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ECONOMIC SURVEY 1992

Central Bureau of statistics
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

The slow-down in the world economic activity during the second half of 1990 continued into 1991. Recessionary conditions were experienced in a number of industrialised countries. While world trade rose by 3 per cent Gross National Products (GNP) grew at a slower pace than the rate of a 2 per cent registered in 1990.

Against the background of sluggish world international economic growth the performance of the national real Gross Domestic Product slowed down from 4.3 per cent in 1990 to 2.2 per cent. The decline in the growth rate of the output was registered in most sectors of the economy. Agriculture and fishing recorded negative growths of 1.1 per cent and 2.2 per cent, respectively compared to positive growth rate of 3.4 per cent, and 4.4 per cent. Real gross fixed capital formation fell by 3 per cent. Inflation, as measured by revised consumer price index, rose from 15.8 per cent in 1990 to 19.6 per cent in 1991. As a result of increase in inflation rate real earnings fell by 8.3 per cent.

Despite the decline in coffee exports, export earnings increased by 31 per cent while imports performed sluggishly. As a consequence the balance of trade improved from K£ 1,302 million in 1992 to K£ 1,016 million in 1990. The overall balance of payments deficit contracted from K£ 169 million in 1990 to K£ 153 million in 1991. The Shilling continued to deteriorate against major currencies and lost 14 per cent in value in 1991.

International Scene

The slow-down in world economic activity during the second half of 1990 continued into 1991. Gross National Product (GNP) in the Organisation for Economic Co-Operation and Development (OECD) countries grew by 1.1 per cent, with recessionary conditions in a third of the major countries.

World trade rose by 3 per cent while the terms of trade for developing countries deteriorated. After rising steeply during the Gulf War, oil prices fell and stabilised. The GATT Uruguay Round negotiations, which had not been concluded by end of March, 1992, hold the key to world trade expansion, especially the opening of markets in industrial countries to products from developing countries.

Major OECD economies seem set to eventually recover as 1992 progresses. In Europe, the restructuring in the new Commonwealth of Independent States (CIS) of the former USSR, the strife in some eastern European countries continue to engage the energies of the European Community (EC). Food shortages have occurred in eastern and southern Africa, while foreign assistance has been curtailed. Under the circumstances, little growth in output and exports can be expected in Africa in 1992.

Domestic Economy

Estimates from national accounts show that the growth rate of real gross domestic product (GDP) declined for the third consecutive year. Real GDP growth rate fell from 5.0 per cent in 1989 to 4.3 per cent in 1990, and to a dismal 2.2 per cent in 1991. This fall was more pronounced in agriculture and fishing activities which had negative growth rates of 1.1 per cent and 2.2 per cent in 1991. Real value added for manufacturing sector declined from 5.2 per cent in 1990 to 3.8 per cent in 1991, respectively. Growth of gross fixed capital formation edged downwards from 3.5 per cent in 1990 to negative 2.9 per cent in 1991, partly owing to depressed aggregate demand, high inflation and interest rates. Private consumption, which had risen by 15 per cent in 1990, increased at a slower 13 per cent in 1991. As a percentage of nominal GDP at market prices, domestic savings rose from 14.8 per cent in 1989 to 15.2 per cent in 1990, and stayed at about the same level in 1991. Inflation, computed from the revised basket of consumer goods and services, rose from 15.3 per cent in 1990 to 19.6 per cent in 1991.

Higher percentage increase in exports coupled with a deceleration in the growth of imports produced a narrower trade deficit in 1991 compared to the previous year. At current prices, balance of trade deficit improved by 22 per cent to reach K£ 1,016 in 1991. Trade with African countries improved significantly, growing by 40 per cent in 1991, compared to 19 per cent in 1990.

Compilation of Consumer Price Index: *Old and Revised*

The old consumer price index (CPI), based on 1975 prices market basket and weights, have been revised and re-based on February/March, 1986 weights and market basket. The revision of the CPI was based on details of expenditures reported by households in the 1982 Urban Household Budg- Survey.

The revision has included definition of a new market basket of goods and services; calculation of new weights to reflect consumption patterns of households; and selection of new retail outlets. Selected items have been specified in detail so that over time prices are collected for identical items. Prices for every item are quoted from at least five pre-selected retail outlets which range from markets, shops, schools, hospitals, super-markets, etc. The CPI is then computed using weighted average consumer price index obtained by first calculating price ratios for the selected "market basket" and then multiplying by appropriate weights. The revised Nairobi CPI for the income groups have been computed from March 1990 and the new series are shown in Chapter 3.

Employment, Earnings and Consumer Prices

The employment situation in 1991 deteriorated compared with the previous year. An estimated 2.0 million persons were engaged, representing a growth rate of 5.1 per cent, slightly lower than 5.5 per cent growth recorded in 1990. Wage employment in the modern sector expanded by 32,300 new jobs

compared with 41,000 jobs created in 1990. There was a significant slow-down in the growth of employment in the public sector, which declined from 2.4 per cent in 1989 to 2.2 per cent in 1990 and 2.1 per cent in 1991. The expanding informal sector created 60,600 new jobs, and accounted for over 25.0 per cent of total persons engaged in 1991.

