of production, the continuing adverse conditions in the international primary commodity markets and an unfavourable weather situation last year played a major role in the reduced pace of activity in the agricultural sector, leading to a slower growth in total output. The real growth rate of the sector's value added declined by 0.5 percentage points during 1990.

Crop production however, had, a mixed performance. Deliveries of cereals to National Cereals and Produce Board (NCPB) declined, reflecting the joint impact of the reduced acreage under maize and beans, and the sales to other buyers as a result of the on-going Cereal Sector Reform Programme. Permanent crops, particularly tea and sisal, performed better, making up for the reduced coffee earnings. Production of temporary industrial crops, including horticulture, also rose during 1990.

Growing demand for livestock and products continue to hold prices favourably high, ensuring adequate compensation for livestock farming. During 1990, demand for beef, milk, mutton and bacon increased further with a corresponding upsurge in production and disposal of livestock and livestock products.

Overall, the situation during 1990 was slightly worse than in 1989 as indicated by the decline in the sector's terms of trade. Higher costs of inputs and the slump in the coffee price were some of the factors contributing to this development. However, food supply remained sufficient to meet the increasing demand.

### **Environment and Natural Resources**

In 1990, the overall performance of the environment and natural resources sub-sectors was moderate with water development, fisheries, forestry and mineral production recording marginal expansions.

Although the total development outlay on water declined, there were significant increases in training, water conservation and expenditure by the National Pipeline and Water Conservation Corporation. High priority water projects received increased emphasis.

For the first time since 1986, the fisheries sub-sector performed poorly largely as a result of a combination of various factors, including, financial instability caused by poor and inefficient marketing outlets, contraction of the inland lakes due to seasonal variation in rainfall and extreme turbidity and high rates of siltation caused by soil erosion. Overall, the sub-sector recorded a marginal decline of 2.7 per cent in the total fish landings, with the corresponding value falling by 2 per cent from K£ 40.9 million in 1989 to K£ 40.1 million in 1990.

Mineral production registered 3.9 percent decline in 1990 compared to a marginal increase of 1.1 per cent in the preceding year. Most of this shortfall was attributable to depressed output of soda ash and fluorspar.

### **Energy**

The fluctuation of crude oil prices around US\$ 16 per barrel continued into 1990, only for the prices to rise to almost US\$ 40 in August in the wake of the Gulf Crisis, before settling to US\$25 by end of the year. The United Nations (UN) embargo on Iraq induced some of the Organisation of Petroleum Exporting Countries (OPEC) member countries to produce above their quota.

Imports of crude petroleum increased by 4 per cent to 2,178 thousand tonnes worth K£ 421.97 million 1990. However, the total import bill increased significantly by 44.2 per cent from K£ 324.40 million in 1989 to K£ 467.81 million in 1990. Export receipts from petroleum products increased by 50.1 per cent, although the quantities increased by only 2.1 per cent.

Electricity generation increased by 5 per cent to 3,044 GWH in 1990, with hydro-based generation accounting for almost 83 per cent of the total. Oil based

electricity generation increased by 57 per cent a factor attributed to rehabilitation of the Kipevu Power Plant.

### **Manufacturing**

The manufacturing sector grew at a rate of 5.3 per cent in 1990, slower than the 5.9 per cent recorded in the previous year. This was a consequence of a prevalent domestic credit squeeze, unstable commodity prices, depreciation of the Kenya Shilling and sustained inflationary pressures, which constrained both increased output and demand for manufactured goods. The Government offered assistance through the provision of appropriate incentive packages, aimed at stimulating the manufacturing sector, particularly for foreign markets.

Employment in the manufacturing sector increased by 2.7 per cent in 1990, while sales of manufactured goods rose by a significant 18 per cent. Value of output of manufactured goods increased by 21 per cent, while intermediate consumption and manufacturing value added rose by 22 per cent and 15 per cent, respectively.

Changes in real physical output of manufacturing product show that significant output increases were obtained in meat and dairy products sub-sector, canned vegetables, fish, oils and fats. There was a slight weakening of overall food manufacturing industry, due to poor performance in the processing of sugar. Both clothing and electrical machinery industries recorded poor performances.

### **Building and Construction**

Building and construction sector recorded a slightly lower growth in 1990 compared to 1989 level. Cement consumption, value of reported private buildings completed and total receipts for work done by private contractors - all recorded moderate growths in 1990. Cement consumption rose by 179 thousand tonnes from 1003.4 thousand tonnes recorded in 1989. The sector generated 2,700 new jobs in 1990 representing a growth of 3.9 per cent below the 7.9 per cent growth recorded in the previous year. The overall building and construction cost index rose by 22 per cent in 1990 compared to 10 per cent in 1989.

### **Tourism**

The tourism industry's performance improved slightly in 1990 despite unfavourable developments in the international scene which were not conducive to foreign travel. Relative to 1989, international arrivals and departures were higher by 9 per cent; hotel bed-nights occupancy rose by 14 per cent, and the average length of stay was 0.7 days longer. Other indicators of the improvement in performance include an increase by 22 per cent in the number of visitors to game parks and game reserves. There was a 9.1 per cent rise in the number of visitors to museums and sites.

Total earnings from international tourism during the year was K£ 533 million, making tourism the leading foreign exchange earner. Efforts to improve the industry were sustained through training of higher number of management and auxiliary personnel at Utalii College, improvements and expansion of hotels and maintenance and upgrading of airport facilities.

### **Transport, Storage and Communications**

The performance of the transport, storage and communications sector was mixed in 1990. Relative to 1989, the total value of output at current prices rose by 17.3 per cent to K£ 1,293 million. While all the sub-sectors registered growth in the value of output, notable declines in volume of business was recorded in railway passenger transport,

exportation and importation of bulk liquids, and issue of licences for passenger and freight hire vehicles. Sluggish growth was experienced in new registration of vehicles and in air cargo.

Major development projects aimed at improving air transport were undertaken. These include construction of access roads and repair works of the taxiway and runways at Jomo Kenyatta International Airport, pavement rehabilitation at Moi International Airport and re-roofing of the terminal buildings at Kisumu and Wilson Airports.

### **The Social Scene**

The total estimated Government expenditure on social services increased by 25 per cent from K£ 675.71 million during 1989/1990 fiscal year to K£ 844.81 million in 1990/91 with education continuing to take the largest share of the expenditure.

Enrolment in secondary schools declined by 3.5 per cent to 618,461 students in 1990 due to the phasing out of Forms 5 and 6 while primary school enrolment grew marginally by about 3,000 pupils over 1989. Female pupils constituted 48.7 per cent of total enrolment.

During the 1990/91 academic year, the four public universities and their constituent colleges had 39,723 students with 20,837 first year students comprised of the double intake of 12,147 students drawn from the last batch of Form 6 students and 8,690 students from the first Form 4 graduates in the 8-4-4 programme. Female students made up 28.4 per cent of the entire university student population.

In 1990, the Government continued to expand health facilities to meet the demand of the rapidly growing population. Six modern health centres with a capacity of twenty beds were constructed while two additional medical institutions were opened.

Total investments by the National Social Security Fund(N.S.S.F.) increased by 17 per cent to K£ 1,212.7 million. Development activities by the National Youth Service realised a total income of K£ 5.9 million compared to K£ 6.2 the previous year.

### **Women and the Labour Force**

Information gathered by the 1986 Urban and 1988/89 Rural Labour Force Surveys provides several insights into changes in the role of women in the labour force. Comparisons between the results of the two surveys and the 1978 Labour Force Survey point to several areas of significant change in the intervening decade. In urban areas, there has been a dramatic increase in the participation rates of women, from about 33 per cent to over 55 per cent. There has been a parallel increase in unemployment rates for women, which more than double those of men.

In rural areas, participation of women in the labour force is more significant. Over 90 per cent of women are currently economically active. There are clear indications that women have significantly less access to wage employment opportunities in rural areas. Evidence on their allocation of time reveals that women spend more time on crop activities, less on livestock related activities and more on firewood gathering and water fetching. Women spend over seven times as many hours on domestic chores compared with men. One of the clear determinants of labour force activity is education. Lack of access by women to secondary and post secondary education may limit their ability to improve other aspects of labour force activity including access to certain occupations.



## OUTLOOK

The global economy registered a lower growth rate of about 2 per cent in 1990, compared to the rate of 3 per cent recorded in the previous year. World trade, whose rate of growth declined from 7 per cent in 1989 to 5.1 per cent in 1990, is projected to improve marginally to 5.2 per cent in 1991.

The rate of growth of GNP for all OECD countries, Kenya's major trading partners, also declined from 3.8 per cent in 1989 to 2.8 per cent in 1990. Expansion of domestic demand in these countries is expected to decline from the 2.7 per cent observed in 1990 to about 1.7 per cent in 1991. The rate of inflation is expected to accelerate to 4.9 per cent in 1991 from 4.3 per cent recorded in 1990.

In the face of the weakened economic activities in the world in 1990, and particularly in the OECD countries, exports may register a sluggish rate of growth in 1991. However, both volume and nominal value of Kenyan tea and coffee exports are expected to increase on account of high prices of these commodities in the world market. International tea auction prices at Mombasa rose by nearly 40 per cent from KShs. 26 per Kg. in June, 1990 to Ksh. 36 per Kg in December, 1990. Similarly, world coffee prices rose from KSh. 1,847 in November, 1990 to Ksh. 3,260 per 50 kilogram bag by mid-February, 1991. Brazil's decision to suspend all its new coffee sales from March, 1991 may further raise international coffee prices. Tourism receipts are expected to pick up as a result of the end of the Gulf Crisis and the stabilisation of the world oil prices.

Aggregate domestic consumption in 1991 is expected to rise on account of better agricultural incomes and the recent increase in general wages of the low income workers. Overall, compensation of employees is expected to continue to increase moderately through the implementation of various wage agreements in the private sector and the anticipated outcome of the Mbithi Committee's Report on Civil Servants Salary Review which was presented to the Government in April, 1991. Consumer prices will rise moderately as the Government controls its deficit and balance of payments.

The agricultural sector will continue to be the main source of economic growth in 1991. Although the 1991 long rains started late, they are deemed to be sufficient for slightly higher than average harvest. Production levels of maize, wheat, rice and beans are expected to be modestly higher than in 1990. Major non-food crops such as coffee and tea are also expected to enjoy satisfactory performance on account of the high prices of these commodities in the world market. In the light of this scenario, value added for agriculture may grow at around 4 per cent in 1991.

The growth rate of the manufacturing sector is expected to record a further decline in 1991, mainly because of the late arrival of the long rains which may benefit the agro-based industries only towards the last quarter of the year. The effects of the recently announced wage increases for the low-income employees will be felt mainly in the second half of 1991, hence growth in the first half of 1991 is expected to be lower than the same period in the previous year. Although increased coffee and tea earnings are expected to boost imports of industrial inputs, domestic demand for industrial output is expected to increase during the last half of the year.

Investment in private residential buildings has recorded a downward trend in the last two years. This trend is likely to continue into 1991 due to high mortgage interest rates and high prices of land, especially in the urban areas. A downturn in the public sector's investment in residential buildings is also expected, due to the need to reduce expenditure. However, real growth for building and construction is expected to fall by less

than a percentage point, because the decline in residential investment is expected to be partly offset by the rise in activities of other civil works.

From the foregoing scenario, major sectors of the economy are expected to record a lower rate of growth in early 1991, progressively picking up towards the end of the year. In 1991, therefore, Kenya's real GDP is projected to grow at around 4.0 per cent compared with 4.5 per cent in 1990.

## KEY ECONOMIC AND SOCIAL INDICATORS, 1986 1990\*

Table 1.

		1986	1987	1988	1989	1990**	
1.	Population (million)	20.9	21.6	22.4	23.2	24.0	
2.	Growth of GDP at constant prices (per cent)	5.6	4.9	5.2	5.0	4.5	
3.	GDP at market prices (K£mn)	5,874	6,559	7,551	8,617	10,033	
4.	Net cost of petroleum products (K£mn)	110	179	135	224	318	
5.	Trade balance (K£mn)	-351	641	813	-1,219	-1,331	
6.	Money supply (K£mn)	1,784	1,983	2,141	2,418	2,902	
7.	Total domestic credit (K£mn)	2,018	2,430	2,591	2,771	3,509	
8.	Balance of payments (current account) (K£mn)	-31	406	403	-604	544	
9.	Coffee marketed production ('000 tonnes)	115	105	125	113	112	
10.	Tea marketed production ('000 tonnes)	143	156	164	181	197	
11.	Maize marketed centrally ('000 tonnes)	670	652	485	626	509	
12.	Wheat marketed centrally ('000 tonnes)	225	148	220	233	187	
13.	Sugar-cane production ('000 tonnes)	3,552	3,698	3,835	4,261	4,200	
14.	Milk sold centrally (mn litres)	316	347	359	353	392	
15.	Manufacturing output (K£mn)	4,297	5,090	6,103	7,283	8,816	
16.	Construction output (K£mn)	499	582	653	798	979	
17.	Cement consumption ('000 tonnes)	713	891	854	1,003	1,182	
18.	Petroleum consumption ('000 tonnes)	1,583	1,748	1,730	1,807	1,830	
19.	Electricity consumption (mn kwh)	2,158	2,372	2,407	2,488	2,665	
20.	Tourism earnings (K£mn)	248	292	349	432	533	
21.	New registration of vehicles (number)	16,955	18,727	19,524	18,405	18,633	
22.	Rail freight (mn tonnes-km)	1,831	1,702	1,755	1,910	1,808	
23.	Air passengers handled ('000)	2,289	2,397	2,522	2,649	2,800	
24.	Wage employment ('000)	1,230	1,280	1,341	1,373	1,408	
25.	Education-primary enrolment ('000)	4,843	5,031	5,124	5,389	5,392	
26.	Education-secondary enrolment ('000)	459	522	540	641	623	
27.	Education-post secondary enrolment ('000)	33	40	41	63	79	
28.	Hospital beds and cots (number)	31,356	31,512	31,983	32,534	33,086	
29.	Registered doctors and dentists (number)	3,421	3,563	3,703	3,827	3,953	
INDEX NUMBERS: (1982=100)							Annual % Rate of change 1986-1990
	Export volumes	114	110	116	115	122	1.7
	Import volumes	101	106	119	125	115	3.3
	Terms of trade	103	85	88	79	69	-9.5
	Consumer prices	146	156	173	191	215	10.2
	Real wages	95	95	97	97	95	-0.1
	Agricultural terms of trade ..	99	95	99	98	95	-1.0

\*More precise measures are given in individual chapters.

\*\*Provisional.

## CHAPTER 1 - THE INTERNATIONAL SCENE

The world economic situation changed considerably in the course of 1990. After several years of reasonable expansion, the world economy grew by just over 2 per cent in 1990, down from 3 per cent registered in 1989. The global contraction was as a result of slow growth in both industrial and developing countries as well as declining output in Eastern Europe and the Soviet Union. Real GNP in the Organisation for Economic Co-operation and Development (OECD) countries rose in 1990, compared to 3.4 per cent in 1989. This average growth of 2.8 per cent was the lowest in eight years. Despite the boost to economic activity from German unification, growth in the OECD area decelerated notably in several of the major economies. Differences became more accentuated between the buoyancy of activities in some countries, notably Japan and Germany, with growth rates in GNP recording 6.1 per cent and 4.2 per cent, respectively; and weaknesses witnessed in others including USA, the UK and Canada, where real GNP grew by 0.9 per cent, 1.6 per cent and 1.1 per cent, respectively. These economies were in recession, by the end of 1990 and in early 1991; recession being defined as economic slowdown in two consecutive quarters. Inflationary pressures remained strong in 1990. World trade expanded moderately by 5.1 per cent in 1990, compared to 7 per cent in 1989.

1.2. The slowdown in world trade which started from mid-1990 is expected to be moderate and should end by mid-1991. Demand from Japan and Germany is expected to remain strong. The recession experienced in the USA, U.K. and Canada in 1990 and early 1991 should be short-lived. These, together with the quick end to the Gulf War in February, 1991, should ensure continued expansion in world trade, which is projected to rise by 5.2 per cent in 1991.

1.3. The international trading system is now at an important juncture, hinging on the outcome of the ongoing Uruguay Round negotiations. The December 1990 Conference aborted without bearing fruit. Success in the Uruguay Round, the first GATT negotiations in which developing countries are closely involved, would help improve medium-term economic performance - as well as liberalisation of world trade. In the event of success, world trade is expected to expand more rapidly than in the recent past, bringing important gains to developing countries.

1.4. Although oil prices rose in the wake of the Iraqi invasion of Kuwait in August, 1990, and the ensuing tensions due to fear of full blown Gulf War, the reduction in supply from Iraq and Kuwait was partly offset by the over-supply already existing in the market. Major oil producers, notably Saudi Arabia, Venezuela and Nigeria, also increased production substantially to meet shortfalls due to non-supply by the two countries at the centre of the conflict. The oil shock of 1990 is, however, expected to do much less damage to the OECD economies than the shocks of 1973-74 and 1979. This is due to a combination of factors, which include the following: the oil price increase was substantially lower this time; the exposure of OECD economies in terms of energy use per unit of GNP has fallen significantly since 1973; and the structural reforms undertaken in 1985, in particular those which reduced rigidities in labour markets and increased competition in product markets, have strengthened the capacity of OECD economies to adjust to relative-price shock without adding permanently to inflation. Further, in making policy adjustments, governments have benefitted from lessons learned from the two earlier oil shocks, including the need for allowing a full-pass through to energy users of the rise in oil prices. The short Gulf war in January-February, 1991, appears to have removed some of the uncertainties surrounding the oil market, and oil prices had dropped to around US\$ 20 per barrel by March, 1991. This development should help sustain growth and reduce inflation over the next two years.

1.5. Oil prices now seem set to stay below \$ 20 a barrel in 1991. In the March 1991 Organisation of Petroleum Exporting Countries (OPEC) meeting in Geneva, Saudi Arabia signalled that it will raise production, and this with its share of one-third of OPEC output augurs well for stability in the oil market. Most non-OECD countries face higher oil import bills; all are being affected by higher interest rates and slower growth of export markets in OECD countries. Some have been hurt by the loss of remittances from Kuwait and Iraq. In Central and Eastern Europe, energy and related problems will further worsen the short-term prospects of countries attempting to transform their economies.

1.6. Table 1.1 gives the performance of the major Western Industrial economies, which form the OECD group. The general decline which began in 1989 continued in 1990, with real GNP growing by 2.8 per cent, compared to 3.4 per cent in 1989. The major reason for the decline was the recessionary condition in several of the OECD countries, except in Japan and Germany where growth was strong. The decline in growth is forecast to continue in 1991, but an upturn is expected to occur in the later part of the year.

1.7. The rate of growth of the US GNP reached a cyclical peak in 1989, and in the middle of that year, capacity utilization in manufacturing reached its highest level since 1980. Output has been slowing down since then, with GNP growth rate in 1990 falling to only one per cent, compared with 2.5 per cent in 1989. The US economy entered into recession during the fourth quarter, with a decline in output at annual rate of 2.1 per cent and drop in consumption. The economy was in severe recession during the first quarter of 1991, but with the quick end to the Gulf War and the easing of oil prices, turnaround in the later part of 1991 is expected to produce a one per cent growth in GNP for the whole year. Industrial growth is expected to receive further boost from increased production of military related equipment both for replacement of hardware lost during the war and increased orders from other countries. The US economy is also expected to be the main beneficiary of the Gulf reconstruction programme.

1.8. Japanese growth remained strong in 1990, with GNP growing by 6.1 per cent. This growth has been accompanied by widening profit margins, high capacity utilization, tight labour markets and clear signs of a rise in inflation. Although inflation remained relatively low in relation to other OECD countries, prices by January 1991 were 4.5 per cent higher than in the same period in 1990, implying the highest inflation recorded in ten years. Slower growth is expected in 1991, especially in the interest rates and personal income led sectors of housing and consumption. Thus GNP growth should fall to around 3.7 per cent in 1991.

1.9. The process of German unification brought unique pressures on the German economy in 1990. Economic developments now and in the near future will be influenced by two historic events: the creation of monetary-economic union between Federal Republic and German Democratic Republic on 1st July, 1990 and the unification of the two Germanys in October, 1990. In Western lander, the upswing in economic activity has continued strongly, with output growing by 7.5 per cent in the first half of 1990, accompanied by expansion of employment. However, assuming that cautious monetary policy will continue to bring down inflation, real GNP growth, which was over 4 per cent in 1990, will progressively decline to below 3 per cent by 1992.

1.10. In contrast to the buoyancy in Western lander, the supply contraction in Eastern lander was more severe than expected. Production declines have been sharp and unemployment has been severe, mainly due to escalation of wages which are catching up with levels prevailing in the Western lander. In the period July to October, 1990, registered unemployment rose more than fivefold. A further marked contraction of output and employment is assumed for 1991 before conditions are created for the potentially rapid recovery of production and creation of new jobs.

KEY ECONOMIC INDICATORS AND PROJECTIONS FOR WESTERN INDUSTRIAL COUNTRIES (OECD)\*  
(SEASONALLY ADJUSTED ANNUAL RATES)

Table 1.1

	1989	1990	I 1991	1992
	(percentage changes from preceding period)			
Real -				
United States	2.5	1.0	0.9	1.9
Japan	4.9	6.1	3.7	3.8
Germany***	3.9	4.2	3.0	2.6
OECD Europe ..	3.5	2.9	2.1	2.5
Total OECD ..	3.4	2.8	2.0	2.5
Real total domestic demand -				
United States	1.9	0.7	0.1	1.1
Japan	5.9	6.4	4.1	3.8
Germany***	2.7	4.5	3.1	2.2
OECD Europe ..	3.4	3.1	2.1	2.3
Total OECD ..	3.4	2.7	1.7	2.1
Inflation (GNP/GDP deflators)				
United States	4.1	4.2	4.9	4.5
Japan	1.5	1.5	2.2	1.9
Germany***	2.6	3.4	4.3	4.0
OECD Europe .. ..	5.5	5.8	6.1	5.4
Total OECD ..	4.3	4.3	4.9	4.3
	(US \$billion)			
Current balances-				
United States	-110.0	-103.6	-93.8	-60.8
Japan	57.2	38.4	37.0	36.1
Germany***	55.4	49.3	29.8	17.9
OECD Europe ..	6.5	-14.7	-34.3	-46.2
Total OECD ..	-79.2	-111.1	-117.4	-95.1
OPEC	-2.2	-14.1	22.2	5.7
Non-OPEC developing countries..	-9.2	-13.1	-19.7	-21.8
	(per cent of labour force)			
Unemployment-				
United States	5.3	5.5	6.4	6.7
Japan	2.3	2.1	2.3	2.3
Germany***	5.6	5.0	5.0	5.1
OECD European members ..	8.5	8.0	8.3	8.4
Total OECD membership ..	6.4	6.2	6.7	6.9
	(percentage changes from preceding period)			
World Trade** ..	7.0	5.1	5.3	6.3

Source: OECD Outlook no. 48, December, 1990.

\* Assumptions underlying the projections include:

no change in actual and announced policies;

unchanged exchange rates from 5th November 1990, in particular \$1 = Y 127.35, DM 1.49;  
no significant change in dollar price for internationally traded oil of US\$ 17 per barrel

\*\* Arithmetic average of the growth rates of the world import volume and the world export volume. The cut-off date for other information used in the compilation of the projections was 13th November, 1990.

\*\*\* The Federal Republic of Germany after unification is referred to as 'Germany'. In the table, only the term \* Germany is used, but the coverage is not identical across - and sometimes even within - specific series:

Data for national accounts, inflation, labour refer to Western Germany only;

Balance-non-payments refer to Western Germany (but excluding transactions with Eastern Germany until the first half of 1990, and to Germany thereafter. Customs trade data (prices and volumes) refer to Germany. In the national accounts, data on trade of Western Germany (before and after unification) include transactions with Western Germany.

'Western lander' and 'Eastern lander' are used to refer to the post-unification Western Germany and Eastern Germany, respectively.

1.11. Political changes, breakdown of central planning, and the first steps in the process of transformation to market economies have put severe strains on the countries in Central and Eastern Europe. In several of the Eastern European countries a reform process has started. Output declined in all these countries in 1990. In the Soviet Union, GNP is estimated to have declined by between 3 per cent and 5 per cent. Inflation in this area is still a widespread problem.

1.12. In the developing countries GDP grew by only 2.3 per cent in 1990, down from 3 per cent in 1989. This slowdown arose from unfavourable external conditions, including a less rapid expansion of world trade, declining prices of non-oil primary commodities and the relatively high international interest rates. They also suffered from the sharp increases in oil prices in the period beginning in August, 1990 to the conclusion of the Gulf war in February, 1991.

1.13. In 1990 non-fuel commodities prices fell further by 7.8 per cent in US dollar terms or 12.9 per cent in SDR terms over their 1989 level. Tropical beverages continued to be hard-hit, with coffee prices being 18 per cent below 1989 prices, and 56 per cent below their 1986 level. Crude petroleum prices averaged 28 per cent above their level in 1989. In December, 1990 price per barrel was \$ 25.42 or 35 per cent above the level a year earlier. Selected world commodity price indices are given in Table 1.2.

SELECTED WORLD COMMODITY PRICE INDICES, 1986-1990  
(1985=100)

Table 1.2

Year	All Coffee*	Tea**	Sisal***	Sugar+	Petroleum++	All+++ Commodities	Industrial Countries	Developing Countries
1986	127.6	97.2	98.1	115.4	51.2	96.1	93.9	98.8
1987	80.4	86.1	97.6	133.0	65.9	104.4	106.5	102.2
1988	86.2	90.2	104.9	147.7	52.5	129.0	135.7	121.1
1989	68.4	101.4	124.8	142.5	63.7	128.5	136.6	119.0
1990	56.0*+	102.4	135.8	165.7	81.7	118.4	125.1	110.4

Source: IMF, *International Financial Statistics*, (February, 1991).

\* All Coffee (New York).

\*\* Average Auction (London).

\*\*\* East African (Europe).

+ E.E.C. Import Price.

++ Average crude price(Spot) (US \$ per barrel).

+++ World (non-fuel commodities).

\*+ August, 1990.

1.14. The debt crisis is less severe than two years ago, though still serious. The World Bank attributes the recent easing to several policy initiatives, debt relief and restructuring. Several countries, among them Kenya, have benefitted from the Brady Plan - the proposal that countries with sound adjustment programmes should receive access to debt and debt service reduction, supported by international financial institutions and official creditors. Further, several countries have reduced commercial debt through swaps of debt for private equity. However, another initiative in September, 1990 (John Major of the U.K. and Jan Pronk of the Netherlands) proposed increasing the amount of debt written off and the concessionality of official debt re-scheduling as well as complete forgiveness of debt. However, increasingly official flows have been linked to restructuring of existing debt rather than new financing inflows. At the same time, voluntary private lending remains minimal. In view of limited availability of external finance, developing countries will need to rely on their own savings more than in the past. The external debt of all developing countries rose by 6 per cent in 1990 to US \$ 1,341 billion. The increase follows three years in which the level of debt had remained roughly constant at \$ 1,270 billion.

1.15. Aggregate net long-term resource flows to developing countries which include long-term lending, foreign direct investment, and official grants amounted to \$ 71 billion in 1990, or 12.2 per cent higher than in 1989. Two-thirds of net resource inflows were from official sources, while 34 per cent were from foreign direct investment. Multilateral financing has also increased relative to bilateral lending. Aggregate debt indicators improved somewhat for developing countries in 1990. Nevertheless, arrears of external debt obligations of severely indebted countries have grown rapidly since 1985. From October, 1988 through July, 1990, Paris Club creditors have facilitated application of concessional options to the consolidation of over \$ 5 billion in debt-service obligations of low-income countries. At present 23 low-income African countries, implementing adjustment programmes are eligible for support under the World Bank's Special Program of Assistance (SPA), launched in 1987. Additional concessional funding totalling \$ 5.5 billion has been provided during 1988-90 from bilateral donors and International Development Association (IDA) to support adjustment programmes in SPA countries.

1.16. The African situation remained critical. Foreign debt at nearly \$ 272 billion in 1990 according to the ECA estimates, continued to cast a shadow on prospects of recovery, given that 34 per cent of export earnings is currently being spent on debt service payments. This has been worsened by the continued low commodity prices. On the other hand, with fast population growth, the 3.0 per cent expansion in GDP in 1990 was inadequate; real per capita GDP actually fell by 0.2 per cent in 1990. Furthermore, the continent continued to suffer from food deficits. Africa needed 4.2 million tonnes in 1989-1990 period, with most of the food deficit being experienced in war affected countries, notably Sudan, Ethiopia, Mozambique and Liberia.

1.17. In the short-run world economic activity will be determined by oil market developments, but the medium-term outlook for the world economy will be strongly influenced by the changes currently taking place in Europe. The restructuring of Eastern Europe and the USSR to market-oriented economies means that output is set to decline. The unification of Germany will also initially result in a fall in output and employment. However, the process of integrating European Economic Community into a single market in 1992, should boost investment and sustain growth in the medium term. With this scenario, the growth in African economies will hinge on continued infusion of capital, stable prices and the outcome of the ongoing Uruguay Round negotiations. Thus, the 1991 prospects for African countries look dimmer: the effects of the recent war related rise in oil prices, the economic slowdown in industrial countries unfolding in the first half of 1991, and the continued low commodity prices, all continue to hamper the continent's ability to increase export earnings and raise output.



## CHAPTER 2 - DOMESTIC ECONOMY

### Overview

The growth in Kenya's real Gross Domestic Product (GDP) is estimated to have slowed down to around 4.5 per cent in 1990. Overall export and private consumption rose appreciably. On the other hand, investment, in both fixed capital and inventories, weakened significantly. Inflation, aided by substantial food and oil price increases, ran at 12.6 per cent during the year (though there is evidence that it is understated). Due mainly to the fall in world coffee prices, terms of trade worsened modestly. Boosted by the trade liberalisation policy, import volume expanded but at a slower pace than export volumes. The current account deficit is estimated to have been narrowed to about K£ 544 million, compared with K£ 604 million in 1989.

2.2. The outcome summarised above is as a result of the structural adjustment programme pursued in recent years. The programme aims at expanding the economy at a stable and sustainable rate which would create extra jobs and raise the standard of living of the population. The principal components of this programme include, among others; a reduction in the fiscal deficit, gradual liberalisation of the trade sector, progressive removal of internal price controls and implementation of conducive monetary and exchange rate policies. In pursuing these policies the Government has, in the recent years, made available substantial foreign exchange resources to domestic industries to import plant machinery and equipment, raw materials, and spare parts. This has been done to allow the local industries to produce and sell at prices which are competitive in the world markets, a strategy intended to diversify the country's exports.

2.3. In the long run, it is expected that the on-going trade liberalisation programme will be financed from increased export revenue and additional direct foreign investment. However, in the short and medium terms, the costs of liberalisation have had to be met through considerable increase in external loans and grants. Overall balance of payments deteriorated from a surplus of K£ 81 million in 1989, to a deficit of K£ 169 million in 1990. The greater gap in the overall balance in 1990 was mainly attributed to decreased capital inflow to the public sector, which declined sharply from K£ 556 million in 1989 to K£ 178 million in 1990.

2.4. The balance of trade deficit, which had increases of about 27 per cent and 50 per cent in 1988 and 1989, respectively, rose by a modest 7 per cent in 1990. This improvement may be attributed to two main factors. First, the expanded commodity export earnings from particularly, tea, petroleum products, horticulture and "other commodities", as shown in Table 7.8, which collectively earned foreign exchange worth K£ 878 million, accounting for nearly three-quarters of the overall merchandise export value in 1990. Manufactured exports grew by 25.4 per cent and 24.3 per cent in 1989 and 1990, respectively. These high growth rates in exports are in line with the Government's export diversification strategy. The export compensation scheme has been an additional incentive towards production for exports. The other contributing factor to the slower growth in the trade deficit is the continued decline in the rate of growth of Kenya's imports, which in 1990 was 13.7 per cent compared to 26 per cent and 23 per cent registered in 1989 and 1988, respectively. The depreciation of the Kenya Shilling and the high world import prices of manufactured goods have been responsible for the slowdown in the growth rate of imports.

2.5. Committed to the policy of reduction of the budget deficit, the Government brought the deficit down, as a percentage of GDP, from 8.6 per cent to 4.7 between 1987 and 1989. Several measures were taken to make this possible. These included lower Government expenditure on subsidies and transfers to parastatal enterprises. The objective of these measures was to make these public enterprises operate more efficiently, in a competitive climate. Some forms of cost recovery measures were implemented in the transport and education sectors of the Government. In addition, "Service Charge" and "Value Added" taxes were introduced at the end of 1989. The former was designed to help increase local authorities' revenue, thereby decreasing Central Government grants to these authorities. The tax collection system is also being restructured to broaden the Government revenue base and to increase efficiency in tax administration. The expected outcome of these favourable developments was a significant 18 per cent growth in Central Government revenue in 1990/91.

2.6. However, the increase in Government revenue was outweighed by a greater rise in Government expenditure, which increased by 26 per cent in 1990/91. One of the main causes of increased Government expenditure was the financing of the rapid rise in university enrolment in recent years. The large intake of over 20,000 undergraduates brought the overall university enrolment to about 39,200 in 1990. This expanded university enrolment, together with increased grants to Teachers Service Commission, raised Government expenditure on education from K£ 564 million in 1989/90 to an estimated K£ 703 million in 1990/91, an increase of 25 per cent. Second major source of budgetary expansion was expenditure on internal and regional security. Thirdly, Government expenditure on agriculture, forestry and related activities was expected to rise appreciably in 1990/91. Most of this amount was directed towards the on-going afforestation and water development programmes. A fourth source of the increase in Government expenditure was the 15 per cent increase in salaries of junior Civil Servants in July, 1990.

2.7. The large budget deficit, which was not matched by a rise in net foreign capital inflow, caused a substantial increase in domestic credit to the Government. Internal credit to the Government rose sharply by 59 per cent in 1990, a growth rate much higher than the 3 per cent registered in the previous year. However, the growth rate of credit to the private sector stagnated at about 12 per cent in 1989 and 1990.

2.8. In 1990, aggregate money supply recorded an increase of K£ 484 million, which was 12 percentage points higher than the level at the end of the previous year. The main source of monetary expansion was net credit to the Government by the banking system. Net domestic credit to the Government increased enormously to K£ 505 million at end of 1990, compared to the negative K£ 26 million registered at the end of 1989. In fact, the deterioration in the overall balance of payments had an off-setting contractionary influence on further monetary expansion in 1990.

2.9. The large increase in aggregate money supply, coupled with the decontrol of prices of some of the basic goods and services, and the sharp rise in the cost of fuel following the Gulf crisis, accounted for the higher inflation rate in 1990. Inflation rate, as measured by the Nairobi Consumer Price Index, increased from 10.5 in 1989 to 12.6 in 1990. Since the commercial bank nominal savings interest rates grew at a lower rate than the inflation rates, real interest rates declined from a positive 2.0 per cent in 1989 to a positive 0.9 per cent in 1990. The decline in real interest rates, among other factors, may have partly contributed to the sluggish growth in aggregate domestic savings, which declined by 8.2 per cent in 1990.

2.10. The outbreak of the Gulf crisis substantially increased world oil prices, a factor which pushed up international air travel costs. The high travel costs, coupled with the insecurity that surrounded the crisis, discouraged further inflow of tourists to Kenya. Consequently, foreign exchange earnings from tourism in the fourth quarter grew at a slower rate than had been previously projected.

2.11. The rise in world oil prices also raised Kenya's oil import bill tremendously. To offset part of the cost of importing oil, domestic petroleum prices were increased by between 30 per cent and 49 per cent in September, 1990. This rise was particularly felt in the manufacturing and transport sectors, whose output is heavily dependent on oil and related inputs. For that reason, the higher oil prices were inevitably followed by increases in prices of transportation service and domestic manufactures. Consequently, the rise in inflation rate was greater during the last quarter of 1990.

### **Sectoral Contributions**

2.12. Table 2.1 and Table 2.2 give the economic performance of various sectors of the economy. The country's overall real GDP recorded an annual rate of growth of 4.5 per cent, compared to 5.0 per cent in 1989. This slowdown may be attributed mainly to the deceleration in the agricultural sector, due to unfavourable weather and low world coffee prices, and in manufacturing output. These two sectors generally play a leading role in determining the rate of overall GDP growth.

2.13. **Agriculture:** A rise of only 0.2 per cent in the volume of agricultural output led to a sluggish GDP growth rate of 3.4 per cent for the agricultural sector. Significant declines were recorded in the production of maize, beans and coffee which decreased by 13 per cent, 25 per cent and 11 per cent, respectively. Several factors explain the less favourable performance of the sector in 1990. First, the "long rains" were inadequate and unevenly distributed in the main crop growing areas of the country. Second, except for wheat, the area planted for major food crops was lower in 1990 than in 1989. Third, the fall of nearly 16 per cent in producer prices of coffee may have been responsible for the 11 per cent decline in the quantity of coffee produced in 1990.

2.14. Partly offsetting those negative contributions to total agricultural production were increases in the value of output of tea, livestock and dairy produce. Livestock sales amounted to K£ 207 million in 1990, an increase of 13 per cent above the 1989 level. Sales of dairy produce rose by a remarkable 27 per cent from K£ 66 million in 1989 to K£ 84 million in 1990. This impressive increase in sales was largely accounted for by increased domestic consumption and export demand. Export of meat and meat products surged from 401 tonnes in 1989 to 1,585 tonnes in 1990. Most of the exports of meat and meat products was taken by United Kingdom probably due to the beef disease reported in that country. Butter and ghee exports went up by nearly 60 per cent; nominal value of tea exports rose by over 15.7 per cent; and exports of horticultural produce rose nearly two-fold from K£ 79 million in 1989 to K£ 142 million, in 1990.

## GROSS DOMESTIC PRODUCT, 1986 - 1990

Table 2.1

K£million

	Current Prices					Constant (1982) Prices				
	1986	1987	1988	1989	1990*	1986	1987	1988	1989	1990*
<b>A. NON-MONETARY ECONOMY</b>										
Forestry	37.26	43.68	52.60	59.27	62.83	27.72	28.62	29.53	30.46	31.37
Fishing	1.80	1.85	2.11	2.85	3.01	1.45	1.50	1.53	1.54	1.49
Building and Construction	71.77	77.07	84.17	90.42	95.84	65.33	67.65	68.24	71.50	72.93
Water Collection	31.57	35.78	40.73	44.47	46.13	21.13	21.72	22.56	23.44	24.14
Ownership of Dwellings	121.41	139.00	162.29	199.00	218.93	86.07	89.33	92.89	96.41	99.71
<b>TOTAL NON-MONETARY ECONOMY</b>	<b>263.81</b>	<b>297.38</b>	<b>341.90</b>	<b>396.01</b>	<b>426.74</b>	<b>201.70</b>	<b>208.82</b>	<b>214.75</b>	<b>223.35</b>	<b>229.65</b>
<b>B. MONETARY ECONOMY</b>										
1. Enterprises and NON-PROFIT Institutions										
Agriculture**	1,598.05	1,669.26	1,902.69	2,088.39	2,235.46	1,023.39	1,062.57	1,109.26	1,152.51	1,192.16
Forestry	37.91	49.57	61.60	93.42	107.39	29.37	33.64	38.14	40.62	42.65
Fishing	15.09	17.50	20.09	27.39	32.76	9.59	10.93	12.27	12.83	13.39
Mining and Quarrying	11.45	13.27	13.69	18.62	24.39	8.40	9.12	10.15	10.62	11.25
Manufacturing	608.23	652.47	752.96	855.36	987.40	448.67	474.34	502.80	532.47	560.34
Building and Construction	175.12	210.81	284.13	386.93	591.32	112.06	116.68	121.68	128.25	135.10
Electricity and Water	52.14	55.24	57.63	64.03	79.40	31.22	33.61	36.47	39.53	43.69
Trade, Restaurants and Hotels	561.01	628.25	712.03	829.07	947.63	389.98	412.53	436.27	455.47	473.69
Transport, Storage and Communications	341.08	393.35	433.74	485.79	598.17	215.42	224.90	234.02	241.06	249.74
Finance, Insurance, Real Estate and Business Services ..	365.22	418.65	501.83	576.90	686.69	261.02	274.52	291.27	313.11	333.15
Ownership of Dwellings**	262.96	303.58	355.62	393.87	480.52	196.53	205.63	212.20	220.63	229.35
Other Services**	153.72	181.66	197.92	228.00	251.48	104.05	111.74	119.72	127.86	135.93
Less: Imputed Bank Service Charges	-150.24	-172.98	-245.95	-281.62	-252.50	-105.94	-113.43	-121.81	-129.12	-134.01
<b>TOTAL</b>	<b>4,031.74</b>	<b>4,420.63</b>	<b>5,047.98</b>	<b>5,766.15</b>	<b>6,770.11</b>	<b>2,723.76</b>	<b>2,856.78</b>	<b>3,002.44</b>	<b>3,145.84</b>	<b>3,286.41</b>
2.PRIVATE HOUSEHOLDS(DOMESTIC SERVICES)	62.96	71.78	83.94	97.49	113.56	44.00	48.71	55.30	62.36	70.52
3.Producers Of Government Services										
Public Administration	143.79	168.50	211.39	271.34	316.85					
Defence	18.17	25.49	27.54	32.48	43.34					
Education	373.26	411.66	479.59	546.97	612.44					
Health	77.51	87.20	96.93	114.50	124.06					
Agricultural Services	43.21	49.12	53.55	54.43	69.73					
Other Services	100.51	116.47	128.99	146.83	156.83					
<b>TOTAL</b>	<b>756.45</b>	<b>858.44</b>	<b>997.99</b>	<b>1,166.55</b>	<b>1,323.25</b>	<b>528.73</b>	<b>554.13</b>	<b>586.16</b>	<b>618.40</b>	<b>646.84</b>
<b>TOTAL MONETARY ECONOMY</b>	<b>4,851.15</b>	<b>5,350.85</b>	<b>6,129.91</b>	<b>7,030.19</b>	<b>8,206.92</b>	<b>3,296.49</b>	<b>3,459.62</b>	<b>3,643.90</b>	<b>3,826.60</b>	<b>4,003.77</b>
<b>TOTAL NON-MONETARY AND MONETARY ECONOMY ..</b>	<b>5,114.96</b>	<b>5,648.23</b>	<b>6,471.81</b>	<b>7,426.20</b>	<b>8,633.66</b>	<b>3,498.19</b>	<b>3,668.44</b>	<b>3,858.65</b>	<b>4,049.95</b>	<b>4,233.42</b>
<b>GROSS DOMESTIC PRODUCT PER CAPITA K£</b>	<b>245.08</b>	<b>261.23</b>	<b>289.06</b>	<b>322.71</b>	<b>359.97</b>	<b>167.62</b>	<b>169.67</b>	<b>172.34</b>	<b>174.77</b>	<b>176.51</b>

\* Provisional.

## GROSS DOMESTIC PRODUCT, 1965 1990

Table 2.2

Percentages

	Current Prices						Constant (1982) Prices					
	1985-86	1986-87	1987-88	1988-89	1989-90*	1986-90**	1985-86	1986-87	1987-88	1988-89	1989-90*	1986-90**
A. NON-MONETARY ECONOMY												
Forestry	11.0	17.2	20.4	12.7	6.0	14.0	3.2	3.2	3.2	3.1	3.0	3.8
Fishing	23.3	2.8	14.1	35.1	5.6	13.7	-12.7	3.4	2.0	0.7	-3.0	0.7
Building and Construction	-6.0	7.4	9.2	7.4	6.0	7.6	-7.5	3.6	0.9	4.8	2.0	2.9
Water Collection	12.4	13.3	13.8	9.2	3.7	9.9	2.3	2.8	3.9	3.9	3.0	3.3
Ownership of Dwellings	13.0	14.5	16.8	22.6	10.0	15.8	4.1	3.8	4.0	3.8	3.4	3.8
TOTAL NON-MONETARY ECONOMY	6.8	12.7	15.0	15.8	7.8	12.8	-0.4	3.5	2.8	4.0	2.8	3.3
B. MONETARY ECONOMY												
1. Enterprises and Non-Profit Institutions												
Agriculture	17.7	4.5	14.0	9.8	7.0	8.8	4.9	3.8	4.4	3.9	3.4	4.0
Forestry	0.8	30.8	24.3	51.7	15.0	23.0	5.1	14.5	13.4	6.5	5.0	9.7
Fishing	24.8	16.0	14.8	36.3	19.6	21.2	1.7	14.0	12.3	4.6	4.4	8.8
Mining and Quarrying	14.8	15.9	3.2	36.0	31.0	20.7	3.6	8.6	11.3	4.6	5.9	7.6
Manufacturing	17.3	7.3	15.4	13.6	15.4	12.8	5.8	5.7	6.0	5.9	5.2	5.7
Building and Construction	8.4	20.4	34.8	36.2	52.8	35.6	3.7	4.1	4.3	5.4	5.3	4.9
Electricity and Water	5.2	5.9	4.3	11.1	24.0	11.0	7.5	7.7	8.5	8.4	10.5	8.8
Trade, Restaurants and Hotels	7.8	12.0	13.3	16.4	14.3	14.0	9.8	5.8	5.8	4.4	4.0	4.9
Transport, Storage and Communications	15.1	15.3	10.3	12.0	23.1	15.0	4.3	4.4	4.1	3.0	3.6	3.9
Finance, Insurance, Real Estate and Business Services	16.0	14.6	19.9	15.0	19.0	17.1	6.8	5.2	6.1	7.5	6.4	6.4
Ownership of Dwellings	13.5	15.4	17.1	10.8	22.0	16.3	3.3	4.6	3.2	6.8	4.0	4.0
Other Services	18.6	18.2	9.0	15.2	10.3	13.2	5.0	7.4	7.1	6.0	6.3	7.0
Total (Excluding imputed bank service charges)	14.9	9.6	14.2	14.2	17.4	13.8	5.8	4.9	5.1	4.8	4.5	4.9
2. Private Households (Domestic Services)	21.6	14.0	16.9	16.1	16.5	15.8	10.6	10.7	13.5	12.8	13.1	12.5
3. Producers of Government Services												
Public Administration	21.9	17.2	25.5	28.4	16.8	21.8						
Defence	11.1	40.3	8.0	17.9	33.4	24.2						
Education	27.5	10.3	16.5	14.0	12.0	13.2						
Health	17.7	12.5	11.2	18.1	8.3	12.5						
Agricultural Services	2.8	13.7	9.0	1.6	28.1	12.6						
Other Services	23.5	15.9	10.7	13.8	6.8	11.8						
TOTAL	22.7	13.5	16.3	16.9	13.4	15.0	6.3	4.8	5.8	5.5	4.6	5.1
TOTAL MONETARY ECONOMY	16.1	10.3	14.6	14.7	16.7	14.0	6.0	4.9	5.3	5.0	4.6	5.1
TOTAL NON-MONETARY AND MONETARY ECONOMY												
GROSS DOMESTIC PRODUCT PER CAPITA	11.5	6.6	10.7	10.9	12.3	10.1	1.9	1.2	1.6	1.4		1.2

\* Provisional

\*\* Cumulative

2.15. **Manufacturing:** The rate of growth of real value added for manufacturing sector declined by about 0.7 percentage points in 1990, mainly as a result of domestic and international factors. The sector suffered from inadequacy of local inputs arising from insufficient production of some major agricultural crops. Closure of some sugar and shoe factories and the bag and cordage factory also reduced production of these products. The sugar industry contracted by 3.3 per cent in 1990, in contrast with an expansion of 4.2 per cent recorded in the preceding year. Quantum growth in the output of wood and wood products rose only marginally from 3 per cent in 1989 to 4 per cent in 1990. Although demand for wood and wood products continues to grow, the supply is somewhat constrained by Government restriction on exploitation of indigenous forests. Unfavourable external conditions consisted of increased cost of imported intermediate inputs combined with inadequate inflow of foreign exchange. These factors combined to reduce growth rate of manufacturing GDP to 5.2 per cent in 1990, compared with 5.9 per cent recorded in the previous year.

2.16. The moderate expansion of 5.2 per cent in manufacturing may be largely explained by the increases in volume of output of meat and dairy products, textiles and paper and paper products. In 1990 output of meat and dairy products went up by 6 per cent, textile by 12.6 per cent and paper and paper products by 4 per cent. These increases were greater than the respective 2.4 per cent, 2.5 per cent and 2.8 per cent growth rates observed in the previous year.

2.17. **Building and Construction:** Despite the unfavourable conditions in the economy in 1990, the maintained a real growth rate of 5.3 per cent in its value added. Growth in volume of cement consumption, a major economic indicator in the construction activity, remained high at about 18 per cent. The sector mainly benefitted from additional expenditure on on-going construction works and maintenance of completed projects. In particular, the sector was greatly boosted by the construction of additional lecture halls, libraries, hostels, and staff houses to accommodate increased university enrolment. Besides, public sector investment in roads, air strips, geothermal exploration and hydro-electric projects made large contribution to value added in the building and construction sector.

2.18. **Electricity and Water:** The sub- sector performed well in 1990. It recorded a real growth rate of 10.5 per cent, owing to the increase in demand from private households and the informal sector. The two sub-sectors have substantially benefitted from the increased supply of electricity through the continuing Rural Electrification Programme and the rehabilitation of Kipevu Power Plant. In the past decade, the Government has stepped up its efforts to supply Kenyan residents with potable water. About 330 water supply projects had been completed by the end of 1990. These projects are the main source of the high growth trend in the output of water in recent years.

2.19. **Transport, Storage and Communications:** With the improving quality of life, Kenyans have displayed a strong propensity for the use of improved transport services. In addition, rapid rural-urban migration has greatly increased traffic volume in major urban centres. In line with these developments, there has been a gradual increase in the number of "matatus" and public buses on Kenyan roads. The volume of air traffic has also increased appreciably. Accordingly, road and air traffic accounted for more than 55 per cent of the output for the sector. The value added for this sector registered an increase of 3.6 per cent, which compares favourably with the rise of 3.0 per cent recorded in 1989.

2.20. Table 2.3 contains production accounts for the various sectors of the economy for 1989 and 1990. There was a little increase in the aggregate ratio of GDP to gross output, from 44.8 per cent in 1989 to 45.3 per cent in 1990. However, wide variations from this average were observed for individual sectors. The highest ratio of GDP to gross output was in ownership of dwellings, with about 91 per cent, followed by agriculture with 89 per cent and 79 per cent for the financial sector. The lowest ratio of around 12 per cent was recorded in manufacturing sector which uses large quantities of intermediate inputs. The proportion of labour cost to GDP also varied significantly. For the economy as a whole, the proportion was 42 per cent in 1990; while it was 8 per cent for agriculture, 70 per cent for building and construction sector and 43 per cent for manufacturing. The modest share of labour cost to GDP in agriculture should be interpreted with care. This is because the huge entry for "operating surplus" in agriculture includes a sizeable component of labour inputs from self-employment and family workers.

### **Structural Changes**

2.21. Some of the structural changes which have emerged in the Kenyan economy in the recent past are observable in Table 2.4. Although the agricultural sector continues to dominate the country's GDP, the economy is undergoing an appreciable process of diversification. Whereas the share of agricultural sector declined from 31.6 per cent in 1982 to 29.0 percent in 1987 and further to 28.2 percent in 1990, manufacturing sector's share rose from 12.8 per cent to 12.9 per cent and to 13.2 per cent, respectively. The financial sector increased its share from 7.5 per cent in 1988 to 7.9 per cent in 1990.

2.22. The above structural changes reveal that increased incomes from agricultural production may have led to higher direct and indirect rises in the demand for non-agricultural goods and services; and hence to the generation of relatively higher GDP growth rates in other sectors. This indicates that over the years favourable growth in agriculture may have widespread effects and provide significant stimulus for the marked increase in the overall growth of the economy.

2.23. An interesting, but an expected feature, in Table 2.4, is the continuing decline of the share of non-monetary sector to the overall real GDP. This proportion fell from 5.8 per cent in 1986 to 5.4 per cent in 1990. The higher proportion in 1986 was due to substantial rise in activity of the "Harambee Projects" in rural areas at the inception of the 8-4-4 system of education. At the initial implementation of this education system in 1985, parents were called upon to construct a significant number of additional classrooms, workshops and teachers' houses. As a result of this rapid increase in self-help activity, non-monetary share of the GDP rose to 6.1 per cent in 1985 before falling to 5.8 per cent in 1986. As forecast in the "1987 Economic Survey", this proportion has continued to decline as most schools complete their construction requirements of the 8-4-4 education system.

### **Terms of Trade**

2.24. Table 2.5 displays the effect of terms of trade on Kenya's economy. The rapid oil price increases and the onset of recession in Western industrialised countries in 1990, combined with substantial rise in prices of other basic imports led to a considerable deterioration of the terms of trade. While the unit value of Kenyan imports rose appreciably due to the worsening terms of trade effect, the onset of recession in developed countries, coupled with the decline in the world coffee prices led to a significant decrease in the real income for Kenyans. This, in turn, led to a downward adjustment in real GDP, resulting in a of about 4.6 per cent in the terms of trade adjusted per capita income in 1990, 1.7 percentage points below the previous year.

PRODUCTION ACCOUNTS. 1989 AND 1990

Table 2.3

K£million

	1989					1990*				
	Gross Output at approx. Basic Prices***	Inter-mediate Consumption	Gross Domestic Product (at Factor Cost)			Gross Output at approx. Basic Prices***	Inter-mediate Consumption	Gross Domestic Product (at Factor Cost)		
			Total	Labour Costs	Operating Surplus**			Total	Labour Costs	Operating Surplus**
A. NON MONETARY ECONOMY	492.82	96.81	396.01	4.23	391.78	536.13	109.39	426.74	1.06	425.68
B. MONETARY ECONOMY										
1.Enterprises and Non-Profit Institutions										
Agriculture	2,381.57	293.18	2,088.39	187.96	1,900.43	2,519.32	283.86	2,235.46	174.88	2,060.58
Forestry	98.86	5.45	93.41	37.05	56.36	117.75	10.36	107.39	53.88	53.51
Fishing	29.77	2.38	27.39	20.00	7.39	33.96	1.20	32.76	8.49	24.27
Mining and Quarrying	20.11	1.49	18.62	13.59	5.03	77.84	53.45	24.39	9.17	15.22
Manufacturing	6,960.22	6,104.86	855.36	368.74	486.62	8,449.88	7,462.48	987.40	420.52	566.88
Building and Construction	798.45	409.02	386.93	261.79	125.14	979.37	388.05	591.32	413.93	177.39
Electricity and Water	149.56	85.53	64.03	37.39	26.64	193.82	114.42	79.40	51.03	18.37
Trade, Restaurants and Hotels	1,506.61	677.54	829.07	368.64	460.43	1,307.50	359.87	947.63	384.37	563.26
Transport, Storage and Communications	1,047.48	561.69	485.79	229.06	256.73	1,292.98	694.81	598.17	264.95	333.22
Finance, Insurance, Real Estate and Business Services	791.91	215.02	576.90	243.21	333.69	874.82	188.13	686.69	260.30	426.39
Ownership of Dwellings	434.29	40.42	393.87	0.00	393.87	529.82	49.30	480.52	0.00	480.52
Other Services	437.14	209.14	228.00	173.28	54.72	485.01	233.53	251.48	189.29	62.19
Less: Imputed Bank Service Charges ..	-563.24	-281.62	281.62	0.00	-281.62	-505.00	-252.50	-252.50	0.00	-252.50
	14,092.74	8,324.10	5,766.14	1,940.71	3,825.43	16,357.07	9,586.96	6,770.11	2,240.81	4,529.30
2.Private Households (Domestic Services)..	97.49	0.00	97.49	97.49	0.00	113.56	0.00	113.56	113.56	0.00
3.Producers of Government Services	1,891.93	725.38	1,166.55	1,157.35	9.20	2,039.48	716.23	1,323.25	1,302.04	21.21
TOTAL MONETARY ECONOMY	16,082.16	9,049.48	7,030.18	3,195.55	3,834.63	18,510.11	10,303.19	8,206.92	3,656.41	4,550.51
TOTAL MONETARY AND NON-MONETARY ECONOMY	16,574.98	9,146.29	7,426.19	3,199.78	4,226.41	19,046.24	10,412.58	8,633.66	3,657.47	4,976.19

\* Provisional

\*\* Including consumption of fixed capital.

\*\*\* After deduction of indirect taxes less subsidies from total of output.