The overall nominal wage bill amounted to K£ 2,649 million in 1991, and expanded by 12.2 per cent in both 1990 and 1991. Average earnings from paid employment per person rose from K£ 1,674.7 per annum in 1990 to K£ 1,837.4 per annum in 1991. Although, there was a general revision of minimum wages with effect from 1st May, 1991, inflationary pressures, however, eroded average earnings in real terms by 8.3 per cent, compared with a decline of 5.8 per cent in 1990. Also, 372 collective bargaining agreements were registered in the course of 1991. The small number reflecting a degree of industrial stability.

After slowing down between 1988 and 1990, inflation rate, estimated by the revised CPI rose significantly from 15.8 per cent in 1990 to 19.6 per cent in 1991. The high inflationary pressures may be attributed to, among other factors, price decontrols, lagged effects of the Gulf crisis and the depreciation of the Shilling.

Money, Banking and Finance

Money supply grew by 20 per cent in 1991, equal to the growth observed in 1990, above the growth in nominal GDP, but about the same as the 19.6 per cent inflation rate registered in 1991. The growth rate of total domestic credit decreased to 19 per cent compared with a 27 per cent registered in 1990. This was attributed to a significant deceleration in the rate of growth of banking system credit to the Government. Net foreign assets position worsened from a negative K£232 million in December, 1990, to negative K£361 million in December, 1991 as reflected in the balance of payments deficit, mainly due to slow-down in inflows of grants and loans.

Commercial banks liquidity ratio dropped by 8 percentage points reflecting active public debt policy, while the advance to deposit ratio remained high. During the year, interest rates were decontrolled and three commercial banks and four non-bank financial institutions were licensed and became operational. Other major developments included establishment of Exchange Risk Assumptions Fund, under the Exchequer and Audit Regulations of 1991, relaxation Credit and Exchange Control Act by Central Bank, Commercial Banks reached a decision to join the Society for World-Wide International Financial Telecommunications (SWIFT.) and introduction of Foreign Exchange Bearer Certificates in the Financial Market.

Public Finance

Due to government control of growth in expenditure and an improvement in revenue receipts, current deficit is expected to improve from K£ 273 million

in 1990/91 to K£ 163 million 1990/92. Capital Expenditure is also projected to drop due to a cut in capital inflows from donors. Provisional figures indicate that overall deficit will be K£ 326 million, and will be mainly financed from domestic borrowing. Internal public debt redemption is expected to grow substantially due to repayment of bonds upon maturity.

Local authorities have continued to improve their capital expenditure since the introduction of the local service charge. Rehabilitation of facilities and new projects like water and sewerage systems, housing estates, re-carpeting of roads, bus parks, markets and street lighting are being undertaken. Despite these efforts their services have continued to be below demand.

External Trade and Balance of Payments

There was some notable improvement in the trading and balance of payments situation during the year 1991. The deficit on the current account of the balance of payments was reduced from K£ 573 million in 1990 to K£318 million in 1991. The overall balance of payments deficit contracted from K£ 169 million in 1990 to K£ 153 million in 1991.

The balance of trade strengthened substantially. Its deficit decreased by 22 per cent from K£ 1,302 million in 1990 to K£ 1,016 million in 1991. For the first time during the last three years the trade deficit was less than export earnings.This encouraging situation was due to increased export earnings, slower growth in imports and depreciation of the Shilling which encouraged exports while it discouraged imports. A notable increase in the exports of gold and other jewellery, transport equipment and cooking fats was registered.

Agriculture

The agricultural sector was adversely affected by unfavourable weather conditions and increased prices for agricultural inputs in 1991. The sector's value added deteriorated by 1.1 per cent from K£ 1,192 million in 1990 to K£ 1,179 million in 1991. The poor performance in agriculture was reflected in the 13.3 per cent, 10.3 per cent, 8.6 per cent, and 1.7 per cent drop in maize, beans, potatoes and sugar production. The overall quantum index of marketed production fell in 1991 as a reduced volume of purchases were realised by marketing boards as a consequence of reform programmes.

The price indices for 1991 rose for all commodities. Prices of major export crops, particularly coffee and tea improved despite the influence of the external markets. Pyrethrum deliveries increased significantly while sisal production fell as result of bad weather and reduced acreage under the crop.

During 1991 large numbers of animal were slaughtered because of the prevailing dry weather. Livestock products declined because of inadequate rains and sales of milk products dropped and resulted in shortages in the market. This was also evident in the decline of the gross farm revenue attributed to co-operatives .

Environment and Natural Resources

For the second year running the Ministry of Water Development recorded a decrease in overall development expenditure from K£ 49.1 million in 1990/91 to K£ 42.6 million in 1991/92. Rural water supplies and national water conservation and\pipeline corporation together received over 75 per cent of the total development outlay. This underlined continued Government's commitment in the provision of water to most rural households.

Although fish farming sub-sector continued to improve, the general performance of the fishing sector in 1991 compared to 1990, was relatively poor. Overall, 182.3 thousand tonnes in fish catches were landed in 1991, representing a decline of 9.6 per cent over 1990. The corresponding value from the sale of fish declined slightly by 2.3 per cent from K£ 90.5 million in 1990 to K£ 88.4 million in 1991. The depreciation in fishery resources is mainly attributable to continued financial instability caused by poor and inefficient marketing outlets coupled with substantial cuts in Government and donor support.

Energy

The invasion of Kuwait by Iraq and the subsequent war, temporarily pushed crude oil prices to US$ 40 per barrel in early 1991. However, concerted efforts by OPEC members lowered the prices to US$ 25 per barrel by the end of the year. In 1991, 2,150 thousand tonnes of crude and petroleum products were imported, the lowest importation since 1987. The import bill has, however, continued to rise and was K£ 502 million in 1991. Although exports of petroleum products decreased significantly by 23 per cent from 544 thousand tonnes in 1990 to 419 thousand tonnes in 1991, earnings increased by 64 per cent from K£ 150 million to K£ 246 million in 1991 due to price effects.

Despite the modest growth in energy sales by Kenya Power and Lighting Company, revenue collection increased due to the tariff increase in May, 1991. Thermal and geothermal based electricity declined by 7 per cent and 11 per cent, respectively. Increase in electricity generation was, therefore, due to hydro-based electricity which was boosted by the commissioning of the Turkwel station. Consumption of electricity rose by 4 per cent in 1991 compared to 7 per cent in 1990.

Manufacturing

Growth in real output of the manufacturing sector, declined significantly to 3.8 per cent in 1991, against the 5.9 and 5.3 per cent recorded in 1989 and 1990 respectively. The Government, however, continued to enact structural changes in the manufacturing sector aimed at increasing its productivity and efficiency. There was a virtually no growth in manufacturing employment in 1991, when a total of 188,874 persons were engaged compared to 187,701 employed in 1990. The sales of manufactured goods in 1991 were K$ 5,071 million, 19 per cent above the K$ 4,270 million registered in 1990.

Building and Construction

The slow-down recorded in building and construction activities in 1990 continued into 1991 as shown by sector's major indicators. The sector recorded a marginal growth of 1.4 per cent in employment in 1991 compared with 3.9 per cent and 9.7 per cent in 1990 and 1989, respectively. Cement consumption declined by 5.3 per cent from 1,182 thousand tonnes in 1990 to 1,120 thousand tonnes in 1991.

Total receipt by private contractors rose from revised K£ 386 million in 1990 to estimated K£ 500 in 1991. Price increases Government financial austerity measures and slow growth in loans and advances to private building and construction enterprises between 1990 and 1991, contributed to the slow-down in the performance of the sector.

Tourism

The tourism industry performed poorly in 1991 compared to 1990. Tourism earnings increased slightly from K£ 533 million to K£594 million. However, the increase in real terms may have been offset by inflation as well as the depreciation of the Shilling. Visitor arrivals decreased by 1.2 per cent from 814.4 thousand in 1990 to 804.6 thousand in 1991, while departures decreased faster by 6.4 per cent from 728.3 thousand departures in 1990 to 681.5 thousand departures in 1991.

Several activities to promote and develop tourism, including participation at fairs and exhibitions locally and abroad, were carried out during 1991. Kenya Tourism Development Corporation also gave loans to various organizations for the development of tourist facilities.

Transport, Storage and Communications

The value of output of the transport, storage and communications sector, at current prices, increased by 12.1 per cent from K£ 1,366.5 million in 1990 to K£ 1,531.5 million in 1991. This is a slower growth rate when compared with a 23.1 per cent growth recorded between 1989 and 1990. The value of output generated by services incidental to transport and that of pipeline transport was slightly lower than that recorded in 1990.

Passenger and freight traffic handled by road, railway, air and water transporters dropped from the 1990 level. The volume of white petroleum products delivered by the pipeline and the tonnage of cargo handled by the Port of Mombasa declined.

Appreciable growths were recorded in postal and telecommunications facilities. The demand for domestic postal and telecommunications services increased while that of external telex and telegraph services dropped.

The Social Scene

The total Government expenditure on social services increased by 9.2 per cent in 1991/92 fiscal year. The significant increase in development expenditure was attributable to construction, purchase of equipment for new primary teachers' training colleges and expansion of facilities in the public universities.

Primary schools enrolment rose by 1.2 per cent while that of secondary schools fell by 0.7 per cent. Female students constituted 48.7 per cent and 43.7 per cent in primary and secondary education, respectively. During 1991/92 academic year, a total of 9,463 first year students, of whom 21.9 per cent were females, were admitted at the public universities and their constituent colleges.

As a result of introduction of graduated rates of contribution, National Hospital Insurance Fund receipts and benefits rose significantly during the year while the contribution net of benefits rose from K£ 1.78 million during 1989/90 fiscal year to K£ 21.20 million in 1990/91.