GROSS DOMESTIC PRODUCT  
SECTOR SHARES AT CONSTANT (1982) PRICES, 1986 - 1990

		<i>Percentage</i>				
		1986	1987	1988	1989	1990*
A. NON-MONETARY ECONOMY						
Forestry		0.8	0.8	0.8	0.8	0.7
Fishing		0.0	0.0	0.0	0.0	0.0
Building and Construction		1.9	1.8	1.8	1.8	1.7
Water Collection		0.6	0.6	0.6	0.6	0.6
Ownership of Dwellings		2.5	2.4	2.4	2.4	2.4
TOTAL NON-MONETARY ECONOMY		5.8	5.7	5.6	5.6	5.4
B. MONETARY ECONOMY						
1. Enterprises and Non-Profit Institutions						
Agriculture		29.3	29.0	28.7	28.5	28.2
Forestry		0.8	0.9	1.0	1.0	1.0
Fishing		0.3	0.3	0.3	0.3	0.3
Mining and Quarrying		0.2	0.2	0.3	0.3	0.3
Manufacturing		12.8	12.9	13.0	13.1	13.2
Building and Construction		3.2	3.2	3.2	3.2	3.2
Electricity and Water		0.9	0.9	0.9	1.0	1.0
Trade, Restaurants and Hotels		11.1	11.2	11.3	11.2	11.2
Transport, Storage and Communications		6.2	6.1	6.1	6.0	5.9
Finance, Insurance, Real Estate and Business Services		7.5	7.5	7.5	7.7	7.9
Ownership of Dwellings		5.6	5.6	5.5	5.4	5.4
Other Services		3.0	3.0	3.1	3.2	3.2
<i>Less: Imputed Bank Service Charges</i>		-3.0	-3.1	-3.2	-3.2	-3.2
TOTAL		77.9	77.9	77.8	77.7	77.6
2. Private Households (Domestic Services).		1.3	1.3	1.4	1.5	1.6
3. Producers of Government Services						
Public Administration						
Defence						
Education						
Health						
Agricultural Services						
Other Services						
TOTAL		15.1	15.1	15.2	15.3	15.3
TOTAL MONETARY ECONOMY		94.2	94.3	94.4	94.5	94.6
TOTAL MONETARY AND NON-MONETARY ECONOMY		100.0	100.0	100.0	100.0	100.0

*Provisional*

IMPACT OF COMMODITY TERMS OF TRADE ON PER CAPITA GDP, 1986 - 1990

*Table 2.5*

	1986	1987	1988	1989	1990*
1. Unadjusted GDP at constant Factor Cost (K£mn.)	3,498.19	3,668.44	3,858.64	4,049.95	4,233.41
2. Adjustment for changes in terms of trade (K£mn.)	39.00	-201.16	-160.93	-331.00	-563.15
3. Adjusted GDP (K£mn.)	3,537.19	3,467.28	3,697.71	3,718.95	3,670.26
<sup>4</sup> Growth in unadjusted per capita GDP	1.90	1.20	1.60	1.30	1.10
5. Growth in adjusted per capita GDP	5.82	-5.38	2.98	-2.81	-4.59

*Provisional.*

2.25. The high positive growth rate in 1988 reflected the effects of the favourable terms of trade which prevailed in that year. During that period, Kenya recorded significant gains from the high prices of coffee and tea. In addition, international oil prices were generally low. As a consequence, terms of trade improved by about 3.5 per cent in 1988 over the previous year. These developments explain the rise of approximately 3.0 per cent in adjusted per capita GDP in 1988.

### Resource Allocation

2.26. Table 2.6 presents the total resources available in the economy, at current prices, and their allocation between investment and consumption. A number of important observations may be made from this table. Perhaps the most striking is the rising rate of consumption in the last two years. The aggregate share of consumption to total resources available, which remained constant at 76.2 per in 1988 and 1989, increased to 78.8 per cent in 1990. Much of this growing consumer spending has been the result of significant increases in real personal disposable income which followed the reduction in direct taxation in 1989 and the rise of over 10 per cent of salaries of low income workers in 1990. The ratio of domestic savings to GPD at market prices decreased from 17.0 per cent in 1988 to 16.5 per cent in 1989 and to an estimated 13.0 per cent in 1990.

TOTAL USE OF RESOURCES AT CURRENT PRICES, 1986 - 1990

<i>Table 2.6</i>	<i>K£million</i>				
	1986	1987	1988	1989	1990*
G.D.P. at Factor Cost	5,114.96	5,648.23	6,471.81	7,426.20	8,633.66
Of which:					
Non-Monetary	263.81	297.38	341.90	396.01	426.74
Monetary	4,851.15	5,350.15	6,129.91	7,030.18	8,206.92
+ Indirect Taxes	759.79	911.57	1,079.19	1,190.50	1,399.04
- Subsidies	0.58	0.67	0.10	0.05	0.10
= G.D.P. at Market Prices	5,874.17	6,559.13	7,550.90	8,616.65	10,032.60
+ Import of goods and services**	1,506.43	1,734.12	2,054.30	2,492.37	2,608.28
- Export of goods and services	1,516.68	1,399.59	1,664.85	1,997.68	2,542.19
= Import Surplus	-10.25	334.53	389.45	494.69	66.09
Total Resources available for Domestic Investment and Consumption	5,863.92	6,893.66	7,940.35	9,111.34	10,098.69
Gross Fixed Capital Formation	1,153.22	1,286.74	1,522.20	1,712.11	1,799.03
Change in Stocks	125.22	305.81	370.87	460.43	345.32
Gross Investment	1,278.44	1,592.55	1,893.07	2,172.54	2,144.35
Public Consumption	1,075.91	1,217.70	1,385.71	1,607.47	1,841.62
Private Consumption	3,519.82	4,083.41	4,661.57	5,331.33	6,112.72
TOTAL CONSUMPTION	4,595.73	5,301.11	6,047.28	6,938.80	7,954.34

\* *Provisional.*

\*\* *The 1989 figure excludes K£120 million value of imports for purchase of one and leasing of another aircraft by the Kenya Airways Corporation.*

2.27. Another important observation in Table 2.6 in 1990 is the de-stocking of around 25 per cent, which compares unfavourably with the substantial stock accumulation that occurred in 1988 and 1989. The de-stocking was largely accounted for by reduced availability of industrial inputs as a result of reduced warehousing period and reduced inflow of foreign exchange already mentioned above. The increase in stock accumulation in the period 1988-1989 was a result of the build-up of inventories of raw materials and spare parts, supported by increased foreign exchange receipts which resulted from high coffee and tea earnings and a substantial inflow of foreign capital.

2.28. The composition of gross investment and the means by which it was financed are given in Table 2.7. The modest fall of 1.3 per cent in gross capital formation in 1990 was mainly attributed to de-stocking that resulted in the drop in the value of inventories in 1990. However, fixed investment as a proportion of GDP, rose by one percentage point to 21 per cent in 1990. A larger share of this investment came from the public sector, whose investment levels increased by 9.8 per cent, in contrast with a decline of 21 per cent experienced by the private sector.

#### FINANCING OF CAPITAL FORMATION, 1986- 1990

Table 2.7 *K£ million*

	1986	1987	1988	1989	1990*
<b>GROSS CAPITAL FORMATION:</b>					
Gross Fixed Capital Formation	1,153.22	1,286.74	1,522.20	1,712.11	1,799.03
Changes in Stocks	125.22	305.81	370.87	460.43	345.32
<b>TOTAL</b>	<b>1,278.44</b>	<b>1,592.55</b>	<b>1,893.07</b>	<b>2,172.54</b>	<b>2,144.35</b>
<b>FINANCING:</b>					
Grants from Abroad	117.71	126.99	205.27	266.57	296.10
Net borrowing from Abroad	31.06	409.47	403.01	484.20	544.20
Domestic Saving	1,129.67	1,056.09	1,284.79	1,421.77	1,304.05
<b>TOTAL</b>	<b>1,278.44</b>	<b>1,592.55</b>	<b>1,893.07</b>	<b>2,172.54</b>	<b>2,144.35</b>

\* *Provisional.*

2.29. There was also considerable shift in the sources of financing of gross capital formation in 1990. While over 67 per cent of gross investment came from domestic savings in 1988, the ratio fell to 65 per cent in 1989 and further to 61 per cent in 1990. The slow rise in deposit interest rates, coupled with the increase in domestic inflation, may have partially accounted for the decline in the rate of domestic savings in the past few years.

#### Factor Incomes and National Product

2.30. Gross National Product (GNP) at market prices is detailed in Table 2.8. This measure of "national income" differs from GDP at factor cost presented in Table 2.1 in that it takes into account the impact of indirect taxes and subsidies as well as net factor payments from abroad. At market prices, GNP is lower than GDP by the amount of net factor incomes paid abroad. The proportion of GNP going to wages declined slightly from 43.6 per cent in 1989 to 42.5 per cent in 1990. This drop may be attributed to the slowdown in the growth rate of nominal wages. The remuneration of employees at current prices increased by 15 per cent to K£ 3,678 million in 1990. The rental surplus and other operating surplus (which includes depreciation) rose by 22 per cent and 18 per cent, respectively.

## GROSS NATIONAL PRODUCT AT CURRENT PRICES 1986-1990

Table 2.8

K£million

	1986	1987	1988	1989	1990*
FACTOR INCOMES:					
A. Non-Monetary Economy ..	263.81	297.38	341.90	396.01	426.74
B 1. Remuneration of Employees :					
Enterprises .. ..	1,278.71	1,471.03	1,688.18	1,940.71	2,240.80
Private Households	62.96	71.78	83.94	97.49	113.56
Producers of Government Services	756.45	858.44	997.99	1,166.55	1,323.25
TOTAL	2,098.12	2,401.25	2,770.11	3,204.75	3,677.61
2. Rental Surplus (including depreciation)	262.96	303.58	355.62	393.87	480.52
3. Other Operating Surplus (including depreciation)	2,490.07	2,646.01	3,004.18	3,431.56	4,048.78
TOTAL MONETARY ECONOMY	4,851.15	5,350.84	6,129.91	7,030.18	8,206.91
TOTAL FACTOR INCOMES = GROSS DOMESTIC PRODUCT (AT FACTOR COST)	5,114.96	5,648.22	6,471.81	7,426.19	8,633.65
Add: Indirect Taxes	759.79	911.57	1,079.19	1,190.50	1,399.04
Deduct: Subsidies	0.58	0.67	0.10	0.05	0.10
GROSS DOMESTIC PRODUCT AT MARKET PRICES	5,874.17	6,559.12	7,550.90	8,616.64	10,032.59
Add: Factor Incomes Received From Abroad	29.99	30.75	7.20	12.32	16.60
Deduct: Factor Incomes Paid Abroad	239.15	279.39	327.81	375.37	402.12
GROSS NATIONAL PRODUCT	5,665.01	6,310.48	7,230.29	8,253.59	9,647.07

\* Provisional.

2.31. In 1989 and 1990, factor income received from abroad amounted to about K£ 12 million and K£ 17 million, respectively, whereas the sums paid abroad was K£ 375 million and K£ 402 million, largely in form of dividend remittances and interest payments. These large amounts of factor payments to non-resident investors underlines the Government's continued commitment to expedite repatriation of profits of foreign investors.

### Trends in Capital Formation

2.32. One of the most unfavourable features of the Kenyan economy in the last two years is the downward trend in the rate of growth of fixed capital formation. -As may be observed in Table 2.9, this slowdown in the pace of fixed investment activity is particularly significant in buildings, machinery and transport equipment. This undesirable development appears to originate from various circumstances. Acquisition of additional machinery and transport equipment has been slowed down by the high cost of imports for manufacturing sector resulting from high import prices and the depreciation of the Shilling; low international coffee prices bringing about decreased foreign exchange receipts and lower output of coffee in the country. High mortgage interest rates and increased domestic prices of building materials may account for the marginal slowdown in the building activity.

2.33. The rapid growth in the building activity that had been witnessed during the second half of the 1980's is unlikely to be maintained in the current decade. This is because the rising trend in building, observed in 1989, could not be maintained in 1990. In 1990, real investment in dwellings and non-residential buildings stood at K£ 108 million and K£ 98 million respectively, down by some 5.7 per cent and 22.2 per cent from 1989. In real terms, total investment in building (residential and non-residential) declined by about 14 per cent in 1990.

## GROSS FIXED CAPITAL FORMATION BY TYPE OF ASSET, 1986 - 1990

Table 2.9.

K£million

	CURRENT PRICES					CONSTANT (1982)				
	1986	1987	1988	1989	1990*	1986	1987	1988	1989	1990*
DWELLINGS:										
PRIVATE:										
Non-Monetary—	81.90	89.51	97.62	109.49	117.85	56.67	55.46	53.57	53.93	47.68
Monetary	60.01	68.10	69.98	73.48	53.48	41.53	42.20	26.70	36.19	21.64
TOTAL:	141.91	157.61	167.60	182.97	171.33	98.20	97.66	80.27	90.12	69.32
PUBLIC	29.68	33.35	44.50	48.94	94.93	20.54	20.66	18.86	24.11	38.40
TOTAL	171.59	190.96	212.10	231.91	266.26	118.74	118.32	99.13	114.23	107.72
NON-RESIDENTIAL BUILDINGS:										
PRIVATE	53.83	62.42	84.93	110.41	56.77	37.96	38.74	47.34	55.95	22.74
PUBLIC	64.56	71.75	151.70	138.56	188.21	45.53	44.54	84.56	70.21	75.40
TOTAL	118.39	134.17	236.63	248.97	244.98	83.49	83.28	131.90	126.16	98.14
OTHER CONSTRUCTION WORKS:										
PRIVATE	25.77	16.16	15.92	27.00	47.00	16.33	9.51	8.47	13.24	19.48
PUBLIC	177.33	185.50	247.31	256.06	355.01	112.38	109.12	131.55	125.53	147.15
TOTAL	203.10	201.66	263.23	283.06	402.01	128.71	118.63	140.02	138.77	166.63
LAND IMPROVEMENT AND PLANTATION DEVELOPMENT										
PRIVATE	8.75	12.75	12.19	12.33	18.99	6.45	7.57	6.37	6.37	6.86
PUBLIC	0.12	0.07	0.06	0.15	1.68	1.70	0.07	0.02	0.02	0.02
TOTAL	8.87	12.82	12.25	12.48	20.67	8.15	7.64	6.39	6.39	6.88
TRANSPORT EQUIPMENT:										
PRIVATE	125.74	146.49	175.52	209.75	92.43	59.90	65.93	68.35	80.32	31.22
PUBLIC	120.36	80.40	73.84	68.22	133.95	57.34	36.19	28.75	26.12	45.24
TOTAL	246.10	226.89	249.36	277.97	226.38	117.24	102.12	97.10	106.44	76.46
MACHINERY AND OTHER EQUIPMENT:										
PRIVATE	315.55	417.01	436.60	469.93	453.61	163.50	221.63	233.32	205.52	158.96
PUBLIC	83.46	96.42	107.33	182.37	182.41	43.25	51.24	57.36	79.76	63.92
TOTAL	399.01	513.43	543.93	652.30	636.02	206.75	272.87	290.68	285.28	222.88
BREEDING STOCK AND DAIRY CATTLE:										
PRIVATE	6.16	6.81	4.70	5.42	2.71	5.00	5.09	4.07	4.07	2.19
TOTAL:										
Non-Monetary Dwellings	81.90	89.51	97.62	109.49	117.85	56.67	55.46	53.57	53.93	47.68
Other	595.81	729.74	799.84	908.32	724.99	330.67	390.67	394.62	401.66	263.09
TOTAL PRIVATE	677.71	819.25	897.46	1,017.81	842.84	387.34	446.13	448.19	455.59	310.77
TOTAL	475.51	467.49	624.74	694.30	956.19	280.74	261.82	321.10	325.75	370.13
TOTAL PRIVATE AND PUBLIC	1,153.22	1,286.74	1,522.20	1,712.11	1,799.03	668.08	707.95	769.29	781.34	680.90

\* Provisional.

\*\* Includes Central Government, Municipalities, Councils and Parastatals.

2.34. Financing costs, which have increased enormously in the last few years are not the only factors that may curb the demand for buildings. An increasing number of construction projects are being held back because of the rising interest rates on mortgage loans and significant increases in land prices in the last few years. In addition, the Rent Tribunal continues to restrict the practice of passing over the price of higher mortgage interest to tenants, a factor which, in turn, causes deterioration in returns on investment in rental housing. Parallel with the higher interest rates is the rise in debt-repayment burdens, especially for owner-occupied dwellings. The latter point has particularly affected investment in individual houses, which had been very strong in the late 1970s and the early 1980s.

2.35. The downturn in gross fixed capital formation was also reflected in machinery and related equipment. Fixed investment in 1990 is estimated to have registered a decline of 21.8 per cent - a steep fall from the modest decline of 2 per cent in the previous year. Inflationary pressures, accompanied by decreased foreign capital inflow and some decline in company earnings may have been responsible for the slowdown in fixed investment in machinery.

2.36. Gross fixed capital formation by industry is presented in Table 2.10. At constant prices the overall fixed investment in 1990 declined by some 12.9 per cent compared with an increase of 1.6 per cent in 1989. Manufacturing sector suffered the heaviest decrease to K£ 59 million or over 45 per cent decline. The decline in this sector was due mainly to the sharp fall in the investment in machinery and related equipment from K£ 84 million in 1989 to K£ 16 million in 1990. Short supply of domestic inputs and imported raw materials resulting from inadequate production of several basic agricultural products and the depreciation of the Shilling against major world currencies, may have discouraged manufacturers from further investment in machinery. The foreign exchange constraint was another factor that inhibited the importation of machinery and plant for manufacturing activity in 1990. Quantum index of imports of transport and machinery fell by over 11 per cent while that of chemicals dropped by 18 per cent in the year.

2.37. The other major decline in real investment in 1990 was registered by the transport and communication sector, which had a negative growth rate of approximately 26 per cent. The main source of this deterioration was again, a slump in the investment in machinery and transport equipment, which had respective decreases of 32 per cent and 29 per cent below their previous year's levels.

## GROSS FIXED CAPITAL FORMATION BY INDUSTRY. 1986 - 1990

Table 2.10

K£million

	CURRENT PRICES					CONSTANT (1982) PRICES				
	1986	1987	1988	1989	1990*	1986	1987	1988	1989	1990*
A. NON MONETARY ECONOMY:										
Non-Monetary Dwellings	81.89	89.51	97.62	109.49	117.85	56.67	55.46	53.57	53.93	47.68
B. MONETARY ECONOMY:										
Enterprises and Non-profit Institutions:										
Agriculture	89.64	106.36	113.52	102.80	143.15	53.79	58.87	60.09	47.71	51.69
Forestry	0.38	0.31	1.66	10.08	1.54	0.23	0.18	0.78	0.50	0.54
Fishing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mining and Quarrying	7.03	12.74	10.21	9.42	16.87	3.64	6.73	5.44	4.12	5.91
Manufacturing	161.34	171.83	218.74	249.91	165.50	83.87	89.64	112.53	108.59	59.92
Building and Construction	50.31	70.19	70.46	65.20	270.12	27.01	37.19	37.07	28.41	104.40
Electricity and Water	48.55	62.20	81.70	124.51	75.54	29.93	35.68	43.40	60.09	27.27
Trade, Restaurants and Hotels	24.86	24.88	36.35	33.55	36.67	14.23	13.36	18.98	14.80	13.25
Transport, Storage and Communications	289.04	306.66	269.28	349.24	215.66	144.83	151.08	119.62	145.32	76.99
Finance, Insurance, Real Estate and Business Services	13.46	21.60	38.40	47.07	65.00	7.58	11.86	20.74	22.37	24.98
Ownership of Dwellings	90.86	104.55	115.85	124.43	154.18	62.67	64.50	46.30	61.18	62.06
Other Services	75.89	85.80	105.98	145.65	89.54	45.49	49.55	57.84	69.26	32.57
TOTAL	851.36	967.12	1,062.15	1,261.86	1,233.77	473.27	518.64	522.79	562.35	459.58
Producers of Government Services										
Public Administration	69.62	77.30	56.98	128.19	162.05	43.44	44.46	29.50	58.85	60.41
Defence	0.00	0.02	0.05	0.02	0.02	0.00	0.01	0.02	0.06	0.06
Education	31.00	31.30	87.41	54.24	88.64	19.38	18.28	47.92	26.33	34.87
Health	12.89	12.60	21.48	12.38	20.08	8.57	7.51	11.63	5.76	7.77
Agricultural Services	15.92	13.43	19.50	21.38	28.07	10.33	7.95	9.97	9.78	10.69
Other Services	90.52	95.46	177.21	133.47	148.55	56.41	55.64	93.89	64.33	59.90
TOTAL	219.95	230.11	362.63	349.68	447.41	138.13	133.85	192.93	165.13	173.70
NON-MONETARY ECONOMY	81.89	89.51	97.62	109.49	117.85	56.67	55.46	53.57	53.93	47.68
MONETARY ECONOMY	1,071.31	1,197.23	1,424.78	1,611.54	1,681.18	611.40	652.49	715.72	727.48	633.28
TOTAL	1,153.20	1,286.74	1,522.40	1,721.03	1,799.03	668.07	707.95	769.29	781.41	680.96
C PERCENTAGE RATES OF GROWTH:										
Non-Monetary Economy	6.70	9.31	9.06	12.16	7.64	0.50	-2.14	-3.41	0.67	-11.59
Monetary Economy.....	33.31	11.75	18.30	7.57	13.66	13.06	5.97	8.66	-2.61	-6.95
TOTAL	30.99	11.58	18.30	7.57	13.66	11.87	5.97	5.25	-2.61	-6.95

\* Provisional.

## Introduction

The 1989 population census was the fifth general census undertaken in Kenya since 1948. The census was taken under the provisions of the Statistics Act (Chapter 112) of the Laws of Kenya and Legal Notice No. 466 of 4<sup>th</sup> November, 1988. As in the case of previous censuses, a *de facto* approach was employed during the census enumeration. Persons were enumerated according to where they were at a previously defined critical moment as opposed to where they usually live in the case of *de jure* approach. The critical moment was the mid-night of 24<sup>th</sup>/25<sup>th</sup> August, 1989. Although the Legal Notice stated that the enumeration was to continue until 2<sup>nd</sup> September, 1989, enumerators were instructed to enquire on the residential status of every person in a household as at mid-night of 24<sup>th</sup>/25<sup>th</sup> August, 1989. Persons who had moved into the household after the critical moment, including births, were excluded from the household, but the enumerator was instructed to include persons who had shifted from the household, including deaths which occurred after the critical moment, regardless of the persons relationship to the household. Arrangements were made to enumerate special groups including travellers, hotel residents, in-patients, night shift workers, etc.

3.2. On the average, the enumeration took about 5 days to complete. But due to call-backs in urban areas, weather constraints and nomadism in some districts, the enumeration took longer than five days in these areas. The average length of enumeration compares favourably with enumeration periods reported by both developed and developing countries: Ethiopia (14 days, 1984), Ivory Coast (30 days, 1975), Mauritania (90 days, 1977), Malawi (21 days, 1986), Zimbabwe (14 days, 1969), Tanzania (4 to 38 days, 1988), U.S.A. (13 days, 1990), and U.S.S.R. (8 days), are a few examples.

3.3. For the first time in Kenya a census of the disabled persons was carried out simultaneously with the General Population Census. The enumerators were instructed to enquire whether any member of the household suffered from any physical, vision, hearing and mental disability.

## Objectives of the Census

3.4. Changes in the socio-economic development which have taken place since independence and more importantly since the launching of District Focus for Rural Development dictated the main objectives of the 1989 Population Census. The objectives of the 1989 Census, which was planned to be more comprehensive than previous censuses, were to :

- i. Provide up-to-date information on the size, composition and distribution of the population.
- ii. Provide information on current trends and levels of fertility, mortality and migration.
- iii. Ascertain the current rate and pattern of urbanization.
- iv. Provide data on the size, distribution and deployment of the labour force.
- v. Provide information on availability of various social amenities.
- vi. Provide an estimate of disabled persons.

## Methodology

3.5. Several activities were mounted to facilitate the procurement of the necessary data to fulfil the census objectives.



3.6. First, the entire country was canvassed and mapped with the assistance of the Provincial Administration. All the administrative sub-locations and urban centres were visited and their boundaries confirmed. Census maps are a vital input into the census operation since they help to ensure census coverage i.e. avoiding omissions or double counting. The sub-locations were subsequently divided into census enumeration areas (EAs) estimated to contain about 500 people. This exercise took into account prominent natural and physical features as EA boundaries. Every EA was accorded a rural or urban status in order to facilitate the breakdown of the population into rural and urban.

3.7. Second, census questionnaire was designed on which to record particulars of all persons in Kenya on the mid-night of 24<sup>th</sup>/25<sup>th</sup> August, 1989. The questionnaire contained five major parts: Part A - included questions to be asked of all persons; Part B - particulars of all females aged 12 years and above; Part C - particulars of all persons aged 10 years and above; Part D - housing particulars; and Part E - details on disabilities.

### **Main Census Results**

3.8. Processing of the data collected in the census is still continuing and is expected to be published before the end of 1991. However, given the need to inform the public about the salient features of the population, it has been deemed necessary to release these provisional results.

3.9. **Population Size** - Table 3.1 provides the provisional population by district. Kenya's population as at mid-night of 24<sup>th</sup>/25<sup>th</sup> August, 1989 was 21.4 million. This is 9 per cent below the projected population of 23.5 million. Two factors account for this difference. First, the projected population was based on 16.1 million which was 0.8 million persons above the 15.3 million enumerated in the 1979 Population Census. Second, the projections assumed moderate declines in fertility and mortality. However, demographic information from the 1989 Kenya Demographic and Health Survey undertaken by the National Council for Population and Development has indicated significant declines in fertility, more than those assumed in the projections. The total fertility rate has declined from 8 children per woman aged 49 years and above in 1979 to 6.7 children in 1989 compared to the projected figure of 7 children.

3.10. **Population Distribution** - The proportionate share of the population by district portrays stability as compared to the percentage distribution recorded in the 1979 Population Census. The only districts which appear to have appreciably gained are Nairobi, Nyandarua, Kilifi, Isiolo, Kajiado, Laikipia, Nakuru, Nandi, Narok, Trans-Nzoia, Uasin Gishu, West Pokot and Bungoma. The major losers have been districts in Central Province (excluding Nyandarua); Kwale and Mombasa in Coast Province; Machakos and Meru in Eastern Province; all districts in North Eastern Province; Kisii, Siaya and South Nyanza in Nyanza Province; Kericho and Turkana in Rift Valley Province and Kakamega district in Western Province. This pattern portrays the migration and fertility trends since 1979. The districts which have registered some gain are those which have continued to attract immigrants, while those that have lost are the ones experiencing excessive out-migration or significant declines in the district's fertility rates.

## 1989 Population Census Provisional Results

Table 3.1

Province\District	Population 1979 (000's)	Provisional Population 1989 (000's)	Intercensal Growth Rate	Province\ District	Population 1979 (000's)	Provisional Population 1989 (000's)	Intercensal Growth Rate
Nairobi	828	1,346	4.86%				
Central							
Kiambu	686	914	2.87%	Kirinyaga	291	388	2.88%
Muranga	648	846	2.67%	Nyandarua	233	349	4.04%
Nyeri	486	613	2.32%	Total	2,344	3,110	2.83%
Coast							
Kilifi	431	611	3.49%	Kwale	288	384	2.88%
Lamu	42	57	3.05%	Mombasa	341	467	3.14%
Taita Taveta	148	202	3.11%	Tana River	92	129	3.38%
				Total	1,342	1,850	3.21%
Eastern							
Embu	263	358	3.08%	Isiolo	43	70	4.87%
Kitui	464	640	3.22%	Machakos	1,023	1,393	3.09%
Marsabit	96	125	2.64%	Meru	830	1,138	3.16%
				Total	2,719	3,724	3.15%
North-Eastern							
Garissa	129	124	-0.40%	Mandera	106	123	1.49%
Wajir	139	125	-1.06%	Total	374	372	-0.05%
Nyanza							
Kisii	870	1,146	2.76%	Kisumu	482	674	3.35%
Siaya	475	643	3.03%	South Nyanza	818	1,095	292%
				Total	2,645	3,558	2.97%
Rift Valley							
Kajiado	149	262	5.64%	Kericho	633	859	3.05%
Laikipia	135	213	4.56%	Nakuru	523	862	5.00%
Nandi	299	440	3.86%	Narok	210	402	6.49%
Baringo	204	286	3.38%	E. Marakwet	149	212	3.53%
Samburu	77	114	3.92%	Trans-Nzoia	260	394	4.16%
Turkana	143	179	2.25%	Uasin Gishu	301	440	3.80%
West Pokot	159	231	3.74%	Total	3,242	4,894	4.12%
Western							
Bungoma	504	731	3.72%	Busia	298	423	3.50%
Kakamega	1,031	1,389	2.98%	Total	1,833	2,543	3.27%
National Totals				15,327	21,397	3.34%	

3.11 **Population Growth Rate** - The provisional figures indicate an inter-censal growth rate of 3.34 per cent during 1979/89 period. It should be noted that this is an average annual growth rate which does not capture recent trends in fertility and mortality and also differential census coverage in 1979 and 1989. The rate of natural increase based on data on fertility and mortality will be estimated after the detailed demographic analysis has been undertaken later in the year.

3.12. **Urbanization** - Table 3.2 gives the provisional population totals for various municipalities, townships and other urban centres. The urban population has increased from 2.3 million in 1979 to 3.8 million in 1989, giving an inter-censal growth rate of 4.8 per cent and a 19 per cent proportionate share of the total population compared to 15 per cent in 1979. The number of centres reporting a population size of 10,000 and above increased from 25 in 1979 to 45 in 1989. Nairobi City continues to have the largest share of the urban population with 36 per cent of the population, similar to 1979. It should be noted that due to intercensal boundary extensions, comparison between past census figures should be done with caution.

### Census of Disabled Persons

3.13. The Census of the Disabled Persons reported about 252,000 (138,000 males and 113,000 females) disabled persons in Kenya. This translates into 2 per cent of the total population. Most of the disabled persons had no education. Table 3.3 gives the distribution of the disabled population by type of disability. The main disabilities relate to vision, hearing, lower limbs and mental retardation.

### Conclusions

3.14. The provisional results presented in this chapter give some direction of the demographic trends which have taken place since 1979. Population movements from densely populated districts to settlement districts and urban areas has continued. Urbanization has increased and more urban centres have sprung up. On the basis of these results, Kenya's population is now estimated at about 23 million.

Distribution of Disabilities by Type of Disability

Table 3.3

Type of Disability	Number		Per cent*	
	Men	women	Men	Women
Vision	32,000	29,000	23.1	25.6
Hearing	28,000	25,000	20.2	22.1
Physical - Lower limb	49,000	37,000	35.4	32.7
- Upper limb	18,000	14,000	13.0	12.4
- Hunch	5,000	5,000	3.6	4.4
Mental Retardation	34,000	26,000	24.6	23.0
Total	166,000	136,000	-	-

\* Based on number of disabled person and, therefore, cannot add to 100 per cent due to multiple disabilities.

Urban Population by Status of Urban Centre, 1979 and 1989

Table 3.2

Urban Centre	1979	1989	Urban Centre	1979	1989
<b>A. Municipalities</b>					
1. Nairobi	827,775	1,346,000	2. Mombasa	341,148	465,000
3. Kisumu*	152,643	185,100	4. Nakuru	92,851	162,800
5. Machakos	84,320	116,100	6. Eldoret*	50,503	104,900
7. Nyeri*	35,753	88,600	8. Meru	70,439	78,100
9. Thika	41,324	57,100	10. Kitale	28,327	53,000
11. Kakamega	32,025	47,300	12. Kisii	29,661	44,000
13. Kericho	29,603	40,000	14. Malindi*	23,275	35,200
15. Bungoma	25,161	29,100	16. Webuye*	17,963	25,700
17. Nanyuki	18,986	24,500	18. Muranga	15,290	21,000
19. Homa Bay*	7,489	20,800	20. Embu	15,986	18,200
21. Nyahururu	11,277	13,900	22. Kerugoya/Kutus	5,776	13,300
23. Busia*	5,266	12,200	24. Voi*	7,397	11,700
25. Kapsabet	2,945	11,500	26. Kitui*	4,402	8,700
27. Kabarnet*	3,621	8,600	28. Kiambu	3,669	4,400
29. Vihiga*	..	4,300	Total**	1,984,875	3,051,100
<b>B. Town Councils</b>					
1. Naivasha	11,491	34,500	2. Garissa	14,076	27,200
3. Mumias		23,900	4. Athi River	9,760	23,000
5. Maralal	10,230	16,900	6. Siaya	4,022	16,800
7. Tala/Kangundo	6,773	12,500	8. Ruiru	1,718	11,800
9. Kilifi*	5,866	11,700	10. Narok	5,690	11,200
11. Nyamira	8,003	10,100	12. Olkalou	1,911	8,400
13. Migori	6,236	7,400	14. Kikuyu	3,961	5,900
15. Kimilili	2,143	5,900	16. Eldama Ravine	3,941	5,400
17. Karatina	2,980	5,100	18. Othaya	2,159	4,500
19. Iten	769	4,400	20. Maua	1,805	3,700
21. Chuka	1,361	3,600	22. Oyugis	1,109	3,400
23. Keroka	958	2,300	24. Runyenjes	1,566	2,000
25. Limuru	1,728	1 600	Total**	110,256	263,200
<b>C. Urban Councils</b>					
1. Maragwa*	6,980	30,600	2. Karuri		14,800
3. Molo	5,350	10,200	4. Ahero	1,763	8,800
5. Kapenguria	2,752	8,300	6. Mariakani	2,766	6,900
7. Sotik	1,335	5,200	8. Makuyu*	2,128	4,700
9. Kehancha		3,500	10. Londiani	4,114	3,300
11. Luanda	3,594	3,300	12. Bondo	702	3,100
13. Kendu-Bay	2,254	2,700	14. Yala	855	2,400
15. Mtito-Andei	2,065	1,500	16. Nandi Hills	1,419	1,300
17. Kangema	..	1,400	18. Ukwala	736	1,100
19. Sirisia		1,000	20. Ogendero	189	900
21. Kandara	..	600	22. Kapsakwony		600
			Total**	39,002	116,200

Table 3.2 contd.

Urban Centre	1979	1989	Urban Centre	1979	1989
D. Trading Centres and Other Centres					
1. Wajir	6,384	19,200	2. Isiolo	11,331	15,400
3. Gilgil	9,103	14,000	4. Elburgon	8,701	12,000
5. Marsabit	8,739	10,900	6. Taveta	1,812	10,200
7. Ngong	4,004	9,300	8. Lamu	8,394	8,900
9. Njoro	5,803	8,700	10. Msambweni	6,117	8,200
11. Muhoroni	5,452	7,800	12. Hola	5,352	7,800
13. Mandera	13,126	6,900	14. Moyale	7,478	6,900
15. Mwingi	2,303	6,600	16. Ongata-Rongai		5,800
17. Kajiado	3,524	5,700	18. Korrr	1,659	5,200
19. Maji Mazuri	3,863	5,100	20. Merti	1,383	5,000
21. Nkubu	2,514	4,700	22. Namanga	2,017	4,400
23. Awendo		4,100	24. Turbo		4,100
25. Loitokitok	2,071	4,000	26. Kargi	2,060	4,000
27. Githunguri	2,517	3,700	28. Sololo	3,507	3,700
29. Wamba	2,256	3,500	30. Kwale	2,200	3,500
31. Nyabikaya		3,500	32. Garsen	1,007	3,200
33. Witu	2,288	3,200	34. Kilgoris	1,840	3,100
35. Baragoi		3,100	36. Mambrui	1,457	3,000
37. Maseno	1,639	2,800	38. Magadi	2,563	2,800
39. Sagana	2,098	2,800	40. Moi's Bridge	1,038	2,800
41. Mogotio	2,216	2,800	42. Marigat	987	2,700
43. Chaptais		2,700	44. Makutano	2,121	2,600
45. Bute	8,646	2,500	46. Lungalunga	1,671	2,500
47. Mwalie		2,500	48. Rumuruti	1,487	2,300
49. Kipkelion	3,712	2,300	50. Wundanyi	389	2,300
51. Butere	1,044	2,300	52. Kibwezi	1,324	2,200
53. Watamu	2,188	2,100	54. Burnt Forest		2,100
55. Modogashi		2,100	56. Nambale		2,000
57. North Horr	1,325	2,000	58. Garbatula		1,800
59. Lolgorian		1,600	60. Sultan Hamud	1,360	1,500
61. Mairo Inya		1,500	62. Rongo		1,300
63. Dadaab	1,719	1,200	64. Chepareria		1,200
65. Soy		1,100	66. Baricho	"	900
67. Tambach	654	900	68. Kimunye		800
69. Oljororok	"	600	70. North Enkare		500
71. Kagumo		500	72. Kianyaga		400
			Total**	178,443	305,400
TOTAL**					
				2,312,576	3,735,900

Centres whose boundaries were extended between 1979 and 1989.

\*\* 1979 Census totals are exclusive of the missing values.

### Overview

The year 1990 was of mixed performance in terms of employment and inflationary tendencies. While an improvement was recorded in the employment scenario, inflationary pressures worsened. The economy generated a total of 91,900 new jobs, representing a 5.1 per cent increase compared with the 4.4 per cent recorded in 1989. The informal sector, alone grew by an impressive 13.6 per cent, creating 53,100 new jobs and accounting for 57.8 per cent of the new jobs. Average nominal wages recorded an increase of 9.1 per cent but in real terms, a decline of 3.1 per cent was evident. Inflationary pressures were accelerated by the Gulf crisis and the resultant sharp increase in domestic oil price, the persistent depreciation of the Kenya Shilling and the continuous upward revision of both producer and consumer prices of basic food items. The inflation rate, as measured by the Nairobi consumer price indices, increased to 12.6 per cent compared with 10.5 per cent recorded in 1989.

### Employment

4.2. Table 4.1 shows that in 1990, an estimated 1.9 million persons were engaged in both the modern and informal sectors of the economy. A total of 91,900 new jobs, representing 5.1 per cent increase over 1989, were created. Of these, the informal sector, which has immense potential for job creation, accounted for 57.8 per cent by generating a total of 53,100 new jobs. Out of the total persons engaged, 443,100 or 23.3 per cent were in the informal sector. Therefore, employment in the sector rose by 13.6 per cent which compares well with a 12.7 per cent growth rate recorded in 1989.

• PERSONS ENGAGED: RECORDED TOTALS, JUNE, 1987 - 1990

Table 4.1

	'000's			
	1987	1988	1989	1990*
Modern Establishments - Urban and Rural Areas:				
Wage Employees** .. .	1,285.4	1,341.3	1,372.8	1,407.7
Self-employed and unpaid family workers ..	38.1	43.9	44.3	48.2
Informal Sector .. ..	312.1	346.2	390.0	443.1
<b>TOTAL</b>	<b>1,635.6</b>	<b>1,731.4</b>	<b>1,807.1</b>	<b>1,899.0</b>

\* Provisional.

\*\* Revised series.

4.3. **Modern Sector** - Modern sector wage employment by industry and sector presented in Table 4.2 shows that in line with Government policy, which emphasises privatisation of the economy, employment in the private sector recorded a significant growth rate of 3.9 per cent in 1990. Agriculture, whose performance in terms of employment declined over the previous three years, showed marked improvement by recording a growth of 3.7 per cent, primarily due to improved performance of small holdings. Electricity and water, although employing a very small number, recorded the highest growth rate of 150.0 per cent. This growth may be attributed to the big water projects under construction. Building and construction industry and manufacturing also performed well, expanding their employment by 10.2 per cent and 3.0 per cent, respectively. Resumption of operations by the Kenya Meat Commission, the rehabilitation of Pan-African Vegetable Processing Company, improved performance in both textiles and grain milling and extensions by Tetrapak contributed to the growth in employment in manufacturing. The building of tenant purchase houses in various towns, rehabilitation of Kabete-Limuru road were some of the contributors to increased employment in building and construction. Employment rate in the public sector, in contrast, slowed down from

3.8 per cent in 1989 to 1.2 per cent in 1990 with decreases registered in agriculture and forestry, electricity and water, building and construction, transport and communications, and finance, insurance, real estate and business services. The laying off of casual workers in the Nyayo Tea Zones Authority and by Kenya Airways, in an effort to streamline their operations, the non-replacement of retirees by Kenya Railways Corporation and other parastatals, have all contributed to the slowing down of expansion in public sector employment.

#### WAGE EMPLOYMENT BY INDUSTRY AND SECTOR\*, 1987-1990

*Table 4.2* '000's

	1987	1988	1989	1990**
<b>PRIVATE SECTOR:</b>				
Agriculture and Forestry	198.8	198.4	195.1	202.4
Mining and Quarrying	6.0	7.6	7.8	7.9
Manufacturing	138.2	141.7	141.8	146.1
Electricity and Water	0.2	0.2	0.2	0.5
Building and Construction	26.1	31.1	33.4	36.8
Wholesale and Retail Trade, Restaurants and Hotels	97.1	98.3	101.4	104.6
Transport and Communications	19.7	23.2	24.5	25.9
Finance, Insurance, Real Estate and Business Services	41.6	44.2	45.3	47.1
Community, Social and Personal Services	130.3	137.1	137.7	142.5
<b>TOTAL PRIVATE SECTOR</b>	<b>658.0</b>	<b>681.8</b>	<b>687.2</b>	<b>713.8</b>
<b>PUBLIC SECTOR:</b>				
Agriculture and Forestry	54.2	66.7	66.7	65.1
Mining and Quarrying	0.5	0.6	0.6	0.7
Manufacturing	36.8	39.1	41.0	41.6
Electricity and Water	19.0	20.2	22.2	21.5
Building and Construction	32.1	32.6	35.3	34.6
Wholesale and Retail Trade, Restaurants and Hotels	8.2	8.4	8.9	9.3
Transport and Communications	44.7	50.4	51.3	48.3
Finance, Insurance, Real Estate and Business Services	16.3	17.1	18.4	18.2
Community, Social and Personal Services	415.6	425.3	441.2	454.6
<b>TOTAL PUBLIC SECTOR</b>	<b>627.4</b>	<b>660.4</b>	<b>685.6</b>	<b>693.9</b>

\* Revised series.

\*\* Provisional.

4.4. The Government continues to pursue the policy of reducing the size of public sector as reflected by a general decline in employment in parastatals. Employment by the Kenya Power and Lighting Company declined marginally, resulting in a slow-down in rate of growth of employment in electricity and water industry sector by 3.2 per cent, against the 9.9 per cent increase recorded in the previous year. Kenya Airways reduced its work force as part of its restructuring programme. Employment in transport and communications sub-sector declined by 5.9 per cent in 1990 compared to the 1.8 per cent growth recorded in 1989. The public sector's contribution to employment is gradually declining and its share of total employment declined to 49.3 per cent in 1990 compared with 49.9 per cent in 1989.

4.5. A breakdown of employment in various public sector domains is presented in Table 4.3. Central Government, the largest public sector employer, decreased its employment by 2.8 per cent. This is mainly due to the changes in the status of Kenyatta National Hospital and Kenya Wildlife Services from Government departments to parastatals which partly explains also the 2.9 per cent growth in employment by parastatals. The Teachers Service Commission, (TSC), the second major employer, expanded by 4.4 per cent required to cater for the increasing enrolment in primary and secondary schools. Local Government increased its employment significantly by 7.2 per cent during the period under review. This was attributable to the upgrading of many urban and town centres and the creation of a new district, Nyamira, which required more employees. Overall, the public sector created 8,300 new jobs.

#### WAGE EMPLOYMENT IN THE PUBLIC SECTOR, 1987 - 1990

Table 4.3

'000's

	1987	1988	1989	1990*	Annual Percentage Change 1990/1989
Central Government	274.4	267.2	277.4	269.7	-2.8
Teachers Service Commission .. ..	173.0	185.1	195.1	203.6	4.4
Parastatal Bodies**	97.3	108.2	110.9	114.1	2.9
Majority Control by the Public Sector	39.2	49.3	53.9	54.7	1.5
Local Government	43.5	50.6	48.3	51.8	7.2
TOTAL .. ..	627.4	660.4	685.6	693.9	1.2

\* Provisional.

\*\*Includes Kenya Railways Corporation, Kenya Ports Authority, Kenya Posts and Telecommunications, Kenya Airways Limited, etc. The series has been revised.

4.6. Table 4.4 sets out data on modern sector wage employment by province. For the four years shown, Nairobi has continued to account for the highest proportion of the urban work force of nearly 28 per cent. Its employment growth rate increased from a minimal 0.3 per cent in 1989 to 4.0 per cent in 1990, mainly as a result of good performance in building and construction and community, social and personal services. Western province recorded the highest growth rate of 7.6 per cent, a relatively fast growth compared to 1989 growth of 2.5 per cent. Most of this growth occurred in manufacturing. Coast province recorded a marginal increase of only 0.5 per cent, in contrast to 1989 when it had the highest growth rate.

#### WAGE EMPLOYMENT BY PROVINCE 1987 - 1990

Table 4.4

'000's

Province	1987	1988	1989	1990**	Percentage Change 1990/1989
Nairobi	348.6	377.7	378.8	393.9	4.0
Coast	159.3	160.6	170.2	171.0	0.5
North Eastern	11.3	12.1	12.2	12.4	1.6
Eastern	104.2	108.9	111.6	114.0	2.2
Central	188.1	193.7	195.4	199.9	2.3
Rift Valley	277.4	284.1	291.1	295.3	1.4
Nyanza	119.0	124.6	131.9	133.4	1.1
Western	77.5	79.6	81.6	87.8	7.6
TOTAL	1,285.4	1,341.3	1,372.8	1,407.7	2.5

\* Revised series

\*\* Provisional



WAGE EMPLOYMENT BY MAJOR TOWNS AND SELECTED INDUSTRIES\*, 1985 AND 1990

Table 4.5

'000's

Towns	Manufacturing		Building and Construction		Trade, Restaurants, and Hotels		Transport and Communications		Finance, Insurance, Real Estate and Business Services		Community, Social and Personal Services		Total Six Industries	
	1985	1990**	1985	1990**	1985	1990**	1985	1990**	1985	1990**	1985	1990**	1985	1990**
Nairobi	61.2	68.2	27.6	39.4	42.1	46.3	23.1	28.2	36.8	45.0	114.5	140.0	305.3	367.1
Mombasa	19.9	24.0	4.2	5.6	12.8	16.3	20.9	23.9	7.4	10.7	31.2	36.1	96.4	116.6
Kisumu	3.5	5.0	0.9	2.7	2.0	2.7	1.4	1.5	1.1	2.1	11.2	16.1	20.1	30.1
Nakuru	5.6	6.2	1.2	2.2	3.0	3.7	1.3	1.2	1.0	1.8	8.4	8.7	20.5	23.8
Thika	9.4	10.4	0.4	0.4	1.3	1.7	0.2	0.2	0.5	1.1	3.1	3.9	14.9	17.7
Eldoret	7.4	8.9	0.4	1.7	1.3	2.4	0.6	0.9	1.2	1.6	4.7	3.1	15.6	18.6
Malindi	0.2	0.3	0.1	0.5	1.1	1.9	0.2	0.3	0.4	0.4	3.1	2.2	5.1	5.6
Kericho	2.4	2.9	0.4	0.9	0.4	0.9	0.1	0.2	0.2	0.3	3.2	4.6	6.7	9.8
Others	14.0	18.7	6.7	10.1	9.4	11.8	3.8	4.9	2.9	3.9	70.2	63.7	107.0	113.1
TOTAL ..	123.6	144.6	41.9	63.5	73.4	87.7	51.6	61.3	51.5	66.9	249.6	278.4	591.6	702.4

Revised series

\*\* Provisional.

4.7. Wage employment for major towns and six dominant industries is presented in Table 4.5. Wage employment increased in all major towns, with the lowest increases of 2.9 per cent and 3.9 per cent recorded for Mombasa and Thika, respectively. Employment in manufacturing increased significantly in Kisumu and Kericho. Building and construction expanded in major towns and the industry recorded significant growth in wage employment of 13.8 per cent, creating a total of 7,700 new jobs. Trade, restaurants and hotels industry recorded a growth rate of 3.7 per cent with majority of the employment being in Nairobi. Transport and communications industry performed well only in Nairobi and Mombasa. The services industries performed particularly well in Kenya's major urban centres of Nairobi, Mombasa, Kisumu and Thika.

4.8. Wage employment by industry and gender is shown in Table 4.6. Female participation has remained low despite a modest growth in its proportion of total employment rising only from 20.8 per cent in 1989 to 21.3 per cent in 1990. However, female wage employment increased faster by 5.0 per cent compared with 1.9 per cent for males. More than 50 per cent of females were employed in community and social services. Employment of women decreased substantially in industries predominantly occupied by men. Mining and quarrying, building and construction, electricity and water and agriculture and forestry recorded declines in growth rates of female employment by 5.9 per cent, 4.6 per cent, 3.1 per cent and 0.2 per cent, respectively. Significantly large increases were recorded in transport and communications, manufacturing, trade, restaurants and hotels and education services of 16.9 per cent, 11.7 per cent, 13.9 per cent and 10.7 per cent, respectively. Education took most of new female employees in absolute figures.

WAGE EMPLOYMENT BY INDUSTRY AND SEX\*, 1989 AND 1990

Table 4.6

'000's

INDUSTRY	MALES		FEMALES		TOTAL	
	1989	1990**	1989	1990**	1989	1990**
Agriculture and Forestry	198.3	204.0	63.5	63.4	261.8	267.4
Mining and Quarrying	6.8	7.0	1.7	1.6	8.5	8.6
Manufacturing	164.8	167.6	18.0	20.1	182.8	187.7
Electricity and Water	19.2	18.9	3.2	3.1	22.4	22.0
Building and Construction	64.4	67.3	4.3	4.1	68.7	71.4
Trade, Restaurants and Hotels	93.8	95.2	16.5	18.8	110.3	114.0
Transport and Communications	66.9	63.8	8.9	10.4	75.8	74.2
Finance, Insurance, Real Estate and Business Services	50.5	51.2	13.1	14.1	63.6	65.3
Community, Social and Personal Services-						
Public Administration	142.7	145.1	39.2	39.2	181.9	184.3
Education Services	160.2	165.5	64.2	71.1	224.4	236.6
Domestic Services	49.8	50.9	19.3	19.9	69.1	70.8
Other Services	69.5	71.0	34.0	34.4	103.5	105.4
TOTAL	1,086.9	1,107.5	285.9	300.2	1,372.8	1,407.7
Of which: Regular	931.4	963.4	243.5	256.6	1,174.9	1,220.0
Casual	155.5	144.1	42.4	43.6	197.9	187.7

\* Revised series

\*\* Provisional

4.9 Male wage employment increased modestly by 1.9 per cent but accounted for 78.7 Percent of the total. Almost three quarters of the employed males were engaged in agriculture and forestry, manufacturing and community, social and personal services. Education services and building and construction recorded significant increases in male employment but agriculture and education recorded the largest creation of new jobs in absolute terms. Declines in male wage employment of 4.6 per cent and 1.6 per cent, were recorded in transport and communications and electricity and water, respectively. Agriculture and forestry recorded a 2.9 per cent increase in male employment, while there was slight decrease of female employment in the industry. The remaining industries recorded marginal growths in male employment

### Wage Earnings in the Modern Sector

4.10. Details of total wage earnings by industry and sector are presented in Table 4.7. The overall nominal wage bill registered a growth rate of 11.8 per cent in 1990, almost equal to the 11.9 per cent reported in 1989. In spite of the marginal growth of employment in public sector, its wage bill rose by 9.5 per cent, slightly lower than the 11.0 per cent recorded in 1989. This was mainly attributable to the salary increases of civil servants in the lower cadre by between 8 and 10 per cent. The public sector wage bill of the building and construction industry increased significantly by 18.5 per cent whilst that of finance, insurance, real estate and business services rose by 17.8 per cent. In the private sector, significant increases of 10.6 per cent, 18.5 per cent and 17.8 per cent were recorded for the electricity and water, building and construction industries and finance,

ESTIMATED TOTAL WAGE PAYMENTS BY INDUSTRY AND SECTOR\*, 1987-1990

	1987	1988	1989	1990**
<b>PRIVATE SECTOR:</b>				
Agriculture and Forestry .. ..	83.0	91.9	99.5	115.4
Mining and Quarrying .. ..	5.4	7.6	8.9	9.5
Manufacturing	198.9	218.2	243.4	276.3
Electricity and Water .. ..	0.3	0.3	0.4	1.0
Building and Construction	27.6	37.0	44.5	52.1
Wholesale and Retail Trade, Restaurants and Hotels	171.1	197.2	227.5	260.0
Transport and Communications ..	37.7	51.3	62.6	72.7
Finance, Insurance .Real Estate and Business Services	122.0	132.5	150.7	174.4
Community, Social and Personal Sen/ices	147.1	156.5	170.0	191.4
<b>TOTAL PRIVATE SECTOR</b>	<b>793.1</b>	<b>892.5</b>	<b>1,007.5</b>	<b>1,152.8</b>
<b>PUBLIC SECTOR:</b>				
Agriculture and Forestry .. ..	37.4	55.3	56.6	59.5
Mining and Quarrying .. ..	1.2	1.5	1.7	1.8
Manufacturing	46.5	55.9	63.4	68.8
Electricity and Water .. ..	35.9	42.2	53.0	58.6
Building and Construction	28.0	30.3	37.8	44.8
Wholesale and Retail Trade, Restaurants and Hotels	15.6	17.0	19.5	22.0
Transport and Communications ..	85.6	109.9	117.6	118.4
Finance, Insurance .Real Estate and Business Services	57.4	67.7	76.4	90.0
Community, Social and Personal Services	497.0	611.4	673.8	740.1
<b>TOTAL PUBLIC SECTOR</b>	<b>804.8</b>	<b>991.2</b>	<b>1,099.8</b>	<b>1,204.0</b>
<b>TOTAL PUBLIC AND PRIVATE</b>	<b>1,597.9</b>	<b>1,883.7</b>	<b>2,107.3</b>	<b>2,356.8</b>

\* *Revised Series*

\*\* *Provisional.*

insurance, real estate and business services, respectively. Increases in electricity and water enhanced activity in rural electrification and provision of potable water to most rural households. Agriculture and forestry in both sectors improved remarkably compared to the previous year, mainly due to the improved performance of tea and horticulture. In particular, the private sector agriculture and forestry wage bill rose by 16.0 per cent.

4.11. Total wage payments by the public sector is summarised in Table 4.8. The growth rate of public sector wage payments moved from 23.2 per cent in 1988 and 11.0 per cent in 1989 to 9.5 per cent in 1990. Expansion of employment and increased allowances raised Local Government wage bill by 20.6 per cent, compared to 5.9 per cent growth recorded in 1989. Central Government wage payments increased marginally by 3.8 per cent. The wage bill of parastatals and the Teachers Service Commission recorded increases of 14.8 per cent and 13.5 per cent, respectively.

TOTAL WAGE PAYMENTS IN THE PUBLIC SECTOR\*, 1987 - 1990

<i>Table 4.8</i>	<i>K£million</i>			
	1987	1988	1989	1990**
Central Government	353.7	455.4	488.3	506.7
Teachers Service Commission ..	196.5	222.0	238.2	270.4
Parastatal Bodies***	147.2	182.4	211.8	243.2
Majority Control by the Public Sector	58.1	74.2	100.9	110.6
Local Government	49.3	57.2	60.6	73.1
TOTAL	804.8	991.2	1,099.8	1,204.0

\* Revised

\*\* Provisional.

\*\*\* Includes Kenya Railways Corporation, Kenya Airways Ltd., Kenya Ports Authority, Kenya Posts and Telecommunication Corporation, etc. The series has been revised.

4.12. Table 4.9 sets out average nominal wage earnings per employee by industry and sector. An overall increase of 9.1 per cent was recorded for 1990 compared with 9.3 per cent in 1989. Private sector employees benefitted by a 10.2 per cent increase compared with 8.1 per cent for those in the public sector. Average earnings in the private sector increased at a faster rate than in the public sector for all industries except electricity and water, building and construction and finance, insurance, real estate and business services.

4.13. Changes in employment and earnings by sector and industry are presented in Table 4.10. Between 1985 and 1990, employment in both public and private sectors grew almost at the same pace. In the private sector, mining and quarrying recorded a substantial growth in employment of 146.9 per cent; its counterpart in the public sector recorded a decline of 56.3 per cent, mainly due to the contraction of employment by the Kenya Fluorspar Company. Public sector employment in trade, restaurants and hotels recorded the largest expansion of 57.6 per cent. Over the four year period, average earnings in the private sector increased substantially in the mining and quarrying industry, whilst, for the public sector, electricity and water recorded the highest increases. Within the public sector, the highest growth in employment was recorded by Teachers Service Commission. Central Government, having the lowest growth in employment, in contrast, recorded the highest growth in average earnings. Majority control by the Public sector, too, recorded above average growth in average earnings.

Table 4.9

K£ per annum

	1987	1988	1989	1990**
<b>PRIVATE SECTOR:</b>				
Agriculture and Forestry	417.5	463.2	510.0	570.3
Mining and Quarrying	900.0	1,001.5	1,137.8	1,186.8
Manufacturing	1,439.2	1,546.5	1,717.0	1,890.8
Electricity and Water	1,500.0	1,537.8	1,790.2	1,987.1
Building and Construction	1,057.5	1,189.4	1,331.8	1,414.9
Trade, Restaurants and Hotels	1,762.1	2,011.9	2,242.5	2,484.9
Transport and Communications	1,913.7	2,212.6	2,557.8	2,856.5
Finance, Insurance .Real Estate and Business Services	2,932.7	2,996.7	3,326.3	3,703.6
Community, Social and Personal Services	1,128.9	1,141.3	1,234.6	1,343.2
<b>TOTAL PRIVATE SECTOR</b>	<b>1,205.3</b>	<b>1,310.7</b>	<b>1,466.0</b>	<b>1,615.8</b>
<b>PUBLIC SECTOR:</b>				
Agriculture and Forestry	688.2	830.5	848.8	913.9
Mining and Quarrying	2,322.2	2,335.2	2,573.4	2,626.3
Manufacturing	1,261.4	1,429.9	1,545.4	1,656.0
Electricity and Water	1,870.1	2,088.0	2,388.6	2,724.4
Building and Construction	874.2	929.3	1,070.8	1,296.4
Trade, Restaurants and Hotels	1,892.8	2,024.5	2,207.9	2,351.7
Transport and Communications	1,928.2	2,180.2	2,291.7	2,430.5
Finance, Insurance .Real Estate and Business Services	3,517.3	3,951.3	4,162.9	4,957.3
Community, Social and Personal Services	1,239.0	1,437.9	1,527.2	1,627.0
<b>TOTAL PUBLIC SECTOR</b>	<b>1,303.8</b>	<b>1,501.1</b>	<b>1,604.3</b>	<b>1,734.3</b>
<b>TOTAL PRIVATE AND PUBLIC SECTOR</b>	<b>1,243.1</b>	<b>1,404.4</b>	<b>1,535.0</b>	<b>1,674.2</b>
<b>MEMORANDUM ITEMS IN PUBLIC SECTOR:</b>				
Central Government	1,289.2	1,704.6	1,760.0	1,879.0
Teachers Service Commission	1,135.9	1,199.4	1,221.0	1,328.2
Parastatal Bodies**	1,659.2	1,685.3	1,910.0	2,131.7
Majority Control by the Public Sector	1,479.8	1,506.2	1,872.7	2,021.3
Local Government	1,131.8	1,130.7	1,256.1	1,412.7
<b>TOTAL PUBLIC SECTOR</b>	<b>1,303.8</b>	<b>1,501.1</b>	<b>1,604.3</b>	<b>1,734.3</b>

\* Revised Series

\*\*\* Provisional.