Rural Child Nutrition Survey, 1987/88

Information gathered by the 1987/88 Rural child Nutrition Survey is part of the ongoing Nutrition Surveillance System and provides insight into changes over time of nutritional status.

Comparison between the four nutrition surveys conducted in 1977, 1979, 1982, and 1987/88 indicate that there was an improvement in nutritional status at the national level. The improvement was also observed in Central, Rift Valley, Eastern and Western provinces. Nyanza and Coast provinces have continued to show high rates of poor nutritional status.

District level data show that Kwale and Kilifi in Coast, South Nyanza, Siaya and Kisii in Nyanza, Machakos and Meru in Eastern, Nyandarua in. Central, Kericho, Narok, and Nakuru in Rift Valley had stunting rates higher than the national prevalence of about 20 per cent.

Poor nutritional status was associated with malaria related fever, poor water and sanitation, low literacy rates and low economic status of households.

Outlook

The rate of growth of the major industrial countries fell from 2.2 per cent in 1990 to 0.9 per cent in 1991, owing to the recession in industrialised economies and a decline in the output of most developing countries. Available indicators reveal that the growth rate of the world economy is expected to show a moderate recovery to 2.8 per cent in 1992. The world trade may grow by 5.7 per cent in 1992 compared to the growth of 3.3 per cent witnessed in 1991.

The downturn in the world economic growth in 1990 and 1991 was more pronounced in Canada, the U.S.A. and the United Kingdom. The fall in output

of these countries was a consequence of a recession, which followed a period of a rapid but unsustainable economic growth rates in 1987 and 1988. The United Kingdom, accounting for nearly 40 per cent of total exports to EC in 1991, has remained the major trading partner. Therefore a recession in the United Kingdom in 1990-1991' implied substantial depression of foreign demand for exports.

There are indications that the world economy may see some recovery in 1992, with output rising by 2.8 per cent in the last half of 1992. This upturn projection takes account of the expected recovery from recession in North America, the United Kingdom and other western countries, the decline of the world oil prices in the past few months, and the end of uncertainty associated with the Gulf crisis. This, not withstanding, the usual time lag between economic recovery of the industrialised economies and the beneficial impact on developing countries implies that Kenya may not benefit appreciably from the world economic recovery in 1992.

Public expenditure is expected to expand moderately in 1992. Much of the additional public expenditure is likely to be spent on security measures and preparation of electoral registers. The growth rate of the Central Government fixed investment is expected to remain low in 1992 due to the continued implementation of budget rationalisation programme.

The slow-down in the rate of private consumption that was observed in 1991 may continue in 1992. This decline is expected to come from the fall in real gross disposable income as a result of continued increase in inflation and the fall in real wages. The fall in real income, along with the continued high inflation rates, may constrain further growth in wage employment in 1992. Hence, employment in the modern sector is expected to show a sluggish rate of growth in 1992.

The gross fixed investment fell by 2.8 per cent in 1991 and a further drop is expected in 1992. Investment in the service sector may also fall further due to low aggregate demand.

Merchandise exports are likely to benefit from the high world prices of tea and mineral products; while growth rate of imports may continue to be dampened by the decline of external grants and. the depreciation of the Shilling. However, due to its poor state the coffee industry will not benefit significantly from price increases. Foreign exchange earnings from tourism are poised to increase appreciably in 1992 given the expected recovery of the world economy, the decline in world oil prices, and the ending of the Gulf crisis. These factors may combine to reduce the deficit on the current account balance. Hence current account deficit may remain low in 1992.

The agriculture and the electricity performance in 1992 are expected to display less favourable growth rates on account of poor weather during the first half of 1992. The 1992 long rains came late, and were erratic and unevenly distributed in most agricultural zones. Extended long drought seasons in 1991/92 reduced water levels within the electricity generating areas, forcing the powercompany to introducing power rationing in the second quarter of 1992.

Poor agricultural production, reduced electricity output, low aggregate demand and high inflation rates are factors which are likely to adversely affect production in manufacturing and construction sectors. The sectors real value added may fallfurther in 1992.

These developments mentioned above reflect a depressed state of the economy. The growth of real GDP is, therefore, likely to remain low at around 2 per cent in 1992.

KEY ECONOMIC AND SOCIAL INDICATORS, 1987-1991*

Table 1.

		1987	1988	1989	1990	1991**	
1 Population	(million)	20.1	20.8	21.5	22.2	22.9	
2 Growth of GDP at constant prices	(per cent)	4.9	5.2	4.9	4.5	2.2	
3 GDP at market prices	(K£mn)	6,558	7,560	8,643	9,939	11,362	
4 Net cost of petroleum products	(K£mn)	179	135	224	318	245	
5 Trade balance	(K£mn)	-641	-813	-1,219	-1,331	-1,016	
6 Money Supply	(K£mn)	1,983	2,141	2,418	2,902	3,473	
7 Total domestic credit	(K£mn)	2,430	2,591	2,771	3,509	4,177	
8 Balance of payments (current account)	(K£mn)	-406	-408	-596	-573	-318	
9 Coffee marketed production	('000 tonnes)	105	125	113	112	87	
10 Tea marketed production	('000 tonnes)	156	164	181	197	204	
11 Maize marketed centrally	('000 tonnes)	652	485	626	509	304	
12 Wheat marketed centrally	('000 tonnes)	148	220	233	187	199	
13 Sugar-cane production	('000 tonnes)	3,698	3,835	4,261	4,200	4,048	
14 Milk sold centrally	(mn litres)	347	359	353	392	359	
15 Manufacturing output	(K£mn)	5,090	6,103	7,283	8,816	10,723	
16 Construction output	(K£mn)	582	653	798	927	1,203	
17 Cement Consumption	('000 tonnes)	891	854	1,003	1,182	1,120	
18 Petroleum Consumption	('000 tonnes)	1,748	1,730	1,807	1,830	1,755	
19 Electricity consumption	(mn Kwh)	2,372	2,407	2,488	2,665	2,778	
20 Tourism earnings	(K£mn)	292	349	432	533	594	
21 New registration of vehicles	(number)	18,727	19,524	18,405	18,023	16,968	
22 Rail freight	(mn tonnes-Km)	1,702	1,755	1,910	1,808	1,865	
23 Air passengers handled	('000)	2,397	2,522	2,649	2,654	2,573	
24 Wage employment	('000)	1,280	1,341	1,368	1,409	1,442	
25 Education-primary enrolment	('000)	5,031	5,124	5,389	5,392	5,456	
26 Education-secondary Enrolment	('000)	522	540	641	618	614	
27 Education-post secondary enrolment	('000)	40	41	63	79	82	
28 Hospital beds and cots	(number)	31,512	31,983	35,534	33,086	33,926	
29 Registered doctors and dentists	(number)	3,563	3,703	3,827	3,953	4,088	
INDEX NUMBERS. (1982=100)							Annual % Rate of change 1987-1991
Export volumes		110	116	115	122	132	4.7
Import volumes		106	119	125	119	111	1.2
Terms of trade		85	88	79	71	82	-0.9
Consumer prices ***		111	124	141	163	195	15.1
Real wages		95	97	97	95	90	-1.3
Agricultural terms of trade		95	99	97	95	91	-1.1

* More precise measures are given in individual chapters.
** Provisional.
*** Weighted Revised Index (Feb/March 1986=100)

CHAPTER 1 - INTERNATIONAL SCENE

The slowdown of world economic activity during the second half of 1990 continued into 1991. In the Organisation for Economic Co-operation and Development (OECD) countries, economic activity reached its trough in the first half of 1991, when the effects of the short Gulf War accentuated the recessionary trends that had emerged in 1990, although with a severity that varied across countries. Total GNP in the OECD grew by 1.1 per cent, with marked differences in the economic situations across countries. During the first half of 1991, GNP fell in about a third of the OECD area (USA, UK, Canada among the major countries), while in Japan, Germany and a few smaller countries, growth remained buoyant. Overall OECD investment fell by nearly 3 per cent despite a boom in Germany. Employment in the OECD area fell bringing the rate of unemployment to 7.1 per cent, from 6.3 per cent recorded in 1990. Restrictive monetary policy, lower oil and commodity prices and weakening labour - market conditions, allowed inflation to be contained from the beginning of 1991.

1.2. Growth of world trade slowed down sharply from the second half of 1990. Terms of trade for industrial countries improved while those of developing countries fell further, as a result of the fall in the prices of energy and other primary commodities. The volume of world trade is estimated to have risen by about 3 per cent in 1991 despite falls in import volumes in the first half of 1991 in USA, UK, Canada, Sweden and Australia, where recession was underway. During the year, non-OECD exports were affected by lower demand in the OECD, the sharp decline in oil exports of the USSR, and the continued fall in OPEC oil prices. World trade is projected to expand briskly in 1992, at 6 per cent, as activity recovers in the OECD area.

1.3. Trading prospects of non-oil developing countries continued to suffer from low commodity prices and failure of the Uruguay Round of GATT negotiations to come to a fruitful conclusion. These negotiations were resumed in early 1992, but the outcome was not yet clear by April of 1992. Success in the Uruguay Round is essential if developing countries are to expand exports of agricultural products and textiles to the industrialized countries.

1.4. The Organization of Petroleum Exporting Countries (OPEC) revenues fell by 20 per cent in US$ terms in the first half of 1991, reflecting both lower oil prices and lower export volumes in the aftermath of the Gulf-War. Nonetheless, OPEC exports have risen briskly since the restoration of Kuwait exports to pre-invasion levels. OPEC economies are estimated to have run a current account deficit of over $40 billion in 1991.