*Includes Kenya Railways Corporation, Kenya Ports Authority, Kenya Posts And Telecommunications Corporation, Kenya Airways Limited, etc.*

Table 4.10

	EMPLOYMENT		AVERAGE EARNINGS	
	1990*/1985	1990*/1989	1990*/1985	1990*/1989
PRIVATE SECTOR:				
Agriculture and Forestry	8.8	3.7	72.3	11.8
Mining and Quarrying	146.9	1.3	137.8	4.3
Manufacturing	18.2	3.0	62.2	10.1
Electricity and Water	.	150.0		11.0
Building and Construction	42.6	10.2	51.4	6.2
Trade, Restaurants and Hotels	24.8	3.2	71.1	10.8
Transport and Communications	26.3	5.7	78.2	11.7
Finance, Insurance .Real Estate and Business Services	17.5	4.0	65.1	11.3
Community, Social and Personal Services	22.0	3.5	65.7	8.8
TOTAL PRIVATE SECTOR	19.0	3.9	68.5	10.2
PUBLIC SECTOR:				
Agriculture and Forestry	18.6	-2.4	65.3	7.7
Mining and Quarrying	-56.3	16.7	26.1	2.1
Manufacturing	18.2	1.5	47.0	7.2
Electricity and Water	21.5	-3.2	107.3	14.1
Building and Construction	43.6	-2.0	33.6	2.0
Trade, Restaurants and Hotels	57.6	4.5	44.8	6.5
Transport and Communications	37.2	-5.8	47.7	6.1
Finance, Insurance .Real Estate and Business Services	36.0	-1.1	69.4	19.1
Community, Social and Personal Services	17.6	3.0	46.1	6.6
TOTAL PUBLIC SECTOR	20.8	1.2	51.6	8.1
TOTAL PUBLIC AND PRIVATE	19.9	2.5	59.6	9.1
MEMORANDUM ITEMS IN PUBLIC SECTOR:				
Central Government	7.0	-2.8	71.4	6.8
Teacher's Service Commission	34.8	4.4	35.3	8.8
Parastatal Bodies**	26.2	2.9	35.4	11.6
Majority Control by the Public Sector	53.7	1.5	56.3	7.9
Local government	13.6	7.2	37.6	12.5
TOTAL PUBLIC SECTOR	20.8	1.2	51.6	8.1

\*Provisional.

\*\*Includes Kenya Railways Corporation, Kenya Ports Authority, Kenya Posts And Telecommunications Corporation, Kenya Airways Limited, etc.

4.14. Tables 4.11 and 4.12 show real average earnings per employee. The real earnings of workers have continued to deteriorate due to the persistent inflationary pressures which have been further exacerbated by the Gulf crisis. Whilst real average earnings were eroded by 1.2 per cent in 1989, in 1990 they declined further by 3.1 per cent, 4.0 per cent in public sector and 2.2 per cent in the private sector. Employees in every industry suffered a loss in real earnings except those in public sector building and construction, finance, insurance, real estate and business services; and electricity and water which grew by 7.5 Per cent, 5.7 Per cent and 1.3 Per cent respectively. Mining and quarrying in public sector recorded the highest decline of 9.4 per cent in real earnings. In general, real earnings were generally higher in the public sector for all industries except manufacturing, building and construction, trade, restaurants and hotels and transport and communications. Central Government recorded the highest decline of 5.2 per cent, in real earnings. Paragraph 4.24 below shows that the inflation rate may be understated by as much as 6 percentage points, and therefore, the average real earnings declined by a larger proportion, than the 3.1 per cent reported in Table 4.12.

ESTIMATED REAL AVERAGE WAGE EARNINGS\* PER EMPLOYEE, 1987- 1990

<i>Table 4.11</i>	<i>K£ per annum</i>			
	1987	1988	1989	1990**
<b>PRIVATE SECTOR:</b>				
Agriculture and Forestry .. ..	110.0	110.3	109.8	109.0
Mining and Quarrying .. ..	237.2	238.5	245.0	226.9
Manufacturing	379.2	368.2	369.7	361.5
Electricity and Water .. ..	390.0	366.1	385.5	379.9
Building and Construction	275.0	283.2	286.8	270.5
Trade, Restaurants and Hotels ..	464.3	479.0	482.9	475.1
Transport and Communications ..	504.3	526.8	550.8	546.2
Finance, Insurance, Real Estate and Business Services	772.8	713.5	716.3	708.1
Community, Social and Personal Services	297.5	271.7	265.8	256.8
<b>TOTAL PRIVATE SECTOR .. ..</b>	<b>317.6</b>	<b>312.1</b>	<b>315.7</b>	<b>308.9</b>
<b>PUBLIC SECTOR:</b>				
Agriculture and Forestry .. ..	181.3	197.7	182.8	174.7
Mining and Quarrying .. ..	611.9	556.0	554.1	502.2
Manufacturing	332.4	340.5	332.8	316.6
Electricity and Water .. ..	492.8	497.1	514.3	520.9
Building and Construction	230.4	221.3	230.6	247.9
Trade, Restaurants and Hotels ..	498.8	482.0	475.4	449.7
Transport and Communications ..	508.1	519.1	493.5	464.7
Finance, Insurance, Real Estate and Business Services	926.8	940.8	896.4	947.9
Community, Social and Personal Services	326.5	342.4	328.9	311.3
<b>TOTAL PUBLIC SECTOR .. ..</b>	<b>343.6</b>	<b>357.4</b>	<b>345.5</b>	<b>331.6</b>
<b>TOTAL PRIVATE AND PUBLIC</b>	<b>327.6</b>	<b>334.4</b>	<b>330.5</b>	<b>320.1</b>
<b>MEMORANDUM ITEMS IN PUBLIC SECTOR:</b>				
Central Government	339.7	405.9	379.0	359.3
Teacher's Service Commission ..	299.3	285.6	262.9	254.0
Parastatal Bodies***	437.2	401.3	411.3	407.6
Majority Control by the Public Sector	389.9	358.6	403.3	386.5
local government	298.2	269.2	270.5	270.1
<b>TOTAL PUBLIC SECTOR</b>	<b>343.6</b>	<b>357.4</b>	<b>345.5</b>	<b>331.6</b>

Average current earnings adjusted for the rise in consumer prices.

*consumer price indices, are based on January-June, 1975. Revised Series.*

*\*\*Provisional.*

*\*\*\*Includes Kenya Railways Corporation, Kenya Ports Authority, Kenya Posts and Telecommunications Corporation, Kenya Airways Limited etc.*

Table 4.12

Percentage

	1987	1988	1989	1990*
Wage employment	3.9	4.1	2.4	2.5
Average earnings at current prices .. ..	7.1	13.0	9.3	9.1
Consumer prices**	7.1	10.7	10.5	12.6
Real average earnings	0.1	2.1	-1.2	-3.1

\*Provisional.

\*\*Percentage increases are derived from a composite index of Nairobi lower, middle and upper income indices calculated as an average of the indices for all 12 months.

### Wage Awards

4.15. The lower cadre in the civil service were awarded salary increases which were effected as from 1st July, 1990. During the year, two Presidential Committees were appointed - Presidential Committee on Employment to look into the ways and means of generating increased employment and the Presidential Committee on Civil Service Salaries Review to look into salaries and other issues relating to civil servants' remuneration. Through collective bargaining, several salary awards were also given.

### Informal Sector

4.16. Available data on the informal sector reveals that the sector has immense potential for job creation. Employment in the sector grew by a significant 13.6 per cent in 1990 compared with 12.6 per cent in 1989. In recognition of the sector's potential for creation of new employment, the Government has set aside land for the establishment and expansion of the sector. Three new open-air markets were constructed in Nairobi and 'Nyayo Jua Kali' sheds, have been constructed at various urban centres. In addition, the rural electrification programme coupled with expanded credit facilities have stimulated the growth of the sector.

4.17. The number of persons engaged in the sector by province is presented in Table 4.13. Significant growth in employment was recorded for Nairobi, Central and Rift Valley Provinces, with the highest growth of 19.6 per cent being recorded in Central Province followed by 18.9 per cent in Nairobi. A slightly higher growth rate was recorded for the urban informal sector.

INFORMAL SECTOR, 1987-1990  
NUMBER OF PERSONS ENGAGED BY ACTIVITY

Table 4.13

Number

Province	1987	1988	1989	1990
Nairobi	75,279	83,319	92,828	110,347
Central	49,855	56,486	63,836	76,354
Nyanza	39,147	43,007	48,603	51,641
Western	21,323	23,373	26,414	28,301
Rift Valley	57,269	63,070	71,277	82,681
Eastern	32,630	35,924	40,598	44,069
Coast	36,656	41,055	46,397	49,711
TOTAL	312,159	346,234	389,953	443,104
Of which				
Urban	202,125	223,056	251,221	286,337
Rural	110,034	123,178	138,732	156,767



4.18. Table 4.14 depicts sectoral contributions to employment by the informal sector. The distribution and services industries, together accounted for 78.2 per cent of the total employment in the sector. These industries require very little initial capital and, therefore, have attracted a large number of operators. The construction activity, though employing a very small proportion of the total, recorded over a three-fold increase in employment. Similarly, manufacturing activity increased its proportion of the total from 12.6 per cent in 1989 to 19.7 per cent in 1990.

INFORMAL SECTOR, 1987-1990  
NUMBER OF PERSONS ENGAGED BY ACTIVITY

*Table 4.14*

Activity	1987	1988	1989	Number 1990
Manufacturing	58,424	66,096	74,441	89,109
Construction	38	40	49	172
Wholesale and Retail Trade, Hotels and Restaurants	200,714	219,131	246,799	271,959
Transport and Communications*	5,076	5,540	6,239	7,280
Community, Social and Personal Services .. ..	47,907	55,427	62,425	74,584
TOTAL	312,159	346,234	389,953	443,104

\* Includes mainly support services to transport activity

### Consumer Prices

4.19. Inflation rate, as measured by the Nairobi consumer price indices, is presented in Table 4.15. The inflation rate, after a record low in 1986, has been gradually rising but stabilised in 1988 and 1989. In 1990, it was recorded as 12.6 per cent. The Gulf crisis and its subsequent effect on prices has further accelerated the inflation rate. By March, 1991, inflation rate was recorded as 17.2 per cent. The first quarter of the year was characterised by an increase in prices of basic food items such as sugar, milk, tea, rice, and postal and telecommunication charges.

PERCENTAGE INCREASES IN NAIROBI CONSUMER PRICES\*, 1987/86-1990/89

*Table 4.15*

Income Group	1987/1986	1988/1987	1989/1988	1990/1989
Nairobi Lower Income Index .. ..	5.1	8.3	9.8	11.8
Nairobi Middle Income Index .. ..	8.3	12.0	10.9	12.9
Nairobi Upper Income Index .. ..	7.8	11.8	10.9	13.2
Average Increases for 12 Months ..	7.1	10.7	10.5	12.6

*\*For purpose of the index:*

1. The lower income group comprises households with monthly earnings below Ksh. 699.
2. The middle income group comprises households with monthly earnings, between Ksh. 700 - Ksh. 2,499.
3. The upper income group comprises households with monthly earnings of Ksh. 2,500 and above.

4.20. Higher inflationary pressures were partly due to the sharp increase in domestic oil prices in September, a direct effect of the Gulf crisis. In particular, prices of petroleum products increased twice over the year, by about 5 per cent in February and by over 30 per cent in September. This is the highest annual price increase in petroleum products recorded over the past decade. This, coupled with higher electricity charges announced in June have increased production costs of consumer goods and consequently pushed their prices up. In addition, inflationary pressures have been further enhanced by the continuous depreciation of the Kenya Shilling which has increased costs of imported raw materials and final consumer goods.

4.21. Table 4.16 sets out Nairobi indices for food, rent and all groups. As can be derived from the table, the food index recorded significantly large increases of 8.6 per cent, 9.3 per cent and 15.8 per cent for the lower, middle and upper income groups, respectively. Increased farming costs have necessitated the upward revision of both producer and consumer prices of basic food items which are price controlled. Producer price increases for sugar, milk, rice and tea were announced in January, 1990 while those for bread and wheat flour were announced in November.

NAIROBI CONSUMER PRICE INDICES\*, 1986-1990

*Table 4.16* *Jan-June 1975= 100*

Income Group/Year	Food	Rent	Others	All Groups
<b>LOWER INCOME:</b>				
1986	348.4	429.9	344.5	370.4
1987	361.5	452.1	369.7	389.4
1988	388.9	489.7	402.9	421.8
1989	424.5	537.7	450.0	463.2
1990	461.0	600.9	527.9	517.7
<b>MIDDLE INCOME:</b>				
1986	311.8	398.0	359.4	353.5
1987	326.4	431.3	394.9	383.0
1988	356.3	482.8	443.6	428.8
1989	393.6	535.5	552.8	475.7
1990	430.4	604.4	565.0	537.1
<b>UPPER INCOME:</b>				
1986	324.2	340.1	354.4	339.8
1987	348.8	366.6	375.7	366.2
1988	374.1	409.9	429.4	409.5
1989	421.2	454.6	471.6	454.2
1990	488.0	514.8	527.7	514.3

\* The indices are annual averages.

4.22. The highest increases for all three income groups were recorded in the last quarter of the year when the effects of the Gulf crisis were felt in the domestic economy. Over the year, marked increases were recorded in the drinks and tobacco, fuel and power, the transport and communications groups. In particular, prices of beer and cigarettes were increased thrice, in March, June and October. Prices of petrol increased in February and September whilst cooking gas prices were increased in February. The petrol price increases had immediate impact on transport fares and prices of vehicles, spare parts, tyres and tubes leading to a substantial rise in the transport and communications index. These, together with increased postal and electricity charges accelerated inflationary pressures for the year.

4.23. Consumer price indices for the three urban centres of Mombasa, Kisumu and Nakuru are set out in Table 4.17. Inflation rates of 15.6 per cent, 13.5 per cent and 13.8 per cent were recorded for Mombasa, Kisumu and Nakuru, respectively. Analysis of quarterly data for these centres reveals that the highest increases were recorded for the drinks and tobacco, fuel and power, health and personal care, transport and communications and the miscellaneous goods and services groups. Food, a significant component of the index, recorded increases of 5.4 per cent in Mombasa, 10.5 per cent in Kisumu and 10.0 per cent in Nakuru.

## CONSUMER PRICE INDICES' FOR MOMBASA, KISUMU AND NAKURU, 1986- 1990

1976=100

Year		Mombasa	Kisumu	Nakuru
1986	Annual Average	291.9	295.5	282.9
1987	Annual Average	316.5	327.2	301.6
1988	Annual Average	352.2	356.1	331.6
1989	Annual Average	393.2	378.2	361.9
1990	March	439.9	414.0	393.6
	June	444.4	420.8	400.9
	September	461.3	432.1	420.8
	December	472.9	449.9	432.4
	Annual Average	454.6	429.2	411.9

*\* These indices refer to households in the lower/middle income groups and exclude rent.*

4.24. The Central Bureau of Statistics has now revised the Nairobi consumer price indices which have been computed from February 1990 onwards. The base year for the revised index is February/March 1986. The revised 'market basket' of goods and services and the weighting system reflecting the consumption patterns of representative households in the given income group were based on details of expenditures reported in the 1982 'Urban Household Budget Survey'. The income groups have now been re-defined as:- Lower Income Groups Households earning Ksh. 0-1,999 per month; Middle Income Group Household earning Ksh. 2,000-7,999 per month and Upper Income Group Household earning Ksh. 8,000 and above per month. The old and the revised indices are now being computed simultaneously. Conclusive analysis using the revised indices can only be done when a two-year series is available. However, preliminary analysis reveals that the old indices under-estimate the inflation rate by about 4.5 percentage points.

## CHAPTER 5 - MONEY, BANKING AND FINANCE

### Overall Trends

The aim of monetary policy in recent years has been to contain the rate of inflation by limiting the expansion in money supply to a rate that is consistent with the rates of economic growth and sustainable balance of payments. Towards this objective, the Central Bank relied on reserve requirements, sale of Treasury bonds, credit guidelines and interest rates reviews. However, the rate of growth of money supply deteriorated further in 1990.

5.2. The year 1990 experienced a growth of 20 per cent in money supply compared with 8 per cent recorded in 1988, and 13 per cent in 1989; but this rate was still much below the 33 per cent growth recorded in 1986. The sharp growth in money supply was a result of expansion in total domestic credit which rose by 27 per cent in the year compared to a growth of 7 per cent recorded in the previous year. The monetary growth resulted in increased average liquidity ratio of commercial banks which stood at 30 per cent in December 1990, compared to 26 per cent in December, 1989. During the year, interest rates were adjusted upwards twice.

5.3. Key monetary indicators are highlighted in Table 5.1. Net foreign assets, which continued to be negative, registered a further decline from K£ 88 million recorded at end of 1989 to K£ 232 million as at December, 1990. This represents a drop of K£ 144 million in net foreign assets compared with an increase of K£ 106 million in net foreign asset holding recorded in 1989. This reflects deterioration in the balance of payments which recorded an overall deficit of K£ 169 million as at the end of December, 1990.

#### MONETARY INDICATORS, 1987- 1990

*Table 5.1*

Date		Net Foreign Assets Kfm	DOMESTIC CREDIT Kfm			Money** Supply Kfm	Commercial Bank Liquidity Ratio per cent	Advances/ Deposits Ratio Per cent
			Private*	Government	Total			
1987	December	-64.15	1,461.35	967.73	2,429.08	1,983.31	31	83
1988	December	-193.73	1,707.68	883.50	2,591.18	2,140.85	24	85
1989	December	-87.92	1,913.44	857.32	2,770.76	2,417.63	26	83
1990	December	-231.50	2,147.15	1,361.95	3,509.10	2,901.80	30	82
1990	March	-124.43	1,882.98	1,071.77	2,954.75	2,437.93	25	81
	June	-229.44	1,979.21	989.43	2,968.64	2,531.85	21	86
	September	-259.15	2,007.20	1,337.44	3,344.64	2,772.63	25	81
	December	-231.51	2,147.16	1,361.94	3,509.10	2,901.80	30	82

Source: Central Bank of Kenya.

\* Includes parastatal bodies.

\*\* See Table 5.2 for Coverage.

5.4. Total domestic credit increased substantially from K£ 2,771 million in 1989 to K£ 3,509 million in 1990, representing an increase of 27 per cent compared with corresponding increases of 7 per cent each, recorded in 1988 and 1989. The high growth in domestic credit is largely reflected in the increase in Government borrowing to finance the budget deficit. Government borrowing from the banking system increased by 59 per cent in 1990, compared with a fall of 3 per cent in 1989. Credit to the private sector and other public institutions increased by 12 per cent; same increase as that registered in 1989. Money supply increased from K£ 2,418 million in December, 1989 to K£ 2,902 million in December, 1990 - a growth rate of 20 per cent.

5.5 Despite restrictive monetary policies pursued in the last four years, the liquidity of commercial banks remained high. The liquidity ratio of commercial banks rose from 26 per cent in December, 1989 to 30 per cent in December, 1990; 10 percentage points above the minimum requirement of 20 per cent. The ratio of advances to deposits remained high at 82 per cent but dropped by 1 per cent below the 83 per cent registered in 1989. The Government used monthly floatation of Kshs. 1 billion worth of Treasury bonds and weekly auction of 90 days Treasury bills to mop-up excess liquidity.

5.6. Table 5.2 shows trends in the components of money supply. The monetary growth during 1990 was not evenly spread. From a growth of about 1 per cent in the first quarter, the growth in money supply attained a peak level of 10 per cent in the third quarter before slowing down to 5 per cent in the last quarter. The high growth during the third quarter reflected an expansion in domestic credit, particularly to the Government. The increase in lending to Government in this quarter coincided with the beginning of the current financial year when large expenditures by ministries are usually financed.

#### MONEY AND QUASI-MONEY SUPPLY, 1987-1990

*Table 5.2* *K£million*

As at end of		Money*	Quasi-Money**	Total
1987	December	1,144.41	838.90	1,983.31
1988	December	1,211.47	929.38	2,140.85
1989	December	1,315.78	1,101.85	2,417.63
1990	December	1,678.15	1,223.65	2,901.80
1990	January	1,364.21	1,113.76	2,477.97
	February	1,402.28	1,096.67	2,498.95
	March	1,346.83	1,091.10	2,437.93
	April	1,414.70	1,106.35	2,521.05
	May	1,437.82	1,109.15	2,546.97
	June	1,404.69	1,127.16	2,531.85
	July	1,473.47	1,141.58	2,615.06
	August	1,520.40	1,143.29	2,663.69
	September	1,608.40	1,164.22	2,772.62
	October	1,590.09	1,193.52	2,783.61
	November	1,667.96	1,242.14	2,910.10
	December	1,678.17	1,223.63	2,901.80

Source: Central Bank of Kenya.

\* Currency outside banks plus all demand deposits and 7 days notice time deposits, except those of Central Government and Non-Resident Banks

\*\* All other deposits except those of Central Government and Non-Resident Banks

Among the components of money supply, narrow money (M1) increased by 28 per cent in 1990 compared to 9 per cent in the previous year. The share of M1 in total money supply was 58 Per cent in 1990, compared with shares of 57 per cent and 54 per cent in 1988 and 1989, respectively. The increase in M1 was mainly due to a 39 per cent crease in demand deposits registered as at December, 1990. Quasi-money on the other hand rose by 11 per cent compared with 11 per cent and 19 per cent recorded in 1988 1989, respectively. The slowdown in growth of quasi-money reflects a shift of Preference from interest bearing deposits of commercial banks to Treasury bonds as the rate of return on the latter improved during the year.

5.8. Table 5.3 shows trends of assets and liabilities of the banking system as a whole. The liabilities of the banking system recorded a growth rate of 22 per cent during the year, compared with 1 per cent and 12 per cent recorded in 1988 and 1989, respectively. Demand, savings and time deposits recorded growth rates of 39 per cent, 13 per cent and 8 per cent, respectively. The revision of the Banking Act and the establishment of the Consolidated Bank of Kenya were developments whose main objective was to enforce the stability of the financial system. Net foreign assets declined to a negative level of K£ 232 million by the end of the year.

5.9. Analysis of the change in money supply and the sources of these changes is presented in Table 5.4. Total money supply recorded a change of K£ 484 million at the end of 1990 compared with K£ 277 million at the end of 1989. Net foreign assets recorded a decline of K£ 144 million in 1990 compared with an increase of K£ 106 million registered in 1989. Total domestic credit increased by K£ 738 million in 1990 as a result of credit to the Central Government which grew by K£ 505 million at the end of 1990. Credit to private sector grew by K£ 210 million at the end of 1990, compared with K£ 240 million at the end of 1989.

5.10. Trends in the real value of certain financial aggregates, i.e. nominal values deflated by the Nairobi Consumer Price Index are shown in Table 5.5. Total liabilities of the banking system grew by 9 per cent against commercial bank credit to private sector which declined slightly by 1 per cent. The modest 5 per cent growth in total commercial bank credit realised in 1989, declined to 1 per cent in real terms in 1990.

#### **Interest Rates**

5.11. Table 5.6 presents information on the principal interest rates for the last three years. Interest rates were reviewed in April and August, 1990 and adjusted upwards. Central Bank rates were all raised by 2.9 percentage points, except for discount rates for treasury bills which increased by 1.9 percentage points. Commercial banks interest rates on savings deposits, loans and advances (less than 3 years) were raised by 1.0 percentage point and 1.5 percentage points, respectively. The interest rates on loans by Agricultural Finance Corporation have remained constant in the last four consecutive years so as to support the agricultural sector. Hire purchase companies and merchant banks rates were all adjusted upwards.

5.12. Table 5.7 contains information on real interest rates obtained after nominal interest rates are adjusted for inflation as measured by Nairobi Consumer Price Index. All the principal interest rates remained positive in real terms in 1990 except Post Office Savings Bank (POSB) deposit rate which became negative in real terms at negative 1.6 per cent. It is Government's policy to maintain positive real interest rates in order to influence credit expansion, stimulate savings and ensure their most efficient allocation in promoting monetary stability and economic growth.

#### **Central Bank of Kenya - Assets and Liabilities**

5.13. Details on assets and liabilities of the Central Bank for the last five years are given in Table 5.8. Assets and liabilities have continued to experience steady annual growth since 1987. The increase in 1990 was 22 per cent compared with corresponding increases of 11 per cent and 17 per cent recorded for 1988 and 1989, respectively. Central Bank foreign assets dropped from K£ 335 million in 1989 to K£ 301 million in December 1990, mainly due to a decrease in balances with external banks and other investments. Advances to the Kenya Government almost doubled, while other assets including Kenya Treasury Bills and Bonds dropped by K£ 41 million.

CONSOLIDATED ACCOUNTS OF THE BANKING SYSTEM. 1986 - 1990

Table 5.3

K£Million

	AS AT THE END OF							
	1986	1987	1988	1989	1990			
					1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
<b>LIABILITIES-</b>								
<b>1. Money:</b>								
1.1 Demand Deposits .. ..	561.72	564.06	532.34	603.01	655.10	689.21	818.70	836.95
Call and 7 days deposits	163.26	195.97	252.32	230.04	214.02	244.22	292.54	299.75
1.2 Currency outside banks	318.56	384.38	426.81	482.73	477.70	471.27	497.16	541.47
Sub-Total	1,043.54	1,144.41	1,211.47	1,315.78	1,346.82	1,404.70	1,608.40	1,678.17
<b>2. Quasi-Money:</b>								
2.1 Savings Deposits .. ..	447.46	564.77	618.25	705.29	723.95	746.33	745.06	795.79
2.2 Time Deposits	293.28	274.13	311.13	396.56	367.15	380.82	419.16	426.84
Sub-Total	740.74	838.90	929.38	1,101.85	1,091.10	1,127.15	1,164.22	1,222.63
<b>3. Other Items (Net) .. ..</b>	242.49	381.62	256.60	265.21	392.40	207.35	312.86	375.79
TOTAL	2,026.77	2,364.93	2,397.45	2,682.84	2,830.32	2,739.20	3,085.48	3,276.59
<b>ASSETS-</b>								
<b>4. Net Foreign Assets</b>	8.74	-64.15	-193.73	-87.92	-124.43	-229.44	-259.15	-231.51
<b>5. Domestic Credit</b>								
5.1 Central Govern- ment(Net)	744.36	967.73	883.50	857.32	1,071.77	989.43	1,337.44	1,361.94
5.2 Private Sector	1,134.20	1,284.42	1,535.76	1,775.58	1,714.06	1,830.92	1,884.91	1,985.70
5.3 Other Public Bodies ..	139.47	176.93	171.92	137.86	168.92	148.29	122.29	161.46
TOTAL	2,026.77	2,364.93	2,397.45	2,682.84	2,830.32	2,739.20	3,085.49	3,277.59

Source: Central Bank of Kenya.

CHANGES IN MONEY SUPPLY AND SOURCES OF CHANGES, 1986-1990

Table 5.4

*K£million comparing year-end values*

	1986	1987	1988	1989	1990
<b>MONEY SUPPLY-</b>					
1. Currency plus demand deposits	+256.50	+100.87	+67.06	+104.31	+362.38
2. Quasi-money	+181.32	+98.16	+90.48	+172.47	+121.78
3. Total money supply	+437.82	+199.03	+157.54	+276.78	+484.16
<b>SOURCES OF CHANGES-</b>					
4. Net foreign assets	+76.96	-72.89	-129.58	+105.81	-143.59
5. Domestic credit —					
(a) to Central Government(net)	+265.87	+233.37	-84.23	-26.18	+504.61
(b) to other public sector	+19.61	+37.46	-5.01	-34.05	+23.60
(c) to private sector	+163.54	+150.22	+251.34	+239.81	+210.12
(d) all domestic credit	+449.02	+411.05	+162.10	+179.58	+738.33
6. Other Items (Net)	-88.16	-139.13	+125.02	-8.61	-110.58
7. Total sources of changes	+437.82	+199.03	+157.54	+276.78	+484.16

TRENDS IN THE REAL VALUE OF CERTAIN FINANCIAL AGGREGATES\*, 1986-1990

Table 5.5

*K£million at constant (1982)prices*

	1986	1987	1988	1989	1990
1. Money	714.8	733.6	700.3	688.9	780.5
2. Quasi-money	507.4	537.8	537.2	576.9	569.1
3. Total liabilities of banking system	1,388.2	1,516.0	1,385.8	1,404.6	1,524.5
4. Commercial bank credit to private sector ..	776.8	823.3	887.3	928.9	922.9
5. Total commercial bank credit	1,052.2	1,162.6	1,142.7	1,204.3	1,220.7
6. Total liabilities of non-bank financial institutions	757.8	714.7	781.8	869.0	1,036.7
Memorandum Item:					
7. Line 6 as per cent of line 3	54.6	47.1	55.2	61.9	68.0

\* *Deflated by average Consumer Price Indices.*



PRINCIPAL INTEREST RATES, 1988- 1990

Table 5.6

Percentage

	AS AT 31st DECEMBER		
	1988	1989	1990
<b>CENTRAL BANK OF KENYA</b>			
Discount Rate for Treasury Bills	15.00	14.00	15.93
Advances against Treasury Bills	15.00	15.50	18.43
Bills and Notes under Crop Finance Scheme:			
Discounts	16.00	16.50	19.43
Advances	16.00	16.50	19.43
Other Bills and Notes:			
Discounts	16.00	16.50	19.43
Advances	16.00	16.50	19.43
Treasury Bonds (Coupon Rates):			
One Year		14.50	15.00
Two Years		15.00	16.50
Five Years		16.00	17.00
<b>KENYA COMMERCIAL BANKS</b>			
Time Deposits:			
12 months (Ksh.250,000-1,000,000)	12.50 - 13.00	12.50 - 13.00	14.50 -15.75
Savings Deposits:	10.00	12.50 - 13.50	13.50
Loans and Advances(Maximum)* .. ..	15.00	15.50	19.00
<b>OTHER FINANCIAL INSTITUTIONS</b>			
Kenya Post Office Savings Bank deposits ..	11.00	11.00	11.00
Agricultural Finance Corporations, Loans:			
(a) Land Purchase	12.00	12.00	12.00
(b) Seasonal Crop Loan	14.00	14.00	14.00
(c) Other	13.00	13.00	13.00
<b>HIRE-PURCHASE COMPANIES AND MERCHANT BANKS</b>			
Deposits(time)	10.00 - 15.00	12.00 - 15.00	13.50 -18.00
Loans	18.00	18.00	19.00
Building Societies:			
Deposits	11.00 - 12.50	11.75 - 14.00	13.00 - 15.00
Loans	14.50	16.50 - 18.00	19.00

Source: Central Bank of Kenya.

\* Loans and advances for less than 3 years.

Table 5.7

Percentage

	Year	Nominal Interest	Inflation Rate*	Real Interest**
1. Commercial bank savings deposits (min)	1986	11.0	5.7	+ 5.3
	1987	11.0	7.1	+ 3.9
	1988	10.0	10.7	-0.7
	1989	12.5	10.5	+ 2.0
	1990	13.5	12.6	+ 0.9
2. Commercial bank loans and advances (max) .. ..	1986	14.0	5.7	+ 8.3
	1987	14.0	7.1	+ 6.9
	1988	15.0	10.7	+ 4.3
	1989	15.5	10.5	+ 5.0
	1990	19.0	12.6	+ 6.4
3. POSB deposits***	1986	11.0	5.7	+ 5.3
	1987	11.0	7.1	+ 3.9
	1988	11.0	10.7	+ 0.3
	1989	11.0	10.7	+ 0.3
	1990	11.0	12.6	-1.6
4. Building society loans (max)	1986	16.0	5.7	+ 10.3
	1987	14.5	7.1	+ 7.4
	1988	14.5	10.7	+ 3.8
	1989	18.0	10.5	+ 7.5
	1990	19.0	12.6	+ 6.4

\* Taken from Table 4.15.

\*\* Nominal interest rate minus inflation rate, gives the appropriate measure.

\*\*\* POSB deposits are exempt from income tax on interest earned.

CENTRAL BANK OF KENYA - ASSETS AND LIABILITIES, 1986-1990

Table 5.8

K£million

ASSETS	1986	1987	1988	1989	1990			
					1st Qr	2nd Qr	3rd Qr	4th Qr
1. Foreign Exchange-								
1.1 Balances with External Banks	293.00	171.79	224.32	288.73	196.97	206.73	169.94	268.85
1.2 Treasury Bills	13.07	10.83	11.98	2.25	15.30	7.09	7.28	3.41
1.3 Other Investments..	27.46	24.99	22.13	32.79	33.92	35.07	23.97	24.30
1.4 Special Drawing Rights	9.45	11.98	0.65	11.50	2.71	3.85	2.22	4.22
TOTAL	342.98	219.59	259.08	335.27	248.90	252.74	203.41	300.78
2. Securities issued or Guaranteed by Kenya Government, Advances and Discounts	261.07	261.61	272.76	212.54	161.61	184.06	161.61	172.00
3. Advances to Kenya Government	264.80	449.28	497.54	410.27	660.35	649.09	941.46	814.34
4. Other Assets including Kenya Treasury Bills & Bonds ..	62.98	74.67	89.14	346.38	303.49	327.62	250.05	305.59
TOTAL ASSETS	931.83	1,005.15	1,118.52	1,304.46	1,374.35	1,413.51	1,556.53	1,592.71
LIABILITIES								
1. Capital and General Resources Fund	29.26	33.87	41.41	50.42	50.42	62.95	62.95	62.95
2. Currency in Circulation-								
2.1 Notes	359.07	425.08	474.96	545.67	525.77	521.45	550.90	620.23
2.2 Coins	12.07	13.70	14.37	17.25	16.04	16.65	16.88	17.49
TOTAL CURRENCY	371.14	438.78	489.33	562.92	541.81	538.10	567.78	637.72
3. Deposits-								
3.1 Kenya Government	116.38	115.07	110.23	126.95	211.13	139.29	253.10	149.09
3.2 Kenya Banks	349.92	296.34	405.35	446.15	420.65	509.74	492.72	563.72
3.3 External Banks	23.27	53.44	18.70	35.26	40.02	88.99	93.75	94.43
3.4 Other								
TOTAL	489.57	464.85	534.28	608.36	671.80	738.02	839.57	807.24
4. Revaluation Account		7.63						
5. Other Liabilities	41.86	60.02	53.50	82.76	110.32	74.44	86.23	84.80
TOTAL LIABILITIES	931.83	1,005.15	1,118.52	1,304.46	1,374.35	1,413.51	1,556.53	1,592.71

Source: Central Bank of Kenya.

5.14. On the liability side, major changes were increases in currency in circulation and external banks deposits. Capital and general resources fund registered a growth of 25 per cent compared with 22 per cent recorded in 1989. Currency in circulation stood at K£ 638 million at the end of 1990 compared with K£ 563 at the end of 1989 - an increase of 13 per cent. All the deposits showed a remarkable growth with an overall increase of 33 per cent. External deposits fluctuated over the period, reaching some K£ 564 million at the end of 1990, while other deposits had a more pronounced growth from K£ 35 million in 1989 to K£ 94 million as at December, 1990.

### Commercial Banks - Credit and Liquidity

5.15. Table 5.9 sets out the commercial banks' lending in the form of bills discounted, loans and advances. Total credit extended by commercial banks increased from K£ 1,863 million in 1989 to K£ 2,073 million in 1990, an increase of 11 per cent which was lower than the 18 per cent realised in 1989. Despite Government policy aimed at

#### COMMERCIAL BANKS - BILLS, LOANS AND ADVANCES\*, 1986-1990

Table 5.9

K£million

	1986 Dec.	1987 Dec.	1988 Dec.	1989 Dec.	1990 Dec.
<b>P</b>					
Central Government	4.84	3.62	0.04	59.09	58.98
Local Government	1.28	2.13	3.84	2.47	3.12
Enterprises, Parastatal bodies and other Public entities	137.82	173.18	166.66	134.11	155.96
<b>TOTAL PUBLIC SECTOR</b>	<b>143.94</b>	<b>178.93</b>	<b>170.54</b>	<b>195.67</b>	<b>218.06</b>
<b>PRIVATE ENTERPRISES:</b>					
Agriculture	147.11	204.72	256.02	291.73	300.73
Mining and Quarrying	8.96	4.56	5.82	9.67	9.80
Manufacturing	239.57	302.65	360.66	420.16	450.97
Building and Construction	57.34	65.90	78.96	105.97	121.71
Transport, Storage and Communication ..	47.11	43.94	55.75	63.65	84.01
Trade:					
Exports**	64.03				
Imports**	68.90				
Domestic	146.32	236.02	285.23	323.79	355.68
Financial Institutions	68.48	23.87	15.45	37.72	49.75
Other Business	167.35	294.82	309.80	370.93	424.42
<b>TOTAL PRIVATE ENTERPRISES</b>	<b>1,015.17</b>	<b>1,176.48</b>	<b>1,367.69</b>	<b>1,623.62</b>	<b>1,797.07</b>
<b>COMMUNITY AND PERSONAL SERVICES***</b> (including non-profit making institutions) ....	68.94	37.53	37.90	43.97	57.95
<b>TOTAL BILLS, LOANS AND ADVANCES .</b>	<b>1,228.05</b>	<b>1,392.94</b>	<b>1,576.13</b>	<b>1,863.26</b>	<b>2,073.08,</b>

Source: Central Bank of Kenya.

\* Excludes portfolio investment by private enterprises and bank deposits placed with non-bank financial institutions.

\*\* From 1987 figures on commercial banks lending for exports and imports are not readily available.

\*\*\* Prior to 1987 this category was classified as "Private households".

reducing indebtedness to the banking sector, bank lending to the public sector increased from K£ 196 million in 1989 to K£ 218 million in 1990.

5.16. Commercial bank lending to the private sector increased by 11 per cent in 1990 compared with 19 per cent in 1989. Although the amounts lent increased in absolute figures, the rate of lending to all sectors decelerated with the exception of transport, storage and communications, community and personal services. Lending to agriculture, manufacturing, building and construction increased by 3.1 per cent, 7.3 per cent and 14.9 per cent in 1990, respectively; compared with 14.0 per cent, 16.5 per cent and 34.2 per cent corresponding growth rates in 1989. The rate of growth in commercial bank lending to financial institutions dropped during the year in comparison to the previous year's growth rate.

5.17. Deposit liabilities and liquid assets of commercial banks are shown in Table 5.10. Deposit liabilities of commercial banks maintained an upward trend while liquid assets showed a remarkable increase during the second half of 1990. The liquidity situation eased from 26 per cent and 28 per cent in December 1989 for banks and non-bank financial institutions, respectively, to 30 and 29 per cent in December 1990. The cash ratio of banks rose from a monthly average of 6.3 per cent in December 1989 to 7.9 per cent in 1990. The interbank rate declined from 13.8 per cent in December 1989 to 9.3 in December 1990.

#### COMMERCIAL BANKS-DEPOSIT LIABILITIES AND LIQUID ASSETS\*, 1987-1990

Table 5.10

		Deposit Liabilities K£mn	Liquid Assets** K£mn	Current Liquidity Ratio*** per cent
1987	December..	1,510.20	469.95	31
1988	December..	1,596.77	380.44	24
1989	December..	1,824.97	444.33	24
1990	December..	2,097.85	608.80	30
1990-				
	January ..	1,930.00	462.45	24
	February..	1,930.65	443.25	25
	March ..	1,874.50	556.35	25
	April .. ..	1,878.95	414.25	22
	May .. ..	1,887.90	372.20	22
	June .. ..	1,922.75	367.65	21
	July .. ..	1,989.00	399.60	21
	August ..	1,954.65	437.35	22
	September..	2,059.30	592.75	25
	October ..	2,079.75	623.40	30
	November.	2,119.10	665.85	31
	December.	2,097.85	608.80	30

Source: Central Bank of Kenya.

\* Deposits and Liquid Assets are calculated as an average of three days balances

\*\* Includes notes and coins, balances at Central Bank, net inter-bank balances in Kenya and Overseas (included only if positive) and Treasury Bills.

\*\*\* The ratios given in this column are not quite consistent with figures in the other two columns because of the inclusion of certain other minor items in the denominator. From 9th February, 1983 the prescribed minimum was fixed at 20 per cent.

## **Non-Bank Financial Institutions**

5.18. Tables 5.5 and 5.11 show the performance of the Non-Bank Financial Institutions (NBFIs). Total assets and liabilities of these institutions increased from K£ 1,660 million in 1989 to K£ 2,126 million at the end of 1990, an increase of 28.1 per cent compared with a slightly lower rate of 22.7 per cent registered in 1989. Deposits from Central and Local Government more than doubled while deposits from other public and private sectors registered 55.9 per cent and 23.8 per cent increases, respectively; which were also higher than those recorded in 1989. Table 5.5 shows that the share of NBFIs in the total liabilities of the banking system was 68 per cent, an indication of their importance in the mobilization of resources.

5.19. Assets of the NBFIs in the form of cash and bank deposit holdings increased by 41.7 per cent from K£ 142 million in 1989 to K£ 202 million in 1990. Holding in other financial institutions registered a slight increase while holding in associated companies recorded a significant increase over 1989. Investment, loans and advances made by these institutions have continued to grow since 1988. Sectoral allocation of non-bank credit indicates that credit to public and private sectors increased by 2 per cent and 32 per cent, respectively.

## **Developments in the Financial Sector in 1990**

5.20. Kenya's financial system continues to be dominated by commercial banks and non-bank financial institutions which provide mainly short and medium term finance. The financial system is composed of the Central Bank of Kenya, 26 Commercial banks with 236 full branches, 87 sub-branches, 41 agencies and 127 mobile units; 52 non-bank financial institutions with 103 branches, and 17 building societies. During 1990, one bank and three non-bank financial institutions were licensed. Other financial intermediaries include 2 development finance companies, the Kenya Post Office Savings Bank, 37 insurance companies and numerous Co-operative Savings and Credit Societies.

5.21. Several steps were taken to privatize Government owned financial institutions in 1990. In September, 1990 Kenya Commercial Bank sold an additional 9 million Ordinary shares to the public and locally owned corporations, Pension/ Trust Funds and Co-operative societies. The floatation increased the public stake in the bank to 30 per cent. The National Bank of Kenya has announced plans to float between 20 per cent and 30 per cent of its equity to the general public.

5.22. In the course of 1990, Deposit Protection Fund invested KShs. 400 million in Consolidated Bank of Kenya to enable it acquire the 9 weak institutions. In addition, measures were taken to increase its capacity to liquidate distressed institutions by amending the Banking Act. In recognition of the need for longer term finance for investment, the Government has been making efforts to facilitate the development of a sound and efficient capital market in Kenya. In this respect, the Capital Markets Authority, which has a strong representation from the private business sector, was established in January, 1990 and seeks to adopt and implement measures that would encourage Kenyan companies to increasingly raise funds through equity and to review activities of the Nairobi Stock Exchange in order to establish rules conducive to active trading.

5.23. In 1990, Bearer Certificates of Deposits, which offer attractive investment alternative, were introduced and are becoming popular with Commercial banks.

ASSETS AND LIABILITIES OF NON-BANK FINANCIAL INSTITUTIONS, 1986 - 1990

Table 5.11

K£million

	AS AT END OF				1990			
	1986	1987	1988	1989	1st Qr	2nd Qr	3rd Qr*	4th Qr
LIABILITIES:								
Deposits-								
Central and Local Government	23.28	32.58	30.22	32.75	44.96	50.83	45.52	62.34
Other Public Sector	146.82	136.97	144.28	190.53	203.89	286.76	259.10	296.95
Other Depositors	635.39	714.18	863.36	1,051.00	1,144.58	1,137.07	1,235.12	1,301.88
Other Liabilities	300.85	231.17	314.68	385.52	436.43	490.26	481.40	464.38
TOTAL LIABILITIES	1,106.34	1,114.90	1,352.54	1,659.80	1,829.86	1,964.92	2,021.14	2,125.55
ASSETS:								
Cash and Banks	123.52	66.22	114.33	142.25	147.89	164.62	174.63	201.58
Other Financial Institutions	98.98	68.36	91.82	140.47	128.82	121.68	124.70	144.18
Associated Companies	12.67	13.59	12.65	21.95	29.53	53.56	60.01	58.20
Investments, Bills, Loans and Advances-								
Public Sector	169.45	170.80	160.82	184.36	163.72	148.36	156.96	187.83
Private Sector	642.81	742.22	897.15	1,079.13	1,254.60	1,362.83	1,390.89	1,424.43
Other Assets	58.91	53.71	75.77	91.64	105.30	113.67	113.95	109.33
TOTAL ASSETS	1,106.34	1,114.90	1,352.54	1,659.80	1,829.86	1,964.92	2,021.14	2,125.55

Source: Central Bank of Kenya.

\* Provisional

## CHAPTER 6 - PUBLIC FINANCE

During the current fiscal year, the Government continued with its policies aimed at enhancing growth with emphasis on a strong export drive. Major incentives to stimulate export production were introduced during the year. Treasury bonds were issued to the non-bank sector in an attempt to control the growth of money supply and, thereby, the rate of inflation.

6.2. Due to a rapidly rising demand for Government services, it proved difficult to reduce the size of the budget deficit. Despite substantial growth in revenues likely to be realised through new measures, some unanticipated expenditure related to internal and regional security, and debt service payments on guaranteed debts of parastatals is likely to offset the gain, and push the deficit upwards.

### Overall Results

6.3. The overall results for the last five fiscal years in the budget out-turn are presented in Table 6.1. Current revenue increased by 76.9 per cent between 1986/87 and 1990/91. The increase in revenue is partly due to the introduction of Value Added Tax (VAT) and the continuing implementation of the Tax Modernization Programme, aimed at restructuring the tax system to increase efficiency in tax administration. Over the same period, current expenditure increased by 77.4 per cent mainly due to the need to allocate funds for operation and maintenance of completed development projects. Provisional figures indicate that the current account deficit is expected to be K£ 238 million in 1990/91 mainly due to a faster growth of current expenditure relative to the growth in current revenue.

CENTRAL GOVERNMENT OUT-TURN OF REVENUE AND EXPENDITURE\*, 1986/87 - 1990/91

	1986/87	1967/88	1988/89	1989/90**	1990/91**	<i>KEmillion</i> Percentage Increases 1986/87 to 1990/91
Current Revenue	1,386.67	1,614.31	1,887.39	2,081.49	2,452.41	76.86
Current Expenditure***	1,517.21	1,731.02	1,967.24	2,154.60	2,690.81	77.35
Current Surplus	-130.54	-116.71	-79.85	-73.11	-238.40	82.63
Capital Revenue	2.94	4.14	31.16	6.12	4.89	66.33
Capital Expenditure***	324.58	281.90	418.94	481.65	595.21	83.38
Net Lending***	47.95	29.32	61.72	64.11	41.08	-14.33
External Grants	62.80	159.40	186.65	217.25	425.50	577.55
OVERALL DEFICIT	-437.33	-264.39	-342.70	-395.50	-444.30	1.59
FINANCING OF DEFICIT:						
External Loans (Net)	1.45	71.45	200.00	301.20	268.10	
Total Domestic Borrowing	406.35	225.85	88.00	68.70	88.00	-78.34
Long-term (net)	156.35	220.80	119.10	100.45	63.20	
Short-term (net)	250.00	5.05	-31.10	-31.75	24.80	
CHANGES IN CASH BALANCES:						
Increase = +	-29.53	32.91	-54.70	-25.60	-93.26	
MEMORANDUM ITEMS:						
Public Debt Redemption .. ..	192.39	180.20	502.83	453.34	659.00	242.53
(a) External	156.27	163.00	212.27	212.15	342.20	118.98
(b) Internal	36.12	17.20	290.56	241.19	316.80	777.08,

\* This Table details Kenya Governments deficit and its financing.

Basic aggregates in the Table can be reconciled as follows:

1. Current Revenue plus Capital Revenue shown in the Table equals Revenue on Recurrent Account as shown in Table 6.4.
2. The sum of Current Expenditure, Capital Expenditure, Net Lending less memorandum item equals total Expenditure in Table 6.9.

\*\* Provisional.

\*\*\* For details, see Table 6.9.



6.4 During the fiscal year 1990/91, current expenditure is expected to grow to K£ 2,691 million, partly due to the recent salary review for junior civil servants and teachers. The substantial increase in capital expenditure is due to completion of a number of ongoing projects especially expansion of facilities in the public universities and National Youth Service headquarters complex, security roads and airstrips, maintaining international boundaries, geothermal exploration and hydro electric development. Friendly nations have continued to support development efforts by extending external grants which were expected to increase substantially from K£ 63 million in 1986/87 to an estimated K£ 426 million in 1990/91, thus helping to contain the overall deficit.

6.5. Due to an increased demand for more public services, expenditure by the Government has continued to increase at a faster rate than the growth in revenue resulting in a projected overall deficit of K£ 444 million in 1990/91. The share of the deficit financed by net external loans is expected to increase substantially from K£ 1 million in 1986/87 to K£ 268 million in 1990/91. Net total domestic borrowing contribution stood at K£ 88 million in 1990/91 from a higher K£ 406 million in 1986/87. Contribution of net domestic long-term borrowing towards financing the overall deficit, seems to have dropped in recent years due to the repayment of a substantial amount of maturing local debt in form of Treasury Bonds. The Government has continued to issue bonds to non-bank sources with the aim of reducing the growth in money supply and inflation.

6.6. Table 6.2 details the trends in some key fiscal indicators for the five years ending 1990/91. The ratio of current deficit to capital expenditure plus net lending is expected to reach a record 37.5 per cent in 1990/91 due to a rapid increase in current expenditure. The ratios of overall deficit to current revenue and overall deficit to total expenditure have nearly stabilised in the last four years. The ratio of external resources to capital expenditure plus net lending recorded the fastest positive growth and is expected to reach 109.0 per cent in 1990/91 enabling the Government to finance most of its capital projects from such sources.

#### ANALYSIS OF KEY FISCAL TRENDS, 1986/87 - 1990/91

Table 6.2

	1986/87	1987/88	1988/89	1989/90*	1990/91*
1. Current surplus/deficit as % of Current Revenue	-9.4	-7.2	-4.2	-3.5	-9.7
2. Current surplus/deficit as % of Capital Expenditure plus Net Lending .. ..	-35.0	-37.5	-16.6	-13.4	-37.5
3. Ratio of Capital Expenditure to Current Expenditure	21.4	16.3	21.3	22.4	22.1
4. Overall deficit as % of Current Revenue	-31.5	-16.4	-18.2	-19.0	
5. Overall Deficit as % of Total Expenditure	-21.0	-11.9	-11.6	-12.5	
6. External Grants and Loans as % of Capital Expenditure plus Net Lending .. ..	17.2	74.2	80.5	95.0	109.0
7. Net Short-Term Borrowing as % of Capital Expenditure plus Net Lending .. ..	67.1	1.6	-6.5	-5.8	3.9
8. Current Revenue as % of GDP at Current Market Prices	27.1	28.8	25.0	24.5	24.4
9. Total Government Expenditure as % of GDP at Current Market Prices .. ..	40.7	39.6	39.1	37.1	39.7
10. Overall Deficit as % of GDP at Current Market Prices	-8.6	-4.7	-4.5	-4.7	-4.4

\* Provisional

CENTRAL GOVERNMENT  
COMPARISON OF BUDGET ESTIMATES WITH ACTUAL OUT-TURNS, 1987/88 - 1990/91

Table 6.3.

K£million

	1987/88			1988/89		
	Budget	Actual	Difference	Budget	Actual	Difference
Recurrent Revenue	1,687.20	1,618.45	-68.75	1,796.49	1,918.55	122.06
Recurrent Expenditure	1,790.70	1,731.02	-59.66	1,851.89	1,967.24	115.35
Recurrent Balance	-103.50	-112.57	-9.07	-55.40	-48.69	6.71
Development Expenditure + Net Lending	458.45	311.22	-147.23	765.44	480.66	-284.78
External Financing (Net)**	227.50	230.85	3.35	555.50	386.65	-168.85
Balance for Domestic Financing (Net)	-334.45	-192.94	141.51	-265.34	-142.70	122.64
	1989/90*			1990/91*		
	Budget	Actual	Difference	Budget	Actual	Difference
Recurrent Revenue	2,222.26	2,087.61	-134.65	2,406.52	2,457.30	50.78
Recurrent Expenditure	2,457.44	2,154.60	-302.84	2,824.58	2,690.81	-133.77
Recurrent Balance	-235.18	-66.99	168.19	-418.06	-233.51	184.55
Development Expenditure + Net Lending	922.10	545.76	-376.34	827.18	636.29	-190.89
External Financing (Net)**	555.50	518.45	-37.05	628.44	693.60	65.16
Balance for Domestic Financing (Net)	-601.78	-94.30	507.48	-616.80	-176.20	440.60

\*Provisional.

\*\*Includes external grants.

6.7. A comparison of initial estimates with actual out-turns from 1987/88 to 1990/91 is given in Table 6.3. Provisional results for 1990/91 indicate that actual revenue receipts will improve substantially than had been estimated. Recurrent issues over the same period are expected to decline as a result of measures taken by the Government to control public spending in view of the prevailing dampened global economic situation created by the Gulf crisis and the delay in disbursement of loans and grants from external sources.

6.8. A breakdown of expected Government revenue is provided in Table 6.4. The Government's efforts towards tax collection, under the Tax Modernisation Programme, is likely to achieve a growth of 17.8 per cent in total gross receipts from K£ 2,088 million in 1989/90 to K£ 2,459 in 1990/91 with indirect taxes yielding 56.5 per cent of this total. Total Value Added Tax (VAT) is expected to yield K£ 783 million at the end of the fiscal year 1990/91, despite the initial problems associated with its introduction to replace sales tax.

CENTRAL GOVERNMENT  
GROSS RECEIPTS ON RECURRENT ACCOUNT\*, 1986/87 - 1990/91

<i>Table 6.4</i>	<i>K£million</i>				
	1986/87	1987/88	1988/89	1989/90**	1990/91**
DIRECT TAXATION:					
Income Tax	385.73	454.48	512.02	599.15	710.00
Other	-	-	-	-	-
Total	385.73	454.48	512.02	599.15	710.00
INDIRECT TAXATION:					
Sales Tax/VAT on Domestic Manufactures	241.75	301.25	351.30	323.74	435.00
Sales Tax /VAT on imports .. ..	155.77	218.71	236.98	316.61	348.00
Import Duties***	246.71	273.69	300.28	347.96	314.00
Excise Duties	106.27	123.06	137.45	149.36	182.00
Export Duties	33.88	16.46	26.55	0.73	1.34
Trading Licences ..	6.31	5.49	8.69	9.05	14.29
Licences and Fees Under Traffic Act	12.34	13.19	16.62	16.61	20.66
Other Taxes, Licences and Duties	51.96	47.00	54.58	67.42	72.63
TOTAL	854.99	998.85	1,132.45	1,231.48	1,387.92
OTHER REVENUE AND INCOME:					
Compulsory Fees, Fines and Penalties	22.02	26.68	40.47	36.01	41.53
Income From Property	60.54	69.55	94.87	100.41	185.90
Current Transfers	15.32	8.27	12.91	12.39	5.32
Sales of Goods and Services	43.42	51.05	76.52	81.77	83.25
Other	7.59	9.57	49.31	26.40	44.66
TOTAL	148.89	165.12	274.08	256.98	360.66
TOTAL ..	1,389.61	1,618.45	1,918.55	2,087.61	2,458.58
MEMORANDUM ITEM:					
Loan Repayments to Government .. ..	6.36	5.12	15.97	3.40	10.53

\* *This is the name of the account used to cover current receipts. It includes internal A in A both recurrent and development. However, it is not possible to identify A in A separately from this table because it is distributed under various heads including sales of goods and services.*

\*\* *Provisional.*

\*\*\* *Gross collections before Export Compensation Payments.*

6.9. A summary of import duty receipts on various imported merchandise is shown in Table 6.5. Import duty is expected to register a value of K£318 million in 1990 from K£ 222 million in 1986. The average annual growth rate of import duty has been considerably lower than the average growth in the value of imports, because of progressive reduction in tariffs, underscoring the Government's commitment to import liberalisation policy as part of the Structural Adjustment Programme (SAP) which began in 1986. The major sources of import duty continue to be machinery for local industries, transport equipment and chemicals providing K£ 180 million, by a significant 56.7 per cent of the total. Other important sources are metals and semi-manufactures. The most significant drop in import duty was registered in textiles, depicting a drop of 57.9 per cent as a result of the Government's effort to restrict importation of secondhand clothes.

CENTRAL GOVERNMENT  
IMPORT DUTY COLLECTIONS, 1986-1990

*Table 6.5* *K£million*

END-USE CATEGORY	1986	1987	1988	1989	1990*
Food, drinks and tobacco .. ..	13.92	10.58	9.22	16.94	12.63
Basic materials	10.30	14.80	14.72	13.31	13.30
Fuels	26.80	30.02	30.14	29.53	34.00
Chemicals	31.81	42.20	54.52	58.31	60.57
Textiles	5.60	6.89	5.28	14.35	6.04
Semi-manufactures	14.41	16.26	25.16	25.66	24.86
Metals	25.60	28.77	34.78	32.68	34.58
Transport Equipment	37.32	44.52	42.61	42.70	53.79
Machinery	48.60	43.68	59.97	63.20	65.94
Miscellaneous commodities .. ..	7.90	8.47	11.08	12.34	12.04
<b>TOTAL</b>	<b>222.26</b>	<b>246.19</b>	<b>287.48</b>	<b>309.02</b>	<b>317.75</b>

\* *Provisional.*

6.10. An analysis of excise revenue by selected commodities is shown in Table 6.6. Total excise revenue fell by about K£ 4 million in 1990. Cigarettes remained the biggest source of excise revenue contributing K£ 109 million, or 71.4 per cent of the total. Compared with K£ 96 million collected in 1989, there was a rise of 13.4 per cent in 1990. Excise revenue from beer and spirits fell marginally by K£ 4 million reflecting a depressed consumer market, particularly for spirits whose output declined by some 6 per cent, prompting major spirits manufacturers to launch vigorous campaigns to restore previous enthusiasm in spirit consumption.