1.5. Table 1.1 details key economic indicators in the OECD countries. In the USA GNP fell by 0.5 per cent in 1991. However, output rose in the third quarter of 1991 after three consecutive quarterly declines. The current account, which recorded a temporary surplus in the first half of 1991 as a result of Gulf War transfers, reversed into deficit in the second half. This was attributable to a rebound in import demand signs as the USA economy began to recover in the first quarter of 1992, with low inflation, rise in retail sales, higher housing construction and credit expansion. However, with the recovery expected to be sluggish, at 1.5 per cent

growth in 1992, it will not reduce the 6.7 per cent unemployment rate. In fact, unemployment may increase with the demobilization and cutback on military contracts.

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

Table 1.1

	1990	1991	1992	1993
	(percentage changes from preceding period)			
Real GNP -				
United States	1.0	-0.5	2.2	3.8
Japan	5.6	4.5	2.4	3.5
Germany***	4.5	3.2	1.8	2.5
OECD Europe	2.9	1.2	2.0	2.7
Total OECD	2.6	1.1	2.2	3.3
Real total domestic demand -				
United States	0.5	-0.9	2.4	3.9
Japan	5.8	3.3	2.8	3.7
Germany***	5.0	3.3	1.8	2.5
OECD Europe	2.9	1.0	1.9	2.7
Total OECD	2.4	0.6	2.3	3.4
Inflation (GNP/GDP deflators)				
United States	4.1	3.8	3.0	2.9
Japan	1.9	2.2	2.1	1.9
Germany***	3.4	4.4	4.5	3.9
OECD Europe	5.7	5.8	5.1	4.5
Total OECD	4.3	4.2	3.7	3.3
	(US $billion)			
Current balances-				
United States	-92.1	-4.1	-55.8	-606.6
Japan	35.4	69.8	81.8	80.4
Germany***	47.9	-20.6	-14.1	-12.1
OECD Europe	-10.4	-51.7	-43.8	-44.7
Total OECD	-101.6	-15.1	-48.0	-57.4
OPEC	16.5	-42.1	-12.3	-13.3
Non-OPEC developing countries	-17.7	-35.3	-38.1	-29.7
	(per cent of labour force)			
Unemployment-				
United States	5.5	6.7	6.7	6.1
Japan	2.1	2.2	2.3	2.3
Germany***	5.1	4.6	5.0	5.1
OECD European members	8.1	8.7	9.3	9.3
Total OECD membership	6.3	7.1	7.4	7.1
	(percentage changes from preceding period)			
World Trade**	5.2	3.3	5.7	7.2

Source: OECD Outlook no. 50, December, 1991.

* Assumptions underlying the projections include:
- no change in actual and announced policies;
- unchanged exchange rates from 5th November 1991, in particular $1 =Y 129.38, DM 1.64;
- Dollar price (OECD fob imports) for internationally traded oil of US$18.5 per barrel
- for 911, $ 19 per barrel for 91 II and constant in real terms thereafter.

** 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 projections was 12th November, 1991.

*** The Federal Republic of Germany after unification is referred to as 'Germany'. Historical data and projections are for Western Germany only, except for foreign trade and balance of payments figures from the second half of 1990.

1.6. Germany's GNP continued to grow strongly, reaching 3.2 percent in 1991. More than a year after political unification, divergences in economic performance between Eastern and Western Germany still remain striking. The Western German economy has continued to benefit from the boom even though the contracting effects of higher taxes introduced to finance reconstruction in the East are now being felt. In Eastern Germany, the steep decline in industrial production appears to have ended, though the upturn is still restricted to certain sectors. Unification process has pushed up inflation.

1.7. In Japan the economy continued to expand in 1991, but at a decelerating pace. GNP rose by 4.5 per cent in 1991 compared with 5.6 per cent in 1990. However, most of the growth occurred in the first half, while in the second, real GNP is estimated to have risen by only an annualized 1 per cent. The source of growth of the GNP was the strong export performance in 1991 after several years of relative import growth. Industrial production growth has been sluggish, with a decline in capacity utilization. While strong export demand is expected to remain strong in 1992, leading to higher current account surplus, real domestic demand is expected to slow down, thus GNP growth in 1992 is expected to be around 2.4 per cent.

1.8. The recent and prospective performance of non-OECD economies has varied widely. The dynamic Asian countries were hardly affected by the slowdown in the OECD area as government investment programmes and monetary policies sustained domestic demand. Average real growth in the six dynamic Asian economies (Korea, Taiwan, HongKong, Singapore, Thailand and Malaysia) grew in the range of 7 to 8 per cent for the third consecutive year. Buoyant domestic demand in these countries offset the slower growth in demand from OECD countries. Growth is expected to moderate slightly in 1992 and 1993 from restrictive policies due to rising inflationary pressures, tight labour markets and need to control current account deficits.

1.9. Restrictive policies in China have reduced inflation rate from 21 per cent in 1988 to only 2 per cent in 1991. The decline of the Chinese Yuan has helped trade, with exports expanding by 7 per cent in 1991 from 5 per cent in 1990. In India, the year began with an inflation rate of 13 per cent and a government deficit exceeding 8 per cent of GDP. The new government, which assumed office in June, 1991, adopted a programme of structural reforms which included the easing of licensing requirements for businesses and direct foreign investment. The Rupee was devalued by 20 per cent. These adjustments are estimated to have reduced the growth rate to slightly below the 6 per cent recorded in 1990.

1.10. Output has continued to fall in Central and Eastern Europe. In part this reflects the severe difficulties in implementing structural reform policies in such areas as privatization. However, sharply falling trade within the region has also had significant adverse effects. The collapse of the Council for Mutual Economic Assistance (CMEA) trade system, exacerbated by economic disintegration within the former USSR, has given rise to major efforts to redirect trade towards OECD countries. Trade among Council for Mutual Economic Assistance (CMEA) countries has fallen by at least 50 per cent in 1991, while the fall in output has averaged 10i per cent.

1.11. Growth recovered in several Latin American economies (Chile, Mexico, Venezuela, Bolivia) following sustained structural and macroeconomic policy adjustments. The removal of tariff and non-tariff barriers in several major economies has been accompanied by marked reversal in attitudes towards direct investment. There has also been some limited access to commercial credit while foreign direct investment flow to adjusting economies have risen dramatically Only the Brazilian economy is still in disarray following the collapse of the stabilization programme adopted in March. 1990.

1.12. The economic situation in Sub-Saharan Africa has been adversely affected, to varying degrees, by such external developments as deterioration of the terms of trade and unfavourable weather, as well as internal factors. From September, 1991, the IMF increased the capital base by 50 per cent of total quotas. This has enabled African countries to increase borrowing from Structural Adjustments Facility (SAF) and the Enhanced SAF which now account for about 13 per cent of total financial assistance from IMF to Sub-Saharan Africa. Debt-write-offs which explained the temporary improvement in the current account position of African countries in 1990, were less important in 1991.

1.13. In the last three years or so, African governments have planned to put Structural Adjustment Programmes (SAPs) into place. The emphasis has to a large extent involved efforts to improve balance of payments and promote measures to boost production, improve national competitiveness and make more efficient use of resources and give incentives to investors.

1.14. World oil prices rose steeply immediately after Iraq's invasion of Kuwait in 1990, but fell after the Gulf War. Average prices rose by 28 per cent between 1989 and 1990, but fell by 17 per cent in 1991. In January, 1992 average prices were 11 per cent lower than in the first quarter of 1991. Non-fuel primary commodities remained weak as is indicated by their price index which has continued to fall since 1988. Prices of tropical beverages including coffee, tea and cocoa continued to fall. Table 1.2 gives indices for selected world commodity prices.

1.15. In his address to UNCTAD VIII in Columbia in February, 1992, the managing director of the IMF observed that the current more open and integrated world economy carries the prospects of higher growth and prosperity. However, he also mentioned two types of risks viz: *instability* and *marginalisation.*

instability: The freedom of capital movements has increased the scope for large and sudden shifts of funds that could pose a threat to the stability of foreign exchange and financial markets. Again the interdependence of countries may increase the scope for the transmission of economic imbalances across borders.

marginalisation: There are widespread worries stemming from the difficulties that have been encountered in completing the Uruguay Round.

SELECTED WORLD COMMODITY PRICE INDICES, 1987-1991

(1985=100)

Table 1.2

Year	"Other milds" Coffee*	Tea**	Sisal***	Sugar*	Petroleum++	All+++ Commodities	Industrial Countries	Developing Countries
1987	77.1	86.1	97.6	133.0	65.9	104.4	106.5	102.8
1988	92.8	90.2	104.9	147.7	52.5	129.0	135.7	121.1
1989	73.5	101.4	124.5	141.1	63.7	128.4	136.6	118.4
1990	61.2	102.4	135.8	164.1	81.7	118.2	125.2	109.8
1991	58.4	92.9	136.3*+	170.9	67.8	112.7	118.3	105.9

Source: IMF. International Financial Statistics, (March, 1992)

* Other milds (New York).

** Average Auction (London).

*** East African (Europe)

\+ E.E.C. Import Price.

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

+++ World (non-fuel commodities).

*+ First Quarter, 1991.

If the GATT negotiations fail, world trading arrangements may deteriorate for some developing countries as a result of increased protectionism in industrial countries. Furthermore, with the European Community (EC) taking increased interest in the emerging economies of eastern Europe, and the new Commonwealth of Independent States (CIS) of the former USSR, Africa stands the risk of marginalisation in the receipt of investable resources. However, official development assistance is far from sufficient, and further progress can be made only if African countries make themselves more attractive to foreign investors.

1.16. The situation in Europe continues to determine the medium-term outlook. The pick-up in activity in the USA and UK in first quarter 1992 appears not yet firmly established and may not be so until the end of the first half of 1992. In the OECD area, growth should be around 3 per cent. However, restructuring in the new commonwealth of states of the former USSR and in Eastern Europe will affect both output and employment. The internal strife in some Eastern European countries will continue to engage the energies of the EC. The Uruguay Round is yet to be successfully concluded. Commodity prices have not improved in 1992, although world oil prices have stabilized. Under these circumstances, the outlook for African countries remain cloudy: food shortages have occurred again in eastern and southern region; despite assurances from donor counties aid flow into Africa has been curtailed; there is now more direct private investment among the industrial countries; and the interest in Eastern and Central Europe is tending to marginalise Africa. Under these circumstances very little growth in output and exports can be expected in African countries in 1992.