CENTRAL GOVERNMENT  
EXCISE REVENUE BY COMMODITIES, 1986-1990

*Table 6.6* *K£'000*

	1986	1987	1988	1989	1990*
Beer and spirits	20,316	23,889	25,975	27,929	23,781
Sugar. . . . .	14,748	18,178	18,894	30,590	19,392
Cigarettes	58,192	70,701	89,803	95,711	108,540
Other commodities**	1,326	1,162	1,511	1,572	252
<b>TOTAL</b>	<b>94,582</b>	<b>113,930</b>	<b>136,183</b>	<b>155,802</b>	<b>151,965</b>

\* *Provisional.*

\*\* *Includes transfer adjustments not allocated by commodity.*

6.11. The Government issues on the capital account and their financing is shown in Table 6.7. As stated above, capital expenditure grew rapidly between 1988/89 and 1990/91 after falling modestly in 1987/88. It is expected to reach a record K£ 595 million in 1990/91. Net lending is expected to fall to a manageable K£ 41 million in 1990/91 after rising to K£ 62 million and K£ 64 million in 1988/89 and 1989/90, respectively. Net external loans and grants continue to be the major source of financing of the capital account reaching more than K£ 694 million in 1990/91. Net long-term borrowing, consisting of medium term Treasury bonds including the recently introduced Bearer bonds reached a peak in 1987/88, thereafter it has registered a steady decline, owing mainly to redemptions of bonds sold earlier.

CENTRAL GOVERNMENT  
FINANCING OF CAPITAL EXPENDITURE AND NET LENDING, 1986/87 - 1990/91

*Table 6.7* *K£million*

	1986/87	1987/88	1988/89	1989/90*	1990/91*
<b>EXPENDITURE:</b>					
Capital Expenditure	324.58	281.90	418.94	481.65	595.21
Net Lending	47.95	29.32	61.72	64.11	41.08
<b>TOTAL</b>	<b>372.53</b>	<b>311.22</b>	<b>480.66</b>	<b>545.76</b>	<b>636.29</b>
<b>FINANCING:</b>					
Surplus on Current Account	-130.54	-116.71	-79.85	-73.11	-238.40
Capital Revenue	2.94	4.14	31.16	6.12	4.89
External Loans (Net)	1.45	71.45	200.00	301.20	268.10
External Grants	62.80	159.40	186.65	217.25	425.50
Long-Term Domestic Borrowing (Net)	156.35	220.80	119.10	100.45	63.20
<b>SHORT TERM BORROWING:</b>					
Cereals and Sugar Finance Corporation (Net)	-65.00	-6.00	11.30	-16.40	24.80
Treasury Bills (Net)	14.60	4.10	-37.15	-15.55	
Other Short-Term Borrowing (Net)..	300.40	6.95	-5.25	0.20	
Change in Cash Balances (decrease = +)	29.53	-32.91	54.70	25.60	88.20
<b>TOTAL</b>	<b>372.53</b>	<b>311.22</b>	<b>480.66</b>	<b>545.76</b>	<b>636.29</b>

\* *Provisional.*

### Analysis of Government Expenditure

6.12. The Government continued with its budget rationalisation policy of trying to limit the overall growth in expenditure aimed at reducing the budget deficit to a manageable Level and redirecting budget allocations to high priority areas. Table 6.8 gives details of expenditure incurred by the Government on various services. Total Government expenditure is expected to rise by 79.4 per cent between 1987/88 and 1990/91. Major shares in the total are accounted for by education, defence, agriculture and health. The 24.5 per cent increase in expenditure on education in 1990/91 over 1989/90 is mainly due to an increase in grants to Teachers Service Commission and expansion of facilities in the four public universities to cope with expanded enrolment. In an effort to boost overall development, the Government continued to offer economic services whose cost is expected to grow by 27.7 per cent in 1990/91 compared to growths of 6.0 per cent in 1989/90 and 42.0 per cent in 1988/89. Expenditure on defence is expected to increase by 11.5 per cent in 1990/91 while that of agriculture, forestry and fishing is expected to grow significantly by 56.4 per cent after a drop of 3.4 per cent in 1989/90.

## CENTRAL GOVERNMENT EXPENDITURE ON MAIN SERVICES, 1987/88 - 1990/91

Table 6.8

K£million

	1967/88			1988/89			1989/90*			1990/91*		
	Recur- rent Account	Deve- lopment Account	Total	Recur- rent Account	Deve- lopment Account	Total	Recur- rent Account	Deve- lopment Account	Total	Recur- rent Account	Deve- lopment Account	Total
GENERAL PUBLIC ADMINISTRATION:												
General Administration	94.36	62.91	157.27	121.38	91.08	212.46	116.48	139.25	255.73	149.74	170.91	320.65
External Affairs	28.98	1.04	30.02	34.13	3.20	37.33	42.71	3.19	45.90	36.60	1.38	37.98
Public Order and Safety	107.73	11.82	119.55	134.19	11.55	145.74	146.11	16.19	162.30	158.10	23.74	181.84
TOTAL	231.07	75.77	306.84	289.70	105.83	395.53	305.30	158.63	463.93	344.44	196.03	540.47
Defence	217.96	26.36	244.32	171.29	29.76	201.05	243.89	25.37	269.26	271.36	28.84	300.20
Education	430.98	25.65	456.63	477.98	55.10	533.08	522.46	41.84	564.30	606.49	96.02	702.51
Health	103.97	13.96	117.93	117.47	21.52	138.99	119.12	24.81	143.93	133.13	53.95	187.08
Housing and Community Welfare .. ..	2.56	4.08	6.64	4.21	16.71	20.92	3.18	9.58	12.76	4.68	11.46	16.14
Social Welfare	36.74	50.93	87.67	37.04	35.97	73.01	38.38	30.84	69.22	43.13	63.05	106.18
ECONOMIC SERVICES:												
General Administration	21.21	59.58	80.79	20.99	83.07	104.06	39.05	106.56	145.61	25.85	117.12	142.97
Agriculture, Forestry and Fishing .. ..	78.49	69.11	147.60	82.71	92.17	174.88	96.09	72.84	168.93	92.11	172.05	264.16
Mining, Manufacturing and Construction	35.98	5.84	41.82	39.23	35.11	74.34	42.35	44.43	86.78	39.66	55.49	95.15
Electricity, Gas, Steam and Water .. ..	21.20	28.87	50.07	24.28	54.49	78.77	23.50	71.17	94.67	24.31	64.65	88.96
Road	8.45	42.99	51.44	10.11	96.61	106.72	11.41	59.57	101.30	12.58	100.30	112.88
Transport and Communications	9.53	4.07	13.60	10.48	2.17	12.65	11.93	7.26	19.19	13.01	27.93	40.94
Other Economic Services**	39.84	1.39	41.23	52.52	1.91	54.43	50.52	4.64	55.16	66.67	7.72	74.39
TOTAL ECONOMIC SERVICES	214.70	211.85	426.55	240.32	365.53	605.85	275.45	366.47	641.92	274.19	545.26	819.45
OTHER SERVICES; INCLUDING PUBLIC DEBT	580.97	0.00	580.97	998.27	0.00	998.27	991.78	0.00	991.78	1,324.60	0.00	1,324.60
TOTAL***	1,818.95	408.60	2,227.55	2,336.28	630.41	2,966.70	2,499.56	657.54	3,157.10	3,002.02	994.61	3,996.63

\* Provisional.

\*\* Includes Export Compensation.

\*\* Total as shown in this table minus loan repayment to the Government equals total expenditure in Table 6.9

6.13. Details of economic analysis of Government expenditure for 1986/87 to 1990/91 are presented in Table 6.9. Current expenditure is expected to increase by 24.9 per cent in 1990/91, while labour costs are expected to increase by 12.1 per cent mainly due to the recent salary review for Junior civil servants and teachers. Total Government expenditure is expected to grow by 26.4 per cent in 1990/91 compared to 6.9 per cent in 1989/90 and 32.8 per cent in 1988/89, mainly due to cost of servicing public debt, especially internal debt, increased expenditure on a number of ongoing projects, strengthening of the Capital Markets Authority, construction of roads and airstrips, geothermal exploration and hydro electric development.

CENTRAL GOVERNMENT  
ECONOMIC ANALYSIS OF EXPENDITURE, 1986/87 - 1990/91

*Table 6.9* *K£million*

	1986/87	1987/88	1988/89	1989/90*	1990/91*
CURRENT EXPENDITURE:					
CONSUMPTION EXPENDITURE ON GOODS AND SERVICES-					
Labour Costs	398.42	453.59	541.48	555.41	622.50
Other Goods and Services	414.35	483.72	526.27	583.34	834.80
TOTAL	812.77	937.31	1,067.75	1,138.75	1,457.30
SUBSIDIES**	26.50	28.96	31.10	46.20	62.17
INTEREST:					
Foreign	102.04	120.85	156.55	160.89	231.60
Domestic	198.17	249.50	306.87	339.33	375.20
TRANSFERS TO:					
Households and Unincorporated Enterprises including Private Non-profit Institutions	32.84	39.16	41.96	70.76	
Financial and Non-Financial Enterprises		6.95		0.01	
General Government	331.01	324.38	353.50	385.95	564.54
Rest of the World	12.28	10.25	7.00	7.22	
Funds	1.59	13.65	2.29	4.83	
TOTAL TRANSFERS	377.72	394.39	404.75	468.77	564.54
OTHERS	0.01	0.01	0.22	0.66	0.00
1. TOTAL CURRENT EXPENDITURE	1,517.21	1,731.02	1,967.24	2,154.60	2,690.81
2. CAPITAL EXPENDITURE:					
Gross Fixed Capital Formation	283.72	242.00	374.46	446.86	557.38
Capital Transfers	40.86	39.90	44.48	34.79	37.83
TOTAL	324.58	281.90	418.94	481.65	595.21
3. NET LENDING:					
Purchase of Equity in Enterprises	7.87	7.13	16.72	9.37	4.60
Loans to Households, Enterprises and General Government Agencies	46.44	27.30	60.97	58.14	47.01
Less Loan Repayments to Government	-6.36	-5.11	-15.97	-3.40	-10.53
TOTAL	47.95	29.32	61.72	64.11	41.08
4. PUBLIC DEBT REDEMPTION	192.39	180.20	502.83	453.34	659.00
5. Total Expenditure (1+2+3 + 4)	2,082.13	2,222.44	2,950.73	3,153.70	3,986.10
MEMORANDUM ITEM:					
Export Compensation	25.43	28.70	31.00	46.15	62.00

\* *Provisional.*

\*\* *Includes Export Compensation.*

## Public Debt

6.14. Total outstanding Government debt, as detailed in Table 6.10, recorded rapid growth from K£ 2,754 million in 1986 to K£ 4,758 million in 1990, an increase of about 72.8 per cent over the period. Over the same period total external debt rose from K£ 2,031 million to K£ 3,419 million, even after taking into account many debt write-offs by friendly countries in the recent past. This underscores the country's continued dependence on external resources to fund its structural adjustment programme in the medium term. Total internal unfunded debt increased considerably with the introduction of medium-term Treasury bonds in 1986/87, thus worsening the domestic debt scenario.

### CENTRAL GOVERNMENT PUBLIC DEBT, 1986 -1990

*Table 6.10* *K£million*

As at 30th June	Public Debt*								
	Funded			Unfunded			Total		
	External	Internal	Total	External	Internal**	Total	External	Internal	Total
1986		712.94	712.94	2,030.90	10.00	2,040.90	2,030.90	722.94	2,753.84
1987..		706 93	706 93	2,342 73	166 25	2,508.98	2,342.73	873.18	3,215.91
1988		696.39	696 39	2,690.93	468.00	3,158.93	2,690.93	1,164.39	3,855.32
1989		572.55	572 55	2,676.26	668 45	3,344.71	2,676.26	1,241.00	3,917.26
1990		555 59	555.59	3,419.00	783 55	4,202.55	3,419.00	1,339.14	4,758.14

\* Excludes Short-term borrowing.

\*\* Includes Treasury bonds.

6.15. Table 6.11 provides information on sources of public unfunded debt from 1986 to 1990. Total Central Government unfunded debt rose sharply to K£ 4,203 million in 1990 from K£ 3,345 million in 1989. Of this total, about 80 per cent is external debt. Multilateral sources accounted for 53.2 per cent of the total external unfunded debt, with the rest coming from bilateral sources led by Japan. The major source of multilateral debt was the International Development Association (IDA) with a contribution of K£ 1,018 million by June 1990. Other major donors were the World Bank (IBRD), African Development Bank (ADB), the African Development Fund (ADF) and the European Economic Community (EEC). Although a late entry into the Kenyan scene, the ADF has shown remarkable growth in development assistance.



CENTRAL GOVERNMENT  
SOURCES OF UNFUNDED DEBT, 1986 - 1990

Table 6.11

*K£million*

Outstanding as at 30th June	1986	1987	1988	1989	1990
EXTERNAL DEBT:					
Lending Countries:					
West Germany	182.63	241.37	279.56	0.00	15.44
Japan	140.57	179.80	235.61	299.62	428.03
France	85.89	121.14	201.19	163.41	61.91
U.S.A	137.22	139.05	149.58	76.10	120.42
Netherlands	68.13	88.33	87.18	93.74	120.94
Denmark	31.75	43.42	38.61	55.81	74.99
Finland	2.63	3.04	4.16	2.13	5.89
Other	526.23	606.73	546.16	731.98	771.05
Total	1,175.05	1,422.88	1,542.05	1,422.79	1,598.67
International Organizations:					
	367.00	399.83	515.06	628.66	1,018.17
I.B.R.D	367.12	380.00	391.89	398.82	493.20
African Development Bank	42.84	67.18	86.10	105.75	156.28
O.P.E.C	9.08	9.07	11.31	13.77	16.19
E.E.C	29.53	42.47	50.45	63.34	74.06
I.M.F	26.77	10.54	65.80	4.73	0.41
Arab League	2.55	2.37	2.39	2.53	2.50
Badea	3.51	0.34	3.57	3.96	5.01
I.F.A.D. ....	3.29	3.05	3.12	6.58	9.27
C.D.C	4.16	5.00	7.83	7.44	7.90
A.D.F	-	-	11.36	17.89	37.34
Total	855.85	919.85	1,148.88	1,253.47	1,820.33
Total External	2,030.90	2,342.73	2,690.93	2,676.26	3,419.00
INTERNAL DEBT:					
Central Bank of Kenya .. ..	10.00	10.00	10.00	10.00	10.00
Other	-	156.25	458.00	658.45	773.55
TOTAL INTERNAL...	10.00	166.25	468.00	668.45	783.55
TOTAL UNFUNDED DEBT ..	2,040.90	2,508.98	3,158.93	3,344.71	4,202.55

6.16. Table 6.12 details the holders of public funded debt between 1986 and 1990. Total funded debt declined substantially from K£ 707 million in 1987 to K£ 556 million in 1990. The National Social Security Fund (NSSF) was owed K£ 263 million in 1990, and contributing 47.4 per cent of the funds, remained the single major source of funded loans to Government. Other holders with substantial securities were the Central Bank and the Central Government Sinking Fund with K£ 163 million and K£ 72 million, respectively, at the close of the 1989/90 fiscal year.

ANALYSIS OF PUBLIC FUNDED DEBT AT BOOK VALUE BY HOLDERS  
ON LOCAL REGISTER AS AT 30TH JUNE, 1986- 1990

*Table 6.12* *K£million*

	1986	1987	1988	1989	1990
<b>PUBLIC BODIES:</b>					
National Social Security Fund	317.35	297.08	294.77	276.97	263.28
Central Government	62.41	76.73	75.79	74.46	72.20
Local Government	0.28	0.45	0.40	0.25	0.25
Kenya Post Office Savings Bank .. ..	10.97	8.91	8.86	5.12	4.47
Former E.A. Community Institutions*	25.02	21.45	20.84	15.37	15.37
Central Bank	261.65	262.76	262.76	162.76	162.76
Other Public Sector	2.46	1.16	1.16	1.16	1.11
<b>OTHER INTERNAL:</b>					
Commercial Banks	9.07	9.07	5.43	5.43	5.43
Insurance Companies	9.44	8.73	8.20	9.11	8.84
Other Companies	14.19	20.49	18.08	21.83	21.79
Private Individuals	0.10	0.10	0.10	0.09	0.09
<b>TOTAL</b>	<b>712.94</b>	<b>706.93</b>	<b>696.39</b>	<b>572.55</b>	<b>555.59</b>

\* And other successors

Source: Central Bank of Kenya.

6.17. Table 6.13 details the debt service charges between June, 1986 and June, 1990. Total net service charges have more than doubled from K£ 416 million for the year ending in June, 1986 to K£ 947 million for the year ending in June, 1990. The most marked increase was recorded in the cost of servicing internal debt which rose from K£ 199 million during the year 1985/86 to K£ 581 million in 1988/89, reflecting the rise in interest rates and volume of medium term Treasury bonds launched in 1986/87, which are mainly targeted at the non-bank sector. On the other hand, the debt service ratio on Central Government external debt as shown in Table 6.14 dropped by about 4 percentage points mainly due to a substantial growth of 27.3 per cent in export of goods and services in 1990.

CENTRAL GOVERNMENT  
DEBT SERVICING CHARGES\*, 1986- 1990

*Table 6.13* *K£million*

Year ending 30th June	ANNUAL DEBT SERVICING CHARGES			INTEREST AND LOAN REPAYMENT RECEIPTS			NET SERVICING CHARGES		
	External	Internal	Total	External	Internal	Total	External	Internal	Total
1986	237.04	198.95	435.99		19.72	19.72	237.04	179.23	416.27
1987	258.31	234.29	492.60		13.95	13.95	258.31	220.34	478.65
1988	283.85	266.70	550.55		11.17	11.17	283.85	255.53	539.38
1989	368.82	597.43	966.25		25.68	25.68	368.82	571.75	940.57
1990	373.04	580.52	953.56		7.01	7.01	373.04	573.51	946.55

\* For breakdown between interest and repayments, see Table 6.1 and Table 6.9

CENTRAL GOVERNMENT  
DEBT SERVICE CHARGES ON EXTERNAL DEBT RELATED TO EXPORT  
OF GOODS AND SERVICES, 1986-1990

Table 6.14

	Debt Service Charges on External Debt* (Financial Year)	Export of Goods and Services (Calendar Year)	External Debt Service Charges as a Percentage of Export of Goods and Services
	K£million	K£million	
1986	237.04	1,516.68	15.63
1987	258.31	1,399.59	18.46
1988	283.85	1,664.85	17.05
1989	368.82	1,997.68	18.46
1990**	373.04	2,542.19	14.67

\* Including debt redemption, interest payments on drawing on IMF are, however, excluded.

\*\* Provisional.

### Local Authorities

6.18. By the end of 1990, there were a total of 116 Local Authorities in Kenya comprising of the City of Nairobi, 28 Municipal councils, 22 Town councils, 26 Urban councils and 39 County councils. The primary objective of Local Authorities remains the provision of public services to augment the Central Government's efforts. However, Local Authorities have found it increasingly difficult to finance some of these services due to inadequate financial base and ever increasing rural-urban migration.

6.19. An analysis of total expenditure by different types of Local Authorities is set out in Table 6.15. The overall expenditure grew from K£ 248 million in 1989/90 to K£ 332 million in 1990/91, an increase of 33.7 per cent. Nairobi City Commission accounted for over half of the total expenditure of Local Authorities making it the largest single spending Authority.

### EXPENDITURE ON LOCAL AUTHORITIES, 1986/87 - 1990/91

Table 6.15

K£million

	MUNICIPALITIES			Town, Urban and County Councils	Total
	Nairobi City Council	Other Municipal Councils	Sub-Total		
1986/87	57.16	48.73	105.89	19.28	125.17
1987/88	73.41	43.72	117.13	22.02	139.15
1988/89	72.02	49.26	121.28	25.19	146.47
1989/90*	99.72	107.28	207.00	41.26	248.26
1990/91*	168.17	103.28	271.45	60.38	331.83

\* Provisional.

6.20. Municipal councils' expenditure by function is given in Table 6.16. Their total expenditure registered a 31.1 per cent growth from K£ 207 million in 1989/90 to K£ 271 million in 1990/91 after a much slower growth in earlier years. Economic services and Community services took the largest share with K£ 142 million and K£ 67 million, respectively. The most significant individual items of expenditure in 1990/91 are expected to be water undertakings, sanitary services, housing estates and roads. Among the major Projects undertaken in 1990/91 is the ongoing Third Nairobi Water Project (Ndakaini), which is expected to cost over K£ 76 million this year.

## MUNICIPAL COUNCILS: CURRENT AND CAPITAL EXPENDITURE ON MAIN SERVICES, 1986/87-1990/91

Table 6.16

K£

million

	1986/87	1987/88	1988/89	1989/90*	1990/91*
Administration	16.75	22.36	27.31	40.48	36.53
COMMUNITY SERVICES:					
Roads	8.44	7.02	8.72	15.28	27.60
Sanitation	11.11	10.88	11.10	32.44	36.81
Other	1.91	1.58	1.52	2.35	2.70
Total	21.46	19.48	21.34	50.07	67.11
SOCIAL SERVICES:					
Education	6.68	7.95	7.75	10.33	9.15
Health	9.71	10.90	13.21	17.54	14.51
Other	0.65	0.69	1.56	1.12	2.53
Total	17.04	19.54	22.52	28.99	26.19
ECONOMIC SERVICES:					
General Administration	4.51	4.32	2.40	5.42	3.35
Water Undertakings	18.94	24.90	20.05	38.07	97.54
Housing Estates (including Staff Housing)	23.26	18.82	15.86	33.36	29.12
Other	3.93	7.71	11.80	10.61	11.61
Total	50.64	55.75	50.11	87.46	141.62
TOTAL EXPENDITURE .. ..	105.89	117.13	121.28	207.00	271.45

\* Provisional.

6.21. An economic analysis of the expenditure incurred by municipal councils is detailed in Table 6.17. Excluding capital expenditure on projects and loan charges, the bulk of expenditure by municipal councils has been incurred on wages and salaries, which accounted for 54.2 per cent of the current expenditure in 1990/91 while 44.6 per cent was on other goods and services. Capital projects cost K£ 161 million in 1990/91 from K£ 99 million in 1989/90. This is attributable to the improvement of the Authorities' revenue base due to the introduction of Local Authorities service charge.

## MUNICIPAL COUNCILS: ECONOMIC ANALYSIS OF EXPENDITURE, 1986/87 -1990/91

Table 6.17

K£million

	1986/87	1987/88	1988/89	1989/90*	1990/91*
CURRENT EXPENDITURE:					
Labour Cost	29.71	37.09	42.32	49.09	53.27
Other Goods and Services	25.86	27.31	28.83	36.34	43.77
Transfer to Households and Enterprises	1.05	0.32	1.80	0.19	0.51
Transfer to Funds (Current) ..	3.69	4.78	0.29	4.34	0.38
Interest					0.33
Total	60.31	69.50	73.24	89.96	98.26
CAPITAL EXPENDITURE:					
Gross Fixed Capital Formation	31.41	32.09	31.08	98.75	161.00
Loan Repayment**	12.50	15.18	16.72	17.43	12.15
Transfer to Funds (capital)	1.67	0.36	0.24	0.86	0.04
Total	45.58	47.63	48.04	117.04	173.19
TOTAL EXPENDITURE	105.89	117.13	121.28	207.00	271.45

\* Provisional.

\*\* Includes interest.

6.22. As per the details in Table 6.18, sale of goods and services has continued to outstrip rates as the dominant source of current revenue for municipal councils. This type of revenue has expanded steadily since the introduction of service charge in 1989 to supplement other revenue sources. Sale of goods and services raised K£ 84 million or 69.2 per cent of the current revenue. Much of the capital revenue is in form of loans raised locally or abroad to finance capital projects such as tenant housing schemes, sewerage works and water undertakings.

MUNICIPAL COUNCILS: ECONOMIC ANALYSIS OF REVENUE, 1986/87 - 1990/91

*Table 6.18* *K£million*

	1986/87	1987/88	1988/89	1989/90*	1990/91*
CURRENT REVENUE:					
Direct Taxes (Rates**)	22.69	27.39	33.11	32.02	33.79
Indirect Taxes (Licences and cesses)	3.50	3.07	1.61	3.33	2.34
Income from Property	1.12	1.40	0.85	1.75	1.04
Current Transfers	0.46	0.19	0.29	0.57	0.17
Sale of Goods and Services*** .. ..	26.23	45.89	63.06	75.38	83.91
TOTAL	54.00	77.94	98.92	113.05	121.25
CAPITAL REVENUE:					
Loans Raised	30.81	18.73	13.78	67.33	118.71
Loan Repayment	0.23	0.14	0.91	0.11	0.97
TOTAL	31.04	18.87	14.69	67.44	119.68
TOTAL REVENUE	85.04	96.81	113.61	180.49	240.93

\* *Provisional.*

\*\* *Paid by households and enterprises.*

\*\*\* *Includes service charge from 1988/89 onwards.*

6.23. Table 6.19 sets out an economic analysis of expenditure and revenue of town, urban and county councils between 1986/87 and 1990/91. Total expenditure more than trebled from K£ 19 million to K£ 60 million during this period. Due to an increase in councils' revenue base, the councils are expected to initiate new, and rehabilitate existing capital projects such as markets, bus-stands, jua *kali* sheds and other construction. Over the same period, total revenue increased from K£ 22 million to K£ 61 million leaving a fair surplus on the current account. The bulk of the receipts were realised from indirect taxes and sale of goods and services which includes the service charge.

TOWN, URBAN AND COUNTY COUNCILS:  
ECONOMIC ANALYSIS OF EXPENDITURE AND REVENUE, 1906/87 - 1990/91

Table 6.19

*K£million*

	1986/87	1987/88	1988/89	1989/90*	1990/91*
<b>CURRENT EXPENDITURE:</b>					
Labour Cost	9.86	11.51	14.83	17.44	22.02
Other Goods and Services	4.76	5.55	5.05	9.67	16.64
Transfer to households and Enterprises	0.45	0.30	0.06	1.12	0.81
Transfer to Funds (Current)	0.30	0.16	0.03	0.40	0.78
Interest	..	..	..		
Total	15.37	17.52	19.97	28.63	40.25
<b>CAPITAL EXPENDITURE:</b>					
Gross Fixed Capital Formation	3.31	4.26	4.21	11.78	19.34
Loan Repayments**	0.30	0.24	0.71	0.78	0.77
Transfer to Funds (capital)	0.30	0.00	0.30	0.07	0.02
Total	3.91	4.50	5.22	12.63	20.13
<b>TOTAL EXPENDITURE</b>	19.28	22.02	25.19	41.26	60.38
<b>CURRENT REVENUE:</b>					
Direct Taxes (Rates***)	1.00	1.19	2.27	2.21	4.56
Indirect Taxes (Licences and cesses)	8.25	7.88	9.75	7.15	12.58
Income from Property	6.71	3.73	7.87	4.53	2.80
Current Transfers	0.73	0.64	0.84	0.48	0.43
Sale of Goods and Services +	4.27	5.48	24.62	31.45	38.27
Total	20.96	18.92	45.35	45.82	58.64
<b>CAPITAL REVENUE:</b>					
Loans Raised	1.15	2.23	1.91	2.21	2.50
Loans Repayments	0.02	0.02	0.01	0.01	0.01
Total	1.17	2.25	1.92	2.22	2.51
<b>TOTAL REVENUE</b>	22.13	21.17	47.27	48.04	61.15

\* *Provisional.*

\*\* *Includes Interest.*

\*\*\* *Paid by households and enterprises.*

+ *Includes Service Charge from 1988/89 onwards.*

## CHAPTER 7 - EXTERNAL TRADE AND THE BALANCE OF PAYMENTS

### Overview

Performance of external trade in 1990 was discouraging. Both the balance of payments and the balance of trade registered large deficits. Balance of trade deficit grew by 6.8 per cent to reach a high K£ 1,302 million. Balance of payments turned around from a surplus of K£ 81 million in 1989 to K£ 169 million deficit in 1990; the highest deficit recorded in recent years. While export prices only improved by 8.3 per cent, import prices rose by 20.2 per cent. The current account deficit improved by 9.9 per cent, attributable to 28.7 per cent growth in the inflow of grants and tourism earnings. The situation would probably have been grimmer had it not been for reduced import quantities.

7.2. Total exports performed better in 1990 by registering 22 per cent growth to reach K£ 1,244 million. Growth in imports slowed to 13.7 per cent compared with 26.8 per cent and 23.4 per cent in 1989 and 1988, respectively. The depreciation of the Kenya Shilling by 19 per cent in 1990, encouraged exports while at the same time it discouraged imports. Higher quantities of agricultural exports and rising prices of minerals were responsible for the rise in export earnings. Kenya recorded adverse balance of trade against most areas of the world except Africa.

### Balance of Trade

7.3. In 1990, the value of total exports grew by 22 per cent over 1989. Re-exports continued the downward trend, first observed in 1988, by recording 41.5 per cent decline in 1990 to register a low level of K£ 12 million. The improved performance of exports was due to higher prices and quantities for tea, meat and meat products, horticultural products, pyrethrum extract, soda ash, cement, fluorspar and wattle extract while higher quantities for coffee, butter and ghee ensured higher value despite lower prices for these two commodities. Imports grew by 13.7 per cent, which was about half the 1989 growth. Higher prices for manufactured goods, fertilizers, rice, animal feeds, paper and paper products may have contributed to lower local demand.

BALANCE OF TRADE, 1986 - 1990

	1986	1987	1988	1989	1990*
<b>EXPORTS:</b>					
Domestic Exports.. ..	957.97	753.41	917.72	999.84	1,232.36
Re-exports .. ..	28.88	36.45	34.16	19.90	11.65
Total .. ..	986.85	789.86	951.88	1,019.74	1,244.01
<b>IMPORTS:</b>					
Commercial .. ..	1,276.03	1,346.33	1,654.45	2,097.27	2,397.55
Government .. ..	61.87	84.56	110.70	141.70	148.08
TOTAL	1,337.89	1,430.88	1,765.15	2,238.97	2,545.63
<b>BALANCE OF TRADE</b>	-351.04	-641.02	-813.27	-1,219.23	-1,301.62
* Provisional					

7.4. The liberalisation of imports contributed to increased commercial imports which grew by 14.3 per cent, although this growth was significantly lower than the 26.8 per cent registered in 1989. In the last five years, Government imports as a proportion of total imports have not exceeded 6.5 per cent, indicating that they play an insignificant role in the total value and volume of imports. The depreciation of the Kenya Shilling

against currencies of major trading partners, while encouraging exports, also resulted in higher unit values for imports and hence contributed to worsening of the balance of trade.

### Price Changes

7.5. Table 7.2 gives the breakdown of both export and import price indices. Export price index rose by 8.3 per cent in 1990. After a significant 17.1 per cent drop in export prices in 1987, this was the third year in a row that the export prices have risen. The increase in export price index is attributable to 22.5 per cent rise in the beverages and tobacco index; 38.5 per cent rise in the animal and vegetable oils and fats index; 19.1 per cent increase in chemicals index; and 16.2 per cent increase in transport and machinery index. The price of wattle extract, which increased by 22 per cent, contributed to the increase in the chemical index.

### PRICE INDICES, 1986- 1990

Table 7.2

1982 = 100

	1986	1987	1988	1989	1990
<b>EXPORTS:</b>					
Food and live animals	188	137	171	162	167
Beverages and tobacco	148	146	185	209	256
Crude materials, inedible .. ..	121	128	138	198	213
Mineral fuels	81	88	84	104	136
Animal and vegetable oils and fats ..	159	139	137	205	284
Chemicals	167	162	161	178	212
Manufactured goods	115	117	129	154	155
Machinery and transport equipment ..	322	202	293	314	365
Miscellaneous manufactured articles..	174	177	184	200	224
All Exports	152	126	145	156	169
Non-oil Exports	174	138	165	171	178
<b>IMPORTS:</b>					
Food and live animals	161	126	150	171	176
Beverages and tobacco	218	262	269	322	381
Crude materials, inedible	144	145	164	220	237
Mineral fuels	77	86	79	106	144
Animals and vegetable oils and fats	159	136	147	192	179
Chemicals	227	214	256	308	357
Manufactured goods	165	184	216	262	329
Machinery and transport equipment ..	198	198	208	239	289
Miscellaneous manufactured articles ..	137	152	193	202	278
All imports	147	149	164	198	238
Non-oil Imports	187	185	209	246	287

7.6. The import price index for all commodities in 1990 increased by 20.2 per cent over the 1989 index. Import price indices increased for all commodities except animal and vegetable oils and fats. The decline in prices of crude palm oil, the single most important item in this group, pulled the index down by 7 per cent. High increases in import price indices were recorded for miscellaneous manufactured articles, mineral fuels and manufactured goods which recorded increases of 37.6 per cent, 35.8 per cent and 25.6 per cent, respectively. The rise in the food index by 2.9 per cent was occasioned by imports of tea for blending, while uncertainty with regard to availability



of crude oil in the wake of the Gulf crisis resulted in crude oil price hikes in the second half of 1990. The non-oil import price index recorded a 16.7 per cent rise indicating the effect of the higher oil imports index in the overall import price index.

### Terms of Trade

77 The terms of trade for all items have steadily worsened during the last four years from 103 in 1986 to 71 in 1990, as shown in Table 7.3. The same pattern of decline was observed in the indices of non-oil items except that they are much lower. This pattern reflects the slow growth or decline in prices of agricultural commodities, which form the bulk of Kenya's exports, as opposed to high prices of manufactured goods and crude petroleum, which constitute the largest share of Kenya's imports.

TERMS OF TRADE, 1986-1990

Table 7.3	1982 = 100				
	1986	1987	1988	1989	1990
All Items	103	85	88	79	71
Non-oil Items	93	75	79	70	62

### Volume Changes

7.8. Table 7.4 shows changes in the volume of trade. While the quantity index for exports rose by 7 points over the 1989 level, the import index fell by 6 points. Larger export quantities of agricultural products, such as coffee, tea, butter and ghee, meat and meat products, and horticultural products caused a rise in the food index by 15.8 per cent, while larger quantities of beer and tobacco brought a 47.8 per cent rise in beverages and tobacco index. Other notable rises in quantities were registered for exports of manufactured goods by 27.8 per cent, mainly from exports of leather and miscellaneous manufactured articles which rose by 39 per cent. Declines in quantum indices were registered by crude inedible materials by 1.8 per cent, occasioned by 89 per cent decline in exports of hides and skins. Index for machinery and transport equipment declined by 58 per cent, resulting from reduced demand.

7.9. Nearly half of import quantity indices declined marginally. Increased imports of wheat, sugar and tea for blending contributed to the rise in food index by 102.8 per cent. Higher imports of crude palm oil caused a 6 per cent rise in the index for animal and vegetable oils and fats; while higher import prices for manufactured goods discouraged imports of chemicals, machinery and transport equipment. Falling imports of fertilizers contributed to 18 per cent decline in imports of chemicals; 15 per cent fall in manufactured goods is attributable to reduced imports of cork and wood manufactures, textile yarn and woven textile fabrics. The 11 per cent decline in machinery and transport equipment was brought about by fewer imports of road motor vehicles as a result of new valuation procedures for tax purposes. Following these mixed performances, the overall import index fell by 4.8 per cent and that of non-oil imports by 6.7 per cent.

### Composition of Exports

10. Exports classified by broad economic categories are shown in Table 7.5. Increased quantities of coffee, tea, meat, horticulture, beers, and tobacco exports helped food and beverages category to record increase of K£ 145.85 million, equivalent to 24.4 per cent rise over 1989. The substantial 31.4 per cent rise in the fuels and lubricants group resulted from price rise of petroleum products. Low demand for Kenyan assembled motor vehicles reduced the export earnings from the transport equipment group by K£1.9 million; while earnings from consumer goods

**QUANTUM-INDICES, 1986- 1990**

Table 7.4

1982 = 100

	1986	1987	1988	1989	1990
<b>EXPORTS:</b>					
Food and live animals	126	125	120	133	154
Beverages and tobacco	340	235	180	186	275
Crude materials, inedible .. ..	119	121	153	113	111
Mineral fuels	89	78	96	76	75
Animal and vegetable oils and fats ..	82	116	150	250	146
Chemicals	95	99	88	108	100
Manufactured goods	99	98	130	133	170
Machinery and transport equipment	38	84	53	59	25
Miscellaneous manufactured articles ..	144	107	122	130	181
All Exports	114	110	116	115	122
Non-oil Exports	121	119	121	127	143
<b>IMPORTS:</b>					
Food and live animals	115	113	69	107	217
Beverages and tobacco	45	54	63	59	62
Crude materials, inedible	129	158	178	157	158
Mineral fuels	94	100	98	101	104
Animals and vegetable oils and fats	112	117	165	141	150
Chemicals	100	122	126	118	97
Manufactured goods	97	105	125	127	108
Machinery and transport equipment	104	102	134	152	135
Miscellaneous manufactured articles ..	105	107	107	128	98
All imports	101	106	119	125	119
Non-oil Imports	103	109	128	135	126

registered a record 45.4 per cent increase. The proportion of food and beverages in the total exports rose while that of industrial non-food supplies declined. Exports of transport equipment have continued to decline in importance and fell below their 1986 level. Except for minor fluctuations, the other groups maintained their relative proportions.

7.11. Quantities of principal exports are shown in Table 7.6. After faltering in 1989, fluorspar, cement, maize and horticultural exports registered increases in 1990. Tea has continued a steady rise over the five year period while soda ash and petroleum products kept a downward trend. Owing to falling prices of crude industrial raw materials and increased domestic demand by local textile and leather industries for cotton, wool, hides and skins, exports of these products were substantially reduced. Thus, there were no exports of cotton for the third year running and Kenya is becoming a net importer of cotton. There were no wool imports in 1990.

7.12. Better packaging, availability of cargo space and rising international demand for horticultural products contributed to the 40.7 per cent rise in their exported quantities. Despite low international price and low domestic production of coffee, greater quantities were exported during the year by drawing down on stocks. Wattle bark suffered a 56 per cent drop in quantity exported following a 6 per cent price rise. Animal feeds recorded 29.4 per cent decrease in exported quantities.

	1986	1987	1988	1989	1990**
1. FOOD AND BEVERAGES	646.77	451.85	546.36	598.19	744.04
Primary	598.61	402.81	492.57	525.16	637.74
For Industry	391.88	196.97	248.00	208.70	226.27
For Household Consumption	206.73	205.84	244.58	316.46	411.47
Processed__	48.16	49.04	53.78	73.02	106.32
For Industry	2.11	3.03	5.49	4.98	4.41
For Household Consumption	46.05	46.01	48.30	68.05	101.91
2. INDUSTRIAL SUPPLIES (Non-Food)	146.71	147.20	194.38	219.49	245.59
Primary	78.01	85.04	113.71	110.47	118.59
Processed	68.70	62.16	80.66	109.02	127.00
3. FUEL AND LUBRICANTS	106.85	101.20	118.34	114.47	150.42
Primary	0.02	0.03	-	0.03	0.03
Processed	106.82	101.18	118.34	114.45	150.39
Motor Spirit	24.39	24.56	25.45	9.06	18.24
Other	82.43	76.62	92.89	105.39	132.15
4. MACHINERY AND OTHER CAPITAL EQUIPMENT ..	4.17	4.06	5.61	6.53	6.90
Machinery and Other Capital Equipment ..	3.16	3.36	4.55	5.94	5.79
Parts and Accessories	1.01	0.70	1.06	0.59	1.11
5. TRANSPORT EQUIPMENT	3.23	4.14	5.34	4.52	2.62
Passenger Motor Vehicles	0.27	0.38	0.09	0.06	0.15
Other	0.72	0.89	1.63	2.12	0.39
For Industry__	0.68	0.78	1.61	2.07	0.36
Non-Industrial	0.04	0.11	0.02	0.05	0.03
Parts and Accessories	2.24	2.87	3.63	2.34	2.07
6. CONSUMER GOODS NOT ELSEWHERE SPECIFIED	49.95	44.72	47.52	56.54	82.23
Durable	5.13	1.30	1.36	1.31	9.11
Semi-Durable	12.40	9.13	12.71	12.15	18.54
Non-Durable	32.42	34.29	33.45	43.07	54.57
7. GOODS NOT ELSEWHERE SPECIFIED.	0.29	0.24	0.18	0.10	0.56
TOTAL	957.97	753.41	917.73	999.84	1,232.36
PERCENTAGE SHARES:					
1. Food and Beverages	67.52	59.97	59.53	59.84	60.36
2. Industrial Supplies (Non-Food)	15.31	19.54	21.18	21.95	19.93
3. Fuel and Lubricants	11.15	13.43	12.90	11.45	12.21
4. Machinery and other Capital Equipment.. ..	0.44	0.54	0.61	0.65	0.56
5. Transport Equipment	0.34	0.55	0.58	0.45	0.21
6. Consumer Goods not elsewhere specified ..	5.21	5.94	5.18	5.65	6.67
7. Goods not elsewhere specified	0.03	0.03	0.02	0.01	0.05
TOTAL	100.00	100.00	100.00	100.00	100.00

\* Excluding Re-exports.

\*\* Provisional.

# QUANTITIES OF PRINCIPAL EXPORTS, 1986- 1990

Table 7.6

Commodity	unit	1986	1987	1988	1989	1990*
Coffee .. ..	Tonnes	126,498	99,977	90,831	98,041	114,384
Tea .. ..		116,456	134,627	138,201	163,279	166,405
Petroleum Products	Mn. Lt	834	684	828	646	638
Pyrethrum Products	Tonnes	850	459	488	540	453
Meat products..	"	763	87	71	401	1,585
Sisal .. ..	"	31,696	27,913	30,937	32,856	30,125
Hides and Skins	"	13,965	16,052	17,580	10,153	1,093
Soda Ash.. ..	"	229,260	196,684	228,384	206,812	185,179
Fluorspar ..	"	41,133	45,681	98,105	81,204	88,229
Cement .. ..	"	495,623	353,249	346,640	313,884	329,539
Maize(raw) ..	"	227,951	247,688	167,237	110,241	159,883
Horticulture	"	119,177	146,602	161,754	134,178	188,825
Butter and ghee	"	423	315	225	262	418
Cotton(raw) ..	"	499	56	..		
Wool .. ..	"	1,109	1,024	795	445	
Animal feeds ..	"	16,966	9,723	7,532	11,238	7,938

\* *Provisional.*

## Unit Price of Selected Export Commodities

7.13. Table 7.7 shows average export prices which point to an unsteady international market for primary commodities. For the five year period only meat and meat products, soda ash, sisal and cement have maintained an upward price trend. Because of its relatively high contribution to export earnings, a slight change in either quantity or price of coffee has a large effect on total export earnings. After an all time high price of KShs. 61.43 per Kg recorded in 1986, the price of coffee has continued to fall, and except for a slight increase in 1988, it now stands at KShs. 38.64 per Kg or 62.90 per cent of the 1986 price. There was some slight compensation of the loss through a 13.5 per cent increase in the price of tea.

## EXPORT PRICES, 1986-1990

Table 7.7

KSh./Unit

Commodity	Unit of Quantity	1986	1987	1988	1989	1990*
Coffee, unroasted ..	Kg.	61.43	38.93	53.89	41.62	38.64
Tea	Kg.	29.67	24.27	26.81	33.30	37.80
Petroleum Products	1,000 Lt.	2,373.97	2,784.78	2,664.42	3,155.53	4,398.86
Maize(raw) .. ..	100Kg.	128.65	157.12	259.13	282.40	258.56
Meat and meat products	Kg.	41.66	49.68	52.64	63.47	70.45
Pyrethrum Extract ..	Kg.	895.29	996.60	693.59	1,619.75	1,936.82
Sisal	100Kg.	690.51	708.19	771.48	989.66	1,257.49
Hides and Skins(undressed)	Kg.	18.06	21.02	29.70	26.76	21.71
Wattle extract.. ..	Kg.	14.54	11.32	12.98	14.3	17.52
Soda Ash .. ..	100Kg.	123.56	138.54	163.00	213.92	263.04
Fluorspar	100Kg.	117.36	105.55	119.29	156.08	190.88
Cement .. ..	100Kg.	54.00	55.88	60.02	69.77	76.60
Horticulture	Kg.	13.15	12.84	14.14	16.72	16.94
Wool	Kg.	22.25	28.73	48.75	57.26	
Animal feeds .. ..	100Kg.	129.07	132.40	164.50	199.70	189.31
Cotton(raw) .. ..	Kg.	21.97	17.86	39.04		38.00
Butter and ghee ..	Kg.	29.61	32.89	30.05	34.34	32.15
Wattle bark .. ..	100Kg.	275.70	980.74	878.33	320.40	339.29

\* *Provisional.*

7.14. Changes in prices, value and quantum of exports given in Table 7.8 show that the highest change in price was registered by petroleum products whose price increased by 39.4 per cent in 1990, followed by sisal with 27.1 per cent price rise and soda ash with 23.0 per cent. Price of wood carvings increased by 22.1 per cent suggesting potential for further growth which need to be exploited. Meat and meat products registered 11 per cent increase in price, while quantities exported rose by almost three times that of 1989.

#### EXPORT CHANGE IN VALUE, QUANTITY AND PRICE \*, 1989-1990

Table 7.8

Commodity	VALUE K£'000			PERCENTAGE CHANGE IN		
	1989	1990**	Changes	Value	Quantity	Price
Coffee, unroasted .. ..	203,813.2	220,996.3	+ 17,183.1	+ 8.4	+ 16.8	-7.2
Tea	271,899.2	314,505.4	+42,606.2	+ 15.7	+ 1.9	+ 13.5
Petroleum products .. ..	101,937.4	140,240.6	+38,303.2	+ 37.6	-1.3	+39.4
Meat and meat products.. ..	1,272.7	5,583.1	+4,310.4	+338.7	+295.2	+ 11.0
Pyrethrum extract .. ..	16,691.6	20,930.5	+4,238.9	+ 25.4	+4.9	+ 19.6
Sisal	16,258.2	18,940.9	+2,682.7	+ 16.5	-8.3	+27.1
Hides and skins (undressed)..	13,583.0	1,186.4	-12396.6	-91.3	-89.2	-18.9
Wattle extract	5,472.9	6,870.0	+ 1,397.1	+ 25.5	+ 3.0	+ 21.8
Soda ash	22,121.0	24,355.1	+ 2,234.1	+ 10.1	-10.5	+ 23.0
Fluorspar	6,337.0	8,420.5	+ 2,083.5	+ 32.9	+ 8.7	+ 22.3
Cement	10,949.1	12,621.9	+ 1,672.8	+ 15.3	+ 5.0	+ 9.8
Horticulture	112,145.9	159,922.4	+47,776.5	+42.6	+40.7	+ 1.3
Wool	1,275.4		-1,275.4			
Animal feeds	1,122.1	751.4	-370.7	-33.0	-29.4	-5.2
Cotton (raw)		0.6	-0.6	„		
Butter and ghee	449.4	672.4	+223.0	+49.6	+59.8	-6.4
Wood carvings	2,061.7	2,382.4	+320.7	+ 15.6	-5.5	+22.1
Metal scrap	2,814.4	2,693.6	-120.8	-4.3	+ 5.8	-9.5
Wattle bark	21.6	10.2	-11.4	-52.8	-55.6	+ 5.9
All other Commodities	209,615.9	263,599.0	+ 53,983.1	+ 25.8		
<b>TOTAL</b>	999,841.7	1,204,682.7	+ 204,841.0	+ 20.5		

\* Excluding Re-exports

\*\* Provisional

#### Composition of Imports

7-15. Values of imports by broad economic category are shown in Table 7.9. Only transport equipment and unspecified goods declined in their values in 1990. As a result of increased imports of wheat, sugar, tea for blending and rice, food and beverages registered 27.1 per cent growth in 1990, which was, however, lower than the 39.9 per cent growth registered in 1989. Industrial non-food supplies registered 7.2 per cent growth from higher imports of crude fertilizers, iron and steel, and leather. Non-food supplies and machinery and capital equipment are required for capital formation as well as servicing existing capacity. However, their total percentage share in total imports increased from only 55.1 per cent in 1989 to 56.8 per cent in 1990; both proportions being lower than the 59.8 per cent recorded in 1988. The share of transport equipment has declined by 19.6 per cent in 1990.

7.16. Changes in value of selected imports, which make up 68.7 per cent of the total, are shown in Table 7.10. Values of imports of all twelve commodity groups have risen except for fertilizers and paper and paper products. The decline in importation of

## TOTAL IMPORTS BY BROAD ECONOMIC CATEGORY, 1986- 1990

Table 7.9

K£million

	1986	1987	1988	1989	1990*
1. FOOD AND BEVERAGES	116.21	98.10	100.97	141.30	179.58
Primary	37.01	35.34	28.82	30.33	68.74
For Industry	21.50	21.63	13.95	28.00	68.32
For Household Consumption	15.51	13.71	14.87	2.34	0.42
Processed	79.20	62.76	72.14	110.97	110.84
For Industry	42.02	40.68	60.21	70.77	77.85
For Household Consumption	37.18	22.07	11.93	40.20	32.98
2. INDUSTRIAL SUPPLIES (Non-Food)	407.97	468.97	641.60	757.80	812.68
Primary	14.70	16.51	21.86	29.50	33.84
Processed	393.27	452.46	619.74	728.30	778.83
3. FUEL AND LUBRICANTS	238.55	282.42	245.91	346.68	489.74
Primary	210.48	248.27	215.75	305.42	430.90
Processed	28.07	34.15	30.17	41.27	58.84
Motor Spirit	5.81	3.15	5.93	3.04	5.83
Other	22.27	31.00	24.24	38.22	53.01
4. MACHINERY AND OTHER CAPITAL EQUIPMENT .. ..	254.46	319.67	414.27	476.48	634.14
Machinery and Other Capital Equipment .. ..	181.00	214.76	259.57	342.20	476.14
Parts and Accessories	73.46	104.91	154.70	134.28	158.00
5. TRANSPORT EQUIPMENT	259.61	190.72	267.19	393.92	315.50
Passenger Motor Vehicles	28.94	34.61	43.24	62.74	69.57
Other	164.84	90.84	137.98	237.49	142.89
Industrial	162.50	87.98	132.44	231.88	136.01
Non-Industrial	2.35	2.86	5.54	5.61	6.88
Parts and Accessories ....	65.83	65.27	85.98	93.69	103.04
6. CONSUMER GOODS NOT ELSEWHERE SPECIFIED ..	59.79	70.60	93.91	116.86	110.51
Durable	10.03	12.22	20.96	28.62	22.13
Semi-Durable	9.44	11.76	16.66	17.68	19.63
Non-Durable	40.32	46.63	56.29	70.55	68.75
7. GOODS NOT ELSEWHERE SPECIFIED	1.30	0.41	1.30	5.93	3.49
TOTAL		1,430.88	1,765.14	2,238.97	2,545.64
PERCENTAGE SHARES:					
1. Food and Beverages	8.69	6.86	5.72	6.31	7.05
2. Industrial Supplies (Non-Food)	30.49	32.77	36.35	33.86	31.93
3. Fuel and Lubricants	17.83	19.74	13.93	15.48	19.24
4. Machinery and other Capital Equipment	19.02	22.34	23.47	21.28	24.91
5. Transport Equipment	19.40	13.33	15.14	17.59	12.39
6. Consumer Goods not elsewhere specified .. ..	4.47	4.93	5.32	5.22	4.34
7. Goods not elsewhere specified	0.10	0.03	0.07	0.26	0.14
TOTAL	100.00	100.00	100.00	100.00	100.00

\* Provisional.

paper and paper products indicates that local production is increasingly meeting local demand.

#### SELECTED IMPORTS, 1986- 1990

*Table 7.10* *K£million*

	1986	1987	1988	1989	1990*
Crude Petroleum	207.83	245.06	210.43	299.10	421.97
Industrial Machinery (including Electrical)..	236.68	278.21	395.45	460.20	596.77
Iron and Steel	64.44	84.49	120.64	151.96	184.82
Motor Vehicle and Chassis ....	88.01	107.77	138.06	174.96	195.16
Petroleum Products refined ....	27.89	33.78	30.02	40.14	55.61
Artificial Resins and Plastic Materials, and Cellulose Esters and Ethers....	41.42	56.36	80.92	75.66	83.46
Pharmaceuticals	32.67	38.22	43.73	56.18	57.61
Fertilizers	50.01	38.96	49.18	69.41	33.28
Agricultural Machinery and Tractors ..	19.66	26.70	29.48	26.92	27.99
Wheat	12.06	17.51	10.00	22.81	62.68
Paper and Paper Products	20.93	21.84	36.22	47.60	40.95
Rice	12.31	5.33	2.71	10.54	9.03

\* *Provisional*

#### Direction of Trade

7.17. Table 7.11 shows destination of exports while Table 7.12 gives the origin of imports. The trade imbalance between Kenya and the European Economic Community in favour of the latter continues. The Community remains the single most important trading partner being the source of 45.0 per cent of imports and the destination of 44.3 per cent of exports. In 1990 imports from and exports to the Community were respectively 13.0 per cent and 23.2 per cent higher than in 1989. France is the only country in the Community from which imports declined in 1990.

7.18. Imports from Eastern Europe declined by 29.8 per cent because of reduced imports of manufactured products from this area. Eastern Europe was undergoing major political restructuring which may have affected its level of trade. Exports to the same area dropped marginally by 1.7 per cent, due mainly to fall in exports of tea and leather.

7.19. Kenya depends on the Middle East as the sole source of crude petroleum while exporting fruits and vegetables to the region. The value of exports to the region was insignificant when viewed against the value of imported oil. Trade has, therefore, been in favour of the Middle East. In 1990, both exports to and imports from the region grew by a significant 64.9 per cent and 50.0 per cent, respectively. The growth in value of imports was due to crude oil price increases occasioned by the Gulf crisis.

7.20. The only area where Kenya registered favourable trade in 1990 was with Africa. Exports to other African countries rose by 18.6 per cent while imports rose by 3.4 per cent. About three quarters of all exports to African countries went to the Preferential Trade Area (PTA) region. Exports to the PTA countries expanded by 26.6 per cent while imports rose by 17.1 per cent. Zambia traded zinc with Kenya and at the same time bought soda ash, iron and steel products from Kenya. Swaziland exported coal and Djibouti exported brake fluid to Kenya. In return, Swaziland imported soda ash while Djibouti imported tea and horticultural products from Kenya. In the rest of Africa, Kenya exported more and imported less, Ghana and Nigeria being the only exceptions. Imports of gas oil from Nigeria and cocoa beans from Ghana helped in tilt the trade balance with Kenya in their favour. Details of trade with African countries are shown in Table 7.13.

DESTINATION OF TOTAL EXPORTS\*, 1986- 1990

Table 7.11

K£million

	1986	1987	1988	1989	1990**
EEC:					
United Kingdom	143.06	133.13	186.93	198.71	218.34
West Germany	136.48	76.19	114.65	88.75	137.87
Italy	20.46	17.01	32.76	27.07	27.83
France	14.13	15.47	17.54	21.36	30.37
Netherlands	91.84	56.88	48.82	49.74	69.92
Other	34.49	36.06	52.56	61.78	67.07
TOTAL	440.46	334.74	453.26	447.41	551.40
Other Western Europe, Total ..	50.54	25.17	43.64	42.01	52.80
Eastern Europe, Total .. ..	10.66	8.87	5.97	20.12	19.78
USA	85.79	42.61	46.24	49.38	42.60
CANADA	9.20	6.27	8.61	10.02	10.85
AFRICA:					
Tanzania	27.26	19.55	24.28	27.48	32.26
Uganda	72.62	69.69	83.70	65.92	64.04
Zambia	1.37	2.09	5.58	2.82	3.29
Other	110.14	128.40	130.32	130.91	170.24
TOTAL	211.39	219.73	243.88	227.13	269.83
MIDDLE EAST:					
Saudi Arabia	22.95	14.62	9.73	8.93	10.51
United Arab Emirates .. ..	4.28	2.20	2.15	2.71	5.67
Iran	0.42	2.91	0.23	0.72	3.40
Other	14.65	10.44	11.46	16.90	28.67
TOTAL	42.30	30.17	23.57	29.26	48.25
FAR EAST AND AUSTRALIA:					
Australia	3.09	3.52	4.73	5.68	4.35
Japan	8.56	7.03	13.72	12.17	15.13
India	5.89	4.28	5.46	8.59	19.46
China(Mainland)	3.97	2.75	2.63	2.68	0.46
Other	76.69	62.25	50.40	97.54	116.29
TOTAL	98.20	79.83	76.94	126.66	155.69
ALL OTHER COUNTRIES	0.85	0.16	0.75	0.67	1.77
Aircraft and Ships Stores .. ..	37.46	42.32	49.04	67.09	91.04
ALL EXPORTS	986.85	789.87	951.90	1,019.75	1,244.01

\* Excluding gold and currency but including Re-Exports.

\*\* Provisional.



ORIGIN OF TOTAL IMPORTS, 1986-1990

Table 7.12

K£million

	1986	1987	1988	1989	1990*
E.E.C:					
United Kingdom	208.94	244.12	333.69	351.04	466.71
West Germany	146.07	118.29	167.31	198.77	199.69
France	153.71	98.09	108.87	196.66	141.79
Italy	48.84	48.40	63.92	100.13	119.59
Netherlands	34.35	41.76	86.22	64.78	87.48
Other	55.85	71.08	82.20	101.51	129.10
TOTAL	647.76	621.74	842.21	1,012.89	1,144.36
Other Western Europe, Total ..	58.45	73.23	98.22	121.05	138.33
Eastern Europe, Total .. ..	18.77	10.72	18.75	25.57	17.95
U.S.A	65.29	101.11	88.31	164.21	114.36
CANADA	6.58	10.87	8.80	5.64	15.71
AFRICA:					
Tanzania	2.21	3.44	6.04	13.26	12.51
Uganda	2.16	0.91	1.27	1.06	1.31
Zambia	2.79	3.14	3.80	8.89	10.42
Other	29.71	35.74	41.72	49.96	51.42
TOTAL	36.87	43.23	52.83	73.17	75.66
MIDDLE EAST:					
United Arab Emirates .. ..	127.26	228.88	201.44	253.33	339.24
Saudi Arabia	38.95	16.48	15.66	42.45	123.35
Iran	19.84	-	14.90	0.13	36.16
Other	41.98	34.43	21.32	53.79	25.39
TOTAL	228.03	279.79	253.32	349.70	524.14
FAR EAST AND AUSTRALIA:					
Japan	146.28	155.66	216.56	245.53	228.51
Australia	6.07	6.69	7.83	11.30	8.15
India	18.23	18.72	28.76	41.76	44.99
China(Mainland)	12.65	14.15	19.72	19.53	22.15
Other	83.49	85.13	123.22	159.70	160.33
TOTAL	266.72	280.35	396.09	477.82	464.13
ALL OTHER COUNTRIES	9.42	9.84	6.61	8.93	50.99
Parcel Post and Special Transactions	-	-	-	-	-
TOTAL	1,337.89	1,430.88	1,765.15	2,238.97	2,545.63

\* Provisional.

TRADE WITH AFRICAN COUNTRIES, 1986 -1990

Table 7.13

K£'000

	EXPORTS					IMPORTS				
	1986	1987	1988	1989	1990*	1986	1987	1988	1989*	1990*
Preferential Trade Area**-										
Uganda	72,625	69,687	83,696	65,919	64,043	2,155	910	1,266	1,063	1,314
Tanzania	27,257	19,554	24,284	27,476	32,264	2,212	3,438	6,044	13,263	12,508
Zambia	1,366	2,091	5,584	2,822	3,292	2,788	3,143	3,803	8,894	10,419
Ethiopia	6,865	8,886	6,355	8,993	11,762	5,945	2,700	1,278	153	57
Burundi	8,897	11,769	11,643	6,344	7,938	2,640	2,875	3,043	365	1,050
Somalia	6,826	7,831	6,988	7,996	23,433	235	38	68	1,002	62
Rwanda	25,239	23,793	23,405	16,865	18,259	8,164	7,997	9,961	1,584	431
Malawi	463	473	2,495	1,032	1,667	94	68	286	57	743
Mauritius	2,541	2,184	2,327	2,867	8,823	216	334	325	285	373
Swaziland	1,146	1,715	1,355	1,320	1,280	2,300	2,203	4,836	5,694	9,167
Zimbabwe	2,455	5,783	9,337	10,706	12,566	7,475	11,040	16,291	26,945	26,839
Comoros	1,194	899	481	401	2,385	-	-	-	-	-
Djibouti	2,527	1,490	1,096	1,025	1,089	1	490	55	1	1,095
Mozambique	1,997	10,424	9,065	2,239	1,378	701	2,327	2,163	409	4,321
Angola	1,517	3,834	1,019	860	8,649				3	-
Lesotho	381	937	11	262	47	2	-	-	1	1,561
TOTAL P.T.A	163,296	171,350	189,141	157,127	198,875	34,928	37,563	49,419	59,719	69,940
Other African Countries:										
Sudan	21,450	22,229	21,774	20,970	20,110	77	332	62	7	62
Zaire	11,389	11,575	10,734	6,742	6,365	1,337	963	586	150	419
Egypt	5,021	6,855	10,045	10,844	27,224	36	202	524	374	69
Algeria and Libya	385	228	227	206	400	1	2	10	1	5
Ghana and Nigeria	1,417	1,066	1,436	2,117	3,060	1	41	753	197	4,450
Reunion	3,000	3,093	5,795	7,477	7,024	4	-	-	-	139
Madagascar and Seychelles	2,310	1,153	1,860	17,838	2,659	25	1,928	23	117	145
All Other African Countries ..	3,127	2,177	2,869	3,814	4,109	463	2,199	1,451	12,606	429
TOTAL	48,099	48,376	54,740	70,008	70,951	1,944	5,667	3,409	13,452	5,718
TOTAL AFRICA	211,395	219,726	243,881	227,135	269,826	36,872	43,230	52,828	73,171	75,658
Percentage of all Exports/Import	21.4	27.8	25.6	22.3	22.2	2.8	3.0	3.0	3.3	3.0

\* Provisional.

" The Eastern and South Africa Preferential Trade Area became operational on 1st July, 1984.

7.21. Trade with the Far-East and Australia was unfavourable. Although imports from Japan fell by 6.9 per cent, exports increased from K£ 12.17 million in 1989 to K£ 15.13 million in 1990, a significant 24.3 per cent growth. However, it was not enough to make any dent in trade balance between the two countries which remains in Japan's favour.

### **Balance of Payments**

7.22. Good performance by the transport and tourism sectors of the economy and a remarkable increase in private grants, led to an improvement in the current account deficit as shown in Table 7.14. During the period under review, the deficit fell to K£ 544 million compared with K£ 604 million in 1989.

7.23. Despite the better performance of the export sector in 1990 leading to a 21.5 per cent increase in export earnings over the 1989 level, significant reductions in both net private and public long-term capital outweighed, by far, the improvement in the current account deficit resulting in a fall in the overall balance of payments deficit from a surplus of K£ 81 million in 1989 to a deficit of K£ 169 million in 1990.

7.24. The import bill continued to rise in 1990 though at a slower pace compared to 1989 when it rose by 26.4 per cent. In 1990 the growth was by 13.7 per cent, and led to a further deterioration of the merchandise balance from a deficit of K£ 1,067 million in 1989 to a deficit of K£ 1,140 million in 1990. The rise in import bill reflects, among others, the continuing effects of the Government's import liberalization policy.

7.25. Net earnings from tourism increased by 21 per cent in 1990, only slightly lower than the 23 per cent growth registered in 1989. High increases in private grants, tourism and other invisible receipts outweighed outflows resulting from international investment income payments (payments of dividends, profits and interests to foreign investors). This resulted in a sizeable improvement in the surplus of invisible transactions from K£ 463 million in 1989 to K£ 596 million last year; an increase of 28.7 per cent.

7.26. The overall balance, as can be seen in Table 7.15, deteriorated greatly in 1990, after improvements in both 1988 and 1989. This turnaround of events is attributable to reductions in net capital inflows, particularly by the public sector. As a result net capital inflow declined by 44.5 per cent. The decline could have been even higher, if the net short-term capital inflows had not increased significantly by over 300 per cent.

7.27. The monetary movements detailed in Table 7.14 shows that the country registered a net fall in reserves amounting to K£ 25 million in contrast to a net increase of K£ 114 million in the previous year. Transactions with the Fund showed a net inflow of K£ 44 million due mainly to drawings under the Enhanced Structural Adjustment Facility (ESAF). Valuation changes resulted from the devaluation of the Kenya Shilling and changes in SDR allocations, as other liabilities constituted the rest of the monetary movement which balanced the accounts.

### **International Liquidity**

7.28. As can be seen from Table 7.16, there was a reduction of K£ 35 million in the total net foreign reserves of the Central Bank which stood at K£ 276 million as at the end of 1990 down from K£ 311 million in 1989. This decline was due to the deficit in the overall balance which was, however, compensated in part by valuation changes due to the depreciation of the Kenya Shilling.

## KENYA BALANCE OF PAYMENTS. 1988-1990

Table 7.14

K£million

	1988+			1989*			1990*		
	Debits/ Assets	Credits/ liabilities	Net	Debits/ Assets	Credits/ liabilities	Net	Debits/ Assets	Credits/ liabilities	Net
<b>A. -CURRENT ACCOUNT</b>									
1. Merchandise (f.o.b.)	1,599.20	902.84	Dr.696.36	2,019.62	952.65	Dr. 1,066.97	2,297.61	1,157.75	Dr.1,139.86
2. Shipment . . . . . *	256.02	40.68	Dr. 215.34	329.38	52.29	Dr.277.09	367.83	58.37	Dr. 309.46
3. Other Transportation	47.66	170.09	122.43	75.65	217.53	141.88	122.13	322.83	200.70
4. Foreign Travel	20.39	349.30	328.91	27.58	432.05	404.47	43.86	533.30	489.44
5. International Investment Income ..	320.29	17.65	Dr.302.64	347.77	12.10	Dr.335.67	428.44	5.30	Dr. 423.14
6. Other goods, services and income : Government	77.11	182.97	105.86	106.40	305.98	199.58	116.88	417.80	300.92
7. Other goods, services and income Private	77.13	19.17	Dr.57.96	81.34	17.40	Dr. 63.94	155.64	63.44	Dr. 92.20
8. Unrequited transfers-Government	0.97	229.03	228.06	5.25	294.35	289.10	6.03	243.03	237.00
9. Unrequited transfers-Private .. ..	34.09	113.08	78.99	45.50	149.94	104.44	58.07	250.47	192.40
<b>TOTAL CURRENT ACCOUNT</b>	2,432.86	2,024.81	Dr.408.05	3,038.49	2,434.29	Dr.604.20	3,596.49	3,052.29	Dr. 544.20
of which: Visible Balance	1,599.20	902.84	Dr.696.36	2,019.62	952.65	Dr.1066.97	2,297.61	1,157.75	Dr.1,139.86
Invisible Balance	833.66	1,121.97	288.31	1,018.87	1,481.64	462.77	1,298.88	1,894.54	595.66
<b>B. -CAPITAL ACCOUNT</b>									
10.Government Long-term		256.43	256.43		389.55	389.55		105.13	105.13
11. Private Long-term	1.97	0.38	Dr.1.59	1.37	72.16	70.79	3.26	29.53	26.27
12.Parastatals Long-term		39.38	39.38		166.89	166.89		72.64	72.64
13.Short-term	2.79	53.19	50.40	30.95	85.12	54.17	76.25	245.83	169.58
<b>TOTAL CAPITAL ACCOUNT .. ..</b>	4.76	349.38	344.62	32.32	713.72	681.40	79.51	453.13	373.62
<b>C. -ERRORS AND OMISSIONS</b>	-	-	4.28		-	3.32			1.64
<b>D. -OVERALL BALANCE</b>	•	-	Dr.67.71	-	-	80.52			Dr. 168.94
<b>E. -MONETARY MOVEMENTS</b>									
14.Change in reserves**	53.02		Dr.53.02	114.15		Dr.114.15	Cr 25.16		25.16
15.Transactions with I.M.F		109.54	109.54		20.89	20.89		117.00	117.00
16.Change in other liabilities..		11.19	11.19		12.74	12.74		26.78	26.78
<b>TOTAL MONETARY MOVEMENTS.. ..</b>	53.02	120.73	67.71	114.15	33.63	Dr.80.52	Cr 25.16	143.78	168.94

\* Provisional.

" Reserves are now defined to include Commercial Banks' foreign assets.

+ Revised.

Changes In Kenya Balance Of Payments Magnitudes\*, 1988-1990

**Table 7.15**

**K£million**

	1988	1989	1990
1. Exports (f.o.b.)* * .. ..	+ 155.30	+ 49.81	+ 201.51
2. Imports(f.o.b.) ** .. ..	-264.25	-420.42	+ 277.99
3. Services(net) .. ..	-17.96	+ 88.17	+ 97.03
4. Transfers (net) .. ..	+ 130.50	+ 86.49	+ 35.86
5. Change on current account ..	+3.59	-196.15	+ 60.00
6. Private long term capital (net)	-54.32	+ 72.38	-44.52
7. Public long term capital (net)	+ 71.99	+ 260.63	-378.67
8. Change on basic balance (net balance on lines 5-7)	+ 21.26	+ 136.86	-363.19
9. Short term capital, errors and omissions (net) ..	+ 15.40	+ 2.81	+ 113.73
10. Net change on all above items (Monetary movements)..	+ 36.66	+ 148.23	-249.46

\* A plus sign indicates a change that improves the balance of payments outcome; a negative sign indicates a change worsening the outcome. Thus, an increase in imports or reduction in exports are marked as negative entries.

\*\* Derived from Merchandise Account and hence some adjustments have been effected.

7.29. Foreign liabilities other than those to IMF, and subscription to the Fund went up by 2.4 per cent and 19.1 per cent respectively at the end of December 1990. However, the IMF holding of Kenya currency, which stood at K£ 479 million in December 1989, declined by 8.0 per cent to K£ 441 million in December 1990. There were major increases in the holding of SDR's by the Bank in May and October, before dropping in June and December, 1990. These reflect acquisition and effective utilization of loans from the Fund.

7.30. The Kenya Shilling exchange rates against selected currencies are presented in Table 7.17. During the year, the Shilling continued to depreciate against all the world's major currencies. Against the US Dollar, French Franc, Pound Sterling, Deutsche Mark and Dutch Guilder, the Shilling depreciated by 11 per cent, 35 per cent, 34 per cent, 30 per cent and 26 per cent, respectively. Most significant depreciation was registered against the Japanese Yen which appreciated by 18.8 per cent compared to only 1.6 per cent in 1989. In terms of the overall trade weighted index, the Shilling depreciated by 19 per cent as at December, 1990.

Central Monetary Authorities: Foreign Exchange Reserves, 1986 - 1990

Table 7.16

K£million

As at end of	Central Bank Of Kenya				Total Net Foreign Reserves of Central Government Authorities	Total Net Foreign Reserves of Central Monetary Authorities	General Accounts With I.M.F.			
	S.D.R.'s	Foreign Reserves	Foreign Liabilities (other than to I.M.F.)	Total Net Foreign Reserves of Central Bank*			Sub- scription	I.M.F. holding of Kenya Currency	Net use of Fund Credit**	Counter part Liability* S.D.R. Account
1986	9.46	333.53	4.26	338.73	0.53	339.26	135.86	461.37	-325.51	36.20
1987	11.98	207.62	4.70	214.90	2.42	217.32	164.93	462.60	-297.67	38.89
1988	0.65	258.42	4.16	254.91	3.64	258.55	177.02	540.43	-363.41	46.11
1989	11.50	323.76	24.08	311.18	12.20	323.38	202.94	479.36	-276.42	52.87
1990										
January .. ..	5.39	269.79	23.98	251.20	16.08	261.79	204.91	482.46	-277.55	53.38
February .. .	3.02	214.73	23.97	193.78	16.68	207.44	206.96	487.29	-280.33	53.91
March ..	2.71	246.19	23.89	225.01	17.05	239.35	211.81	471.58	-259.77	55.17
April ..	13.15	227.95	24.00	217.10	17.08	221.03	213.93	474.71	-260.78	55.73
May ..	20.05	234.87	23.24	231.68	17.93	229.56	216.08	459.73	-243.65	56.29
June ..	3.85	248.89	25.14	227.60	6.83	230.58	217.16	445.09	-227.93	56.58
July ..	4.14	188.74	22.94	169.94	7.35	173.15	222.64	454.65	-232.01	58.00
August .. ..	7.96	213.48	24.03	197.41	7.57	197.02	228.26	458.48	-230.22	59.44
September ..	2.22	201.19	25.64	177.77	6.21	181.76	230.55	453.65	-223.10	60.06
October .. ..	16.40	201.59	26.97	191.02	8.00	182.62	236.08	456.91	-220.83	61.50
November ..	4.34	176.40	27.02	153.72	9.57	158.95	239.27	455.37	-216.10	62.33
December ..	4.22	296.56	24.65	276.13	9.23	281.14	241.67	441.08	-199.41	62.95

Source: Central Bank of Kenya.

\* Excludes subscription to I.M.F.

" Figures with minus indicate use of fund credit.

+ Liability of the member country, corresponding to the issue of S.D.R.'s.

**FOREIGN EXCHANGE RATES OF KENYA SHILLING FOR SELECTED CURRENCIES, 1986-1990**

**Table 7.17**

CURRENCY	MEAN RATES IN KENYA SHILLINGS				
	31st Dec. 1986	31st Dec. 1987	31st Dec. 1988	31st Dec. 1989	31st Dec. 1990
1 US Dollar	16.042	16.515	18.599	21.601	24.084
1 Pound Sterling	23.566	30.685	33.302	34.670	46.470
1 Deutsche Mark	8.242	10.357	10.408	12.812	16.131
1 French Franc	2.490	3.059	3.051	3.747	4.743
1 Swiss Franc	9.872	12.802	12.293	14.036	18.904
1 Dutch Guilder	7.292	9.203	9.217	11.341	14.298
1 Swedish Kroner	2.355	2.830	3.023	3.485	4.288
1 Norwegian Kroner	2.162	2.632	2.825	3.286	4.115
1 Zambian Kwacha**	1.262	2.912		1.033	0.509
1 Austrian Schilling	1.170	1.472	1.480	1.821	2.287
1 Belgian Franc	0.396	0.493	0.496	0.608	0.781
1 Danish Kronor	2.174	2.683	2.694	3.289	4.175
1 Canadian Dollar	11.602	12.686	16.606	18.681	20.764
1 Finish Marka ..'	3.330	4.158	4.447	5.352	6.673
1 Australian Dollar	10.655	11.911	15.897	17.162	18.598
100 Japanese Yen	10.030	13.400	14.800	15.032	17.860
100 Italian Lira	1.184	1.404	1.414	1.710	2.134
1 Indian Rupee	1.224	1.286	1.240		1.326
1 Pakistan Rupee					
100 Burundi Francs**	13.882	16.475	17.615	12.552	14.663
100 Rwanda Francs**	18.940	22.474	24.032	27.829	19.885
Overall Weighted Index*					
1982=100	136.700	165.300	179.200	200.800	247.400

\* Trade weighted Fisher's Ideal index. The index excludes weighting by unavailable exchange rates

\*\* P.T.A. Exchange Rates (Zambia, Rwanda and Burundi).

## CHAPTER 8 - AGRICULTURE

### Overview

The agricultural sector registered a mixed performance during 1990. The year was characterised by continuing adverse conditions in the international coffee markets, rising costs of production and unfavourable weather. However, the effects of these adverse conditions were offset by the impact of marketing and price incentives, improved external market conditions for the other export crops - tea, pyrethrum and sisal; increased demand for beef and mutton, upsurge in milk production and ongoing liberalization programmes which boosted farmers' initiative to produce more. Although production of food crops particularly maize, beans and paddy rice declined, the overall food supply situation in the country remained satisfactory. Value added at constant prices rose by 3.4 per cent during 1990.

8.2. Agricultural output, inputs and value added are summarised in Table 8.1. Total output increased by 0.2 per cent in real terms in 1990 compared with 3.6 per cent in 1989. However, due to a sizeable decline in the value of inputs, value added for the sector rose by 3.4 per cent in 1990 compared to 3.9 per cent registered in 1989.

### AGRICULTURAL OUTPUT AND INPUT, 1986-1990

<i>Table 8.1</i>	<i>K£million</i>				
	1986	1987	1988	1989	1990*
<b>AT CURRENT PRICES-</b>					
Total Output .. ..	1,814.05	1,873.38	2,189.03	2,381.57	2,519.32
Less Inputs .. ..	216.00	238.29	286.34	293.18	289.66
Value Added .. ..	1,598.05	1,635.09	1,902.69	2,088.39	2,229.66
<b>AT CONSTANT (1982) PRICES-</b>					
Total Output .. ..	1,217.32	1,246.43	1,297.84	1,345.14	1,347.19
Less inputs .. ..	193.93	183.86	188.59	192.63	155.15
Value Added .. ..	1,023.39	1,062.57	1,109.25	1,152.51	1,192.04

\* *Provisional.*

### Marketed Production

8.3. Table 8.2 presents recorded marketed production data. The table indicates that sales of crops and livestock and products generally performed better in 1990. Market forces, efficiency and increased domestic demand for livestock and products prompted the industry to register a growth rate of 16.5 per cent. Recorded marketed production of maize and wheat decreased by 18.6 per cent and 20.0 per cent, respectively in 1990. Sales of temporary industrial crops increased by 28.3 per cent due to fair weather, increased world demand and better domestic producer prices. Lower earnings from coffee were adequately compensated for by increased demand for tea and sisal resulting in an overall growth of 12.1 per cent for permanent crops.



Table a2

	Kmillion				
	1986	1987	1988	1989	1990*
CEREALS-					
Maize	66.50	68.09	54.18	69.89	56.87
Wheat	32.88	21.88	35.12	39.96	31.97
Others	7.82	11.07	10.23	6.98	2.07
Total .. ..	107.20	101.04	99.53	116.83	90.91
TEMPORARY INDUSTRIAL CROPS-					
Sugar-cane .. ..	52.79	55.47	68.77	78.41	96.40
Pyrethrum .. ..	4.48	5.64	6.63	10.05	12.60
Others	35.45	42.26	18.04	14.15	22.67
Total .. ..	92.72	103.37	93.44	102.61	131.67
OTHER TEMPORARY CROPS	27.81	18.83	11.90	24.04	18.71
PERMANENT CROPS-					
Coffee	288.32	192.16	278.11	243.90	203.35
Tea	242.33	194.76	203.72	245.32	346.86
Sisal	15.42	13.54	13.76	16.63	18.05
Others	4.71	4.34	6.02	3.82	3.10
Total .. ..	550.78	404.80	501.61	509.67	571.36
TOTAL CROPS	778.51	628.04	706.48	753.15	812.65
LIVESTOCK AND PRODUCTS-					
Cattle and Calves..	84.26	103.87	138.88	148.98	164.03
Dairy Produce	56.51	62.08	60.67	66.21	84.33
Others	19.03	23.71	39.71	34.86	43.06
Total .. ..	159.80	189.66	239.26	250.05	291.42
GRAND TOTAL .. ..	938.31	817.70	945.74	1,003.20	1,104.07

\* *Provisional.*

8.4. The quantum and price indices of marketed output are summarized in Table 8.3. The table shows relative changes in the volume and prices for commodities purchased by marketing boards. As a result of less production and enhanced commodity market reform programmes aimed at reducing the role of the NCPB, the quantum index of cereals fell below the preceding year, from 97.0 in 1989 to 79.9 in 1990. However, the quantum index of livestock and products rose while the indices for temporary industrial crops and permanent crops dropped only marginally. The overall quantum index of the total marketed production fell by 9.8 percentage points from 130.3 in 1989 to 120.5 in 1990. All price indices except that of permanent crops maintained an upward trend reflecting favourable world market prices and regular domestic producer price adjustments by the Government. Quantum and price indices of livestock and products rose by 6.6 per cent and 9.2 per cent, respectively compared with 0.9 per cent and 15.0 Per cent in 1989.

Table 8.3

1982=100

	1986	1987	1988	1989	1990*
QUANTUM INDICES-					
Cereals	104.3	92.4	86.5	97.0	79.9
Temporary Industrial Crops ..	82.0	89.1	90.9	100.1	99.3
Permanent Crops	130.9	121.4	142.9	132.0	131.6
TOTAL CROPS	128.0	119.0	130.4	131.6	116.6
Livestock and Products	92.7	105.1	126.1	127.2	135.6
TOTAL GROSS MARKETING PRODUCTION	120.8	116.2	125.2	130.3	120.5
PRICE INDICES-					
Cereals	171.2	179.5	193.6	198.8	242.0
Temporary Industrial Crops ..	148.5	150.3	173.9	189.8	242.2
Permanent Crops	181.6	140.7	158.2	154.2	134.8
TOTAL CROPS	180.0	142.7	159.1	167.4	163.0
Livestock and Products .. ..	134.8	150.2	157.4	181.0	197.6
TOTAL GROSS MARKETING PRODUCTION	170.8	144.2	161.8	160.9	163.0

\* Provisional.

8.5. Table 8.4 gives the average gross commodity prices paid to farmers between 1986 and 1990. Prices for all commodities increased except that of coffee whose price declined by 15.7 per cent. The drop in the price of coffee was caused by the collapse of the International Coffee Agreement and suspension of the quota system in 1989. The rising demand for tea coupled with production problems experienced by other competing producers especially India and Sri Lanka, and the increased purchases by the Soviet Union and Pakistan were some of the factors behind the rise in the price of this commodity. Sisal prices were also sustained by increased demand and fairly stable prices in the world market. Pyrethrum (extract equivalent) price continued to change favourably in the wake of consumption shifts towards natural insecticides that are less hazardous to the environment. Sugar-cane, cotton and milk prices also went up as a result of Government's producer price adjustments. Prices of livestock and products seem to have stabilized after the liberalization of the industry.

AVERAGE GROSS COMMODITY PRICES\* TO FARMERS, 1986- 1990

Table 8.4

KSh. per stated unit

	UNIT	1986	1987	1988	1989	1990**
Coffee	100kg	5,020.00	3,662.00	4,465.00	4,312.00	3,636.00
Tea		3,382.00	2,500.00	2,037.19	2,717.00	3,521.00
Sisal		743.00	705.00	744.80	892.00	1,179.36
Sugar-cane	tonne	297.00	300.00	358.30	368.00	447.50
Pyrethrum (extract equivalent)	Kg	1,210.00	1,210.00	1,250.00	1,675.00	1,800.00
Seed Cotton	100Kg	470.00	482.00	585.89	570.50	981.00
Maize	"	198.00	209.00	214.23	223.32	261.67
Wheat	"	293.00	295.00	340.57	342.80	475.00
Rice Paddy	"	348.00	372.00	388.00	388.00	-
Beef (third grade).. ..	"	1,857.00	2,115.00	2,300.00	2,380.00	2,600.00
Bacon Pigs	"	2,057.00	2,432.00	2,200.00	2,275.00	2,345.20
Milk	100 litres	325.00	325.00	340.00	375.00	435.00

\* The prices are for calendar year and may differ from those based on crop years. In the case of tea and coffee, the prices are for made tea and processed coffee respectively.

\*\* Provisional.

- No purchases of Paddy by NCPB.

8.6. Sources of output sold to the marketing boards are shown in Table 8.5. Value of marketed output from large farms declined from K£ 508.3 million to K£ 497.6 million in 1990. This decline was attributed to continuous sub-division of formerly large scale farms into small farms. In 1990, the small farms sector output rose by 24.7 per cent, raising its share of gross farm revenue to 55.4 per cent. The small farms dominance is bound to continue with more sub-division of large farms.

**SALE TO MARKETING BOARDS FROM LARGE AND SMALL FARMS, 1986-1990**

*Table 8.5*

YEAR	LARGE FARMS		SMALL FARMS		TOTAL		PERCENTAGE
	K£ mn.	Annual Percentage change	K£ mn.	Annual Percentage change	K£ mn.	Annual Percentage change	SHARE OF SMALL FARMS
1986	515.53	48.80	422.79	3.30	938.32	24.10	45.06
1987	432.07	-16.20	385.63	-8.80	817.70	-12.90	47.16
1988	500.41	15.80	445.33	15.50	945.74	15.70	47.09
1989	508.32	1.58	494.88	11.13	1,003.20	6.07	49.33
1990*	497.56	-2.12	617.30	24.73	1,114.86	11.13	55.37

*\*Provisional.*

8.7. Input mix optimization is central to maximization of agricultural production. Data pertaining to agricultural input indices are given in Table 8.6. Fertilizer use has been decreasing while its price index rose by 35.1 percentage points from 167.2 in 1989 to 202.3 in 1990 due to high prices, inappropriate weight packaging and inefficient distribution system. Domestic production of gunny bags has dwindled over the years due to closure of the East African Bag and Cordage Company and its subsidiary Kensack, even though plans are underway to re-open the factories under new ownership and management. To make up for the shortfall in production, about 1.5 million jute bags were imported during 1990. Purchase of seeds fell by 14.5 per cent. This was mainly attributable to the increased prices of certified seeds which prompted farmers to use home-grown seeds and reduced area under maize in 1990. The rise in the quantum and price indices of manufactured feeds points to their intensified application and the gradual shift towards more zero-grazing in the livestock industry.

Table 8.6

1982=100

	1986	1987	1988	1989	1990**
<b>QUANTUM INDICES-</b>					
Fertilizers	162.4	224.1	271.7	158.4	146.6
Fuel and Power	115.5	131.9	128.3	103.6	121.1
Bags	139.6	139.1	109.9	97.3	94.1
Manufactured Feeds	255.7	280.9	257.4	258.7	260.1
Purchased Seeds	145.4	109.3	92.9	125.6	107.4
Other Material Inputs .. ..	98.2	106.1	106.5	90.5	92.2
Total Material Input .. ..	143.3	162.9	165.0	133.3	134.9
Service Inputs	111.2	121.2	121.6	118.0	105.2
<b>TOTAL INPUTS</b>	139.5	157.9	159.9	131.6	131.0
<b>PRICE INDICES-</b>					
Fertilizers	151.4	151.4	155.7	167.2	202.3
Fuel and Power	122.9	127.9	140.7	147.3	224.1
Bags	157.7	159.0	159.8	158.8	162.4
Manufactured Feeds	132.4	136.5	151.6	176.6	188.3
Purchased Seeds	161.3	175.0	266.0	222.1	238.2
Other Material Inputs .. ..	91.1	102.0	117.6	129.4	154.6
<b>TOTAL MATERIAL INPUT .. ..</b>	123.2	129.4	147.2	154.3	188.8
<b>NON-FACTOR SERVICE INPUTS .. ..</b>	123.1	131.7	132.2	136.2	153.2
<b>TOTAL NON-FACTOR INPUTS .. ..</b>	123.2	129.6	145.5	152.2	186.7

\* Coverage is more limited than for Table 8.1 because labour and other factor inputs are excluded.

\*\* Provisional.

8.8. Fertilizer, fuel and power, feeds and seeds are still the major agricultural inputs. Table 8.7 shows that purchases of other chemicals and livestock drugs and medicines declined due to use of more disease resistant crops, inefficient supply and distribution systems and the high cost of livestock inputs. Overall value of inputs purchased dropped by 3.3 per cent, from K£ 212.4 million in 1989 to K£ 205.4 million in 1990. The value of service inputs particularly marketing, research and publicity services rendered to the sector during 1990 declined by about 10.6 per cent. There were virtually no research activities at the Ruiru based Coffee Research Foundation in 1990 as these activities are only undertaken every other year. The high prices of fuel, especially during the last quarter of 1990, explain the sharp rise in the price index of fuel and power. Unit price of power also increased significantly in 1990. Value of purchased manufactured feeds rose by 33.3 per cent from K£ 23.4 million in 1989 to K£ 31.2 million in 1990. Prices of feeds, especially for the pig industry, are expected to stabilize with the commissioning of the new Farmers Choice animal feeds factory.

8.9. Agricultural terms of trade continued to deteriorate for the sixth year running. Table 8.8 shows a decline of 2.2 percentage points in 1990. The observed increase in the index of agricultural output in the period under review was offset by the sharp rise of indices of purchased inputs and consumer goods which went up by 22.7 per cent and 9.3 per cent, respectively in 1990. Factors contributing to the decline were poor earnings from coffee and general agricultural input price increases.

## PURCHASED AGRICULTURAL INPUTS\*, 1986-1990

Table 8.7

K£millllon

	1986	1987	1988	1989	1990**
<b>MATERIAL INPUTS-</b>					
Fertilizers. . . . .	34.08	43.28	53.51	69.23	48.47
Other Agricultural Chemicals..	21.93	14.97	12.03	13.50	11.13
Livestock Drugs and Medicines..	10.33	15.47	16.11	19.57	18.82
Fuel and Power	22.59	27.85	30.17	25.49	34.58
Bags	12.26	12.59	11.15	11.86	11.47
Manufactured Feeds	18.89	20.91	20.63	23.39	31.18
Purchased Seeds	23.73	20.09	26.03	25.40	27.09
Other Material Inputs .. ..	6.91	7.45	9.89	8.08	8.47
<b>Total</b>	150.72	162.61	179.52	196.52	191.21
<b>SERVICE INPUTS.</b>	14.68	15.84	17.11	15.87	14.18
<b>TOTAL INPUTS.</b>	165.40	178.45	196.63	212.39	205.39

\* Except labour.

\*\* Provisional.

## PRICE AND TERMS OF TRADE INDICES FOR AGRICULTURE, 1986-1990

Table 8.8

1982=100

	1986	1987	1988	1989	1990*
General Index of Agricultural Output Prices**	149.0	150.3	168.7	176.4	182.8
<b>PRICE PAID-</b>					
Purchased Inputs	123.2	129.6	145.5	152.2	186.7
Index of Purchased Consumer Goods-Rural Areas	159.9	167.8	178.6	188.4	205.9
<b>INDICES OF PRICES PAID .. ..</b>	150.7	158.8	170.5	181.2	192.0
Agricultural Sector terms of Trade	98.9	94.7	98.9	97.4	95.2

\* Provisional.

\*\* Derived from Table 8.1. This is the output price index used in calculating the terms of trade.

8.10. The weather in 1990 was less favourable than in 1989, The rains started early in both seasons. However, during the later part of the year, some parts of the country experienced prolonged dry spells at critical stages of crop development particularly for maize, beans and potatoes while excessive precipitation in western region caused localized waterlogging. Generally, the rains were inadequate and unevenly spread in the main growing areas of Western, Nyanza, Central and Eastern provinces. In addition, the 1990/91 season was characterized by a reduction in acreage planted by smallholders under some major food items particularly maize, beans, potatoes, sorghum and millet. This, coupled with poor weather, led to below average performance for these crops and for the entire sector in general.

8.11. Aggregate output of maize, beans and potatoes from bi-annual crop forecast surveys is presented in Table 8.9. Latest estimates put production of maize at 25.4 million bags, 13 per cent below previous year's level of 29.2 million bags. Production of beans and potatoes dropped by 24.9 per cent and 33.6 per cent, respectively. As mentioned earlier, the shortfall in production is attributed to insufficient rains and a general decline in area planted.

**ESTIMATED PRODUCTION OF SELECTED AGRICULTURAL COMMODITIES IN AGRICULTURAL  
YEARS, 1986/87-1990/91**

(Based on Crop Forecast Surveys)

<i>Table 8.9</i>	<i>million bags</i>				
CROP	1986/87	1987/88	1988/	1989/90	1990/91*
Maize	32.20	26.84	30.68	29.23	25.44
Beans	3.60	2.31	2.70	2.85	2
Potatoes ..	6.11	2.43	2.55	2.59	2

\* Provisional.

8.12. Despite unfavourable weather conditions, the overall food supply situation remained satisfactory as indicated by the observed rural retail price trends of some essential food commodities. Table 8.10 shows that by September, 1990 marginal price increases for maize were noted in Coast, Eastern and Rift Valley provinces compared with prices prevailing in March the same year. It is worth noting that maize retail prices were also relatively higher in Eastern, Central and Rift Valley provinces in September, 1990 compared with the same month in 1989. Except for Coast, Eastern and Nyanza the rest of the provinces recorded lower beans prices in September 1990 compared with prices existing in March of the same year. Eastern Province continued to retail beans more cheaply and at almost less than half the price at the Coast. At national level, retail price for beans in September, 1990 stood at Ksh. 8.30 per kilogramme, reflecting a 12 per cent increase over the price in March. The national retail price for potatoes stood at Ksh. 5.70 per Kg. in September, an increase of about 31 per cent over the price in March the same year. Large provincial price differentials for potatoes exist between Rift Valley on the one hand, and Coast and Nyanza provinces on the other - with September prices in the two latter provinces being around Ksh. 7.60 compared with Ksh. 3.48 in Rift Valley.

### **Production by crop**

8.13. Government's agricultural policies have continuously been reviewed with the objective of achieving food self-sufficiency; enhanced investment in agriculture; increasing income to farmers; consistency between income growth and food security amidst constraints of fixed land base and unstable prices in the world market for exports. These have led to mixed responses with respect to production and sales to marketing boards. Table 8.11 presents data on recorded sales of some major crops to marketing boards. Sales of maize, wheat, coffee and sugar-cane to the marketing boards declined in 1990, while increases were noted in the sales of cotton, tea, sisal and pyrethrum.

8.14. *Ockg* - As mentioned in paragraph 8.11 above, estimated maize production declined in 1990 by 13 per cent from 29.2 million bags in 1989 to 25.4 million bags due to reduced area under maize and low yields. Low yields were in part attributable to adverse weather and fertilizer leaching. The implementation of the Cereals Sector Reform Programme coupled with a drop in maize production during 1990 contributed to the decline in the sales of maize to NCPB, leading to a fall of about 19 per cent from 625.9 thousand tonnes in 1989 to 509.3 thousand tonnes in 1990. The role of NCPB will mainly focus on maintenance of strategic food reserves and act as a buyer of last resort.

RURAL MARKET PRICES FOR SELECTED FOOD CROPS BY PROVINCE, 1987 -1990

Table 8.10		KSh. per Kg.							
CROP	Province	1987		1988		1989		1990	
		March	September	March	September	March	September	March	September
Maize	Coast		"					3.75	3.80
	Eastern	2.43	2.54	2.93	2.74	2.67	2.74	2.86	3.00
	Central	4.02	3.41	3.11	2.93	2.75	3.27	3.44	3.30
	Rift Valley .. ..	2.20	2.38	2.73	2.35	2.66	2.63	2.56	3.02
	Nyanza	2.51	2.50	2.79	2.72	2.64	2.85	2.89	2.60
	Western	2.30	1.94	2.69	2.64	3.42	2.78	3.06	2.76
Beans	Coast	10.00	11.85	9.03	10.67	11.28	9.11	11.71	12.67
	Eastern	3.96	4.35	6.97	5.55	6.02	4.74	5.29	6.10
		5.83	5.94	7.53	4.75	7.54	8.33	7.60	7.44
	Rift Valley .. ..	8.30	5.31	7.57	7.06	7.66	6.67	7.75	7.54
	Nyanza	5.83	5.75	7.73	6.92	7.27	6.91	6.65	7.55
	Western	6.00	4.76	5.96	5.44	7.16	7.14	7.38	6.94
Potatoes	Coast .. .	3.78	3.47	6.00	5.30	5.98	11.00	7.73	7.68
	Eastern	3.60	2.83	4.34	3.67	4.14	4.03	3.78	3.57
	Central	2.58	2.23	3.19	2.50	5.12	4.64	3.48	5.56
	Rift Valley .. ..	2.75	2.06	2.71	2.85	3.37	2.62	2.56	3.48
	Nyanza	2.26	2.59	5.87	2.90	6.78	4.98	7.91	7.66
	Western	5.81	2.73	4.02	3.90	4.03	3.71	3.25	3.53

# SALE OF SOME MAJOR CROPS TO MARKETING BOARDS, 1966-1990

Table 8.11

CROP	UNIT	1986	1987	1988	1989	1990*
Maize	'000 tonnes	669.5	651.9	485.3	625.9	509.3
Wheat		224.7	148.3	220.2	233.2	186.5
Rice Paddy		21.3	30.1	31.7	31.5	-
Cotton		25.4	23.8	10.9	13.8	18.8
Coffee		114.9	104.9	124.6	113.1	111.9
Tea		143.3	155.8	164.0	180.6	197.0
Sisal		41.5	37.0	36.9	37.4	39.3
Sugar-cane		3.6	3.7	3.8	4.3	4.2
Pyrethrum (Extract Equivalent)	mn. tonnes	74.0	93.0	102.0	124.1	140.0

*Provisional.*

8.15. **Wheat** - As shown in Table 8.12 wheat production in 1990 is estimated to have decreased by 22.1 per cent, from 244.2 thousand tonnes in 1989 to 190.2 thousand tonnes. The drop in output was attributable to late planting occasioned by early rains which made mechanised land preparation difficult. In 1990 the producer price per 90 kg bag of wheat was adjusted by 38.6 per cent.

## PRODUCTION AND IMPORTS OF WHEAT, 1986- 1990

YEAR	PRODUCTION*	IMPORTS	TOTAL
1986 .. ..	252.0	115.3	367.3
1987.. ..	207.0	217.9	424.9
1988 .. ..	234.0	75.6	309.6
1989 .. ..	244.2	123.5	367.7
1990** .. ..	190.1	322.6	512.8

\* Includes retention for seed.

\*\* Provisional.

8.16. **Coffee** - The effects of the suspension of the International Coffee Agreement and the quota system persisted in 1990 leading to a further drop in price. Delivery of the crop to Kenya Planters Co-operative Union fell marginally by 1.1 per cent, from 113.1 thousand tonnes in 1989 to 111.9 thousand tonnes in 1990. Production from co-operatives and estates declined by 11.2 per cent and 10.9 per cent, respectively. These drops were caused by low prices and associated husbandry problems experienced by the industry.



**COFFEE PRODUCTION BY AREA, EXPORT QUOTA AND AVERAGE YIELD PER GROWER, 1985/88- 1989/90**

*Table 8.13*

	1985/86	1986/87	1987/88	1988/89	1989/90*
<b>AREA (Ha) 000-</b>					
Co-operatives	117.7	116.1	117.7	116.4	116.4
Estates .. ..	38.6	38.4	38.6	36.7	36.7
<b>TOTAL</b>	156.3	154.5	156.3	153.1	153.1
<b>Production (tonnes) '000-</b>					
Co-operatives	68.4	67.9	84.3	78.3	69.5
Estates .. ..	45.5	36.4	44.4	38.6	34.4
<b>TOTAL</b>	113.9	104.3	128.7	116.9	103.9
<b>Quota (tonnes) '000-.. ..</b>	-	-	72.0	80.0	-
<b>Average yield (kg./Ha.)-</b>					
Co-operatives	581.0	577.0	710.0	673.0	595.0
Estates .. ..	1,179.0	942.0	1,150.0	1,054.0	900.0

\* *Provisional.*

8.17. *Tea* - Significant growth was noted in the tea industry in 1990. Production of ready made tea increased by 13 per cent from 95 thousand tonnes in 1989 to nearly 107 thousand tonnes in 1990. Several factors accounted for the expansion. Notable among these were increased acreage under tea, favourable weather in the early part of the year, increased processing capacity, restructuring of the tea industry and the increasing number of tea growers. Adoption of better crop husbandry practices resulted in higher yields, which rose from 1,460 Kg per hectare in 1989 to 1,605 Kg per hectare in 1990, a 10.0 per cent yield improvement. As a result, deliveries to the tea marketing board rose by 9.1 per cent, from 180.6 thousand tonnes in 1989 to 197 thousand tonnes in 1990. The positive outlook in the industry is attributed to an increase in world demand.

**DEVELOPMENT OF SMALL HOLDER TEA, 1985/88 -1989/90**

*Table 8.14*

<b>AGRICULTURAL YEARS</b>	<b>Total hectares at end of year</b>	<b>Number of growers at end of year</b>	<b>Production of ready made tea (tonnes)</b>	<b>Average yield per hectare (kg)</b>
1985/86 .. ..	56,542	150,414	65,564	1,160
1986/87 .. ..	56,889	150,557	73,940	1,300
1987/88 .. ..	63450**	203905**	76,429	1,205
1988/89 .. ..	65205**	213583**	95,191	1,460
1989/90 * .. ..	66,981	219,824	107,479	1,605

\* *Provisional.*

\*\* *Figures revised after the 1988 Tea Census.*

8.18. *Cotton* - The renewed growth in the production of cotton first recorded in 1989 was sustained in 1990. Purchases by the Cotton Lint and Seed Marketing Board went up by 36.0 per cent during 1990-compared with the 26.6 per cent increase recorded in 1989. This sharp rise in production is due to price incentives announced during the period under review, the new mode of payment and their implicit impact on availability of Inputs. Despite this remarkable improvement, the domestic demand for cotton continues to outstrip supply and imports have continued to bridge the gap.

8.19. *Uwict/ecpg* - The production level of sugar-cane dropped marginally from 4,261 thousand tonnes in the previous year to 4,200 thousand tonnes in 1990. The decline is attributed to the closure of some factories due to financial problems. With the revival of some of the closed factories and expansion of the crushing capacity in the operational ones, growth in output is set to increase.

#### SUGAR CANE PRODUCTION BY TYPE OF GROWER, 1986-1990

Table 8.15

'000 tonnes

TYPE OF GROWER	1986	1987	1988	1989	1990*
Factory Estates .. ..	796.0	692.8	695.7	728.2	547.6
Large Farms .. ..	502.1	607.5	630.0	699.9	172.8
Small-Holders .. ..	1,689.1	1,824.2	1,891.9	2,185.7	3,108.3
Co-operative Societies..	261.3	315.9	327.6	363.9	149.1
Settlement Schemes	303.1	257.6	290.0	283.6	222.2
<b>TOTAL .. ..</b>	<b>3,551.6</b>	<b>3,698.0</b>	<b>3,835.2</b>	<b>4,261.3</b>	<b>4,200.0</b>

\* *Provisional.*

8.20. Table 8.16 shows that whereas production of sugar dropped by about 2 per cent from 442.2 thousand tonnes in 1989 to 434 thousand tonnes in 1990, consumption rose by 10 per cent from 489.5 thousand tonnes to 538 thousand tonnes over the period. The continued importation to meet the shortfall calls for increasing the output of the operational factories and rehabilitation of the closed ones.

#### PRODUCTION, IMPORTS, CONSUMPTION AND EXPORTS OF SUGAR, 1986- 1990

Table 8.16

'000 Tonnes

YEAR	PRODUCTION	IMPORTS	CONSUMPTION	EXPORTS
1986 .. ..	369.70	126.20	381.40	
1987 .. ..	390.00	49.10	400.70	
1988 .. ..	412.90	42.00	485.34	
1989 .. ..	442.22	80.00	489.54	
1990*.. ..	434.00	64.10	538.00	

\* *Provisional.*

8.21. *J qtwewmtg* - Table 8.17 indicates that both the volume and value of horticulture increased considerably in 1990. Quantity of exports increased by 40.7 per cent from 134.2 thousand tonnes in 1989 to 188.8 thousand tonnes in 1990, while the value rose by 42.6 per cent from K£ 112.1 million to K£ 159.9 million. This was as a result of increased air cargo space, reduction in tariff charges, efficient input supply, improved post-harvest handling and development of marketing infrastructure. With the creation of a department of horticulture in the Ministry of Agriculture and the recent removal of import duties on packaging materials used in the industry, there is now better scope in the industry to exploit external markets.

Table 8.17

YEAR	VOLUME	VALUE
	'000 Tonnes	K£million
1986	110.4	66.1
1987	136.9	77.1
1988	151.5	94.8
1989	134.2	<b>112.1</b>
1990	188.8	159.9

\* *Provisional.*

8.22. *R/tgyj two* - The value of pyrethrum (extract equivalent) marketed increased by 24.8 per cent from K£ 10.1 million in 1989 to K£ 12.6 million in 1990. Sales to the Pyrethrum Marketing Board rose by 12.8 per cent from 124.1 tonnes in 1989 to 140 tonnes in 1990. Improved quality and favourable prices occasioned by shift in consumer demand to insecticides that are environmental friendly were the major factors behind the expanded production.

8.23. *Ukn* - A slight increase in production of sisal was recorded in 1990, from 37.4 thousand tonnes in 1989 to 39.3 thousand tonnes. Problems in the industry occasioned by the collapse of E.A. Bag and Cordage Company and its subsidiary Kensack continued, but are likely to come to an end with the change in the ownership of the two firms which might resume operation. The price of sisal rose from Ksh. 892.0 in 1989 to Ksh. 1,179.4 per tonne. The favourable change was caused by the generally increasing demand for natural fibres as opposed to synthetics.

### Irrigation

8.24. As shown in Table 8.18, area cropped and number of plot holders increased by 1.0 per cent and 2.3 per cent, respectively in the irrigation schemes. Gross value of output and payments to plot holders, also increased by 2.2 per cent and 0.2 per cent, respectively. However, individual performance in the various irrigation schemes under National Irrigation Board either declined or stagnated. No sugar-cane was produced in the West Kano scheme due to closure of Miwani Sugar Mills and the below expected intake by the other buyer, Panama Jaggery. Production of paddy rice at Mwea, Kenya's biggest scheme, declined marginally by 3.1 per cent from 27,555 tonnes in 1989 to 26,713 tonnes in 1990. At Ahero, West Kano and Bunyala schemes, paddy rice production dropped by 6.7 per cent, 11.0 per cent and 32.0 per cent, respectively. The decline in production in these schemes was attributed to chronic shortage of irrigation water. Perkeria scheme posted an increase of 30.0 per cent for onions, and a record 234 tonnes of chillies in 1990, from nil deliveries in 1989, due to high demand for these products.

**PROGRESS AND PRODUCTION AT SEVEN IRRIGATION SCHEME AREAS, 1985/86- 1989/90**

*Table 8.18*

	1985/86	1986/87	1987/88	1988/89	1989/90*
<b>MWEA-</b>					
Area cropped-Hectares .. ..	8,271	5,799	5,795	5,818	5,820
Plot-holders-Number	3,234	3,236	3,236	3,238	3,248
Gross value of output-K£'000 ..	4,212	4,477	4,643	5,366	5,605
Payments to plot-holders-K£'000..	1,458	2,499	2,701	3,225	3,239
<b>ALL (7) SCHEME AREAS-</b>					
Area cropped-Hectares .. ..	13,950	11,212	11,422	10,789	10,893
Plot-holders-Number	7,376	7,646	7,949	7,602	7,776
Gross value of output-Ke'000 ..	7,453	7,599	8,017	8,913	9,108
Payments to plot-holders-K£'000..	2,862	3,911	4,345	5,044	5,056
<b>CROPS PRODUCED - Tonnes</b>					
Mwea-Paddy	26,407	25,236	27,163	27,555	26,713
Ahero-Paddy	4,378	3,894	4,213	2,983	2,783
W.Kano-Paddy	2,650	2,319	1,728	2,387	2,124
Bunyala-Paddy	1,259	1,209	1,379	1,379	941
Total Paddy	34,694	32,658	34,483	34,304	32,561
W. Kano - Sugar-cane	-	4,463	16,995	3,339	-
Tana-Cotton	1,839	1,966	1,952	1,938	1,324
Bura-Cotton	5,182	5,504	5,500	5,519	5,519
Pekera-Onions	587	492	254	939	1,218
-Chillies	234	217	68	-	234

\* *Provisional.*

**Livestock and Products**

8.25. *Nkxigientkpf'ttqfwewu* - Sustained growth has been registered in the livestock and products sub-sector. Recorded milk production rose by a significant 11.0 per cent from 353 million litres in 1989 to 392 million litres in 1990. Whole milk derivatives had varied performances. While dried whole milk powder production increased by 35.5 per cent, that of all other milk products declined. This was as a result of the Kenya Co-operative Creameries company's policy shift towards conversion of surplus milk into milk powder for use during deficit periods.

8.26. National offtake of animals for slaughter continued to improve as indicated in Table 8.19. Cattle and calves offtake increased by 10.1 per cent from 752 thousand heads in 1989 to 828 thousand heads in 1990; sheep and goats by 20.8 per cent to 1,206 thousand heads from 998 thousand heads in 1989; and pigs by 15.1 per cent from 73 thousand heads to 84 thousand heads in 1990. Kenya Meat Commission's (KMC) re-entry into the meat market coupled with the increase in private abattoirs activity to exploit the lucrative liberalized meat market played a major role. KMC's intake of cattle and calves more than doubled, while sheep and goats made a return of 10 thousand heads slaughtered. Despite the continued closure of Uplands Bacon Factory, pigs slaughtered increased due to Farmers Choice's increased slaughter capacity, extension services and opening of a new animal feed processing facility.

# *ECONOMIC SURVEY* *1991*

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Table 8.20

## Co-operatives

8.28. The performance of the co-operative movement in Kenya has been very encouraging. Its ability to mobilize domestic savings and generate employment has made the movement one of the most effective vehicles for fostering fast economic development in the country. Table 8.21 indicates that the number of co-operative societies and unions increased significantly by 4.2 per cent from 5,183 in 1989 to 5,400 in 1990. Savings and Credit Co-operative Societies (SACCOs) grew faster in number than others. They increased by 5.1 per cent over the same period. This increase is attributable to the public growing awareness of the advantages of saving and easy access to credit on much softer terms. The number of unions and country-wide co-operatives grew from 66 in 1989 to 76 in 1990.

NUMBER OF SOCIETIES AND UNIONS BY TYPE, 1986-1990

*Table 8.21* *Number*

TYPE OF SOCIETY	1986	1987	1988	1989	1989
Coffee	191	203	203	206	207
Sugar-cane	78	82	85	89	91
Pyrethrum	53	54	53	56	56
Cotton	59	60	60	81	81
Dairy	142	153	157	190	192
Multi-produce	494	532	561	905	942
Farm Purchase	214	217	218	198	198
Other Agricultural Societies..	332	359	395	500	522**
Fisheries	56	56	57	61	62
<b>TOTAL</b>	1,619	1,716	1,789	2,286	2,351
Savings and Credit	1,462	1,608	1,723	2,141	2,251
Other Non-Agricultural Societies	377	419	445	680	722
<b>TOTAL</b>	1,839	2,027	2,168	2,821	2,973
Unions and Country-wide Co-operatives*	66	66	67	66	76
<b>TOTAL</b>	3,524	3,809	4,024	5,183	5,400

\* Includes KCC and KGGCU.

8.29. Table 8.22 provides data on sales of selected agricultural produce by co-operatives and their share contribution to the gross farm revenue. There was a notable drop in the gross farm revenue from K£ 282.3 million in 1989 to K£ 241.2 million in 1990, mainly due to the decline in revenue from coffee, which dropped by a significant 19.6 per cent, as a result of unfavourable world prices. However coffee still leads as it accounted for about 54 per cent of the gross farm revenue. The sharp increase in cotton earnings in the same period was due to the recent price incentives offered for the crop. All cotton produced in the country is marketed through the co-operatives.

**SALE OF SELECTED AGRICULTURAL PRODUCE BY CO-OPERATIVE AND THEIR CONTRIBUTION TO GROSS  
FARM REVENUE \*, 1986- 1990**

*Table 8.22*

YEAR	COFFEE	SUGAR-CANE	PYRETHRUM	COTTON	DAIRY PRODUCTS	TOTAL
	Sale K£million					
1986 .. ..	163.87	33.23	1.81	5.97	42.56	247.44
1987 .. ..	123.03	34.56	2.68	5.77	45.96	212.00
1988 .. ..	177.99	44.01	3.18	3.20	49.14	277.52
1989 .. ..	162.84	52.15	6.40	3.93	56.95	282.27
1990** .. ..	131.00	44.47	8.22	8.90	48.65	241.24
	Percentage Share					
1986 .. ..	57.00	63.00	40.00	100.00	78.00	60.00
1987 .. ..	60.00	64.00	46.00	100.00	81.00	65.00
1988 .. ..	64.00	64.00	48.00	100.00	81.00	67.00
1989 .. ..	67.00	66.00	64.00	100.00	86.00	71.00
1990** .. ..	65.00	64.00	65.00	100.00	82.00	66.00

\* *Marketed Production in Table 8.2.*

\*\* *Provisional.*

## **CHAPTER 9 - ENVIRONMENT AND NATURAL RESOURCES**

The Government has continued to ensure that growth and development initiatives do not undermine the natural resource base through deforestation, overgrazing, water and air pollution and soil erosion. Only by pursuing this strategy can sustainable growth and development be achieved.

9.2. In pursuance of this strategy, the Government has continued to implement programmes and policies designed to ensure that growth requirements are met within the context of sound environmental management. Towards this end, the Government has the following institutions to monitor and protect the environment: Rural Afforestation and Extension Service (RAES), Department of Resource Surveys and Remote Sensing (DRSRS), International Union for Conservation of Nature and Natural Resources (IUCNR) and National Environment Secretariat (NES).

### **Water Supplies**

9.3. The Government, through the Ministry of Water Development and local authorities has the overall responsibility for the conservation, development, operation and maintenance of water supplies including sewerage disposal and pollution control. The basic aim is to ensure that every household has portable water in sufficient quantity and within reach.

9.4. To achieve this objective, the Ministry of Water Development, the National Water Conservation and Pipeline Corporation (NWC & PC) and various donor agencies continued the construction of water supply projects, sinking of boreholes, construction of water catchment dams, treatment of water supplies and pollution control. By the first quarter of 1991, operational water projects gazetted were 330, out of which 220 were in the rural areas. The Ministry had also embarked on over 700 water projects and programmes which are in various stages of implementation. Other major projects undertaken by the Ministry, in conjunction with the NWC & PC, include the NOL-Turesh Water Project, which is currently operational and serving both Machakos and Kajiado districts, and the two Greater Nakuru Water Projects. Eventually the Corporation is expected to take over the construction and management of major water projects with minimal reliance on the Exchequer.

9.5. In view of the enormous development costs involved, the Government, through the Ministry, has continued to commit substantial resources for the development and maintenance of water supply systems. Table 9.1 presents expenditure on water supplies by the Ministry of Water Development from 1986/87 to 1990/91 financial years. Although the total outlay increased between 1987/88 and 1989/90, it decreased by 10.7 per cent in 1990/91 to K£63.5 million from K£ 71.2 million in 1989/90. Significant increases were, however, recorded in training and water conservation and pipeline corporation. Rural water supplies and the National Water Conservation and Pipeline Corporation, which together were allocated 80.0 per cent of the total development expenditure compared to 67.4 per cent in 1989/90, underline Government's commitment to the provision of water to most households. It further demonstrates the Government's commitment to re-channelling of resources to high priority projects.

### **Fisheries**

9.6. The Fisheries Department's management and development strategy emphasizes maximization of yields from inland and marine fish resources. This strategy is facilitated through conducting research on new species and controlling the composition and production of fish landings.



Table 9.1

K£'000

	1986/87	1987/88	1988/89	1989/90	1990/91*
Water Development .. ..	5,061	1,839	86	102	1,424
Training of Water Development Staff.. ..	179	-	1,255	250	430
Rural Water Supplies .. ..	12,411	7,599	26,397	47,456	17,203
Self-help Water Supplies** ..	3,978	1,139	709	365	110
County Council and Urban Water Supplies ..	17,684	16,640	18,525	14,464	4,421
Miscellaneous and Special Water Programmes	364	1,651	7,519	7,993	6,312
Water Conservation and Pipeline Corporation	1,038	-	-	544	33,637
TOTAL .. ..	40,715	28,868	54,491	71,174	63,537

\* *Provisional.*\*\* *Includes only contributions by the Ministry of Water Development.*

9.7. Although there was no major development in fish farming programmes in 1990, potential still exists for full exploitation of fisheries resources. Most of the inland sources such as lakes Turkana, Naivasha and Baringo continue to realize minimal contribution to total output despite efforts by the Fisheries Department and donor agencies to develop commercial fishing.

9.8. This shortfall is mainly attributed to several factors; which include financial instability caused by poor and inefficient marketing outlets, recession of the lakes due to seasonal variation in rainfall, extreme turbidity and high rates of siltation caused by soil erosion. The collapse of the Tilapia S.S.P. Fishery Project in Ferguson Gulf further explains the diminishing trend in inland lakes' fish landings. The Indian ocean, despite offering high potential for development of commercial fishing, has hardly been exploited except for limited catches by local fishermen who are apparently constrained by low level of technology and resources.

9.9. Despite these shortcomings, there was notable progress in fish farming programmes during the year. These activities were mainly conducted through extension services with assistance from various foreign agencies and donors. Notable among these were the NORAD Fisheries Project in lake Turkana which aims at developing a commercial fishery and the Italian Fisheries Project whose objective is to increase production of tilapia, common carps and restoration of fingerlings and other species in depleted areas.

9.10. Table 9.2 presents the quantity and value of fish landed between 1986 and 1990. There was a marginal decrease in the total quantity of fish landed in 1990 as compared to 1989. From an increase of 6 per cent in the total volume of fish and other marine products landed in 1989, a 2.7 per cent decrease was recorded in 1990. Despite the decrease, the output was still 3.1 per cent above that recorded in 1988. Overall fish production amounting to 142.4 thousand tonnes valued at K£ 40.1 million was registered.

9.11. The output from fresh-water fish contributed 94.4 per cent of the total fish output. Lake Victoria continued to dominate the landings with a total production of 131 thousand tonnes, which was 3.3 per cent below the 1989 level. Lake Turkana, on the other hand, registered a remarkable increase of 20.7 per cent with a total production of 1,195 tonnes, up from 990 tonnes recorded in 1989. For the first time since 1986, the revenue from the sales of fish showed a decline of 2 per cent from K£ 40.9 million recorded in 1989 to K£ 40.1 million in 1990.

**QUANTITY AND VALUE OF FISH LANDED, 1986- 1990**

*Table 9.2*

	1986	1987	1988	1989	1990*
Quantities - Tonnes:					
Freshwater fish-					
Lake Victoria .. ..	103,163	113,452	125,071	135,431	131,000
Lake Turkana .. ..	7,324	7,240	4,128	990	1,195
Other areas .. ..	2,707	2,742	1,835	2,372	2,184
<b>TOTAL</b>	113,194	123,434	131,034	138,793	134,379
Marine fish .. ..	6,156	6,755	6,027	6,708	7,015
Crustaceans .. ..	302	812	887	715	830
Other marine products..	146	180	185	187	193
<b>GRAND TOTAL ..</b>	119,798	131,181	138,133	146,403	142,417
Value - K£'000:					
Freshwater fish	14,558	20,208	27,080	35,016	33,900
Marine fish .. ..	2,719	2,590	2,498	3,760	3,916
Crustaceans .. ..	508	2,318	2,481	1,834	1,943
Other marine products	218	299	352	343	371
<b>TOTAL</b>	18,003	25,415	32,411	40,953	40,130

\* *Provisional.*

**Forestry**

9.12. The Government is committed to the maintenance of adequate forest cover for environmental control and sustenance of sound ecological balance. Consequently, cautious felling of trees for various economic reasons and subsequent replacement through planting remained an important resource management activity undertaken during the year. The Rural Afforestation and Extension Service (RAES), continued to initiate programmes aimed at sustaining a balanced ecosystem while at the same time ensuring constant supply of forest products for various domestic and industrial use.

9.13. Table 9.3 presents data on recorded forest plantation area for the period 1986 to 1990. Total forest plantation area increased marginally from 168 thousand hectares in 1989 to 169 thousand hectares in 1990, with virtually all the wood types recording slight expansions. The area under exotic soft woods continued to dominate, taking up 133.1 thousand hectares in 1990, while the indigenous and the exotic hardwoods remained more or less at their 1989 levels.

**FOREST PLANTATION AREA, 1986-1990**

*Table 9.3*

	<i>'000 Hectares</i>				
Type of Forest	1986	1987	1988	1989	1990*
Indigenous softwood .. ..	8.4	7.2	10.2	11.0	11.1
Indigenous hardwood .. ..	6.4	8.7	7.4	8.0	8.0
Exotic softwoods-					
Cypress	72.7	73.9	75.2	75.6	75.9
Pines	61.5	59.6	58.2	57.0	57.2
Exotic hardwoods-					
Timber	3.5	4.0	8.9	4.9	4.9
Fuel	11.6	11.8	7.2	11.8	11.9
<b>TOTAL AREA</b>	164.1	165.2	167.1	168.3	169.0

\* *Provisional.*

9.14. Table 9.4 shows changes in plantation area between 1986 and 1990. In 1990 the plantation area clear-felled for timber and other uses or destroyed by fires, game animals and other causal agents was 3.4 thousand hectares while additions to forest was 4.1 thousand hectares in 1990. Significant excisions were recorded on cedar, pines and cypress trees while the indigenous species recorded significant gains during the year. This reflects Government's commitment to the protection of indigenous trees.

#### CHANGES IN PLANTATION AREA, 1986- 1990

*Table 9.4* *'000 Hectares*

	1986	1987	1988	1989	1990*
Previous Plantation Area	160.5	164.1	165.2	167.2	168.3
Area Planted	6.2	5.4	5.5	4.7	4.1
Total	166.7	169.5	170.7	171.9	172.4
Area Clear felled	2.6	4.3	3.5	3.6	3.4
Total Area	164.1	165.2	167.2	168.3	169.0

\* *Provisional.*

9.15. It is estimated that a total of 200 thousand hectares of forest cover is likely to be destroyed by the aphid pest unless stricter counter measures are instituted. Consequently, it will have significant effects on the environment, the wood-based industries and the national economy in general. To control this widespread destruction of industrial plantation, the Government, through the Kenya Forest Research Institute (KEFRI), has initiated studies on the biology and behaviour of the pest. Alongside this, substantial funds have been committed to the purchase of motorized sprayers, chemicals and protective clothing in an effort to fight and control its infestation. In addition, the Forestry Department has taken measures aimed at reducing plantation area of the affected species, promotion of alternative species and mobilization of surveillance teams to combat the pest.

9.16. Table 9.5 shows the sales of forest products by the Forest Department for the period 1986 to 1990. During the year, the sales of peels/veneer and pulpwood experienced slight increases while the sales of timber, fuel-wood/charcoal recorded decreases of 2.2 per cent and 7.0 per cent respectively.

#### RECORDED SALE OF FOREST PRODUCTS, 1986- 1990

*Table 9.5*

Forest Product	1986	1987	1988	1989	1990*
Timber - '000 true cu. metres-					
Soft wood	419	474	462	446	437
Hardwood	15	13	8	4	3
<b>TOTAL</b>	434	487	470	450	440
Fuel - '000 stacked cu. metres-					
Peels\Veener logs	65	60	79	80	85
Pulpwood	305	320	341	340	350
Fuelwood /Charcoal	185	201	210	215	200
Power and Telegraph Poles - numbers	23,252	30,000	30,060	32,000	32,800

\* *Provisional.*

9.17. The sales of power and telegraphic poles averaged about 30 thousand for the period 1986 to 1990. In 1990, the number of poles sold were 32,800, reflecting an increase of 2.5 per cent over 1989. The increase in pole sales reflects increased demand for rural electrification and telephone services.

### Mining

9.18. Table 9.6 gives details of quantity and value of mineral production during the period 1986 to 1990. Overall, there was a decline of 3.9 per cent in quantity produced in 1990 compared to 1989. The decline is attributable to declines in outputs of soda ash and fluorspar, which still account for over 68 per cent of the total mineral output in 1989 and 1990. Production of soda ash decreased by 4.5 per cent from 242.9 thousand tonnes recorded in 1989 to 231.9 thousand tonnes in 1990 while fluorspar output decreased by 15.8 per cent from 95.6 thousand tonnes in 1989 to 80.5 thousand tonnes in 1990. Salt output recorded 70,318 tonnes while limestone products went up from 32.2 thousand tonnes in 1989 to 35.7 thousand tonnes in 1990.

9.19. Total revenue from the sales of minerals rose by 17.1 per cent from K£ 41.9 million in 1989 to K£ 49.1 million in 1990. Fluorspar and salt registered significant increases in overall sales of 43.3 per cent and 53.3 per cent, respectively, with the value of salt increasing from K£ 2.6 million in 1989 to K£ 3.9 million in 1990. Sale of soda ash maintained its upward trend to attain K£ 33.6 million in 1990.

QUANTITY AND VALUE OF MINERAL PRODUCTION, 1966-1990

Table 9.6

Mineral	1986	1987	1988	1989	1990*.
Quantities - Tonnes:					
Minerals-					
Soda Ash	236,600	231,800	220,300	242,900	231,900
Fluorspar	50,851	46,568	67,351	95,625	80,529
Salt	64,780	72,269	88,193	66,830	70,318
Limestone Products** ..	35,000	37,460	28,601	32,167	35,733
Other	39,276	37,705	38,459	38,921	39,388
<b>TOTAL</b>	<b>426,507</b>	<b>425,802</b>	<b>442,904</b>	<b>476,443</b>	<b>457,868</b>
Value - K£'000:					
Soda Ash***	16,514	17,442	17,477	30,610	33,594
Fluorspar***	3,129	2,802	3,399	5,594	8,018
Salt	3,016	2,583	2,900	2,568	3,938
Limestone Products.. ..	1,150	1,173	924	1,241	1,556
Other	1,663	1,779	1,783	1,865	1,951
<b>TOTAL</b>	<b>25,472</b>	<b>25,779</b>	<b>26,483</b>	<b>41,878</b>	<b>49,057</b>

\* **Provisional.**

\*\* *Excluding limestone used as input into cement product.*

\*\*\* *Including Export Value.*

9.20. Table 9.7 shows the trend in average export prices of soda ash and fluorspar between 1986 and 1990. The average export price of soda ash continued to rise recording an increase of 29.4 per cent in 1990 compared to 38.7 per cent in 1989. The export price of fluorspar accelerated for the second year running with a 20.7 per cent increase in 1990 compared to an increase of 21.6 per cent in 1989.

### Wildlife Conservation

9.21. Wildlife conservation is an important factor in preserving the ecological **balance** and a natural resource heritage which must be preserved for posterity. **In** recognition of

*Table 9.7* *KE per tonne*

Mineral	1986	1987	1988	1989	1990*
Soda Ash .. ..	80.6	83.3	90.1	125.0	161.7
Fluorspar.. ..	61.5	68.8	67.6	82.2	99.2

\* *Provisional*

this importance, the Government has created a new parastatal, Kenya Wildlife Services (KWS), to oversee the sector. The KWS replaced the Kenya Wildlife and Management Department which had proved ineffective. It has brought poaching under control and is developing a comprehensive policy framework and a five-year investment programme for wildlife conservation and development.

9.22. Table 9.8 presents data on wildlife population in the Kenya rangeland for the years 1985, 1987 and 1990. Although there was a general decline in population in virtually all the species during the period 1985-87, the trend changed significantly during period 1987-90. The population of giraffes, kongoni, oryx, eland, warthog and ostrich made substantial recovery registering an increase of 50 per cent on average; while elephants, grey zebras, Thomson's gazelle, and waterbucks, the more threatened species, only improved slightly. This declining trend is largely explained by the increasing human pressure on land for settlement and agriculture. The poaching activities in some parts of the country further explain the sharp drop in elephant numbers from 19,200 recorded in 1985 to 17,100 in 1990.

**WILDLIFE POPULATION IN THE KENYA RANGELANDS FOR SELECTED YEARS**

*Table 9.8* *'000 Number*

SPECIES	1985	1987	1990
Elephant	19.2	17.4	17.1
Buffalo	45.5	36.9	45.1
Giraffe	54.8	44.5	56.4
B. Zebra	142.1	141.2	193.7
G. Zebra	7.0	4.3	6.2
Topi	81.5	102.5	109.8
Kongoni	24.2	19.6	23.3
Wildebeest	93.4	67.6	100.2
Oryx	41.5	25.5	38.1
Eland	26.8	17.0	31.3
H. Hartbeest	2.0	1.9	2.6
Waterbuck	11.1	7.7	6.0
Kudus	6.9	7.6	13.2
Gerenuk	24.8	24.6	23.0
Impala	122.0	111.4	104.5
G. Gazelle	183.9	126.6	184.3
T. Gazelle	183.9	107.1	98.7
Warthog	108.2	11.8	22.0
Ostrich	20.6	25.5	38.3

### Resource Assessment and Monitoring Activities

9.23. In 1990, the Department of Resource Surveys and Remote Sensing, (DRSRS) continued to map, detect and monitor major environmental parameters caused by earthquakes, soil erosion, floods, droughts, lightning and other causal agents. Special emphasis was placed on the impacts of desertification process, general vegetation cover, maize and wheat yield forecasts, wildlife and livestock populations.

9.24. With the help of a combination of both conventional and recent technological innovations particularly LANDSAT, SPOT imagery scenes and infra-red photographs, the department was able to effectively provide data on general vegetation cover, wildlife and livestock populations, hectarages, yields and expected total production of maize and wheat. It was also able to detect the impact of the devastating aphid pest on indigenous trees as well as providing data for the national fuel wood assessment project.

9.25. The installation of the National Oceanic and Atmospheric Administration (NOAA) satellite ground receiving station in Nairobi further proved an effective asset in the compilation and analysis of early warning data on such disasters as floods, drought and locust invasion. The facility has also the capability to delineate and calculate changes in forested areas.

9.26. The International Union for Conservation of Nature and Natural Resources (IUCNR) continued to initiate programmes aimed at increasing public and government awareness of the links between conservation and development as well as carrying out background studies needed for the strategy. The most extensive programme undertaken by IUCNR during the year was the launching of the District Environmental Assessment and Resources Survey. The survey was aimed at laying the foundation for a National Environment Enhancement and Management Act and assessing both the economic potential and the risks involved in developing the country's resource base. Alongside this programme, the organization in collaboration with the National Environmental Secretariat (NES) embarked on a joint venture to examine and propose a structure for the development of a national environmental strategy in Kenya.

9.27. Refuse collection by the Nairobi City Commission (NCC) continued to show signs of recovery although its current strategy of disposing garbage by controlled tipping has not been very successful. Recent studies by the NCC indicate that the estimated garbage collection stands at 500 tonnes per day while refuse generation is approximated at 900 tonnes per day. Vegetable materials represent about 80 per cent of the total refuse generation. The shortfall in garbage collection is mainly attributed to poor methods of disposition through reclamation of old quarries and lack of tipping equipment.

9.28. Table 9.9 indicates the approved estimates by the NCC between 1985/86 and 1989/90 financial years. Total expenditure on garbage collection recorded a marginal increase of 3.4 per cent between 1985/86 and 1987/88 but almost doubled in the following period. The growth in expenditure reflects the NCC's continued commitment to curb environmental pollution caused by refuse generation and other pollutant emissions. However, the current expenditure on garbage collection is totally inadequate.

**EXPENDITURE ON REFUSE COLLECTION BY THE NAIROBI CITY COMMISSION, 1985/86 - 1989/90**

<i>Table 9.9</i>		K£ '000		
		1985/86	1987/88	1989/90
Total Expenditure .. ..		80.6	83.3	161.7

## CHAPTER 10 - ENERGY

### Overview

The fluctuation of crude oil prices in the late 1980s continued into early 1990. The second quarter of the year saw crude oil prices drop to within US 16 per barrel, with a daily Organisation of Petroleum Exporting Countries (OPEC) ceiling of approximately 21 million barrels. However, all this changed with the onset of the Gulf crisis in early August, when crude oil prices escalated reaching almost US 40 per barrel. Due to the invasion, the UN placed economic embargo against Iraq thus effectively blocking the export of more than 4 million barrels daily. To make up for this shortfall, some OPEC member countries decided to boost their output above their agreed quotas, especially Saudi Arabia which raised output to around 8 million barrels from a quota of 5 million barrels per day. As the production was raised, prices began to fall, and by December, 1990, premium crude oils were trading at around \$25 per barrel. This price drop was further stimulated by measures undertaken by large consumers, especially the industrialised nations. While industrial economies resorted to efficient management of energy resources including draw-down on stocks, many third world countries rationed supplies and encouraged consumers to conserve.

### Petroleum

10.2. As shown in Table 10.1 the decline in petroleum imports which started in 1988 was reversed in 1990. Whereas in 1989, 2,178 thousand tonnes of crude and petroleum products were imported, 2,324 thousand tonnes were imported in 1990, reflecting an increase of 6.7 per cent. On the other hand, the total import bill increased significantly by 44.2 per cent to K£ 467.81 million. The effects of the Gulf crisis coupled with the steady depreciation of the Kenya Shilling against the US dollar contributed to the significant increase in the import bill in 1990. Despite the decline in the importation of lubricating oils and greases, importation of refined petroleum fuels increased significantly from 45.15 thousand tonnes in 1989 to 132.64 thousand tonnes in 1990. During the year imports of crude petroleum alone accounted for 93.7 per cent of total petroleum imports. The value of white oils imported in 1990 rose by 81.2 per cent above that of 1989.

10.3. Exports of petroleum products to Uganda, Zaire, Rwanda and other neighbouring countries continued to decline for various reasons, amongst which was the direct importation of their white oils requirements, as opposed to buying all their requirements from Kenya. In 1990, a total of 544 thousand tonnes were exported up from 533 thousand tonnes exported in 1989, an increase of only 2 per cent compared to the 24 per cent drop in 1989. Total export value rose from K£ 100.07 million in 1989 to K£ 150.16 million in 1990 with petroleum fuels accounting for 94 per cent.

10.4. Throughput statistics depicting crude oil intake by type for 1986-1990 are shown in Table 10.2. With the exception of 1988 when crude oil intake showed a fall of 88 thousand tonnes, or a 4 per cent decline, other years have shown an increase in crude oil intake. The Kenya Petroleum Refineries (KPRL) processed 2,225 thousand tonnes of crude oil in 1990. As in the previous years, Murban crude, despite a drop in its intake in 1989, accounted for nearly 80 per cent of the refinery's intake. Zakum which recorded an increase in 1989, after a decrease in 1988 once again decreased by 23 per cent from 263 thousand tonnes to 202 thousand tonnes. No imports of Marib Light were recorded in 1990.

QUANTITY AND VALUE OF IMPORTS AND EXPORTS OF PETROLEUM PRODUCTS, 1986 - 1990

Table 10.1

	Quantity ( 000 Tonnes)					Value (k£' Mn)				
	1986	1987	1988	1989	1990*	1986	1987	1988	1989	1990*
IMPORTS:										
Crude Petroleum .. ..	2,006.00	2,130.50	2,041.80	2,100.90	2,178.28	207.83	248.52	217.94	299.10	421.97
Petroleum Fuels .. ..	105.40	92.30	106.80	45.15	132.64	15.89	14.39	18.43	11.16	39.09
Lubricating Oils .. ..	26.00	46.00	38.20	31.69	13.09	9.64	15.41	12.77	13.77	6.62
Lubricating Greases ..	0.50	2.30	0.10	0.21	0.07	0.46	2.38	0.95	0.37	0.13
TOTAL	2,137.90	2,271.10	2,186.90	2,177.95	2,324.08	233.82	280.70	250.09	324.40	467.81
EXPORTS:										
Petroleum Fuels .. ..	804.50	571.90	689.90	515.89	534.16	116.94	96.43	109.16	88.79	141.13
Lubricating Oils .. ..	11.00	6.50	6.90	16.38	9.01	7.01	4.88	5.38	10.52	8.57
Lubricating Greases ..	0.30	0.40	0.50	0.68	0.34	0.26	0.43	0.51	0.76	0.46
TOTAL	815.80	578.80	697.30	532.95	543.51	124.21	101.74	115.05	100.07	150.16
NET BALANCE	1,322.10	1,692.30	1,489.60	1,645.00	1,780.57	109.61	178.96	135.04	224.33	317.65

\* Provisional



CRUDE OIL INTAKE BY TYPE, 1986 -1990

Table 10.2

'000 Tonnes

Crude intake	A.P.I. Gravity	1986	1987	1988	1989	1990*
Arabian Light	33.4	26.5	0.1	-	-	-
Arabian Medium	31.0	-	-	-	-	-
Arabian Heavy	27.9	26.3	26.9	-	45.2	55.4
Arabian Light Berri .. ..	-	272.2	-	-	0.1	-
Iranian Light	33.9	-	-	65.0	-	108.8
Iranian Medium	-	200.9	85.6	69.1	87.0	86.2
Qatar Marine	36.7	-	-	-	-	-
Qatar Durkhan	41.2	267.9	-	-	-	-
Kuwait	32.0	32.1	30.8	-	-	-
Zakum	40.1	181.0	562.8	227.7	262.8	201.6
Murban	39.6	1,004.3	1,318.6	1,659.8	1,468.5	1,772.4
Dubai	32.4	-	-	-	68.2	-
Oman	-	-	84.4	-	-	-
Marib Light	-	-	-	-	212.8	0.1
Slop	-	1.0	0.5	0.4	0.9	0.3
<b>TOTAL</b>	-	2,012.2	2,109.7	2,022.0	2,145.5	2,224.8

\* *Provisional.*

10.5. Table 10.3 details output of petroleum products from KPRL. Since 1988, when there was a slight drop in the refinery's output, the last 2 years have registered growth rates of 6 per cent and 4 per cent, respectively. Output of various products totalled 2,225 thousand tonnes in 1990 with major increases being recorded in illuminating kerosene and jet/turbo fuel whose production increased from 454 thousand tonnes in 1989 to 492 thousand tonnes in 1990. This production increase in dual purpose kerosene (DPK) is in line with Government policy on optimisation of automotive diesel and DPK yield from petroleum crude oils, since these two products command the highest social-economic

**OIL REFINERY: THROUGHPUT AND OUTPUT OF FINISHED PETROLEUM PRODUCTS\*\*, 1986-1990**

Table 10.3

'000 Tonnes

	1986	1987	1988	1989	1990*
<b>OUTPUT-</b>					
Liquefied petroleum gas..	26.1	26.2	27.7	27.6	28.4
Motor gasoline premium ..	143.3	138.3	135.3	159.0	143.9
Motor gasoline regular ..	188.7	198.0	192.7	202.9	190.9
Illuminating kerosene and Jet/turbo fuel	391.8	412.8	410.1	454.0	492.2
Light Diesel oil..	489.5	547.1	516.7	534.8	533.0
Heavy Diesel oil and Marine Diesel oil	35.5	33.8	32.6	26.8	30.1
Fuel oil	383.8	372.8	392.2	369.6	411.3
Export residues ..	257.7	260.2	228.3	261.2	258.2
Bitumen	28.6	31.1	5.9	21.3	31.2
Intermediates ..	-3.5	5.7	1.8	-5.2	4.2
Refinery usage .. ..	70.9	83.8	78.7	93.3	101.1
<b>THROUGHPUT=TOTAL OUTPUT</b>	2,012.4	2,109.8	2,022.0	2,145.3	2,224.5

\* *Provisional.*

\*\* *Excludes lubricants.*

returns. Since 1986 output of liquefied petroleum gas (LPG) has been increasing only marginally due to structural design constraints of KPRL. In 1990 its output increased by 3 per cent over 1989. Production of motor spirit (premium and regular) decreased from 362 thousand tonnes to 335 thousand tonnes in 1990, while that of bitumen increased by 46 per cent; a factor attributed to increased road construction activity.

10.6. Details of supply and demand balance in petroleum products shown in Table 10.4 show that domestic demand increased marginally from 1,807 thousand tonnes in 1989, to 1,830 thousand tonnes in 1990. Despite this overall increase, the demand for motor spirit (premium and regular) fell from 377 thousand tonnes in 1989 to 340 thousand tonnes in 1990, a decrease of 10 per cent. Notable increases were recorded in aviation spirit, illuminating kerosene and liquefied petroleum gas. It should be noted that aviation spirit is not locally produced and the entire demand is met by imports. Refinery usage increased by 19 per cent and 8 per cent in 1989 and 1990, respectively.

#### PETROLEUM SUPPLY AND DEMAND BALANCE, 1986-1990

*Table 10.4* '000 Tonnes

	1986	1987	1988	1989	1990*
<b>DEMAND-</b>					
Liquefied petroleum gas ..	24.1	25.3	26.9	26.4	27.4
Motor spirit (premium and regular)	295.1	321.8	325.0	376.7	339.9
Aviation spirit	6.1	6.3	6.5	6.7	7.1
Jet/turbo fuel	263.4	249.5	254.6	274.3	302.4
Illuminating kerosene ..	109.1	133.7	154.7	181.1	184.2
Light Diesel oil .. ..	481.0	572.7	537.3	543.6	555.4
Heavy Diesel oil .. ..	26.1	27.7	32.7	26.8	36.5
Fuel oil	378.3	410.8	392.7	371.0	377.4
<b>TOTAL</b>	<b>1,583.2</b>	<b>1,747.8</b>	<b>1,730.4</b>	<b>1,806.6</b>	<b>1,830.3</b>
Refinery usage	70.9	83.8	78.7	93.3	101.1
<b>TOTAL DOMESTIC DEMAND .. ..</b>	<b>1,654.1</b>	<b>1,831.6</b>	<b>1,809.1</b>	<b>1,899.9</b>	<b>1,931.4</b>
Exports of petroleum fuels ..	804.5	571.9	689.9	515.9	534.2
<b>TOTAL DEMAND**</b>	<b>2,458.6</b>	<b>2,403.5</b>	<b>2,499.0</b>	<b>2,415.8</b>	<b>2,465.6</b>
<b>SUPPLY-</b>					
Imports:					
Crude oil	2,006.0	2,130.5	2,041.8	2,100.9	2,178.3
Petroleum fuels	105.4	92.3	106.8	45.2	132.6
<b>TOTAL</b>	<b>2,111.4</b>	<b>2,222.8</b>	<b>2,148.6</b>	<b>2,146.1</b>	<b>2,310.9</b>
Adjustment***_	347.2	180.7	350.4	269.7	154.7
<b>TOTAL SUPPLY**</b>	<b>2,458.6</b>	<b>2,403.5</b>	<b>2,499.0</b>	<b>2,415.8</b>	<b>2,465.6</b>

\* *Provisional.*

\*\* *Difference is due to rounding.*

\*\*\* *Adjustment for inventory changes and losses in production.*

10.7. Table 10.5 shows that the transport sector (road, rail, marine and aviation) continues to be the main consumer of petroleum products. In 1989, the sector accounted for 72 per cent of the total net sales of 1,807 thousand tonnes, while in 1990 the sector consumed 77 per cent of the total sales figure of 1,830 thousand tonnes. The retail pump outlets and road transport accounted for 61 per cent of the total sales in 1990. Agricultural sector which had recorded 13 per cent decline in 1989 recorded a marginal increase of 2 per cent. Fuel sales for power generation have continued to drop since

**NET DOMESTIC SALE OF PETROLEUM FUELS BY CONSUMER CATEGORY, 1986-1990**

*Table 10.5*

*'000 Tonnes*

User	1986	1987	1988	1989	1990*
Agriculture	61.2	71.2	72.7	63.5	64.9
Retail pump outlets and road transport	676.8	762.2	781.0	847.3	863.5
Rail transport	29.4	31.1	22.2	26.0	35.3
Tourism**	9.9	11.0	11.6	12.4	13.0
Marine (excl. Naval Forces) ..	177.0	168.5	106.3	158.4	215.3
Aviation (excl. Government) ..	263.0	249.5	255.1	273.2	302.0
Power Generation ..	34.3	87.2	50.1	39.8	27.9
Industrial, Commercial and Other	455.8	483.4	489.8	459.5	452.9
Government	52.3	127.7	47.7	49.0	70.8
Balancing Item	-176.6	-244.0	-106.1	-122.6	-215.4
<b>TOTAL</b>	<b>1,583.1</b>	<b>1,747.8</b>	<b>1,730.4</b>	<b>1,806.5</b>	<b>1,830.3</b>

\* *Provisional*

\*\* *Comprises sales to tour operator*

1987. In 1990, fuel sales for power generation decreased by 30 per cent, from 40 thousand tonnes in 1989 to 28 thousand tonnes in 1990. This was as a result of a reduction in the generation of thermal based electricity due to favourable hydro-power production conditions. Industrial, commercial and other related consumers reduced their consumption in line with the unfavourable economic conditions obtaining during the second half of 1990. Sales to Government increased by 45 per cent from 49 thousand tonnes in 1989 to 71 thousand tonnes in 1990. This increase was partly due to the Post Census Enumeration Survey (PCES) carried out in late 1990.

10.8. Table 10.6 shows changes in wholesale prices for petroleum products at Mombasa. The causes for high domestic consumer prices recorded over the last decade can be traced to rising import prices of crude oil coupled with the devaluation of the Kenya Shilling. With the exception of the period between April 1984 and March 1986, when prices remained stable, and then reduced in March and June 1986, all other periods have witnessed substantial price increases except for liquefied petroleum gas and illuminating kerosene. The highest wholesale prices were recorded in September, 1990, due to the Gulf crisis which resulted in crude oil prices rising by more than 100 per cent between June and August of the same year. Therefore, domestic prices had to be increased to meet the higher cost of crude importation.

**WHOLESALE PRICES\* OF PETROLEUM PRODUCTS AT MOMBASA, 1973-1990**

*Table 10.6*

*KSh. per tonne*

	30-9-73	17-6-88	30-9-89	22-2-90	8-9-90	Ratio 1990/73 (per cent)
Liquefied petroleum gas	2,060	6,400	7,820	11,629	14,129	685.9
Premium motor gasoline.	1,551	11,831	13,441	14,362	18,715	1,206.6
Regular motor gasoline.	1,468	11,337	13,551	14,127	18,533	1,262.5
Illuminating kerosene.	736	4,012	5,033	6,471	9,053	1,230.0
Light diesel oil ..	892	6,005	7,227	8,275	11,764	1,318.8
Industrial diesel oil ..	471	3,982	4,668	6,089	9,034	1,918.0
Fuel oil	334	2,408	3,164	3,509	5,405	1,618.3

\* *Including duties and VAT.*

10.9. Table 10.7 shows changes in Nairobi retail prices for some petroleum products between March, 1986 and September 1990. Prices for premium and regular petrol had previously risen from KShs. 10.48 and KShs. 10.18 to KShs. 11.00 and KShs. 10.70 per litre, respectively. The corresponding prices of gas oil (diesel) went up by 13 per cent from KShs. 6.76 to KShs. 7.65 per litre. In September, 1990 unit prices per litre were again adjusted upwards by 30 to 40 per cent to KShs. 14.41 for premium, KShs. 14.11 for regular and KShs. 10.90 for gas oil per litre, respectively.

#### NAIROBI RETAIL PRICES, 1986-1990

Table 10.7

KSh. per litre

Date	MOTOR	SPIRIT	Gas Oil
	Premium Gasohol*	Regular	
20-3-86	8.02	7.64	5.45
13-6-86	8.02	7.64	5.30
1-4-87	8.61	8.13	5.62
1-7-87	9.01	8.43	5.62
17-6-88	9.31	8.63	5.72
30-9-89	10.48	10.18	6.76
22-2-90	11.00	10.70	7.65
8-9-90 . . . . . *	14.41	14.11	10.90

\* Gasohol was introduced from 1983

#### Electricity

10.10. Table 10.8 shows that in 1990 there was no change in the installed electric power, hydro, thermal and geothermal installed capacities. Hydro-power capacity will be boosted by 106 MW with the commissioning of Turkwell Gorge multipurpose project later in 1991. While generation of electricity increased by 5 per cent from 2,900 GWH in 1989 to 3,044 GWH in 1990, that of hydro-based electricity increased by only 3 per cent over the 1989 level of 2,469 GWH. Thermal based electricity increased from 109 GWH to 171 GWH in 1990. This, was a result of the completion of the rehabilitation work at Kipevu Power Plant.

#### INSTALLED CAPACITY AND GENERATION OF ELECTRICITY, 1986-1990

Table 10.8

	INSTALLED CAPACITY * MW"				GENERATION * GWH **			
	Hydro	Thermal Oil	Geothermal	Total	Hydro	Thermal Oil	Geothermal	Total
1986	353.5	160.2	45.0	558.7	1,736.0	202.0	369.0	2,307.0
1987	353.5	176.2	45.0	574.7	1,813.0	267.0	374.0	2,454.0
1988	353.5	160.2	45.0	558.7	2,323.0	198.0	323.0	2,844.0
1989	497.5	180.1	45.0	722.6	2,469.0	109.0	322.0	2,900.0
1990 +	497.5	180.1	45.0	722.6	2,537.0	171.0	336.0	3,044.0

\* Includes estimates for industrial establishment with generation capacity.

\*\* 1 megawatt = million watts = 1,000 kilowatts.

\*\*\* Gigawatt hour = 1,000,000 kilowatt hours

+ Provisional

10.11. The electricity energy supply and demand balance for 1986-1990 presented in Table 10.9 reveals that electricity consumption rose by 23 per cent, from 2,158 million KWH in 1986 to 2,665 KWH in 1990 equivalent to an annual growth rate of 5.5 per cent. Between 1989 and 1990 consumption rose by 177 million KWH. This growth is due to the recovery in sales to the large commercial and industrial consumers such as the sugar industry, from 1,632 million GWH in 1989 to 1,754 million GWH in 1990 and the expansion of the Rural Electrification Programme (REP). Total sales to large commercial and industrial consumers accounted for 66 per cent of the total sales both in 1990 and 1989. Demand by domestic and small commercial consumers rose by 7 per cent and accounted for 29 per cent of the total demand same as 1989. This increase was attributed to the development of new residential units and development of "Jua Kali" sheds. Demand for street lighting remained at the 1987 level of 14 million KWH. Off-peak demand increased marginally by 4 per cent. Although imports from Uganda Electric Board (UEB) increased by 55 per cent from 112 million KWH to 174 million KWH in 1990, it however constituted less than 6 per cent of total electricity available.

**ELECTRICITY ENERGY SUPPLY AND DEMAND BALANCE, 1986- 1990**

*Table 10.9*

*Million KWH*

	1986	1987	1988	1989	1990*
DEMAND-					
Domestic and Small Commercial	600	616	709	729	780
Large Commercial and Industrial	1,441	1,580	1,574	1,632	1,754
Off-peak .. ..	109	162	110	113	117
Street Lighting .. ..	8	14	14	14	14
TOTAL	2,158	2,372	2,407	2,488	2,665
Transmission losses and unallocated demand .. ..	335	367	475	482	486
TOTAL DEMAND = TOTAL SUPPLY	2,493	2,739	2,882	2,964	3,151
of which imports from Uganda ..	235	176	110	112	174
Net generation .. ..	2,258	2,563	2,772	2,858	2,977

\* *Provisional.*

10.12. The generation of electricity is expected to increase in line with economic growth. Electricity output is expected to rise substantially when some of the major projects are completed, as programmed in the Master Plan for the electric power sector, covering the period 1986-2006.

10.13. Kenya's reliance on imported energy is shown in Table 10.10. Total energy consumption in 1990 was 2,667 thousand tonnes of oil equivalent of which imports accounted for 57 per cent, compared to 1989 when imports were 65 per cent of total energy consumption. Consumption of liquid fuels in 1990 dropped by 4 per cent from 1,990 thousand tonnes of oil equivalent in 1989 to 1,830 thousand tonnes of oil equivalent in 1990. Consumption of hydro and geothermal based energy went up from 697 thousand tonnes of oil equivalent to 731 thousand tonnes of oil equivalent in 1990. Imports from Uganda Electricity Board accounted for 41.8 thousand tonnes of oil equivalent. Local production of energy went up by 4 per cent in 1990, in line with Government policy to reduce the country's dependence on imported energy.

PRODUCTION, TRADE AND CONSUMPTION OF ENERGY" EXPRESSED IN TERMS OF PRIMARY  
SOURCES, 1986-1990

*Table 10.10*

*'000 Tonnes Oil Equivalent*

	1986	1987	1988	1989	1990*
COAL AND COKE CONSUMPTION OIL:-	67.9	82.2	79.0	91.6	105.8
Imports of crude oil .. ..	2,006.0	2,130.5	2,041.8	2,100.9	2,178.3
Net exports of petroleum	-699.0	-479.6	-583.1	-470.8	-425.7
Stock changes and balancing item	347.1	180.7	350.4	269.7	77.7
TOTAL CONSUMPTION OF LIQUID FUELS	1,654.1	1,831.6	1,809.1	1,899.8	1,830.3
HYDRO AND GEOTHERMAL ENERGY:-					
Local production of hydro power	416.7	435.1	557.5	592.6	608.9
Local production of geothermal power	88.6	89.8	77.5	77.3	80.6
Imports of hydro power .. ..	56.4	50.6	26.4	26.9	41.8
TOTAL CONSUMPTION OF HYDRO AND GEOTHERMAL ENERGY	561.7	575.5	661.4	696.8	731.3
TOTAL LOCAL ENERGY PRODUCTION	505.3	524.9	635.0	669.9	689.5
TOTAL NET IMPORTS	1,428.4	1,783.7	1,564.1	1,748.6	1,900.2
TOTAL ENERGY CONSUMPTION .. ..	2,280.9	2,489.3	2,549.5	2,688.2	2,667.4
LOCAL PRODUCTION AS PERCENTAGE OF TOTAL	22.2	21.1	24.9	24.9	25.8
PER CAPITA CONSUMPTION IN TERMS OF KILOGRAMS OF OIL EQUIVALENT	108	113	115	117	111

\* *Provisional.*

\*\* *Modern sector only; fuelwood and charcoal are excluded.*

### **Renewable Energy Resources**

10.14. Sharp increases in conventional energy prices especially crude oil, have aroused considerable interest in other renewable energy resources in developing nations. In Kenya various renewable resources are yet to be fully exploited due to lack of the necessary expertise coupled with prohibitive harnessing costs of new and renewable sources of energy. However, appropriate incentives have been put in place to encourage widespread use of commercially viable wind and solar technologies.

10.15. Power alcohol was introduced as a fuel substitute for motor gasoline in 1983 with the commissioning of the Agro-Chemical and Food Company (ACFC) plant at Muhoroni. The company has, however, never achieved its full production capacity due to the reluctance of marketers to lift the entire power alcohol production. Under normal operating conditions, the company can produce some 18 million litres of alcohol per annum. To overcome the on-going marketing problems, the Government will provide the necessary policy guidelines.

### **Energy Conservation**

10.16. The need to conserve energy and to develop alternative energy resources cannot be over-emphasised given the vulnerability of the economy to external oil shocks. In this regard, the Government has initiated various energy conservation projects such as Kenya Renewable Energy Development Project (KREDP), and the Kenya Industrial Energy Management Project (KIEMP), a joint project between Ministry of Energy and Kenya Association of Manufacturers. In addition, Transport Energy Management Programme (TEMP) with a major aim of conserving petrol in the transport sector is actively being considered.

## **CHAPTER 11 - MANUFACTURING**

### **Overview**

Growth in the manufacturing sector slowed down further to register a growth rate of 5.3 per cent in 1990, compared with 6.0 per cent and 5.9 per cent in 1988 and 1989, respectively. Sustained inflationary pressures, a fluctuating international market for tea and coffee and weak performance in the local sugar processing industry contributed to the sector's slow growth. Similarly, the depreciation of the Kenya Shilling against major trading currencies led to increased cost of imported raw materials, machinery and spare parts. However, continued producer price incentives sustained availability of raw inputs for agro-based manufacturing. Trade liberalisation continued to offer increased competition to local manufacturers.

### **Manufacturing Under Bond (MUB)**

11.2. Manufacturing Under Bond (MUB) is one of the recent schemes adopted by the Government to attract both local and foreign investment to encourage industrial exports. Under the scheme, plant, machinery, equipment and raw materials are exempted from all customs duties and Value Added Tax (VAT), while a further incentive gives an investment allowance of 100 per cent of value of building, plant and machinery. While about 20 projects have been approved within Nairobi and Mombasa, only 5 are operational.

### **Export Processing Zones**

11.3. In 1990, the Government enacted legislation to regulate operation of Export Processing Zones (EPZs). One private export processing zone has already been constructed in Nairobi. Among the concessions and other incentives available to manufacturers operating in the EPZs include exemption from all customs duties, VAT, along with appropriate tax holidays. These incentive packages are meant to attract foreign capital, create employment, and generate foreign exchange. Despite competition from the relatively well established EPZ manufacturing countries, the Kenyan ones should in the long run prove to be viable option for increased manufacturing growth since import substitution strategy has largely been exhausted.

### **Employment**

11.4. The manufacturing sector employment grew by 2.7 per cent in 1990 compared with 1.4 per cent recorded in 1989. In 1990, 187,683 persons were engaged in the manufacturing sector compared with 182,773 persons employed in the previous year. Significant increases in employment were observed in meat processing, confectionery and chocolate. Soap manufacturing, rubber products and non-metallic minerals industry recorded commendable increases of 22 per cent, 9 per cent and 18.3 per cent, respectively.

### **Sales Value and Stocks**

11.5. Data from the Business Expectations Enquiry (BEE) show that the sales of manufactured goods increased by 18 per cent in 1990 compared with 14 per cent in 1989. At the same time, stocks of manufactured goods increased by 18 per cent from K£ 712 million in 1989 to K£ 840 million last year. The value of sales of manufactured goods in 1990 was K£ 4,251 million up from K£ 3,583 million in the previous year.

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QUANTUM INDEX OF MANUFACTURING PRODUCTION, 1986-1990

Table 11.2

1976=100

INDUSTRY	1986	1987	1988	1989	1990*	Percentage Change 1990/1989
Meat and Dairy Products .. ..	97.0	115.3	127.9	130.9	139.9	6.0
Canned Vegetables, Fish, Oils and Fats	228.2	268.1	267.7	291.1	320.9	10.2
Grain Mills Products .. ..	192.2	198.3	224.7	175.5	177.9	1.4
Bakery Products .. ..	134.6	151.5	155.4	155.1	158.1	1.9
Sugar and Confectionery .. ..	180.1	189.5	201.5	210.0	203.1	-3.3
Miscellaneous Foods .. ..	169.0	189.7	224.7	225.6	226.8	0.5
Food Manufacturing .. ..	144.9	157.8	167.5	171.0	173.2	1.3
Beverages	166.8	196.9	207.9	210.3	218.0	3.4
Tobacco	156.2	170.8	178.1	178.6	178.2	-0.2
Beverages and Tobacco .. ..	166.0	194.3	201.9	204.1	210.7	3.2
Textiles	186.5	192.5	197.2	202.3	227.8	12.6
Clothing	354.8	359.8	368.3	378.6	347.2	-8.3
Leather and Footwear .. ..	81.9	83.5	88.1	94.7	99.2	4.7
Wood and Cork Products .. ..	67.1	68.1	66.4	68.1	70.2	3.0
Furniture and Fixtures .. ..	72.7	73.5	72.7	72.9	73.7	1.0
Paper and Paper Products ..	157.1	170.0	189.3	194.7	203.9	4.7
Printing and Publishing .. ..	350.4	372.2	389.1	392.9	401.8	2.3
Basic Industrial Chemicals ..	166.5	170.0	182.1	198.1	211.3	6.6
Petroleum and Other Chemicals ..	279.0	303.5	342.9	396.0	457.8	15.6
Rubber Products	262.3	277.0	286.3	308.7	325.9	5.6
Plastic Products	205.7	212.3	202.8	219.1	227.4	3.8
Clay and Glass Products .. ..	289.7	291.7	306.5	338.1	367.2	8.6
Non-Metallic Mineral Products ..	135.0	142.7	140.7	147.0	167.1	13.6
Metallic Products	104.4	116.2	133.1	154.6	177.0	14.5
Non-Electrical Machinery .. ..	118.4	127.9	138.7	132.8	103.8	-21.8
Electrical Equipment .. ..	162.9	168.4	189.3	193.8	190.3	-1.8
Transport Equipment .. ..	593.7	547.4	612.4	638.0	673.5	5.6
Miscellaneous Manufactures ..	260.1	336.0	360.3	375.0	406.1	8.3
TOTAL MANUFACTURING	188.7	199.4	211.3	223.8	235.6	5.3

\* Provisional

PRODUCTION OF GRAIN MILLING PRODUCTS, 1986-1990

Table 11.3

'000 tonnes

YEAR	COMMODITY			
	Sifted Maizemeal	Wheat Flour	Whole Rice	Broken Rice
1986 .. ..	225.7	303.6	19.8	0.1
1987 .. ..	197.9	260.0	17.2	0.6
1988 .. ..	261.2	266.6	14.7	0.1
1989 .. ..	220.3	189.0	16.2	1.9
1990* .. ..	241.4	171.9	19.8	2.4

\* Provisional.

and sausages increased by 12 per cent and 27 per cent, respectively, in 1990. The expansion of Farmers Choice is expected to include a modern processing facility and an animal feeds mill.

11.11. The output of liquid milk increased by 8 per cent from 450 million litres in 1989 to 486 million litres in 1990. Production of cheese increased by 11 per cent while that of butter, milk-based baby foods and ice cream fell significantly.

11.12. Substantial increases in output were recorded in the canned vegetables, fish, oils and fats group of industries. The production of fruit and vegetables juices in 1990 was 5.2 million tonnes, nearly one and half times the 3.6 million tonnes produced in 1989. Output of edible fats and margarine increased to 112,073 tonnes in 1990, 26.9 per cent over the 88,344 tonnes manufactured in 1989. Production of both cotton seed oil and coconut oil increased by 5 per cent and 20 per cent, respectively. However, appreciable declines were registered in output of jams and marmalades while increased prices of oils and fats enabled the oil processing industry to sustain growth.

11.13. The sugar and confectionery industry registered the lowest growth rate in the last 3 years. Sugar production in 1990 declined by 3.3 per cent from 431 thousand tonnes produced in 1989 to 414 thousand tonnes. However, it is planned to rehabilitate sugar companies by way of loans and grants. Chemelil, Nzoia, Miwani, South Nyanza Sugar (SONY) and East African Sugar factories will benefit from the rehabilitation. The Government announced new producer prices in 1990 for cane deliveries to mills with a view to encouraging increased output in sugar production. The total rehabilitation of the industry is also aimed at reducing overhead costs of sugar production as well as maximising use of installed capacity. The 17 thousand tonnes drop in the production of sugar in 1990 was accompanied by reduced imports of sugar which fell from 44 thousand tonnes in 1989 to 20 thousand tonnes in 1990.

11.14. The miscellaneous food manufacturing sub-sector, which covers the important tea and coffee industries, continued to stagnate in 1990. After recording an impressive growth of 18.5 per cent in 1988 the industry grew by only 0.4 per cent and 0.5 per cent in 1989 and 1990, respectively. The output of black tea which contributed most of the growth, increased by 8.8 per cent, from 181 thousand tonnes in 1989 to 197 thousand tonnes in 1990. These increases were attributed to good export demand in Asia and Europe. Considerable potential exists for increased production of black tea, with increased output from the Nyayo Tea Zones. Four new factories are in the process of construction, while twenty one are being rehabilitated to help raise production of made tea. Output of cocoa, salt, curry powder and ground spices rose significantly while the instability in international coffee market led to a 5 per cent decline in production of milled coffee. Output of cashew nuts is expected to increase significantly with the recent restructuring of the management of Kilifi Cashew Nut factory.

11.15. Table 11.4 shows that, while production of beer rose by 5.0 per cent from 315.4 million litres in 1989 to 331.1 million in 1990, declines of 6.4 per cent and 11.7 per cent were respectively registered in the production of spirits and mineral waters. Output of cigarettes declined marginally. There was a significant increase in imports of spirits in 1990 over that of 1989. Both the tobacco and beverages industries continued to suffer from decreased domestic demand. However, increased exports of the commodities, particularly within the P.T.A., together with attractive producer prices helped sustain growth in the sub-sector.

Table 11.4

YEAR	COMMODITY			
	Spirits '000 Litres	Beer Million litres	Mineral Waters Million litres	Cigarettes Million sticks
1986	552.5	292.6	182.1	5,822
1987	981.4	307.5	200.9	6,372
1988	956.0	314.4	186.7	6,642
1989	1,274.1	315.4	169.8	6,661
1990*	1,192.9	331.1	150.0	6,648

\* *Provisional*

11.16. Although domestic textile manufacturing faced numerous financial and administrative problems over the last 3 years, the industry picked up significantly in 1990 with a growth of 12.6 per cent. Output of cotton woven fabrics increased by 29.5 per cent from 38.6 million square metres in 1989 to about 50 million square metres in 1990; output of polyester viscose fabrics was 35 million square metres, 16.7 per cent above the 30 million square metres produced in 1989. Production of toweling materials rose by almost one and a half times; while production of knitted fabrics and bed sheets increased by 22 per cent and 19 per cent, respectively. Importation of textile yarn declined significantly by 88.9 per cent from 1,516 tonnes in 1989 to a low 168 tonnes in 1990. Similarly, imports of synthetic fibres decreased from 12,929 tonnes to 10,927 tonnes. Significant declines were recorded in production of woollen and nylon fabrics, blankets and canvas materials. Operational problems, however, strained the textile industry, especially in production of gunny bags. Two firms engaged in production of gunny bags remained closed in 1990.

11.17. Much as the textile industry has recovered, the local clothing industry, expected to have benefitted from the textile manufacturers forward linkages, weakened considerably in 1990. While the clothing industry recorded a negative growth rate of 8.3 percent, much of the blame could be attributed to an increase in imports of wearing apparel, whose value was more than double that in 1989. Imported fabrics have offered unprecedented competition to local clothing industry which should encourage increased efficiency.

11.18. Competition offered by *Jua Kali*, small and medium scale producers of shoes continued to be felt by the local leather and footwear industry. The growth rate in the sector which was 7.5 per cent in 1989, weakened in 1990 to 4.7 per cent. Production of leather shoes remained at approximately the 1989 level of 1.6 million pairs. Sheep and goat skins delivered to leather processing factories in 1990 was 5.98 million units, 26.2 per cent above the 4.74 million delivered the previous year. Production of PVC leather cloth rose by nearly 10 per cent, while output of finished leather increased by nearly 18 per cent. There were significant decreases in production of unfinished leather and sole leather. Importation of cheap shoes may have contributed to the slow-down in the shoe and leather industry, although significant exports have been realised.

11.19. The wood and cork products industry has gradually improved over the last two years. Consequently output of sawn timber increased by 6.4 per cent, from 90,299 cubic metres in 1989 to 96,098 cubic metres in 1990, with the forward linked manufacture of furniture also rising by 1.1 per cent. The demand for wood products has been rising, mainly due to increased aggregate demand in the building and construction industry, and also because of the increased prices of timber substitutes, such as steel.

11.20. After growing at an impressive rate of 11.3 per cent in 1988, growth in the paper and paper products industry slowed down markedly to 2.9 per cent in 1989 before recovering to register 4.7 per cent in 1990. However, demand for various types of paper, such as newsprint and kraft, has continued to rise. Output of kraft paper board increased by 14.0 per cent from 6,523 tonnes in 1989 to 7,439 tonnes in 1990; while output of exercise books remained nearly at their 1989 levels of approximately 5 million dozens. Production of corrugated pack containers increased by one and a half times, while toilet paper rolls and paper cores rose by 9 per cent and 4 per cent, respectively. Significant declines were registered in manufacture of wrapping paper, paper bags and sacks, partly due to increased usage of plastic substitutes. Imported paper and related products decreased from 48 thousand tonnes to 37 thousand tonnes in 1990. Exports of paper products worth K£ 6.4 million in 1990, indicate that considerable export potential exists in the industry. Alternative sources of raw materials in paper recycling and sugar cane waste can boost local paper production significantly.

11.21. The basic industrial chemicals industry continued its impressive growth over the year, recording a growth rate of 6.6 per cent in 1990, but slightly below the 7.1 per cent registered in 1989. Output of oxygen, nitrogen and hydrogen taken together in 1990 was 4.5 million litres, 9.8 per cent above the 4.1 million in 1989. Production of wattle and pyrethrum extract, both with considerable export demand, rose by 11 per cent and 9 per cent, respectively. Production of acetylene gas, useful in the engineering industry remained roughly at 1989 level, while output of electrodes declined somewhat. Production of solid insecticides rose by 40.4 per cent from 2,171 tonnes in 1989 to 3,048 tonnes in 1990. While there was stagnation in the manufacture of aerosols and cattle-dip chemicals, output of vaccines declined from 13 million doses in 1989 to 8 million in 1990.

11.22. In spite of a number of domestic petroleum products price increases in 1990, necessitated by rises in world crude oil prices, the petroleum and other chemicals industry grew by 15.6 per cent; about the same rate of growth as that registered in 1989. Production of fuel oil, diesel, kerosene, paints and distemper increased by 39 per cent, 12 per cent, 8 per cent, 24 per cent and 6 per cent, respectively. The output of motor spirit, however, declined. The manufacture of liquid drugs nearly doubled in 1990, while that of pharmaceuticals rose by nearly 20 per cent. The output of laundry soap increased by a marginal 2.9 per cent, from 22,056 tonnes in 1989 to 22,699 tonnes in 1990. While production of cream lotion increased by nearly 37 per cent, that of detergent powder, tooth paste, hair oil, tonics, shoe polish and matches remained unchanged. There was a marginal rise in output of resin emulsions from 4,014 metric tonnes in 1989 to 4,163 tonnes in 1990.

11.23. Performance of the rubber industry weakened slightly, growing at 5.6 per cent in 1990 compared with 7.8 per cent in 1989. The slow down in growth was attributed to output declines in new bicycle tubes and retread tyres, of 40 per cent and 15 per cent, respectively. Output of new motor vehicle tyres in 1990 was 494,632 units, 9.4 per cent above 452,066 units produced in 1989. Production of new motor vehicle tubes **increased** by 26 per cent, while 77 million pairs of rubber shoes were produced, 6.9 per cent above the 72 million registered in 1989.

11.24. Demand for plastic products both in households and industry have enabled the plastics industry to maintain a steady growth. However, increased competition from substitutes weakened the growth rate from 8.0 per cent in 1989 to 3.8 per cent in 1990. The output of plastic shoes in 1990 was 1,217 thousand pairs, 5.4 per cent above 1,155 thousand produced in 1989. Output of P.V.C. floor tiles increased by 20 per cent, while there were no changes in output of polythene film bags, plastic crates and bottles. Output of P.V.C. pipes decreased from 2,721 metric tonnes in 1989 to 2,511 tonnes in

1990. Due to the significantly high demand for plastic products, potential has been created for recycling of plastic material. However, the cost of recycling is higher than that of basic raw materials, thereby rendering recycling uneconomical. The quantity of plastic products imported in 1990 was 62,923 tonnes, about 3 times the 23,731 tonnes imported in the previous year.

11.25. Demand for glassware continued to rise significantly in 1990, in spite of increased competition from plastic substitutes. The number of windscreens manufactured in 1990 rose by nearly one and a half times from 31,822 units in 1989 to 45,532 units. Manufacture of glass bottles, however, declined slightly. The output of floor and wall tiles increased by 28 per cent as a result of continued demand by the building and construction sector. The clay and glass product industry in 1990 grew by 8.6 per cent.

11.26. The production of cement has been growing at the rate of 6 per cent per annum, due to increased construction activity over the last four years. Table 11.5 shows that during the year, 1,512 thousand tonnes of cement was produced, about 14.8 per cent above the 1,316 thousand produced in 1989. Cement consumption increased by 17.8 per cent from 1,003 thousand tonnes in 1989 to 1,182 thousand tonnes in 1990. The output of roofing tiles rose by 24 per cent, concrete pipes and blocks by 17 per cent and that of clinker by 8 per cent; while production of limestone declined by a significant 26 per cent.

**CEMENT PRODUCTION AND UTILIZATION, 1986-1990**

*Table 11.5* *'000 tonnes*

YEAR	PRODUCTION	IMPORTS	CONSUMPTION AND STOCKS	EXPORT TO	
				Uganda and Tanzania	All Other Countries
1986 .. ..	1,198.7	0.5	713.4	54.8	431.0
1987 .. ..	1,243.3	0.4	890.5	50.7	302.5
1988 .. ..	1,200.7	0.0	854.1	62.6	284.0
1989 .. ..	1,316.4	0.9	1,003.4	60.7	253.2
1990*.. ..	1,511.5	0.0	1,182.0	44.6	285.0

\* *Provisional.*

11.27. The metal products industry registered a growth rate of 14.5 per cent, slightly lower than the 16.1 per cent recorded in 1989. Output of iron-bars and rods in 1990 was 45,582 tonnes, 28.1 per cent above the 35,592 tonnes in 1989. Production of galvanised sheets, jembes, bolts and nuts, barbed wire and welded mesh, remained at their 1989 levels. However, significant increases were registered in output of steel drums and pails, nails, exhaust pipes, silencers and metal beds. While significant foreign exchange savings potential exists in the metal products industry through recycling of scrap metal, the industry continued to suffer considerable competition from imported finished metallic products.

11.28. Considerable technological changes coupled with continued trade liberalisation have tended to weaken the domestic electrical machinery industry. As a result of competition from imports of completely assembled radios and television sets, the industry, for the first time since 1987, recorded a negative growth of 1.8 per cent in 1990, compared with increases of 12.4 per cent and 2.4 per cent, in 1988 and 1989, respectively. Devaluation of the Kenya Shilling also made the importation of Completely Knocked Down kits (CKDs) components, used in the industry, expensive. The number

of assembled radios in 1990 was 22,640 units compared with 32,121 units in 1989, a fall of 29.5 per cent. The output of radio cassettes declined by a modest 4 per cent while that of gramophone records nearly halved. Imported television sets in 1990 more than doubled while radios increased by 10.7 per cent from 78,000 in 1989 to 86,325. However, there was a 9 per cent increase in the output of motor vehicle batteries.

11.29. Transport equipment industry has responded well to fiscal incentives offered in the last few years. Reductions of sales tax on a variety of motor vehicles and duty on CKDs motor vehicle components, and liberalization of import licensing, have largely sustained the industry. The number of vehicles assembled locally in 1990 was 14,056 units, 6.6 per cent above the 13,184 units assembled in 1989. The number of lorry bodies increased by 32 per cent, while coaches and bus bodies produced declined by a significant 20 per cent. The industry, however, continued to suffer from exchange rate effects, leading to high assembling costs. A number of ancillary industries have been stimulated by the motor vehicle industry especially manufacture of motor vehicle batteries.

### **Industrial Credit**

11.30. Loan facilities from industrial development finance institutions to potential investors stabilised in 1990, a process which started in 1988. Increased inflationary pressures, unattractive foreign currency-denominated loans are some of the key factors which constrained lending to the manufacturing sector. Table 11.6 shows that in 1990, a total of 248 projects were approved for credit assistance with a total financial commitment of K£ 16.7 million. While the physical number of projects was the highest approved since 1987, the relatively modest financial outlay indicates investment preference for small labour intensive projects. The policy objective of rural-urban balance intended to spread development to the rural areas continued to show some success through increased financial flows to manufacturers in small towns and rural areas by the banking sector.

11.31. The decline in growth of manufacturing sector in 1990 was amply demonstrated by the stagnation of new investment participation by the Industrial Development Bank (IDB). During the year, the number of project approvals by IDB stood at 8, the same number as in 1989. Five of the projects involved expansion of existing factories. Four of the projects located outside Nairobi are involved in manufacturing of pharmaceuticals, paper, textiles and rubber. Other investment projects were in furniture, plastics and sugar processing. All these projects are expected to create direct employment for 216 persons. At the same time, the IDB continued to monitor ailing industrial ventures with the aim of rehabilitating them.

11.32. During the year 1990, and for the first time since 1988, the Development Finance Company of Kenya (DFCK), registered an upward trend in project approvals in terms of loans committed. A total of nine projects, worth K£ 5.3 million were approved, a financial outlay nearly seven times that of 1989. Locational analysis of the projects shows that four projects, namely manufacture of collapsible tubes, collection of steel scrap metal, processing of concrete blocks, wearing apparel and textiles are in Nairobi and its periphery. A chemical factory was approved for Mariakani in Mombasa; while a fish processing factory was approved for South Nyanza. The approved projects involve expansion and re-locational ventures with employment potential of 337 additional jobs. Foreign currency denominated loans continued to constrain growth of **investment** portfolios of the DFCK, but potential investors will in future be protected by the Foreign Exchange Risk Assumption Fund.

INDUSTRIAL PROJECTS APPROVED BY SELECTED GOVERNMENT OR QUASI-GOVERNMENT INSTITUTIONS, 1986 - 1990

Table 11.6

INSTITUTION	NUMBER OF PROJECTS					APPROVED EXPENDITURE K£ MILLION				
	1986	1987	1988	1989	1990*	1986	1987	1988	1989	1990*
Industrial Development Bank Limited (I.D.B.)	10	18	15	8	8	5.7	11.3	6.5	3.3	3.4
Development Finance Company of Kenya (D.F.C.K.)	10	12	4	3	9	4.2	6.1	0.7	0.8	5.3
Kenya Industrial Estates Limited (K.I.E.) .. • ..	411	164	205	131	219	4.3	2.4	3.3	2.5	4.0
Industrial and Commercial Development Corporation (I.C.D.C.)	12	15	14	6	12	6.1	7.6	3.1	7.0	4.0
TOTAL . . . . .	443	209	238	148	248	20.3	27.5	13.6	13.6	16.7

\* Provisional.

1.33. It has been the Government policy to promote rural based small scale industries with strong labour and raw material linkages, through the Kenya Industrial Estates (KIE). During 1990 the KIE disbursed a total of K£ 4.0 million covering a total of 219 industrial projects. The average financial commitment of these projects is Ksh. 340,500 per project. Each of the projects assisted by KIE generated an average of eight jobs, and consequently a capital - labour ratio of about KShs. 40,000. Out of the 219 projects, only 43 were within Nairobi and Mombasa environs, the remaining 176 being evenly spread nation wide.

11.34. During the year 1990, the Industrial and Commercial Development Corporation (ICDC) was mainly involved in rehabilitation and expansion of existing projects with insignificant commitment to new industrial ventures. The Corporation disbursed 82 per cent of the funds available to industrial entrepreneurs as loans, while 18 per cent was in the form of equity participation. A textile factory in Thika benefitted from a fair proportion of loan facilities in the rehabilitation programme; other beneficiaries included a motor vehicle batteries manufacturing firm; vegetable processing in Naivasha, cashew nut factory in Kilifi and mineral waters manufacturing. A significant equity participation by ICDC was in a firm involved in manufacture of ceramics.

### **Labour Cost and Productivity**

11.35. As can be seen from Table 11.7, the Kenyan manufacturing sector is characterized by low wages as a component of total output which has fluctuated around 4.3 per cent. The proportion of wage costs in manufacturing value added has also been consistently low at about 33 per cent, such that a significant amount of the operating surplus which is a component of value added can potentially be re-invested. The decline in manufacturing activity in 1990, against a largely stable trend in manufacturing employment growth at 2.7 per cent, led to reduced labour productivity of 2.6 per cent, in 1990, the lowest rate since 1987.

INDICATORS OF LABOUR COST AND PRODUCTIVITY IN MANUFACTURING, 1986 - 1990

*Table 11.7*

INDICATOR	1986	1987	1988	1989	1990*
1. Change in the quantum index of manufacturing ..	+ 5.9	+ 5.7 '	+ 6.0	+ 5.9	+ 5.3
2. Change in numbers employed in manufacturing ..	+ 3.8	+ 2.3	+ 2.6	+ 2.8	+ 2.7
3. Implicit change in labour productivity .. ..	+ 2.1	+ 3.4	+3.4	+ 3.1	+ 2.6
4. Wage cost as percentage of gross output .. ..	48	4.6	4.1	4.3	3.9
5. Wage cost as percentage of value added .. ..	33.8	33.8	30.7	34.5	33.1

\* *Provisional.*



## CHAPTER 12 - BUILDING AND CONSTRUCTION

Building and Construction sector maintained an upward growth in its performance in 1990, although at a slightly lower rate than in 1989. Employment, cement consumption, value of reported private buildings completed and total receipts for work done by private contractors, the sector's major indicators, recorded moderate growths in 1990. The slow-down in the sector's performance was attributable to; rising building and construction costs, lower growth in credits extended by commercial banks to private sector building and construction enterprises, and a cut in public expenditure on roads, housing, and water development. Despite the shortfalls, the sector benefitted from major building and other construction works started between 1988-89 and which were still in progress during the year.

12.2. Table 12.1 gives data series from which trends of the major indicators for building and construction for the last five years could be derived. In employment, the sector generated 2,700 new jobs in 1990, representing a growth of 3.9 per cent down from 9.7 per cent in 1989. Estimated cement consumption rose by 179 thousand tonnes from 1003.4 thousand tonnes recorded in 1989. The continued growth in cement consumption was attributable to construction of sky-rise buildings in Nairobi and other towns, water dams and Turkwel George Multi-purpose project.

### REAL TRENDS IN BUILDING AND CONSTRUCTION\*, 1986 -1990

Table 12.1

1982=100

	1986	1987	1988	1989	1990**
"Index" of reported private building work completed in main towns***	64.3	72.2	81.3	84.2	
"Index" of reported public building work completed in main towns***	12.1	16.3	14.9	10.0	
"Index" of government expenditure on roads ..	55.1	49.8	65.2	77.1	71.8
Cement consumption f000 tonnes)	702.4	890.3	854.0	1,003.4	1,182.0
"Index-	121.2	153.7	147.4	173.2	205.2
Employment ("000).. ..	55.9	58.1	62.6	68.7	71.4
"Index"	92.2	96.2	103.6	113.7	118.2

\* Actual deflated by various building or construction cost indices.

\*\* Provisional.

\*\*\* The average of two succeeding years is taken in each case for reported completion of building.

12.3. Data from the Business Expectation Enquiry (BEE) indicate that total receipts for work done by civil, building and special contractors, rose from K£ 263 million in 1989 to K£ 365 million in 1990. A substantial part of this increase may be attributed to increased prices of building and construction materials. Building construction activities continued to dominate the sector's activities during the year due to major building works which were in progress in major towns.

12.4. The overall building and construction index rose by 21.9 per cent in 1990 compared to 9.9 per cent in the previous year. Cost of material rose by almost double the increase in labour costs. Labour costs rose by 12.4 per cent, partly due to Regulation of General Wages (Amendment) Order of 1st June 1990. Unskilled, semi-skilled and skilled labour recorded 5 per cent, 13 per cent and 19 per cent increases, respectively. Materials cost recorded 25.7 per cent growth, the highest since 1988. This rise was largely due to the increase in fuel and oil prices, coupled with depreciation of the Kenya

Shilling against major currencies thus contributing significantly to the prices of imported raw materials. The prices of cement, a major input in the building and construction sector, rose by 20 per cent in 1990 compared to only 10 per cent in 1989 contributing to increases in prices of concrete products, pipes and pre-casts. Other inputs whose prices rose during the year include aggregate, sand, steel and explosives. Details on building and construction cost indices are shown in Table 12.2.

ANNUAL PERCENTAGE INCREASE IN BUILDING AND CONSTRUCTION COST INDICES\*, 1988- 1990

Table 12.2

	MATERIALS			LABOUR			TOTAL COST		
	1988	1989	1990**	1988	1989	1990**	1988	1989	1990**
Residential Buildings ..	14.8	10.9	24.7	4.6	11.5	12.4	12.7	11.0	22.4
Non-Residential Buildings	13.7	9.8	30.8	4.6	11.5	12.4	11.3	10.2	26.2
All Buildings	14.3	10.4	27.4	4.6	11.5	12.4	12.1	10.6	24.2
"Other" Construction ..	9.3	6.7	22.0	4.6	11.5	12.4	7.5	8.5	18.2
TOTAL COST INDEX	12.7	9.3	25.7	4.6	11.5	12.4	10.3	9.9	21.9

\* From December to December.

\*\* Provisional.

12.5. Table 12.3 presents data series on the value of building plans approved by Nairobi City Commission (NCC) and other major towns. Total value of plans approved by NCC and other towns stagnated in 1990 compared to 14.1 per cent increase in 1989. The drop in total value was attributable to 12.5 per cent decrease in value of plans approved by NCC. Despite the decline in total value of plans approved, the number and value of residential plans approved increased during the period, mainly to meet the increasing demand for residential houses in urban areas. The plans approved by NCC in 1990 included the General Post Office (GPO) headquarters, offices for Insurance Company of East Africa, office block for Afya Co-operative Savings and Credit Society, Strathmore Post-Secondary College and shops and offices for Barclays Bank. The value of reported plans approved by other towns increased by 21.2 per cent in 1990.

VALUE OF BUILDING PLANS APPROVED BY NAIROBI AND OTHER TOWNS, 1986-1990

Table 12.3

YEAR	NAIROBI	OTHER TOWNS	TOTAL
1986	78.44	65.38	143.82
1987	111.82	90.81	202.63
1988	148.38	98.93	247.31
1989	212.85	69.26	282.11
1990*	186.24	83.91	270.15

Provisional.

12.6. Comparison of value of private plans approved and buildings completed since 1986 is detailed in Table 12.4. Whereas the value of plans approved declined, the value of reported building works completed increased slightly by 9.2 per cent.

COMPARISON OF VALUE OF PRIVATE PLANS APPROVED AND BUILDINGS COMPLETED  
IN MAIN URBAN AREAS, 1986-1990

Table 12.4

K£million

YEAR	PLANS APPROVED	BUILDING WORK COMPLETED
1986	141.82	21.80
1987	202.15	33.49
1988	247.31	40.74
1989	282.11	48.59
1990*	270.15	53.08

\* Provisional.

12.7. Data series presented in Table 12.5 indicate that the value of reported private buildings completed in main towns rose by 7.8 per cent in 1990 due to increased demand for residential, office and commercial facilities. Significant increases were recorded in Mombasa and Kisumu, with Nakuru recording moderate expansion, attributable to their growth as industrial and commercial centres. Nairobi, which in the past registered steady growth, recorded a decline from K£ 31.2 million in 1989 to K£ 21.8 million in 1990, the first such decline since 1986.

VALUE OF REPORTED PRIVATE BUILDING\* WORKS COMPLETED IN MAIN TOWNS, 1986-1990

Table 12.5

K£million

Year	Nairobi	Mombasa	Kisumu	Nakuru	Eldoret	Total
1986	14.30	7.61	0.18	2.38	0.38	24.85
1987	21.78	11.73	0.23	2.77		36.51
1988	26.24	14.35	1.10	3.85	0.38	45.92
1989	31.19	13.28	4.36	3.90		52.73
1990**	21.79	22.05	8.09	4.93		56.86

\* Including the value of extension.

\*\* Provisional.

12.8. Trend analysis of reported completions of new private buildings in main towns by residential and non-residential category is shown in Table 12.6. Although the total number of both residential and non-residential units completed by private developers declined in 1990, their estimated costs rose by 13.1 per cent and 2.0 per cent per cent, respectively. Despite a decline in the number of units completed, the private sector continued to play a major role in the provision of residential, office and commercial buildings in main towns.

REPORTED COMPLETIONS OF NEW PRIVATE BUILDINGS\* IN MAIN TOWNS, 1986- 1990

Table 12.6

YEAR	NUMBER		ESTIMATED COST K£million		
	Residential	Non-Residential	Residential	Non-Residential	Total
1986	1,078	67	16.83	4.97	21.80
1987	1,042	82	18.01	15.48	33.49
1988	1,466	85	27.10	13.64	40.74
1989	1,296	124	31.81	16.78	48.59
1990**	999	66	35.96	17.12	53.08

\* Excluding the value of extensions.

\*\* Provisional.

12.9. Reported completions of new public buildings shown in Table 12.7 indicate a drop in both the number and estimated cost in 1990. Total value of the reported buildings declined by 13.9 per cent with declines of 6.6 per cent and 26.3 per cent in residential and non-residential buildings, respectively. Major public buildings in progress during the 1989-90 period included Nairobi West Phase I Housing Scheme, Government offices for newly created districts, the extension of National Social Security Fund building and residential houses for the Police Force in Nairobi. When these constructions are completed, they will help ease the demand for offices and houses.

REPORTED COMPLETIONS OF NEW PUBLIC BUILDINGS\* IN MAIN TOWNS, 1986-1990

*Table 12.7*

YEAR	NUMBER		ESTIMATED COST K£million		
	Residential	Non-Residential	Residential	Non-Residential	Total*
1986	184	18	2.97	0.82	3.79
1987	150	26	1.65	0.79	2.44
1988	167	22	2.31	0.81	3.12
1989	158	28	1.98	1.18	3.16
1990**	155	26	1.85	0.87	2.72

\* Including the value of extensions.

\*\* Provisional.

12.10. In an effort to alleviate acute housing shortage in urban areas, the Government spent K£ 10.01 million during 1989/90 fiscal year on housing under various housing programmes. This, however, represented a drop of 47.8 per cent from the K£ 19.18 spent in 1988/89 fiscal year. Loans and grants to National Housing Corporation and Municipalities took almost 90 per cent of the total expenditure on housing, mainly for the completion of various housing schemes. Under urban pool housing programme, the Government completed the Nairobi West Phase I Housing Scheme; while Phase II is in progress. Approved expenditure on housing similarly showed a downward trend during 1990/91 fiscal year. The drop in both actual and approved expenditure was partly due to budget rationalization. Data on both actual and approved expenditure are presented in Table 12.8.

APPROVED AND ACTUAL CENTRAL GOVERNMENT EXPENDITURE ON HOUSING, 1986/87- 1990/91

*Table 12.8*

YEAR	K£ Million		Approved Expenditures as Percentage of Development Expenditure
	Approved	Actual	
1986/87	8.41	7.16	2.20
1987/88	7.33	7.48	1.20
1988/89	19.18	19.18	2.00
1989/90	12.42	10.01	1.30
1990/91*	11.50	**	1.18

\* Provisional.

12.11. National Housing Corporation (NHC), whose responsibility is to implement Government's housing policy, recorded a drop in its housing construction activities in 1990. This is evidenced by a decline in the number of units completed and people who benefitted from the 'Rural Housing Scheme'. The downturn in the Corporation's housing activities was occasioned by limited funds allocated for various housing schemes.

12.12. Data on housing units completed by NHC and their value during the last five years is presented in Table 12.9. The number of units completed and the corresponding value declined by 32.2 per cent and 48.3 per cent, respectively in 1990. Housing Schemes completed in 1990 included 212 units at Kakamega USAID Tenant Purchase, upgrading of 257 units of squatter settlement at Kiawara/Shauri-Yako in Nyeri and 87 units at Nairobi Uhuru Garden Phase II Extension. In addition to 681 units completed in 1990, 2,745 units were under construction in 14 towns, while 5,856 units were under various planning stages. Schemes under construction include: Kibera Phases I and II Highrise Flats, Isiolo

USAID Tenant Purchase and Malindi low cost mortgage comprising of 1,900,125, and 40 units, respectively.

#### HOUSING UNITS COMPLETED BY THE NATIONAL HOUSING CORPORATION, 1986-1990

Table 12.9

Units completed	1986	1987	1988	1989	1990*
PROVINCE-					
Nairobi		85		367	87
Coast		50			
North-Eastern .. ..					
Eastern	253	248			
Central	95	111	166	149**	357**
Rift valley .. ..	115	41	63	105	25
Nyanza	152	40		384	
Western					212
TOTAL NUMBER	615	575	229	1,005	681
Of which site and service	276	50		234	
Value of units completed K£000					
Nairobi		1,350		4,288	2,056
Coast		116			
North-Eastern .. ..					
Eastern	1,013	1,095			
Central	186	349	1,010	930**	558**
Rift valley .. ..	506	240	524	399	98
Nyanza	268	604		878	
Western					644
TOTAL VALUE	1,973	3,754	1,534	6,495	3,356

\* Provisional

\* \* Include upgrading of squatter settlement in Nyeri Town.

12.13. In 1990, no units were completed under the 'site and service scheme' which in early eighties accounted for more than half of the total units completed by the Corporation. The shift to Tenant Purchase, Mortgage and Rental schemes has contributed to the phasing out of 'site and service scheme'.

12.14. The 'Rural Housing Scheme' whose aim is to advance funds to rural households to put up decent housing, registered nil disbursements of funds in 1989/90 fiscal year compared to K£ 0.3 million disbursed in 1988/89.

12.15. Since 1986 remarkable achievements have been made in the development of various categories of roads as shown in Table 12.10. This is in line with Government policy to not only improve the country's road system but also to link it with neighbour countries to facilitate inter-regional trade. By July 1990, the total classified road network covered 62,300 kilometres compared with 54,200 kilometres in July 1986. Earth/gravel roads still constitute the largest proportion of all roads. Roads completed during the last five years which have contributed to the growth in kilometres of bitumen category include Lodwar-Kakuma, Kakuma-Lokichogio, Thuchi-Nkubu, Mumias-Kakamega and Kabarnet-Tambach.

## KILOMETRES OF ROAD AS AT 1st JULY, 1986 AND 1st JULY, 1990 BY TYPE AND CLASSIFICATION

Table 12.10

'000Km

Type of Road	1986		1990	
	Bitumen*	Earth/ Gravel**	Bitumen*	Earth/ Gravel**
A- International Trunk ..	2.3	1.2	2.6	1.0
B- National Trunk .. ..	1.2	1.5	1.3	1.4
C- Primary	1.9	5.9	2.3	5.5
D- Secondary	0.7	10.3	1.0	10.1
E- Minor	0.4	25.8	0.5	33.6
F- Special Purpose.. ..	0.2	2.8	0.2	2.8
TOTAL .. ..	6.7	47.5	7.9	54.4

\* Bitumen Road:- Include Government access, township and municipality roads.

\*\* Earth/Gravel:- Include township, settlement, strategic, tourist, sugar, tea, wheat and Special Rural Development Programme (S.R.D.P.) roads.

12.16. Total development and recurrent expenditure by Ministry of Public Works on various types of roads continued to show an upward trend, recording a 28.3 per cent increase in 1989/90, and is projected to rise by a lower 10 per cent in 1990/91 fiscal year. While recurrent expenditure stagnated, development expenditure increased slightly, underlining Government's commitment to make more areas accessible. Data on road development and recurrent expenditure are presented in Table 12.11.

12.17. By July, 1990, seven major road works were completed covering a total of 291 kilometres at a total cost of about K£ 30 million. Roads under construction include the Kabete-Limuru Dual carriage way, Rumuruti-Sukuta-Marmar, Ndori-Owimbi, Makutano-Muranga-Sagana, Sagana-Marua-Nyeri, Nunguni-Kiboko and Kiserian-Isinya roads.

12.18. The extension of the NSSF building, Capitol, Nation and View Park Towers, Post Office headquarters, Sun-view Estate, Lonrho House, Kilifi Bridge, Turkwel Gorge Multi-Purpose Project, the third Nairobi water supply, Kilimanjaro-Machakos water project, the Kasarani sports complex and the Nakuru Great Water Supply, were some of the major building and construction works which were in progress and contributed to the growth in the sector's performance in 1990.

## TOTAL EXPENDITURE ON ROADS, 1988/89 - 1990/91

Table 12.11

K£million

	1988/89	1989/90	1990/91*
DEVELOPMENT:			
Trunk Roads	17.5	49.7	45.1
Primary Roads	16.8	12.7	16.2
Secondary Roads .. ..	3.1	7.4	12.4
Unclassified Roads.. ..			
Miscellaneous Roads.. ..	28.6	21.8	27.1
TOTAL	66.0	91.6	100.8
RECURRENT (maintenance and repair)	23.4	23.1	25.5
TOTAL .. ..	89.4	114.7	126.3

\* Provisional

## Overview

Despite adverse international developments, the tourism industry's performance improved slightly in 1990. This improvement was demonstrated by visitor arrivals and departures; increased bed-nights occupancy in most zones of the country; rising numbers of visitors to the national parks and museums; and marginally higher level of foreign exchange earnings from the industry.

13.2. At the international level, the escalation of the Gulf conflict, which started in the third quarter of the year, had adverse effects on tourism. Following developments in the Gulf area, oil prices went up and their future direction remained uncertain for some time. This resulted in a general increase in the cost of travel. At the same time, concern for personal safety discouraged travel. On the positive side, the depreciation of the Kenya Shilling against major currencies made holidays in Kenya cheaper than previously and this aided in boosting the industry.

13.3. The number of international arrivals recorded at the different entry points, was 9.0 per cent higher than in the previous year, with a similar increase in the number of departures; hotel bed-night occupancy rose by some 13.7 per cent over the previous year's level and the average length of stay was slightly longer than in 1989; foreign exchange earnings were K£ 533 million in 1990, a growth of 23.4 per cent from the K£ 432 million recorded in 1989. Tourism was, nevertheless, the leading foreign exchange earner.

## International Tourism

13.4. International arrivals increased by 9.0 per cent to 801 thousand. Table 13.1 shows that the third quarter of the year recorded the highest number of visitors while the fourth quarter recorded almost an equal number. Growth in the number of visitors was contributed mostly by those on holiday, who increased by 13.5 per cent over 1989; while business and transit visitors declined by 21.2 per cent and 33.0 per cent, respectively. Other visitors recorded higher arrivals in all quarters of the year and especially so in the 4th quarter.

13.5. Visitor departures increased from 645 thousand in 1989 to 702 thousand in 1990, a growth rate of a 8.8 per cent. Departures were highest in the first and third quarters at 205 thousand and 210 thousand visitor departures, respectively. As in arrivals, visitors on holiday contributed the highest number of visitor departures. Business and transit visitor departures declined by 23.3 per cent and 13.6 per cent, respectively. Table 13.2 shows that visitor departures on "other visitor" departures increased significantly and reached an all time record of 25 thousand.

13.6. Analysis of visitor departures by country of residence and purpose of visit is presented in Table 13.3. Europe contributed 61.0 per cent of the total number of visitors, higher than 55.4 per cent in 1989. Africa, America and Asia contributed 20.5 per cent, 11.2 per cent and 5.5 per cent, respectively. There was a 14.9 per cent growth in the number of European visitors with West Germany and United Kingdom which registered increases of 16.2 per cent and 19.2 per cent, respectively, contributing most of the growth. In the European market, slight decreases were noted in the number of visitors from Italy and Switzerland, although the two countries remained stronger markets after West Germany and United Kingdom. In the American market, a decrease of 12.6 per cent was recorded. Tanzanian visitors were 8.5 per cent higher than in 1989 and totalled 73,100, while visitors from Uganda and other African countries dropped significantly. Among Asian countries, only India and Japan recorded increases in the number of visitors coming on holiday.

QUARTERLY VISITOR ARRIVALS BY PURPOSE OF VISIT, 1986 - 1990

Table 13.1

'000

Quarter/ Purpose		1986	1987	1988	1989	1990*
1 st Qr.	Holiday .. ..	130.3	138.6	155.1	192.6	186.6
	Business .. ..	17.9	18.0	20.2	15.8	12.5
	Transit .. ..	12.0	13.0	13.0	5.8	4.3
	Other .. ..	3.6	2.0	2.1	1.4	1.7
	TOTAL .. ..	163.8	171.6	190.4	215.6	205.1
2nd Qr.	Holiday .. ..	83.3	100.4	102.6	124.5	158.2
	Business .. ..	18.0	18.1	20.4	13.8	5.4
	Transit .. ..	16.7	16.9	17.1	6.5	1.4
	Other .. ..	3.8	1.8	2.0	1.0	1.6
	TOTAL .. ..	121.8	137.2	142.1	145.8	166.6
3rd Qr.	Holiday .. ..	119.9	134.0	158.7	158.9	202.9
	Business .. ..	14.0	14.1	14.8	9.6	8.1
	Transit .. ..	16.8	14.6	17.3	9.5	3.5
	Other .. ..	3.4	1.4	2.0	1.3	1.4
	TOTAL .. ..	154.1	164.1	192.8	179.3	215.9
4th Or.	Holiday .. ..	143.1	156.1	139.5	166.1	181.2
	Business .. ..	15.8	15.9	14.1	14.6	16.4
	Transit .. ..	13.6	14.4	14.0	12.7	13.9
	Other .. ..	2.0	2.0	2.0	0.6	1.6
	TOTAL .. ..	174.5	188.4	169.6	194.0	213.1
Year	Holiday .. ..	476.6	529.1	555.9	642.1	728.9
	Business .. ..	65.7	66.1	69.5	53.8	42.4
	Transit .. ..	59.1	58.9	61.4	34.5	23.1
	Other .. ..	12.8	7.2	8.1	4.3	6.3
	TOTAL .. ..	614.2	661.3	694.9	734.7	800.7

\* Provisional.



QUARTERLY VISITOR DEPARTURES BY PURPOSE OF VISIT, 1986-1990

Table 13.2

'000

Quarter/ Purpose	1986	1987	1988	1989	1990*
1 st Or. Holiday .. ..	134.2	146.6	155.2	146.4	181.7
Business .. ..	15.1	16.4	17.3	21.5	9.7
Transit .. ..	13.9	14.2	15.0	12.0	12.2
Other .. ..	2.6	3.4	3.6	0.9	1.1
TOTAL .. ..	165.8	180.6	191.1	180.8	204.7
2nd Qr. Holiday .. ..	87.5	95.6	92.7	99.6	97.9
Business .. ..	17.1	17.9	17.3	17.8	9.0
Transit .. ..	17.8	19.2	18.6	13.0	10.5
Other .. ..	3.5	3.1	3.0	0.6	0.7
TOTAL .. ..	125.9	135.8	131.6	131.0	118.1
3rd Qr. Holiday .. ..	117.3	136.8	145.0	140.8	165.0
Business .. ..	12.3	18.1	19.2	9.1	13.1
Transit .. ..	17.0	18.8	19.9	14.0	12.7
Other .. ..	2.2	2.7	2.9	0.5	19.1
TOTAL .. ..	148.8	176.4	187.0	164.4	209.9
4th Qr. Holiday .. ..	125.5	131.4	129.7	142.5	140.8
Business .. ..	19.3	17.4	17.2	12.5	14.9
Transit .. ..	15.9	17.9	17.7	13.3	9.8
Other .. ..	2.8	2.6	2.6	0.7	3.8
TOTAL .. ..	163.5	169.3	167.2	169.0	169.3
Year Holiday .. ..	'464.5	510.4	522.6	529.3	585.4
Business .. ..	63.8	69.8	71.0	60.9	46.7
Transit .. ..	64.6	70.1	71.2	52.3	45.2
Other .. ..	11.1	11.8	12.1	2.7	24.7
TOTAL .. ..	604.0	662.1	676.9	645.2	702.0

\* Provisional

DEPARTING VISITORS BY COUNTRY OF RESIDENCE AND PURPOSE OF VISIT, 1989- 1990

Table 13.3

'000

Country of Residence	Holiday		Business		Transit		Total**	
	1989	1990*	1989	1990*	1989	1990*	1989	1990*
West Germany	103.2	120.5	1.2	1.0	1.5	1.6	105.9	123.1
United Kingdom	79.4	97.0	4.9	4.4	3.9	3.7	88.2	105.1
Switzerland	35.8	33.7	0.5	0.5	0.8	1.1	37.1	35.3
Italy	39.7	39.3	0.9	0.6	1.5	1.5	42.1	41.4
France	35.0	38.4	1.1	0.9	1.2	0.9	37.3	40.2
Scandinavia	16.7	21.6	1.6	1.5	2.1	2.2	20.4	25.3
Other Europe	33.8	49.8	1.6	1.5	2.0	1.7	37.4	53.0
TOTAL EUROPE	343.6	400.3	11.8	10.4	13.0	12.7	368.4	423.4
U.S.A	67.8	58.5	3.3	2.7	5.2	4.0	76.3	65.2
Canada	10.9	10.9	0.6	0.6	1.1	1.0	12.6	12.5
TOTAL NORTH AMERICA ..	78.7	69.4	3.9	3.3	6.3	5.0	88.9	77.7
Uganda	10.5	8.9	18.3	7.4	5.2	5.1	34.0	21.4
Tanzania	53.1	57.9	9.2	9.8	5.1	5.4	67.4	73.1
Other Africa	25.3	23.4	14.7	10.9	17.4	13.3	57.4	47.6
TOTAL AFRICA	88.9	90.2	42.2	28.1	27.7	23.8	158.8	142.1
India	7.7	9.5	1.1	1.0	2.2	2.0	11.0	12.5
Japan	7.0	8.3	1.0	0.9	0.8	0.5	8.8	9.7
Israel	3.5	3.4	0.2	0.2	0.4	0.4	4.1	4.0
Other Asia	8.0	8.4	1.4	1.2	3.0	2.2	12.4	11.8
TOTAL ASIA	26.2	29.6	3.7	3.3	6.4	5.1	36.3	38.0
Australia and New Zealand	8.1	9.1	0.4	0.3	0.5	0.5	9.0	9.9
All Other Countries	2.6	2.7	0.3	0.3	0.4	0.4	3.3	3.4
TOTAL	548.1	601.3	62.3	45.7	54.3	47.5	664.7	694.5

\* Provisional.

\*\* The Total does not include 'Other Visitors' Category.

13.7. A breakdown of the number of days stayed by purpose of visit is presented in Table 13.4. Total length of stay by visitors rose from 9.1 million days in 1989 to 10.1 million days in 1990, an increase of 10.8 per cent. This was attributable to 14.0 per cent growth in number of days stayed by visitors on holiday. The average length of stay at 14.3 days was only slightly higher than the 13.6 days observed in 1989 and lower than the 16 days recorded between 1986 and 1988. This reflects visitors reaction to increasing costs of travel and maintenance.

NUMBER OF DAYS STAYED\* BY PURPOSE OF VISIT, 1986- 1990

*Table 13.4* *'000*

Purpose	1986	1987	1988	1989	1990**
Holiday	8,569.2	9,364.3	9,747.4	8,255.7	9,410.7
Business	659.9	822.0	855.6	647.7	485.6
Transit	198.0	218.5	227.5	177.9	170.3
TOTAL .. ..	9,427.1	10,404.8	10,830.5	9,081.3	10,066.6
Average length of stay in days	15.9	16.0	16.0	13.6	14.3

\* Excludes days stayed by "Other Visitors" Category.

\*\* Provisional.

### Hotel Occupancy

13.8. Hotel bed-night occupancy has sustained an upward trend over the years and stood at slightly over 6 million in 1990, an increase of nearly 13.7 per cent over the 1989 occupancy level. Available bed-nights in 1990 were 10.5 million, resulting in occupancy rate of 57.6 per cent in 1990 compared to 55.2 per cent in 1989. Increased occupancy was registered from residents of all regions except America. Occupancy by residents of America remained at almost the 1989 level as decreased occupancy by residents of USA was off-set by increased demand by residents of Canada and Other America. The level of permanent occupancy dropped by some 12.1 per cent to 168 thousand bed-nights in 1990. Hotel occupancy by Kenyan residents picked up again after the slight drop observed in 1989, increasing by 5.6 per cent to reach 875.5 thousand bed-nights in 1990.

13.9. Increased occupancy by residents of foreign countries is attributable to the devaluation of the Kenya Shilling which has made holidaying in Kenya cheaper relative to other countries. The decreased demand by USA residents can be explained by their concern for personal safety with regard to international travel as USA was one of the countries deeply involved in the Gulf conflict. This reduced international travel by USA residents, particularly to this part of the world. With popularisation of domestic tourism and a growing business community, increased demand by Kenyan residents is expected. Hotel bed-night occupancy by country of residence is presented in Table 13.5.

## HOTEL BED-NIGHTS OCCUPIED BY COUNTRY OF RESIDENCE, 1986-1990

Table 13.5

'000

	1986	1987	1988	1989	1990*
Permanent Occupants**	210.4	191.4	191.0	191.1	168.0
West Germany	1,229.7	1,215.9	1,274.2	1,370.2	1,610.7
Switzerland	501.8	467.8	475.3	474.6	494.9
United Kingdom	512.2	513.0	547.6	628.4	847.8
Italy	261.4	298.7	299.7	252.8	275.1
France	218.7	205.5	223.2	238.0	298.9
Scandinavia	87.5	87.2	82.5	90.5	122.7
Other Europe	227.1	223.3	222.9	244.0	346.2
EUROPE	3,038.4	3,011.4	3,125.4	3,298.5	3,996.3
Kenya Residents	837.1	847.5	853.9	829.4	875.5
Uganda	61.6	55.7	55.1	51.2	44.6
Tanzania	40.6	41.9	42.8	43.3	42.6
East and Central Africa ..	86.9	88.2	41.4	51.9	48.5
West Africa	29.9	30.9	12.7	14.0	16.0
North Africa	18.9	18.9	7.9	10.9	14.0
Other Africa	17.9	18.1	82.1	81.4	84.4
AFRICA .. ..	1,092.9	1,101.2	1,095.9	1,082.1	1,125.6
U.S.A	396.5	449.2	443.1	456.0	442.6
Canada	43.1	46.1	49.3	47.3	53.6
Other America	19.5	18.8	21.5	22.2	28.5
AMERICA	459.1	514.1	513.9	525.5	524.7
Japan	19.1	27.3	25.8	29.2	33.5
India	11.7	16.5	17.4	22.1	28.6
Middle East	17.6	20.2	22.9	24.4	26.9
Other Asia	62.2	55.5	52.2	47.6	45.8
ASIA	110.6	119.5	118.3	123.3	134.8
Australia and New Zealand	11.9	16.0	21.4	30.2	39.3
All Other Countries	86.7	77.7	68.6	65.8	57.2
TOTAL- OCCUPIED	5,010.0	5,031.3	5,134.5	5,316.5	6,045.9
TOTAL -AVAILABLE	9,371.2	9,479.2	9,704.3	9,630.8	10,494.7
Occupancy rate % ..	53.5	53.1	52.9	55.2	57.6

\* Provisional.

\* \*Persons staying one month or more in one hotel-includes some block bookings for aircrew.

13.10. Table 13.6 analyses hotel bed-night occupancy by zone. Increased occupancy was recorded in all zones except Central and Nairobi middle and low cost hotels. The fast growth in occupancy in Coastal Beach, Nairobi High Class and Masailand is a reflection of the dependence of Kenya's hotel industry on international tourism particularly in the established tourist circuits. The continued growth in Western and Nyanza basin is an encouraging pointer to the potential of these regions for development of tourist attractions and facilities, which may eventually ease congestion in the currently established tourist circuits.

## HOTEL BED-NIGHTS OCCUPIED BY ZONE, 1986- 1990

Table 13.6

'000

Zone	1986	1987	1988	1989	1990*
Coastal-Beach	2,353.0	2,316.5	2,404.2	2,521.3	3,200.3
-Other	336.0	314.0	308.3	298.4	304.3
Coast Hinterland .. ..	132.0	141.5	142.4	158.6	175.2
Nairobi-High Class .. ..	548.9	564.8	577.5	605.1	649.9
-Other .. ..	841.6	864.9	843.3	831.8	780.2
Central	359.8	376.0	391.4	430.2	423.5
Masailand	248.6	259.8	268.2	270.6	291.4
Nyanza Basin	104.8	108.1	111.5	112.0	123.1
Western	76.7	77.0	78.9	79.6	81.3
Northern	8.6	8.7	8.8	8.9	10.0
TOTAL-OCCUPIED	5,010.0	5,031.3	5,134.5	5,316.5	6,039.2
TOTAL-AVAILABLE	9,371.2	9,479.2	9,704.3	9,630.8	10,494.7

\* *Provisional.*

## HOTEL BED-NIGHTS OCCUPIED BY COUNTRY OF RESIDENCE, 1990\*

Table 13.7

'000

Country of Residence	Nairobi	Coast	Lodges	Others	Total
Permanent Occupants**	113.5	18.3	15.4	20.8	168.0
West Germany	66.1	1,394.3	106.1	44.2	1,610.7
Switzerland	27.0	417.8	45.7	4.4	494.9
United Kingdom	187.8	488.1	116.6	55.3	847.8
Italy	38.8	212.9	20.7	2.7	275.1
France	58.6	173.9	60.6	5.8	298.9
Scandinavia	48.5	68.2	3.8	2.2	122.7
Other Europe	71.8	237.4	28.4	8.6	346.2
Kenya	249.8	337.9	46.8	241.0	875.5
Uganda	30.2	7.2	0.3	6.9	44.6
Tanzania	28.9	10.1	0.5	3.1	42.6
Other East and Central					
Africa	42.8	4.1	0.4	1.2	48.5
West Africa	12.3	2.7	0.2	0.8	16.0
North Africa	10.0	2.4	0.5	1.1	14.0
Other Africa	59.1	18.7	2.3	4.3	84.4
USA	210.9	40.1	126.9	64.7	442.6
Canada	24.1	14.5	11.1	3.9	53.6
Other America	18.7	2.4	5.3	2.1	28.5
Japan	23.2	4.1	5.6	0.6	33.5
India	22.9	3.3	2.4		28.6
Middle East	18.4	3.9	4.2	0.4	26.9
Other Asia	31.3	6.9	5.1	2.5	45.8
Australia and New Zealand	16.9	10.0	8.0	4.4	39.3
All Other Countries	18.5	25.4	7.9	5.4	57.2
TOTAL	1,430.1	3,504.6	624.8	486.4	6,045.9

\* *Provisional.*\*\* *Persons staying one month or more in one hotel -includes some block bookings for aircrew*

13.11. Bed-night occupancy by country of residence in different areas of the country is presented in Table 13.7. Coastal hotels continued to lead in occupancy as in the past. The Coast is the major destination for most of the European visitors, particularly the Germans whose level of hotel occupancy in the coast was only slightly lower than that of the rest of all Europeans combined. Africans (except Kenyans) and Americans patronise Nairobi hotels more than hotels in other areas. But Americans continued to lead occupancy in lodges, although their number in 1990 was lower than in 1989 and only slightly higher than that of United Kingdom visitors. Hotels in other parts of the country (apart from Nairobi, Coast and lodges) are mainly patronised by Kenyans who in 1990 constituted nearly 50 per cent of bed-night occupancy.

13.12. Hotel bed-night occupancy by foreign residents in Game reserves and national parks rose by 15.2 per cent in 1990 compared to 8.3 per cent growth in 1989. Similarly, occupancy by East African residents increased by 9.1 per cent in 1990. Full catering remained the popular choice of most occupants and self catering actually dropped slightly for foreign residents. Occupancy of game lodges in national parks and game reserves is detailed in Table 13.8.

**GAME LODGES\*\* OCCUPANCY, 1988- 1990**

*Table 13.8*

Lodge locality/Type	BEDNIGHTS OCCUPIED					
	Foreign Residents			E.A. Residents		
	1988	1989	1990*	1988	1989	1990*
Game Reserves	257.0	266.6	323.7	12.1	13.9	23.4
National Parks	280.3	315.5	346.9	31.2	30.0	24.5
TOTAL	537.3	582.1	670.6	43.3	43.9	47.9
Of which full catering -	493.8	534.4	625.4	36.3	37.1	39.0
Self Service	43.5	47.7	45.2	7.1	6.8	8.9

\* Provisional.

\*\* Lodges in National Parks and Game Reserves only.

### Other Tourist Attractions

13.13. *PwapiRctm* Visitors to national parks and game reserves in 1990 were 1.53 million, a 22.1 per cent increase over the 1.25 million recorded in 1989. The most popular national parks with over 100 thousand visitors were Amboseli, Animal Orphanage, Masai Mara, Lake Nakuru, Nairobi and Tsavo East in that order. The Nairobi Park, Tsavo West, Masai Mara and Meru recorded slightly fewer visitors than in the previous year but this may be viewed as a result of competing destinations. Similarly, the drop in visitors to Malindi Marine park may be due to competition from the nearby Watamu Marine Park, which recorded substantial increases in the number of visitors. Details of the number of visitors to the different national parks and game reserves are set out in Table 13.9.

13.14. *Owigwo u'epf'Ugus* As in the case of other sectors of the tourism industry, the upward trend in number of visitors to museums and sites was sustained in 1990. Overall, there were 906,900 visitors to museums and sites in 1990 compared to 831,000 visitors in 1989 - an increase of 9.1 per cent. The National Museum (Main Gate), National Museum (Snake Park) and Fort Jesus, all of which hosted more than 200,000 visitors each, continued to be the main attractions in 1990. Gedi nearly doubled the number of

**NUMBER OF VISITORS TO NATIONAL PARKS AND GAME RESERVES, 1986 - 1990**

*Table 13.9*

'000

	1986	1987	1988	1989	1990*
Nairobi	91.6	99.8	125.5	155.2	152.8
Animal Orphanage ..	73.0	82.1	84.8	43.3	213.8
Amboseli	157.0	148.5	137.7	140.4	237.2
Tsavo (West) .. ..	82.9	80.6	85.4	96.8	78.6
Tsavo (East) .. ..	75.3	89.6	87.3	101.1	127.7
Aberdare	42.5	54.0	59.9	57.5	66.6
Buffalo Springs.. ..	41.4	43.4	64.0	70.4	
Lake Nakuru .. .	127.9	127.9	138.6	167.4	174.2
Masai Mara .. ..	94.8	95.9	118.8	196.2	180.5
Malindi Marine.. ..	36.1	38.6	39.2	40.7	
Lake Bogoria .. ..	25.6	31.2	32.8	46.2	53.8
Meru	20.4	26.8	23.7	17.4	11.1
Shimba Hills .. ..	10.9	13.4	16.7	21.5	60.0
Mount Kenya .. ..	16.6	19.2	18.0	13.3	18.7
Samburu	5.1	4.3	3.6	4.0	
Kisite/Mpunguti.. ..	12.2	11.0	17.9	18.2	27.1
Mombasa Marine .. ..				16.5	29.1
Watamu Marine.. ..			16.9	17.3	20.5
Hell's Gatet		16.9	14.5	18.2	31.1
Other** .. ..	12.2	12.8	10.5	13.4	13.8
<b>TOTAL .. ..</b>	<b>925.5</b>	<b>996.0</b>	<b>1,095.8</b>	<b>1,255.0</b>	<b>1,532.2</b>

\* *Provisional.*

\*\* *Other includes Mount Elgon, Ol-Donyo sabuk, Marsabit, Saiwa Swamp, Sibililo, Ruma National Park, and Mwea National Reserves.*

visitors while Kisumu, Lamu and Jumba la Mtwala had fewer visitors in 1990 than in 1989. Details of the number of visitors to museums, snake parks and sites are presented in Table 13.10.

**VISITORS TO MUSEUMS, SNAKE PARK AND SITES, 1986-1990**

*Table 13.10*

'000

	1986	1987	1988	1989	1990*
National Museum: (Main Gate)	204.3	185.7	217.2	224.3	234.5
National Museum: (Snake Park)	188.1	163.6	167.0	210.1	220.6
Fort Jesus	168.8	187.6	189.6	206.1	226.6
Kisumu Museum .. ..	56.3	69.5	38.1	38.8	28.6
Kitale Museum .. ..	37.8	34.7	35.1	15.9	21.9
Gedi	32.8	46.5	47.0	35.6	71.1
Meru Museum .. ..	29.5	25.2	25.5	12.4	28.4
Lamu	28.0	18.1	13.3	13.0	11.4
Jumba la Mtwala .. ..	8.4	14.6	14.8	14.2	9.4
Ologressaile .. ..	6.5	2.5	2.5	3.4	
Kariandusi .. ..	4.1	2.8	4.3	5.8	
Hyrax Hills .. ..	2.7	4.3	2.7	2.8	
Karen Blixen			51.0	48.6	53.3
Kilifi Mwarani					1.1
<b>TOTAL</b>	<b>767.3</b>	<b>755.1</b>	<b>808.1</b>	<b>831.0</b>	<b>906.9</b>

\* *Provisional.*

## Conference Tourism

13.15. Data in Table 13.11 show that Kenyatta International Conference Centre hosted 36 conferences attended by 6,160 participants. These conferences took 128 days, thus slightly boosting the percentage occupancy to 35.1 per cent. Conferences which were hosted in other venues in the country, both international and local, are not covered in this survey and it is not possible to give an indication of the overall trend.

CONFERENCES HELD AT KENYATTA INTERNATIONAL CONFERENCE CENTRE, 1986 - 1990\*\*

Table 13.11

	1986	1987	1988	1989	1990*
Number of conferences	30	58	19	32	36
Number of conferences days	202	176	180	111	128
Attendance (Number of Delegates)	6,487	7,411	3,915	5,510	6,160
Percentage of occupancy	55.3	48.2	49.2	30.4	35.1

\* Provisional

\*\* International conferences/delegates only.

## Tourism Promotion

13.16. The department of tourism continued to support promotion of both international and domestic tourism. Towards this end, the department participated in seven overseas trade fairs and exhibitions at a cost of K£ 206,228. These fairs and exhibitions were organised in Madrid, Brussels, Hamburg, Berlin, Milan and London. Locally, the department participated in National Tourism Exhibition at KICC, National Tourism Seminar at Utalii College and Domestic Tourism Workshop at Malindi.

## Development of Tourism

13.17. As pointed out in paragraph 13.16, active promotion of tourism was pursued through participation in international trade fairs and exhibitions. The department of tourism maintains tourist offices in major markets, all of which were busy during the year in efforts to market Kenya as a destination for prospective visitors.

13.18. Kenya Utalii College, an institution dedicated to the training of management and auxiliary staff for the different sub-sectors of the tourism industry, had 700 trainees compared to 671 trainees in 1989. In addition the college hosted refresher courses and seminars which attracted 656 participants compared to 578 participants in 1989.

13.19. The Kenya Tourist Development Corporation complements private sector efforts in development of the industry. This is achieved through provision of finances for improvement and expansion of facilities either as loans or in form of equity participation. During the year 1989/90, the Corporation approved loans amounting to K£ 364,800 and disbursed some K£ 279,284.



## CHAPTER 14- TRANSPORT, STORAGE AND COMMUNICATIONS

### Overview.

In 1990, the transport, storage and communications sector registered mixed performance in terms of volume of traffic handled as indicated by key indicators of the overall sector performance: higher quantities of cargo transported by Kenya Railways; higher quantities of dry cargo exports and imports handled at the Mombasa sea port; increased numbers of passengers handled at both Jomo Kenyatta and Moi International Airports; and real growth in postal services and facilities. Activities that registered lower volume of business include: railway passenger transport; exportation and importation of bulk liquids; and the issuance of licences for passenger and freight hire vehicles. Marginal growth was achieved in registration of motor vehicles and in cargo transport by air.

14.2. The good performance in freight transportation observed in railway and water transport is attributable to growth in trade, particularly external trade where appreciable growth was registered in both exports and imports. Air cargo benefitted from increased exports of horticultural products while growth of international and domestic tourism resulted in the remarkable growth of the output in the air transport sub-sector.

14.3. The value of output of the sector between 1986 and 1990 is presented in Table 14.1. Value of output at current prices increased by 17.3 per cent rising from K£ 1,102.4 million in 1989 to K£ 1,292.9 million in 1990. Significant rates of growth were recorded in some sub-sectors like railway and airtransport whose 1990 outputs increased by over 30 per cent. However, communications and pipeline transport outputs increased at modest rates of 6.2 per cent and 9.6 per cent, respectively. Road transport, which remains the dominant sub-sector, contributing slightly more than one-third of the total value of output, recorded a low growth rate of 7.0 per cent.

### TRANSPORT AND COMMUNICATIONS - VALUE OF OUTPUT, 1986-1990

<i>Table 14.1</i>					<i>K£million</i>
	1986	1987	1988	1989	1990*
Road Transport	288.1	311.7	355.2	421.5	450.8
Railway Transport	59.5	60.7	67.9	73.7	96.3
Water Transport	72.6	75.5	79.0	109.9	134.0
Air Transport	102.2	131.3	155.0	192.6	268.2
Services Incidental to Transport	39.0	45.6	52.2	57.8	80.5
TOTAL	561.4	624.8	709.3	855.5	1,029.8
Pipeline	26.5	26.8	27.7	29.2	32.0
Communications	141.3	145.8	194.0	217.7	231.1
TOTAL	729.2	797.4	931.0	1,102.4	1,292.9

\* *Provisional.*

14.4. Total earnings from both rail and road traffic recorded a growth rate of 10.5 per cent rising from K£ 495.2 million in 1989 to K£ 547.1 million in 1990. This is a much lower growth rate compared with the 17.0 per cent growth attained in 1989. The slowdown in growth in earnings is attributable to a slight decline in the road haulage sub-sector. On the other hand, railway freight haulage maintained its competition to road haulage and grew at 7.8 per cent. As shown in Table 14.2, road transportation remains the dominant mode of transport for both passenger and freight traffic, contributing over 82 per cent of the total traffic earnings between 1986 and 1990. However, in 1990, railway transport increased its share of earnings by 3 percentage points over 1989. With

17.6 per cent share of the total traffic earnings, the performance of railway transport was the best in the five-year period under review.

EARNINGS FROM ROAD AND RAIL TRAFFIC\*, 1986-1990

Table 14.2

K£million

	1986	1987	1988	1989	1990**
Passenger Traffic:					
Road	197.0	200.7	212.4	244.9	275.7
Rail	5.7	6.3	7.0	8.1	10.3
Total	202.7	207.0	219.4	253.0	286.0
Freight Traffic:					
Road	91.1	111.0	142.8	176.6	175.1
Rail***	53.8	54.4	60.9	65.6	86.0
Total	144.9	165.4	203.7	242.2	261.1
Total Road Traffic .. ..	288.1	311.7	355.2	421.5	450.8
Total Rail Traffic.. ..	59.5	60.7	67.9	73.7	96.3
Total	347.6	372.4	423.1	495.2	547.1

\* *Railway figures have been adjusted to read calendar year from 1986*

\*\* *Provisional*

\*\*\* *Includes other Revenue.*

### Road Transport

14.5. The Nyayo Bus Corporation has steadily consolidated its position in the passenger transport market. From a fleet of six buses in 1986 and sixteen in 1987, the Corporation had a fleet of 186 buses in 1990. This has immensely complemented other passenger transport modes. In addition, it has injected healthy competition in the inter-urban and intra-city passenger transportation. In 1990, the Corporation realised a revenue of K£ 5.1 million compared with K£ 4.9 million in 1989.

14.6. Table 14.3 presents data on new registrations of road vehicles between 1986 and 1990. Newly registered vehicles increased by 1.2 per cent to 18,633 vehicles in 1990. The 1990 performance is lower than both the 1987 and 1988 level of new registrations. New valuation procedures adopted by Customs and Excise Department for duty

NEW REGISTRATION OF ROAD VEHICLES, 1986-1990

Table 14.3

Number

Type of Vehicle	1986	1987	1988	1989	1990*
Saloon Cars	3,229	4,914	5,561	5,007	5,069
Station Wagons	3,092	3,008	2,795	2,898	2,935
Panel Vans, Pick-ups, etc.	4,751	4,720	4,783	4,899	4,961
Lorries/Trucks	1,906	1,759	1,790	1,477	1,496
Buses and Coaches .. ..	680	761	1,075	785	794
Mini Buses	368	569	509	465	470
Special Purposes Vehicles	43	46	32	29	28
Trailers	565	619	643	618	624
Rollers, Graders, Cranes	79	54	26	13	13
Wheeled Tractors	1,038	1,124	1,172	1,111	1,124
Crawler Tractors	5	3	4	8	7
Motor and Auto Cycles ..	1,196	1,146	1,131	1,095	1,109
Three Wheelers	3	4	3	0	3
All Vehicles	16,955	18,727	19,524	18,405	18,633

\* *Provisional.*

computation on imported vehicles had the effect of reducing vehicle imports resulting in deceleration of new registration of road vehicles. Saloon cars continued to lead in newly registered vehicles followed by panel vans and pick-ups and station wagons. These three groups of vehicles maintained their share of about 70 per cent of all newly registered vehicles.

14.7. The issuance of licences for freight and passenger vehicles on hire is shown in Table 14.4. Total licences issued dropped by 5.5 per cent from 11,095 in 1989 to 10,485 in 1990. The decrease in the total number of licences issued is largely attributable to the 13.8 per cent drop in the number of licences issued for Passenger Service Vehicles (P.S.V.) and 1.9 per cent drop in licences issued for Freight Transport Vehicles. Indeed, since 1987, a declining trend has been observed for licences issued for P.S.V. vehicles on hire.

LICENCES ISSUED FOR VEHICLES ON HIRE, 1986 - 1990

<i>Table 14.4</i>	<i>Number</i>				
	1986	1987	1988	1989	1990*
Passenger Service Vehicles ..	4,553	4,652	3,850	3,343	2,881
Freight Transport Vehicles ..	4,459	6,050	7,200	7,752	7,604
Total	9,012	10,702	11,050	11,095	10,485

\* *Provisional.*

14.8. The contribution of matatus in the national economy cannot be overemphasised. In 1990 an estimated 14,137 matatus were operating nationwide employing about 35 thousand persons. The revenue accruing from these operations amounted to some K£ 184 million compared to K£ 151 million in 1989.

### Railway Transport

14.9. A summary of the Kenya Railways Traffic performance is provided in Table 14.5. Freight handled in 1990 was 8.0 per cent higher than that handled in 1989. Increased freight traffic coupled with an upward revision of tariff resulted in a 22.2 per cent growth in revenue from K£ 66.94 million in 1989 to K£ 81.78 million in 1990.

RAILWAY TRAFFIC, 1986- 1990

<i>Table 14.5</i>	Unit	1986	1987	1988	1989	1990*
Freight:						
Tonnes	'000	3,230	3,002	3,255	3,317	3,581
Tonne-km	million	1,831	1,702	1,755	1,910	1,808
Revenue**	K£million	51.22	51.97	55.69	66.94	81.78
Revenue per tonne-Km..	cts	56	61	63	70	90
Passenger:						
Journeys	'000	3,563	3,757	4,037	3,347	3,109
Passenger-Km	million	693	752	828	732	699
Revenue	K£million	5.65	6.31	6.99	8.09	10.30
Revenue per passenger-Km.	cts	16	17	17	22	29

*Provisional.*

\*\* *Revised to calendar year from 1986 and includes 'other coaching'.*

14.10. Passenger traffic handled by the Kenya Railways Corporation has continued to decline since 1988. Passenger-Kilometres have dropped from 828 million in 1988 to 699 million in 1990. Upward tariff revisions during the period coupled with stiff competition

from alternative transport modes and uncompetitive journey time contributed to the declining trend in the number of journeys. However, revenue per passenger-km has nearly doubled from 16 cents in 1986 to 29 cents in 1990.

### Harbours and Shipping

14.11. Table 14.6 depicts the Kenya Ports Authority performance for the last five years. The overall performance by the Authority indicated a 4.1 per cent increase in 1990 over 1989. This is a lower growth rate when compared with the 8.2 per cent registered in 1989.

#### FREIGHT HANDLED AT MOMBASA HARBOUR, 1986-1990

Table 14.6

	'000 Tonnes				
	1986	1987	1988	1989	1990*
Loaded:					
Dry Cargo	1,600	1,656	1,486	1,466	1,907
Bulk Liquids	388'	354	297	529	390
Total	1,988	2,010	1,783	1,995	2,297
Landed:					
Dry Cargo	2,070	2,134	1,980	2,096	2,193
Bulk Liquids	2,839	2,747	2,887	3,104	2,999
Total	4,909	4,881	4,867	5,200	5,192
Total Freight Handled .. .. '	6,897	6,891	6,650	7,195	7,489

\* *Provisional.*

14.12.- Decreases were recorded in both the exports and imports of bulk liquids. Dry cargo exports on the other hand, grew impressively by 441 thousand tonnes, or by 30.1 per cent, over the 1989 level as a result of quantum increases in exports of maize, tea and coff&e. Transit traffic handled on behalf of neighbouring countries using the port increased by 4 thousand tonnes in 1990.

### Pipeline Throughput:

14.13. Pipeline throughput of white petroleum products from 1986 to 1990 is given in Table 14.7. Overall performance for the Kenya Pipeline Company recorded a relatively faster growth rate of 5.7 per cent in 1990 compared to 4.4 per cent in 1989. Illuminating kerosene oil and Motor Spirit (Regular) which had previously shown an increasing trend, experienced a marginal decline. Jet fuel recorded the highest growth of 38.9 per cent in 1990 increasing from 268 thousand cubic metres in 1989 to 372 thousand cubic metres.

#### PIPELINE THROUGHPUT OF WHITE PETROLEUM PRODUCTS, 1986-1990

Table 14.7

	'000 Cubic Metres						
Year	Motor Spirit Premium	Motor Spirit Regular	Kerosene Illuminating Oil	Light Diesel Oil	Jet Fuel*	Aviation Turbo	Total
1986 .. ..	279.4	253.9	148.7	648.6	262.1	51.3	1,644.0
1987 .. ..	299.8	269.0	158.0	650.7	244.1	76.5	1,698.1
1988 .. ..	334.3	273.0	187.6	677.8	245.7	79.7	1,798.1
1989 .. ..	337.0	281.0	237.3	684.3	268.0	69.3	1,876.9
1990**.. ..	351.8	271.9	235.1	692.9	372.2	59.5	1,983.4

\* *Includes Jet fuel in Mombasa from 1988*

\*\* *Provisional*

## Air Transport

14.14. Commercial traffic at both Jomo Kenyatta International Airport (JKIA) and Moi International Airport is shown in Table 14.8. Total passengers handled at JKIA grew by 5.4 per cent while that of Moi International Airport grew by 6.7 per cent. This good performance is attributable to improvement in the tourism sector. Overall performance in freight handled by both airports grew from 66 thousand tonnes in 1989 to 69 thousand tonnes in 1990.

COMMERCIAL TRAFFIC AT JOMO KENYATTA AND MOI INTERNATIONAL AIRPORTS, 1986-1990

Table 14.8

	1986	1987	1988	1989	1990*
Passengers-'000's:					
Landed	859.7	916.0	992.7	1,061.6	1,148.0
Embarked	856.9	921.7	987.1	1,055.6	1,129.5
In Transit	572.5	559.0	542.1	531.7	522.3
Total .. ..	2,289.1	2,396.7	2,521.9	2,648.9	2,799.8
Freight -'000 tonnes:					
Cargo: Landed	15.6	16.9	18.2	22.3	25.4
Loaded	40.7	40.1	39.7	39.2	39.3
Mail: Landed	1.4	2.0	2.5	3.1	2.8
Loaded	0.8	1.1	1.6	1.8	1.9
Total	58.5	60.1	62.0	66.4	69.4

\* Provisional

14.15. Major developments were carried out at JKIA, Moi International Airport and other airports and airstrips to facilitate the increasing air traffic flow. Construction of access roads and repair works of the taxiway and runways were carried out at JKIA, while a major pavement rehabilitation project is going on at Moi International Airport. Other works include re-roofing of the terminal buildings at Kisumu and Wilson airports and the construction of a terminal building and apron at Ukunda Airstrip.

## Postal Services and Communications

14.16. Details of various postal and telecommunications services and facilities are presented in Table 14.9 and Table 14.10. While the Posts and Telecommunications Corporation's facilities have expanded substantially in the recent past, the growth of some

POSTAL AND TELECOMMUNICATION SERVICES, 1986-1990

Table 14.9

	Unit	1986	1987	1988	1989	1990*
Post Offices	No	848	929	972	1,013	1,024
Private Letter Boxes	'000	198	207	216	231	243
Registered and Insured Items Posted	million	3.1	3.3	3.7	3.7	3.7
Total correspondence handled	million	246	258	259	287	318
Parcels handled	'000	313	347	406	422	378
Telephone Exchange connections ..	'000	129	145	157	169	183
Public Call boxes	No	2,659	3,571	3,723	3,981	5,135
Manual Telephone Calls made	million	14.1	15.0	12.5	11.9	10.9
Subscriber Dialed Units	million	943	1,075	1,294	1,746	1,805
Telex Subscribers	'000	2.1	2.4	2.4	2.3	2.2
Telegrams Handled	'000	1,181	1,189	1,189	1,748	1,772
Money Orders	No. (million)	1.8	1.8	2.0	1.9	2.1
Postal Orders	No. ('000)	98	124	105	92	73

\* Provisional.

facilities slackened slightly in 1990. Full fledged post offices increased by 1.1 per cent and private letter boxes by 5.2 per cent compared with increases of 4.2 per cent and 6.9 per cent, respectively, in 1989. Total correspondence handled rose by 10.8 per cent as in the previous year, while registered and insured items posted remained at the 1989 level.

#### EXTERNAL TELECOMMUNICATIONS TRAFFIC, 1986 - 1990

Table 14.10

	1986	1987	1988	1989	1990*
Telephone service-million paid minutes-					
Outgoing	9.4	10.7	11.6	18.4	21.4
Incoming	13.7	16.7	12.9	13.9	18.4
Telex service-million paid minutes-					
Outgoing	3.6	3.9	3.3	3.0	2.7
Incoming	3.7	4.0	3.0	2.2	1.5
Telegraph service-million paid words-					
Outgoing	1.9	1.9	1.9	1.2	0.9
Incoming	1.9	1.6	1.6	0.5	0.7

\* *Provisional.*

14.17. Demand for domestic telephone services continued to record a high growth rate with telephone exchange connections increasing by 8.3 per cent and public call boxes by 29.0 per cent over the 1989 level. Subscriber dialed units were up by 59 million units, while telegrams handled increased by 24 thousand.

14.18. On external telecommunications, a substantial growth occurred in number of paid minutes in both outgoing and incoming telephone calls with corresponding increases of 16.3 per cent and 32.4 per cent over the 1989 level of utilization. However, paid minutes of both outgoing and incoming telex services were lower than in 1989. Telegraph service in million paid words continued the downward trend observed in the past, although there was an insignificant improvement in incoming telegraphs. Improved telephone and telefax services have contributed to the decline in the utilisation of telegraph facilities.

14.19. Table 14.11 depicts the purchase and licensing of radios and television sets from 1986 to 1990. New radio licences in 1990 grew by 18.4 per cent, only slightly lower than the 18.9 per cent registered in 1987. This, however, contrasts remarkably with the substantial growth recorded in television sets which shot up to 34 thousand sets in 1990 from 21 thousand sets in 1989.

#### NEW RADIOS AND T.V. SETS SOLD AND LICENSED, 1986- 1990

Table 14.11

	1986	1987	1988	1989	1990*
Radios	175.3	208.4	217.8	224.5	265.7
Television Sets	14.1	18.7	22.8	20.5	34.2

\* *Provisional.*

14.20. Weekly English and Kiswahili Newspapers have continued to enjoy wider readership compared to their daily counterparts. The comparison is presented in Table 14.12. In 1990 there was a much higher readership of all the papers than in any of the other years in the five years under review. This is indicative of increasing literacy of the population.

**DAILY/WEEKLY AVERAGE LOCAL NEWSPAPER CIRCULATION, 1986-1990**

*Table 14.12*

	<i>'000 Copies</i>				
	1986	1987	1988	1989	1990*
Morning Newspapers-					
English	214.2	243.3	256.4	287.7	318.6
Swahili	65.8	56.9	52.2	79.5	81.9
Other Newspapers-					
English Weeklies	220.3	254.9	280.4	331.7	356.7
Swahili	92.9	78.5	50.4	87.6	90.5

\* *Provisional.*

## CHAPTER 15 - SOCIAL SCENE

Table 15.1 gives details on Government expenditure on social services, between 1987/88 and 1990/91 fiscal years. The total Government expenditure on social services increased by 25 per cent from K£ 675.71 million during 1989/90 to K£ 844.81 million in the 1990/91 fiscal year. Recurrent expenditure estimated at K£ 683.71 million, accounted for 81 per cent of total expenditure, 10 percentage points lower than the previous year. Education continues to take the largest share of recurrent and development expenditure on social services.

### CENTRAL GOVERNMENT EXPENDITURE ON SOCIAL SERVICES, 1987/83 -1990/91

Table 15.1

K£million

	1987/88	1988/89	1989/90*	1990/91**
<b>RECURRENT EXPENDITURE-</b>				
Ministry of Education	404.02	436.60	479.09	520.59
Ministry of Health	101.01	113.69	114.78	142.73
Ministry of Labour	4.57	2.88	3.09	3.31
Ministry of Culture and Social Services	11.33	13.08	14.72	17.08
<b>DEVELOPMENT EXPENDITURE-</b>				
Ministry of Education	23.41	51.30	36.36	92.91
Ministry of Health ..	12.94	20.90	24.09	60.36
Ministry of Labour	-	0.02	0.21	0.27
Ministry of Culture and Social Services	11.34	3.30	3.37	7.56
<b>TOTAL EXPENDITURE</b>	<b>568.62</b>	<b>641.77</b>	<b>675.71</b>	<b>844.81</b>

\* *Provisional.*

\*\* *Estimates excluding supplementaries.*

15.2. As shown in Table 15.2, during 1990/91, Local Authorities are expected to incur an expenditure of K£ 27.88 million on social services; an increase of about 35 per cent over 1989/90. For the last four years health took the largest share of Local Authorities' expenditure as opposed to education in the case of Central Government.

### LOCAL GOVERNMENT EXPENDITURE ON SOCIAL SERVICES, 1986/87 - 1990/91

Table 15.2

K£million

	1986/37	1987/88	1988/89	1989/90*	1990/91**
Education	7.80	7.87	9.90	8.10	11.88
Health	6.22	9.00	12.49	11.00	14.71
Other Social Services	1.76	1.49	0.61	1.60	1.29
<b>TOTAL EXPENDITURE .. ..</b>	<b>15.78</b>	<b>18.36</b>	<b>23.00</b>	<b>20.70</b>	<b>27.88</b>

\* *Provisional.*

\*\* *Estimates.*

### Education

15.3. Details of the expenditure of the Ministry of Education and the Ministry of Technical Training and Applied Technology (in respect of technical and polytechnic education) are given in Table 15.3. Total Education expenditure increased by 19.4 per cent from K£ 526.36 million in 1989/90 to K£ 628.56 million in 1990/91. Development expenditure almost tripled over the same period, rising from K£ 36.63 million in 1989/90 to K£ 95.79 million in 1990/91. Higher education, which took 72.7 per cent of the total Development



Expenditure, continued to take the largest proportion. The continued higher expenditure on education is largely attributable to the Government's commitment to expand the facilities to cope with the increased enrolments at the four public universities.

#### EXPENDITURE OF THE MINISTRY OF EDUCATION, 1987/88 - 1990/91

*Table 15.3* *KEmillion*

	1987/88	1988/89	1989/90*	1990/91**
<b>RECURRENT EXPENDITURE-</b>				
General Administration and Planning	41.38	36.32	46.78	44.72
Pre-Primary Education .. ..	0.30	0.49	0.60	-
Primary Education	221.40	237.94	246.97	271.45
Secondary Education .. ..	57.32	69.57	78.60	76.87
Technical Education +	3.12	4.88	5.65	6.27
Teacher Training	15.08	15.39	17.45	12.48
Special Schools	2.73	3.16	3.82	3.89
Polytechnic Education + .. ..	2.94	3.06	3.64	5.03
Higher Education*** *	58.42	73.25	84.44	109.63
Miscellaneous	1.33	1.68	1.78	2.43
<b>TOTAL</b>	<b>404.02</b>	<b>445.74</b>	<b>489.73</b>	<b>532.77</b>
<b>DEVELOPMENT EXPENDITURE-</b>				
General Administration and Planning	2.88	2.12	0.90	10.43
Pre-Primary Education .. ..	-	-	-	-
Primary Education	0.62	0.58	1.02	1.26
Secondary Education .. ..	2.18	1.84	1.99	5.58
Technical Education +	0.08	0.05	0.05	1.05
Teacher Training	1.67	7.76	8.84	5.80
Special Schools	0.30	0.33	0.37	0.72
Polytechnic Education + .. ..	0.21	0.95	0.20	1.23
Higher Education*** *	15.01	38.30	23.09	69.64
Miscellaneous	0.46	0.36	0.17	0.08
<b>TOTAL</b>	<b>23.41</b>	<b>52.29</b>	<b>36.63</b>	<b>95.79</b>

\* *Provisional.*

\*\* *Estimates Excluding supplementaries.*

\*\*\* *Includes expenditure on Universities of Nairobi, Moi, Kenyatta and Egerton.*

+ *Currently under the Ministry of Technical Training and Applied Technology.*

15.4. Table 15.4 shows the number of educational institutions by category from 1986 to 1990. The total number of institutions rose by 197 from 17,369 in 1989 to 17,566 in 1990, with most of the expansion being in primary schools. The number of primary schools increased from 14,691 in 1989 to 14,864 in 1990. The 17 primary teacher training colleges include 15 fully Government maintained and 2 private ones - Kamagambo in South Nyanza and St. Pauls (Nyabururu) in Kisii.

#### NUMBER OF EDUCATIONAL INSTITUTIONS, 1986-1990

*Table 15.4*

Category	1986	1987	1988	1989	1990*
<b>Schools:</b>					
Primary	13,392	13,849	14,288	14,691	14,864
Secondary	2,485	2,592	2,717	2,654	2,678
<b>Training Colleges:</b>					
Primary	16	16	16	17	17
Secondary	6	6	7	7	7
<b>TOTAL</b>	<b>15,899</b>	<b>16,463</b>	<b>17,028</b>	<b>17,369</b>	<b>17,566</b>

\* *Provisional.*

15.5. A breakdown of primary school enrolment by standard from 1987 to 1990 is contained in Table 15.5. The enrolment in primary schools increased marginally by about 3,000 pupils, from 5,389,300 in 1989 to 5,392,300 in 1990. Girls constituted 48.7 per cent of the total enrolment, thus maintaining the 1989 gender ratio. A transition rate of 65.7 per cent for the pupils in Std 7 proceeding to Std 8 in 1990 was observed. This was slightly lower than the 76.4 transition ratio observed in 1989. A total of 366,710 candidates sat for Kenya Certificate of Primary Education (KCPE) examination in 1990, of whom 177,470, or 48.4 per cent, were expected to join Form I in 1991.

PRIMARY SCHOOL ENROLMENT BY STANDARD, 1987 - 1990

Table 15.5

'000

Class	1987		1988		1989		1990*	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Standard 1	476.0	442.3	491.6	461.2	482.2	457.3	484.6	457.2
Standard 2	400.2	373.6	402.9	382.6	424.1	397.3	411.4	389.4
Standard 3	351.4	326.9	358.4	337.4	385.3	363.5	382.6	364.2
Standard 4	328.0	313.5	331.3	319.3	351.3	334.0	358.4	344.1
Standard 5	295.8	290.2	294.5	290.5	312.9	305.5	313.5	305.1
Standard 6	273.3	267.3	273.8	269.3	290.6	285.8	292.1	286.5
Standard 7	271.5	253.2	279.4	263.0	295.5	289.4	313.3	305.4
Standard 8	207.8	160.4	206.6	161.8	224.1	190.5	210.4	174.1
TOTAL ..	2,604.0	2,427.4	2,638.5	2,485.1	2,766.0	2,623.3	2,766.3	2,626.0

\* Provisional.

15.6. Table 15.6 shows enrolment in secondary schools by form and sex from 1986 to 1990. Secondary schools' enrolment declined by 3.5 per cent from 640,735 students in 1989 to 618,461 in 1990 mainly due to the abolition of Forms 5 and 6. The last batch of Kenya Advanced Certificate of Education candidates sat for the examination in 1989. The proportion of girls enrolled in secondary schools increased by 2.6 percentage points over the previous year to 42.8 per cent. Enrolment in Form 1 rose by about 2.6 per cent from 166,748 students in 1989 to 171,071 in 1990. Out of 141,787 students enrolled in Form IV in 1990, 133,250 sat for the 1990 Kenya Certificate of Secondary Education examination (KCSE).

ENROLMENT IN SECONDARY SCHOOLS BY FORM AND SEX, 1986-1990

Table 15.6

FORM	19 86		19 87		19 88		19 89		1 99 0*	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
FORM 1	94,383	68,865	95,528	69,719	99,822	73,783	97,725	69,023	96,079	74,992
FORM 2			93,340	66,825	92,166	67,245	93,866	65,109	91,482	69,615
FORM 3	80,678	60,158			91,491	63,533	85,471	58,955	83,334	60,172
FORM 4	70,407	48,154	88,961	61,963			84,655	54,346	82,800	59,987
FORM 5	12,341	6,386	13,799	7,882	17,705	9,305				
FORM 6	11,509	5,831	14,416	7,828	16,817	8,325	21,418	10,167		
TOTAL	269,318	189,394	306,044	214,217	318,001	222,191	383,135	257,600	353,695	264,766
TOTAL	4 5 8, 7 1 2		5 2 2, 26 1		5 4 0, 19 2		6 4 0, 7 3 5		618, 461	

\* Provisional.

15.7. Details of the number of teachers by qualification and school level are given in Table 15.7. The total teaching force in both primary and secondary schools rose by 6.3 per cent from 191,665 in 1989 to 203,738 in 1990. For the period under review, there were 173,117 teachers in primary schools i.e. 85 per cent of the total teaching force. The Untrained Teachers (UTs) in primary schools remained steady at about 30 per cent of total primary schools teaching force, those in secondary schools fell from 39 per cent in

1989 to 36.5 per cent in 1990. Student-teacher ratios for both primary and secondary schools improved considerably. In primary schools the ratio moved from 33 to 31 pupils per teacher, while in secondary schools it moved from 23 to 20 students per teacher in 1989 and 1990, respectively. The two developments - improvement in the student-teacher ratio and the decline in the proportion of untrained teachers in the secondary schools; while having adverse cost implications by raising the relative cost of providing education, are welcome, signifying quality improvement in the education system.

15.8. At the Kenya Institute of Special Education (KISE), 80 diploma students composed of 13 females and 67 males were enrolled for 1989/91 period. The students were registered in physically handicapped, mentally handicapped, hearing impaired and visionary handicapped departments. During the year, 70 teachers (17 for the mentally handicapped, 16 for the visionary handicapped, 19 for the physically handicapped and 18 for the hearing impaired) graduated from the in-service programmes carried out at KISE, while 8 other courses were offered at the institute and attended by 226 participants.

NUMBER OF TEACHERS IN SCHOOLS BY QUALIFICATION AND SCHOOL LEVEL, 1988- 1990

Table 15.7

Numbers

	PRIMARY			SECONDARY		
	1988	1989	1990*	1988	1989	1990*
<b>TRAINED-</b>						
Graduate	16	34	13	7,569	7,315	7,812
Approved +	443	519	617	1,170	1,186	1,346
S1	3,752	4,275	4,919	7,669	8,419	9,898
P1	63,005	69,106	75,748	203	219	375
P2	28,607	28,309	28,670	-	-	-
P3	12,395	11,790	11,454	-	-	-
P4	206	54	40	-	-	-
Others	-	-	-	-	-	-
<b>TOTAL</b>	108,424	114,087	121,461	16,611	17,139	19,431
<b>UNTRAINED-</b>						
Graduate	-	-	-	936	938	989
K.A.C.E	4,314	4,391	4,170	7,902	9,199	9,515
K.C.E	34,812	36,890	39,088	23	71	46
K.J.S.E	6,404	6,543	7,001	-	-	-
C.P.E	1,688	1,523	1,337	-	-	-
Other	52	175	60	429	709	640
<b>TOTAL</b>	47,270	49,522	51,656	9,290	10,917	11,190
<b>GRAND TOTAL</b>	155,694	163,609	173,117	25,901	28,056	30,621

\* Provisional.

+ An approved teacher has completed the equivalent of a University Education

15.9. Table 15.8 shows a breakdown of student enrolment in all 15 Government maintained primary teacher training colleges (PTTCs) by qualification, sex and year of study in 1990/91. Trainee enrolment in the PTTCs rose by 10.5 per cent from 15,456 in 1989 to 17,073 in 1990. The proportion of female trainees rose from 42.4 per cent in 1989/90 to 44.8 per cent in 1990/91. The 1990/91 intake into PTTCs was made up of 66.7 per cent of trainees drawn from the first graduates of 8-4-4 education programme. In the recent past several changes occurred which affected diploma teacher training colleges. These resulted in the conversion of Moi and Siriba colleges into constituent colleges of Moi University, and Laikipia college into constituent college of Egerton University. These three diploma colleges enrolled 1,185 second year students who later graduated in the course of the year. Of the three remaining diploma colleges, Kagumo and Kenya Science

Teachers colleges will be training science teachers while Kisii will concentrate on humanities. The fore-mentioned 6 diploma colleges had a combined enrolment of 3,126 trainees of whom 35.5 per cent were females. Kenya Technical Teachers College (KTTC), the seventh diploma college which specializes in training technical teachers, enrolled 812 trainees for different courses of whom 22.7 per cent were females.

15.10. The present form of in-service teacher training programme for primary school teachers was started in 1982 with a total enrolment of 3,445 trainees comprising of 1,047 P1s, 1,750 P2s and 648 P3s. This lot of trainees graduated in 1985. The second group of 4,918 students, were enrolled for 1985/88 period of whom 29.6 per cent were females. The current enrolment for 1988/91 rose to 6,018 students composed of 2,166 P1s, 3,371 P2s and 481 P3s. Females formed 33 per cent of the total enrolment. Two factors contributed to this substantial increase. First, the Netherlands Government sponsored a special in-service course centre at Chewoyet secondary school; while Norway sponsored another centre at Lodwar secondary school. Second, whereas in 1982/85 period only 12 colleges were used for running the programme, currently all the 15 PTTCs are hosting the programme. From 1989, most of the technical training programmes were transferred to the Ministry of Technical Training and Applied Technology. The institutions offering these programmes are: the three polytechnics - Kenya, Mombasa and Eldoret; 17 Harambee Institutes of Technology (HITs) and the 18 Technical Training Institutes (TTIs). These institutions had a total enrolment of 18,352 students of whom 24 per cent were females.

15.11. The three polytechnics enrolled 6,977 students of whom 25.3 per cent were females. Of the total enrolment about 42 per cent were registered for courses in engineering and 17.1 per cent in business studies.

15.12. The HITs enrolled 5,469 students in 1990. Most of the students were enrolled in the Business Studies and Engineering departments.

15.13. The TTIs registered 5,906 students, recording arise in enrolment of 47.4 per cent over the 1989 figure of 4,006 students. Out of this enrolment, 27.4 per cent were registered for courses in business education, 36.1 per cent in engineering, 30.2 per cent in building and 6 per cent in other craft courses.

STUDENT ENROLMENT IN ALL GOVERNMENT PRIMARY TEACHERS TRAINING  
COLLEGES BY QUALIFICATIONS, 1990/91\*

*Table 15.8*

*Numbers*

QUALIFICATION	1ST YEAR		2ND YEAR		TOTAL	
	Male	Female	Male	Female	Male	Female
K.C.E	4,551	3,683	4,482	3,630	9,033	7,313
K.J.S.E	218	146	99	89	317	235
C.P.E	40	61	40	34	80	95
TOTAL	4,809	3,890	4,621	3,753	9,430	7,643

\* *Provisional.*

15.14. During the 1990/91 academic year, the four public universities and their constituent colleges admitted over 20,800 undergraduate students. Of these 12,147 students were selected from the final output of the Kenya Advanced Certificate of Education (KACE) examination under the old system; while 8,690 were selected from the first Kenya Certificate of Secondary Education candidates in the 8-4-4 education programme. As a result, enrolment in 1990/91 academic year reached an all time high of 39,723 of whom 1,160 were pursuing diploma courses, 36,781 undergraduate courses and 1,782 pursuing

post-graduate courses. There were 11,280 female students or 28.4 per cent of the entire student population. These details are depicted in Table 15.9.

STUDENT ENROLMENT IN NATIONAL PUBLIC UNIVERSITIES, 1989/90 - 1990/91

Table 15.9

COURSE	1989/90			1990/91*		
	Male	Female	Total	Male	Female	Total
(a) Diploma Programmes						
Agriculture**	214	91	305	140	71	211
Horticulture	81	48	129	67	31	98
Animal Health	82	24	106	62	23	85
Animal Husbandry	23	8	31			
Dairy Technology	49	14	63	31	15	46
Irrigation and Water Resources	57	7	64	41	5	46
Farm Management	78	24	102	68	16	84
Agricultural Engineering	171	20	191	144	18	162
Electrical Engineering	46	5	51	50	5	55
Mechanical Engineering	122	9	131	76		76
Electronics	38	14	52	20	4	24
Architecture	88	3	91	91	2	93
Advanced Nursing		60	60	20	46	66
Education and Home Economics	74	83	157	39	75	114
Total	1,123	410	1,533	849	311	1,160
(b) Undergraduate						
Agriculture **	1,101	600	1,701	1,567	526	2,093
Horticulture	210	72	282	319	70	389
Fisheries				21	2	23
Forestry	162	27	189	153	26	179
Wildlife Management	94	11	105	104	17	121
Wood Science Technology	74	13	87	90	9	99
Production Technology	80	3	83	106	4	110
Architecture	215	9	224	266	15	281
Building Economics	94	4	98	85	10	95
Land Economics	84	43	127	82	40	122
Design	60	40	100	75	56	131
Arts and Cultural Studies	4,215	1,395	5,610	6,263	2,103	8,366
Anthropology	248	82	330	331	123	454
Fine Art	15	16	31	29	9	38
B. Ed. (Art)	3,209	3,063	6,272	7,040	4,995	12,035
B. Ed. (Science)	1,019	295	1,314	1,304	488	1,792
B. Ed. (Home Economics)	5	255	260	5	271	276
B. Ed. (Technology)	71	1	72	172	8	180
B. Ed. (Home ScienceTechnology)				34	15	49
B. Ed. (Art-External Degree)	381	115	496	180	90	270
Information Science	80	30	110	161	67	228
Law	429	203	632	545	204	749
Commerce	955	311	1,266	1,450	429	1,879
Science	1,822	318	2,140	2,961	468	3,429
Electrical and Communication						
Technology	92	6	98	112	3	115
Engineering***	1,082	46	1,128	1,346	74	1,420
Veterinary Medicine	393	60	453	492	140	632
Medicine	581	150	731	686	156	842
Dental Surgery	77	54	131	96	54	150
Pharmacy	152	42	194	179	55	234
Total	17,000	7,264	24,264	26,254	10,527	36,781

Table 15.9 Cont.

COURSE	1989/90			1990/91*		
	Male	Female	Total	Male	Female	Total
(c) Postgraduate						
Agriculture**	168	63	231	165	57	222
Forestry and Wildlife Management	1		1	2		2
Architecture, Design and Development	59	23	82	59	22	81
Arts	218	112	330	293	132	425
Education	249	98	347	49	35	84
Law	9	2	11	10	2	12
Commerce	44	25	69	41	11	52
Science	214	33	247	252	48	300
Engineering***	67		67	81	1	82
Veterinary Medicine	61	8	69	66	15	81
Medicine	146	36	182	175	55	230
Journalism	16	9	25	16	17	33
Computer Science	17	6	23	32	2	34
African Studies	13	10	23	24	18	42
Population Studies	43	17	60	38	19	57
Diplomacy			0	23	2	25
Technology			0	1		1
Environmental Studies	6	2	8	13	6	19
Total	1,331	444	1,775	1,340	442	1,782

\* Provisional.

\*\* Includes courses on Food Science and Technology, Range Management and allied Agricultural studies.

\*\*\* Includes civil, mechanical, electrical, agricultural and building construction.

15.15. The total student population, enrolled at the University of Nairobi was 14,888 compared with 12,428 enrolled during the 1989/90 academic year. A total of 6,364 first year students were enrolled, of whom 3,085 students were selected from the first Form 4 output in the 8-4-4 education programme.

15.16. As a result of 3,848 first year students enrolled at Moi university, total enrolment increased two-fold from 3,173 students in 1989/90 academic year to 6,298 students in 1990/91; of whom 84 were pursuing post-graduate courses. The break down of the first year enrolment was 1,551 students drawn from the first Form 4 output in the 8-4-4 education system and 2,297 students from the last Form 6 output under the old system. Maseno university college, a constituent college of Moi university, enrolled a total of 1,617 first year students. Home Science Technology and Fisheries courses were also introduced.

15.17. Kenyatta University (excluding Jomo Kenyatta University College of Agriculture and Technology), enrolled a total of 8,820 students during 1990/91 academic year, of whom 163 were pursuing post-graduate courses. Of the 4,571 first year students, 2,281 were selected from the first Form 4 output of the 8-4-4 education programme. As in the previous years more females than males were registered in the Bachelor of Education (Arts) and Home Economics programmes.

15.18. Egerton University (including Laikipia Campus), had a total student population of 6,619 of whom 518 were pursuing diploma courses, 6,198 undergraduate courses and 3 post-graduate courses. There were 1,755 female students or 26.1 per cent of the total enrolment.

15.19. During the 1990/91 academic year, Jomo Kenyatta University College of Agriculture and Technology enrolled a total of 1,381 students of whom 576 were pursuing diploma courses and 805 various undergraduate programmes.

15.20. In the 1990/91 academic year, the 11 registered private universities had a total student population of 2,074 of whom 124 were pursuing diploma courses, 1,704 undergraduate courses and 246 post-graduate courses.

## Health

15.21. The Government continues to put much emphasis on the provision of preventive services in the control of diseases. Such programmes include: The Kenya Expanded Programme on Immunization (KEPI). The Control of Diarrhoeal Disease (CDD) and water and sanitation programmes. These programmes are components of the Primary Health Care which aims at providing health for all by the year 2000. In addition to these efforts, the Government strives to create public awareness on various aspects of health.

15.22. New hospitals and health centres were constructed in various districts. Among the newly constructed hospitals were Vihiga, Mukowe, and Longisa which is nearing completion. In addition, six modern health centres with bed capacity of twenty four beds each were constructed at Sacho, Isenya, Malakisi, Keumbu, Kisegi and Masimba. The number of hospital beds and cots have continued to rise steadily. It rose from 32,534 in 1989 to 33,086 in 1990. As a result of population growth, there was again a drop in the number of beds and cots per 100,000 population from 138 in 1989 to 136 in 1990. Details of health institutions, including beds and cots, are shown in Table 15.10.

HEALTH INSTITUTIONS AND HOSPITAL BEDS AND COTS BY PROVINCE, 1990

Table 15.10

Province	HEALTH INSTITUTIONS			HOSPITAL BEDS AND COTS		
	Hospitals	Health Centres	Health sub-centres and Dispensaries	Total	No. of Beds and Cots	No. Per 100,000 Population
Nairobi	31	18	139	188	5,886	391
Coast	26	32	162	220	3,366	157
Eastern	42	43	223	308	4,769	109
North-Eastern ..	3	6	31	40	414	65
Central	44	46	234	324	5,060	137
Rift Valley	61	65	457	583	6,474	121
Nyanza	42	49	254	345	4,283	99
Western	19	40	64	123	2,834	100
TOTAL 1989	268	299	1,564	2,131	33,086	136
TOTAL 1989	264	294	1,555	2,113	32,534	138

15.23. Since 1978, over 300 Maternal Child Health (MCH) rural health facilities have been converted into Maternal Child Health and Family Planning Service delivery points offering full family planning service on a daily basis. In 1988, there were 1,200 service delivery points (SDPs) and by 1990, the number had risen to 1,506. Table 15.11 depicts details of total number of medical personnel trained on Maternal Child Health and Family Planning with the major objective of achieving greater maternal health and reducing maternal morbidity. The total number of staff trained rose by 27 per cent between 1988 and 1989.

Table 15.11

	<i>Number</i>			
Type of Personnel	1986	1987	1988	1989
Enrolled Community Nurses	394	411	560	741
Kenya Registered Nurse/Midwife	65	88	96	94
Clinical Officers	16	21	39	43
Total	475	520	695	878

15.24. Training and distribution of Traditional Birth Attendants (TBA) also forms an integral part of Government strategy towards improved health for women of child bearing age (15-49 years). The integration of TBAs into the health referral facilities has led to reduction of maternal mortality in Kenya. The total number of TBAs trained between 1981-1985 was 1,566 and rose to 4,464 in 1990 - an increase of 185 per cent.

15.25. Table 15.12 details the number of registered medical personnel including those in training institutions. An increase is observed in all cadres of medical personnel trained between 1989 and 1990. This increase is also attributable to establishment of a medical school at Moi University and a school of nursing in Kabarnet. Enrolment of doctors, pharmacists and clinical officers in training institutions grew by over 10 per cent, a welcome move taking into account the rate of population growth.

## REGISTERED MEDICAL PERSONNEL 1989 - 1990

Table 15.12

	<i>Number</i>		<i>Number</i>		<i>Number</i>	
	19 89		19 90		IN TRAINING	
Type of Personnel	Number	No. Per 100,000 Population	Number	No. Per 100,000 Population	1989-90 Number	1990-91 Number
Doctors	3,266	14	3,357	13.8	913	1,072
Dentists	561	2	596	2.4	131	150
Pharmacists	413	2	443	1.8	194	234
Pharmaceutical Technologists	559	2	604	2.5	147	145
Registered Nurses	4,712	24	5,441	22.4	1,169	1,174
Enrolled Nurses	15,200	65	17,734	72.4	7,604	7,639
Clinical Officers	2,534	11	2,630	10.8	470	530
Public Health Officers	550	2	585	2.4	124	122
Public Health Technicians	2,393	10	2,528	10.4	668	670

15.26. The National Hospital Insurance Fund recorded a 2 per cent increase in its receipts. Recorded benefits, however, declined sharply to K£ 7.94 million from K£ 8.80 million in the previous year. As a result, contribution net of benefits increased by 147 per cent. The relevant information is contained in Table 15.13.

## NATIONAL HOSPITAL INSURANCE FUND, 1985/86 -1989/90

Table 15.13

	<i>KEmillion</i>		
YEAR	Receipts	Benefits	Contribution Net of Benefits
1985/86	7.14	5.24	1.90
1986/87	7.62	6.16	1.46
1987/88	9.47	8.86	0.61
1988/89	9.52	8.80	0.72
1989/90	9.72	7.94	1.78



## Other Social Services

15.27. *National Youth Service* - For the year 1990, the service recruited 2,800 servicemen and 450 service-women. There were no pre-university recruitment. The service continued to undertake various development activities. Development activities undertaken by the service during the year under review were:-

- (i) construction of Garissa Road Project in Central and Eastern Provinces which is supposed to upgrade the road communication network from Thika to Mwingi;
- (ii) construction of an Air Strip at Masai Mara to promote tourism in the area; and
- (iii) continuation of the construction of Tana River Basin and Kerio Valley Roads.

15.28. The service also runs the Nyayo Bus Service and conducts agricultural activities in a total of 8 districts. The agricultural units are actively involved in cereals, horticulture, beef and dairy farming. The income earned through the service's domestic activities is shown in Table 15.14.

**NATIONAL YOUTH SERVICE RECRUITMENT AND INCOME EARNED, 1987 - 1989**

*Table 15.14*

*Table 15.14*

	Recruits (Numbers)					Income K£
	Servicemen		Servicewomen		Total	
	Regular	Pre-University	Regular	Pre-University		
1987	2,102	5,578	603	1,557	9,840	1,646,947
1988	3,400	3,645	1,200	1,856	10,101	2,553,990
1989		4,878		2,878		5,895,622
1989	2,890		450		3,330	

15.29. *National Social Security Fund* - A total of 1,170 new businesses were registered with the Fund while 205 closed business in the year 1990. The number of employees registered by the Fund were 70,623 men and 22,334 women. Table 15.15 shows registration and investments made by the Fund.

**NATIONAL SOCIAL SECURITY FUND, 1986-1990**

*Table 15.15*

	1986	1987	1988	1989	1990
Employers registered '000	36.8	38.1	39.0	39.0	39.9
Employees registered '000	1,527.8	1,656.1	1,679.9	1,795.1	1,887.7
Annual contribution K£mn.	47.4	54.2	55.2	58.0	59.2
Annual benefits paid K£mn.	6.1	6.4	8.1	10.6	11.2

15.30. *Adult Education* - Although the literacy rate in the rural areas has risen to 54 per cent, adult education enrolment continues to record a modest increase. As shown in Table 15.16, the total enrolment of adult learners was 138,154 in 1990 compared to 133,931 in 1989, an increase of only 3 per cent.

# ADULT EDUCATION ENROLMENT BY SEX 1986 • 1990

Table 15.16

Year	Male	Female	Total	% of Female enrolment
1986	49,910	172,232	222,142	78.0
1987	38,580	120,546	159,126	76.0
1988	52,744	105,490	158,234	67.0
1989	33,548	100,383	133,931	75.0
1990	32,696	105,458	138,154	76.3

15.31. *Women in development* - Tremendous increase has been recorded in modern sector employment for women. Whereas in 1964 female representation in the modern sector employment was only 12.2 per cent, the proportion rose to 16.2 per cent by 1979 and over 21 per cent in 1987. The women's Bureau has continued to offer grants to women groups all over the country. Table 15.17 shows Government grants to women groups which amounted to KShs. 3.3 million in 1990 compared to KShs. 1.6 million in 1989 and were distributed to all the provinces. While grants increased by 76 per cent, the number of groups assisted decreased by 46 per cent. The Bureau also embarked on a census of all women's groups which will shed some light on the number of women involved in income generating activities in the country.

## GOVERNMENT GRANTS TO WOMEN GROUPS BY PROVINCE, 1988-1990

Table 15.17

Province	Number of Groups Assisted			Amount Granted KSh. '000		
	1988	1989	1990	1988	1989	1990
Nairobi	10	10	4	61	61	150
Coast	60	60	4	226	238	200
Eastern	60	60	52	201	213	420
North-Eastern ..	30	30	30	93	99	460
Central	50	50	45	200	210	500
Rift Valley	130	130	36	468	494	500
Nyanza	40	40	40	154	162	600
Western	30	30	32	118	124	450
<b>Total</b>	410	410	243	1,521	1,601	3,280

## CHAPTER 16 - WOMEN AND THE LABOUR FORCE

Over the past two decades there have been important changes in the role of women in all aspects of development of Kenya. One area where there is considerable evidence of change is the role of women in the labour force. As the gap between education levels of men and women has been declining, women have been gaining increasing access to employment opportunities. However, progress is not evenly spread throughout Kenya, and the impact on certain groups, for example women in rural areas who are also heads of households, is less significant. Evidence from recent labour force surveys illustrates areas where advances have been made, where they are limited, and new problems to be faced by women in future.

16.2. Table 16.1 shows the national employment picture for women in the modern and informal sectors. Expressed as a percentage of the total employment in each category, it is evident that there has been some progress in virtually all components of the modern sector. Overall, females currently account for 25.1 per cent of total employment, though they are apparently making gains in the public sector and as self-employed and unpaid family workers than in the private sector. Moreover, other evidence reveals that within the informal sector women are concentrated in retail activities and seriously under-represented in manufacturing and services.

FEMALE EMPLOYMENT AS A PERCENTAGE OF PERSONS ENGAGED BY EMPLOYMENT CATEGORY, 1970 - 1990

Table 16.1

Percentage

Year	Wage Employment		Self-employed and Unpaid Family Workers'	Total
	Private Sector	Public Sector		
1970	14.2	14.5	17.7	14.5
1975	14.7	17.5	23.2	16.8
1980	17.0	18.2	29.2	19.4
1985	18.6	20.8	34.8	22.3
1990	18.8	26.1	36.3	25.1

\* Includes Informal Sector

16.3. The contribution of women to the labour force is markedly different in rural and urban areas. Though women have been gaining an increasing share of modern sector employment since 1970, most of this employment is concentrated in the urban areas. Throughout rural Kenya, most of the population is engaged in farming activities on their own holdings. Employment opportunities for women are thus more limited than in urban areas. Fortunately, evidence of the current labour force situation in both rural and urban areas is available from two recently completed labour force surveys. The 1986 Urban Labour Force Survey (ULFS) sampled almost 3,000 households and collected labour force data on 1,249 women in the labour force. The survey collected socio-economic data including age, marital status, and education; and labour force data including occupation, hours of work, and details of job search and job training. Households were selected using the NASSEP II frame and include 34 of the 91 urban centres as defined in the 1979 population census.

16.4. To help capture seasonality, the 1988/89 Rural Labour Force Survey (RLFS) was conducted in two phases during August-November of 1989 and March-May of 1990. In all, 8,102 households were interviewed in Phase I and 7,869 in Phase II. Each survey phase contains data on over fifteen thousand women above the 8 years of age. The questionnaire was designed to collect socio-economic data including age, education, and

marital and migration status; hours of work spent in various labour force activities; and details of labour force activity both on and off the holding.

16.5. Taken together, the data collected from these two surveys provide a detailed description of the activities of the labour force. In particular, they permit comparisons to be drawn between the labour force activities of men and women in both urban and rural areas. Comparisons between the results of these two surveys and the 1977/78 Labour Force Survey (LFS) can also point to areas of significant change in the intervening decade.

#### **Participation and Unemployment Rates of Women in the Urban Labour Force**

16.6. There are two important summary indicators of labour force activity in urban areas for which there are significant differences between men and women: participation and unemployment rates. Participation rates measure the degree to which the overall population or its component chooses to engage in labour force activity, i.e. become *currently economically active*. Unemployment rates, either for the overall population or some component, for example youth, women, those with a particular level of education, indicate the success of labour force participants with these characteristics in securing employment.

16.7. Table 16.2 compares age-specific labour force participation and unemployment rates for men and women in urban areas. Overall, the participation rate for women is just over 55 per cent but is over 80 per cent for men. The situation for males has remained relatively the same since the LFS undertaken in 1977/78. However, there has been a significant increase in labour force participation by women. Whilst in 1977/78 only about one-third of the women in urban areas participated in the labour force, by 1986 this proportion had risen to over 55 per cent. Long standing social and cultural barriers to women's full participation are gradually disappearing. Though child bearing and rearing responsibilities still constitute an important constraint to full participation, progress is being made.

#### **LABOUR FORCE PARTICIPATION AND UNEMPLOYMENT RATES BY AGE AND SEX IN URBAN AREAS**

Table 16.2

Percentage

Age Group	Participation Rates		Unemployment Rates	
	Males	Females	Males	Females
15-19	19.6	31.8	63.1	39.6
20-24	73.7	53.7	34.0	45.0
25-29	94.5	69.4	10.9	23.4
30-34	98.8	64.2	5.3	14.1
35-39	96.4	61.2	3.2	12.3
40-44	99.5	59.9	2.0	3.1
45-49	97.4	60.2	3.3	1.4
50-54	95.3	53.4	3.6	4.1
55-59	84.8	48.1	7.8	43.2
60-64	74.0	47.5	0.0	0.0
Total	82.2	55.8	11.7	24.1

\* The sample size used for the estimate of unemployment for 55-59 year olds is small and therefore unreliable.

16.8. There is a clear difference in labour force participation rates between women who are household heads and those who are not. An examination of the data in the ULFS

reveals that 96 per cent of females heads of households participate in the labour force. Clearly, they have little choice. Women who are not the heads of a household, the situation is markedly different. It can be shown that age, marital status, and especially the level of education are all important factors in determining the likelihood of a women participating in the labour force. More educated, younger single women are much more likely to enter the labour force in comparison to the less educated and married. A large portion of the increase in labour force activity of women can be attributed to their increasing levels of education.

16.9. Unfortunately, the improvements in labour force participation rates for women have coincided with an increase in their rates of unemployment. As shown in Table 16.2, the unemployment rate for urban women is over twice the rate of men. Unemployment rates of young school leavers are particularly high for both sexes, but beyond the age of 24 there is a considerable drop for males. Though the unemployment rate for males of age 15-19 is extremely high, fewer males in this age category participate in the labour force. High rates of unemployment among women persist until about age 34, whilst for men there is a considerable drop by age 24.

16.10. In terms of the number of unemployed, there are more unemployed women than men in urban areas. Though it is clear that many more women are now participating in the labour force, employment opportunities for them are very limited. Overall, the 1986 ULFS found unemployment in the late 1980's to be roughly the same as it was when the LFS of 1977/78 was undertaken. While the overall rate of unemployment has been constant, it has risen four fold for women and decreased for men.

### **Occupational Distribution of Women in the Urban Labour Force**

16.11. There are significant differences in the occupational distribution by gender for both paid employees and the self-employed in urban areas. As shown in Table 16.3 women as paid employees continue to be over-represented in clerical, service and agricultural occupations and notably under-represented in the manual occupations such as production workers in the manufacturing sector, smiths, welders and sheet metal workers, and packing, loading, and transport workers. While there appears to be a large proportion of women in professional, technical and related occupations, most of those enumerated here are primary and secondary school teachers.

DISTRIBUTION OF THE EMPLOYED URBAN LABOUR FORCE BY OCCUPATION AND SEX

Category	Percentage			
	Paid Employees		Self-employed	
	Males	Females	Males	Females
Professional, technical and related workers	17.7	26.2	8.1	0.8
Administrative, managerial and clerical	20.2	29.1	9.6	2.3
Sales	4.2	0.9	37.7	56.8
Service	20.8	33.7	5.8	7.0
Agriculture, forestry	2.4	5.9	13.0	24.1
Production, manufacturing and maintenance	6.2	2.4	9.2	9.0
Smiths, welders, and sheet metal workers	17.3	0.6	14.6	0.0
Packing, loading and transport	11.3	1.2	2.1	0.0
Total	100.0	100.0	100.0	100.0

16.12. For the self-employed, two occupational categories include a large majority of women - sales workers and agriculture and related workers. There is a disproportionately low representation of women in professional occupations, as well as in virtually all manual occupations. This evidence supports the contention that only a small proportion of managers or owners of businesses are women. The distribution of the labour force by gender and occupation in urban areas of the ULFS is remarkably similar to that of the 1977/78 LFS. Self-employed women are generally engaged in petty trading and hawking of vegetables, fruit, and relatively cheap consumer durables such as utensils. Self-employed men, on the other hand tend to be less marginalised and engage in activities such as newspaper vending, woodworking, and running kiosks.

### **Job Training**

16.13. There are two sources of skill development for the labour force. First there are skills learned in primary and secondary schools. The other important source of skill development are the training activities specific to the job provided by employers, various vocational institutions, or offered in the private sector. A distinction can be made between "private" and "public" sources of job training. Private training includes skill training from friends or relatives, apprenticeship programmes, on the job as well as formal course training by employers, and private schools and institutions such as driving schools and secretarial colleges. Public training activities include vocational schools, polytechnics, the National Youth Service (NYS), institutes of technology, colleges and universities.

16.14. The type of private training received by those employed in the labour force by sex is shown in Table 16.4. About 60 per cent of men and nearly 75 per cent of women reported no formal private training for the jobs they are doing. This appears to be lower than in 1977/78 when 75 per cent reported no training. Apprentice programs and on the job training by employers tend to be significantly more common for men than women in positions as paid employees. Training received from private colleges and institutes is much more important for females than males. Secretarial colleges were often cited by respondents. Training from friends and relatives is the most common form of private training received by the self-employed, and again is more important for men than women. Over three quarters of all women receive no private training.

16.15. Most respondents cited no specific training activities, particularly those who are self-employed. Paid employees, colleges and universities are particularly important for white collar workers, though polytechnics and institutes of technology are also cited. Universities and colleges were the most frequently cited sources by women, reflecting the importance of primary and secondary school teachers in the public service. Vocational schools, village polytechnics and institutes of technology were more frequently utilized by men, reflecting their predominate role in production, manufacturing, and maintenance occupations. The most notable characteristic of the self-employed is the virtual complete absence of public sources of training. Apart from university and college training received by those in professional occupations, the self-employed seem to have acquired their skills through informal sources, apprenticeships and on the job. Almost 95 per cent of self-employed women have received no public training of any form. This is in conformity with the marginality of many of the occupations in which women are found in urban areas, particularly hawking.

Table 16.4

Percentage

Type of Training	Paid Employees		Self-employed	
	Males	Females	Males	Females
<b>Private Sources:</b>				
None	61.6	74.0	54.5	74.7
Friend/Relative	4.5	0.7	27.3	21.8
Apprentice	1.6	0.0	3.3	0.5
On the job by Employer	15.2	6.7	4.8	0.7
On the job courses by Employer	7.9	3.3	1.7	0.6
Colleges/Schools	9.3	15.2	8.4	1.7
Total	100.0	100.0	100.0	100.0
<b>Public Sources:</b>				
None	66.6	65.6	86.4	94.1
Vocational School	3.2	0.9	1.9	4.3
Village Polytechnic	2.0	0.7	2.5	0.5
Institute of Technology	2.4	0.4	1.1	0.1
National Youth Service	0.7	0.4	0.0	0.0
Polytechnic	3.8	2.6	0.6	0.6
College	15.0	23.6	1.0	0.3
University	6.3	5.7	6.5	0.2
Total	100.0	100.0	100.0	100.0

**Women in the Rural Labour Force**

16.16. A rural woman in Kenya is likely to be a young farmer, the wife of a man who spends considerable time away from the farm and has several young children at home. Households in rural areas are increasingly headed by women, as more educated, mobile husbands move to urban areas or seek other work opportunities off the farm. Women stay behind with their children and preserve family or kin ties to the land. Because of the high proportion of female headed households in rural areas, as well as changes to the division of labour on the holding, women now represent the core of small holders in the country. The traditional division of labour which restricted women from cash cropping has apparently broken down and women are now increasingly involved in both food and cash crops of their holding.

16.17. Based on a one week reference period, the RLFS reveals that over 89 per cent of the entire working age population aged 8 years and over reported to be participating in the labour force. Between ages 15 to 64, over 94 per cent of the rural population participate in the labour force. Whereas in urban areas participation rates for women are considerably lower than men, in rural areas the converse is the case. Female labour force participation rates approach 100 per cent between ages 20 to 64 and decline thereafter. The decline in participation begins much later in rural areas and the elderly still do many farm chores. Overall, over 91 per cent of women participate in the labour force compared to 87 per cent of men.

16.18. Evidence from the 1988/89 RLFS also includes data on the time allocated to thirteen different activities disaggregated by the age and sex. In addition, information has been gathered of all individuals over 8 years since there is considerable evidence that labour inputs from children of school going age continue to constitute a significant

proportion of the total labour available on farms. Table 16.5 summarizes the distribution of hours worked in the week preceding the interview, considering *all* labour force participants. School age children (aged 8-14 years) spend about 12 hours per week on average on various farm activities. Boys spend the large majority of their time in crop and livestock activities, while girls tend to spend less hours on these activities and an equal proportion of time in firewood gathering and water fetching.

AVERAGE HOURS WORKED PER WEEK ON ECONOMIC ACTIVITIES BY THE WORKING POPULATION BY AGE AND SEX

*Table 16.5* *Hours*

Age Group	Crop	Livestock	Marketing	Firewood	Water	Labour other Farms	Wage Employment	Non-farm Profit Making	Total Average Hours
<b>Males</b>									
8 - 14	35	64	03	0.7	1.2	0.1	0.2	02	126
15 - 19	63	58	0.5	0.5	0.7	0.3	1.4	0.9	16.5
20 - 24	10.2	5.1	1.1	0.3	0.5	0.5	7.2	2.3	27.2
25-29	10.4	5.3	1.3	0.5	0.6	0.8	13.8	4.8	37.7
30-34	11.2	5.1	1.8	0.4	0.4	0.9	5.4	5.6	40.8
35 - 39	10.9	5.7	1.9	0.3	0.3	0.6	17.7	6.6	44.0
40 - 44	12.2	6.3	1.9	0.3	0.3	0.4	15.0	4.5	40.8
45 - 49	11.8	6.7	1.6	0.3	0.3	0.5	13.4	4.8	39.4
50 - 54	11.9	7.9	1.3	0.5	0.4	0.2	9.8	3.8	35.8
55 - 59	14.0	9.5	1.7	0.4	0.3	0.6	6.6	4.8	37.8
60 - 64	11.6	9.8	1.7	0.3	0.3	0.6	4.2	3.9	32.4
15 - 64	10.0	6.2	1.3	0.4	0.5	0.5	9.0	3.5	31.4
65 +	10.0	10.6	1.3	0.7	0.6	0.3	2.0	2.3	27.8
Total	77	6.5	0.9	0.5	0.7	0.4	56	2.3	24.8
<b>Females</b>									
8 - 14	36	2.0	0.4	2.7	3.3	0.1	0.1	0.1	12.4
15- 19	7.1	2.1	1.0	3.7	4.7	0.2	1.0	0.3	20.0
20-24	11.0	3.5	2.1	4.4	5.4	0.5	2.6	1.3	30.8
25-29	13.4	4.4	2.7	4.8	6.3	0.5	3.4	2.3	37.8
30 - 34	14.2	5.5	4.2	4.5	5.7	0.7	2.9	1.9	39.6
35 - 39	14.7	5.1	3.2	4.5	5.7	0.6	2.4	2.5	38.7
40 - 44	15.1	4.9	2.8	4.8	5.4	0.7	2.2	2.3	38.2
45 - 49	15.7	4.7	2.9	4.7	5.9	0.6	2.7	2.0	39.4
50 - 54	16.5	5.2	3.0	4.6	5.3	0.4	0.9	2.1	38.0
55 - 59	14.3	4.7	2.9	4.6	4.8	0.3	0.9	0.8	33.2
60 - 64	13.7	4.9	2.3	3.8	4.5	0.5	0.6	0.9	31.3
15 - 64	12.6	4.1	2.5	4.4	5.4	0.5	2.1	1.6	33.2
65 +	9.7	3.4	1.6	3.6	3.4	0.2	0.3	0.5	22.8
Total	98	3.5	1.9	3.9	4.7	0.4	1.4	1.1	26.5

16.19. On average, women spend about 20 per cent more hours than men in crop-related activities, whereas men spend more hours in livestock related activities. Women also spend a significant number of hours in marketing, firewood gathering and water fetching activities. Firewood gathering and water fetching took up over 8 hours of the previous week for all women, and over 10 hours of the week for women 25-44 years of age. There is a clear difference in the access to wage employment by gender. Roughly four times as many hours are spent in wage employment by men compared to women. In the case of men aged 25-44 years, the time allotted to paid employment is comparable to the time worked on the family farm. Men also dominate the hours allocated to non-farm business activities. On the average, women between 15 and 64 years of age spend about two more hours per week on economic activities than men in the same age group.

16.20. If the contribution of women to the rural labour force is limited to the economic activities defined above, it would clearly underestimate the contribution of women. This is because it would exclude their contribution in terms of hours spent on domestic chores that must be undertaken on the holding. Women spend considerably more time on



domestic activities than men. The domestic chores, which include both food preparation and child care, and add a considerable burden to the daily work load.

16.21. Table 16.6 compares the average hours spent per week by men and women in rural areas on domestic chores. On average, men spend a mere two hours per week on domestic chores, and this contribution seems to be the same from age 8-65; while for women, domestic chores take up on the average 14.1 hours per week. Only those of school age, between the ages of 8 and 19, and the elderly beyond the age of 65 have limited work loads in this area. The population aged 15-64 years spent almost 20 hours per week on domestic chores. When added to the economic activities summarized in Table 16.5, this means that women in the working age group work 50.9 hours per week compared to only 33.2 hours by their male counterparts.

AVERAGE HOURS SPENT IN DOMESTIC CHORES BY THE WORKING POPULATION BY AGE AND SEX

<b>Table 16.6</b>		<i>Hours</i>	
Age Group	Males	Females	
8 - 14	1.7	6.3	
15 - 19	1.4	11.3	
20 - 24	1.6	18.7	
25 - 29	2.1	21.6	
30 - 34	2.3	19.7	
35 - 39	1.6	20.4	
40 - 44	1.9	18.4	
45 - 49	1.8	18.8	
50 - 54	2.1	18.0	
55 - 59	2.0	16.8	
60 - 64	2.1	17.5	
15 - 64	1.8	17.7	
65 +	2.7	14.0	
Total	1.8	14.1	

### Education and Labour Force Activity

16.22. It is clear that one of the prime determinants of a woman's labour force activity is her level of education. Highly educated women are more likely to participate in the labour force and less likely to be unemployed, particularly if they attend college or university. Since those who are educated are more likely to migrate to urban areas than those who are not, the potential gains of women in the labour force in the next decade will be particularly determined by their success rate in completing secondary school and expanding their post-secondary opportunities. It is therefore useful to closely examine the prevailing trends in education in Kenya.

16.23. Table 16.7 compares important indicators based on education enrolment patterns in the 1980s directly relevant to the success of women in the labour force. There is now virtual equality in the proportion of girls and boys who enter primary school in Standard 1. The most serious problem is that there are still very high drop out rates for girls before they complete primary school. Comparing rates of attrition by gender, that is the ratio of enrolment in Standard 8 seven years after entering Standard 1, it is apparent that the attrition rates for girls are higher than for boys. Data for the most recent period also show that the gap between them is apparently increasing again. As a consequence the sex ratio in Standard 8 is currently about 1.2 males per female. Implementation of policies

to decrease this phenomenon will undoubtedly improve labour force alternatives for women.

#### EDUCATION SYSTEM INDICATORS BY SEX

**Table 16.7**

Year	Primary School Attrition Rates		Continuation Rates to Secondary School		Percentage Women Undergraduates
	Males	Females	Males	Females	
1980	.60	.66	.28	.31	28
1981	.41	.49	.30	.33	30
1982	.30	.40	.32	.32	„
1983	.32	.40	.32	.32	31
1984	.21	.28	.30	.32	28
1985	.37	.43			
1986	.62	.68	.47	.43	29
1987	.56	.63	.49	.47	28
1988	.53	.60	.48	.46	28
1989	.52	.56	.47	.43	30
1990	.54	.59	.43	.38	29

16.24. The changes in the continuation rate from Standard 8 to secondary school by gender over the 1980 - 1990 period are also given in Table 16.7. Before the introduction of 8-4-4 system of education, continuation rates were almost identical, though in absolute numbers more boys than girls continued to secondary schools. Following the introduction of 8-4-4, rates of continuation to secondary school increased, but only because the size of the new Standard 8 cohort was much smaller than that of Standard 7. The differences in continuation by gender are now about 5 percentage points in favour of boys and there has been a significant decline in both rates in 1990. A smaller percentage of female primary school leavers enrol in government maintained schools, with a large majority going to Harambee schools.

16.25 The proportion of women in undergraduate university enrolment has been relatively constant over the 1980 - 1990 period. Less than 30 per cent of undergraduates are females. Equality of opportunity for university places by gender continues to be a significant problem. There are particular problems in several subject areas including sciences, medicine, engineering and commerce, and there are more women than men in education programs. The ability of women to continue their achievements in all aspects of labour force growth and change depends, to a large extent, upon whether or not they can continue to maintain progress in the education sector. Increased levels of education generally will increase female participation in the labour force and lower unemployment.