CHAPTER 2 - DOMESTIC ECONOMY

Overview

Provisional figures from the national accounts show that the growth rate of real gross domestic product (GDP) declined for the third consecutive year. The real GDP expanded by about 2.2 per cent in 1991, the lowest rate of growth since 1984, when the country was hit by a severe drought. This slowdown in GDP growth in 1991 was due to an actual decline in real output and value added in agriculture coupled with slugish growth in aggregate private domestic demand and foreign exchange shortages leading, import to reduced imports of intermediate goods. Agriculture recorded a negative growth rate of 1.1 per cent while manufacturing registered a weak growth rate of 3.8 per cent in 1991. Gross fixed investment declined by 2.9 per cent. Inflation, measured by the revised consumer price index, rose by over 19.6 per cent, which was 3.9 percentage points higher than that recorded in 1990.

Inflation

2.2. The average year-on-year rate of inflation, measured by the revised Consumer Price Index, continued on an upward trend. The inflation rate rose from 12.3 per cent in 1987 to 15.8 per cent in 1990; and jumped further to 19.6 per cent in 1991. This acceleration of the rate of inflation was basically a consequences of import price increases, depreciation of the Shilling against major currencies, increases in the domestic prices of petroleum products, increase in average wage earnings and reduced agricultural production.

2.3. The real per capita income grew by 1.2 per cent in 1987 and by 1.5 per cent in 1988 and 1989. However, the annual rate of growth of per capita income has declined significantly since then, reaching 0.8 per cent in 1990 and negative 0.3 per cent in 1991. The population growth rate, 3.5 per cent in 1991 was greater than the real GDP growth rate of 2.2.

Producers of Government Services

2.4. The Government's efforts to reduce budget deficit as a part of its overall policy met with some success as evidenced by reduced public expenditure in 1991. Except for education, expenditures on current economic activity and fixed investment recorded notable decreases. By concentrating its financial and managerial resources on a reduced number of high priority projects, in line with the programme of budget rationalisation, the public sector reduced its real development expenditure from K£ 386 million in 1990 to K£ 363 million in 1991, a 6 per cent decline. Growth in personnel emoluments continued for the third successive year. In nominal terms, the increase in personnel emoluments fell from 16.3 per cent in 1988 to 13.2 per cent in 1990, and further to 12.9 per cent in 1991. These levels of expenditure were mainly financed through improved collection of income tax and

the taxes on goods and services (VAT), which in 1991 rose by 11 per cent and 25 per cent, respectively.

2.5. In fiscal 1991/92, overall Government expenditure is expected to grow by a moderate 8 per cent, while revenue will increase by about 20 per cent. As a result of these developments the deficit is expected to decline from K£ 676 million in 1990/91 to K£ 326 million in 1991/92. The 1991/92 deficit will be financed mainly through domestic sources.

External Trade

2.6. The pronounced decline in the imports of plant, machinery and transport equipment, combined with strong export performance by tea, meat and animal feed, contributed to the improvement in the overall balance of foreign trade. Rapid expansion of exports by 31 per cent accompanied by a sluggish growth in imports of about 4 per cent reduced the trade deficit to K£1,016 million - an improvement of nearly 22 per cent.

2.7. These developments have been assisted in part by the depreciation of the Shilling which has discouraged imports and promoted exports. Increased regional cooperation helped increase trade between Preferential Trade Area (PTA) countries and other African countries and greatly contributed to the improvement in the balance of trade. The rate of growth of exports to other African countries rose from 19 per cent in 1990 to over 41 per cent in 1991. This scenario contrasts a decline of nearly 7 per cent in 1989. Imports from African countries, which accounted for about 3 per cent of total imports in 1991, remained modest with growth rates of some 3 per cent and 4 per cent in 1989 and 1990, respectively. In 1991 intra-regional trade accounted for 23 per cent and 3 per cent of Kenya's total exports and imports, respectively.

2.8. As a result of the world recession, particularly the in the United Kingdom exports to European Economic Community (EEC) declined by about 3 per cent. This sharply contrasted with increases of 20 per cent in 1989 and 13 per cent in 1990. Despite favourable export prices, the quantity of exported coffee fell by about 26 per cent, because both current output and stocks were low.

Sectoral Contributions

2.9. The performance of by sector value added in current and constant 1982 prices is detailed in Table 2.1, while annual growth rates and percentage shares are presented in Tables 2.2 and 2.4, respectively.

2.10. *Agriculture:* Agriculture accounting for about 27.3 per cent of the total GDP, is the largest sector of the economy. Its growth is hence a key indicator of the country's aggregate economic performance. Recent performance of the sector has been disappointing. The growth rate in its real value added fell from 4.4 per cent in 1988 to 3.4 per cent in 1990. Its rate of growth in 1991 was a negative 1.1 per cent. The unsatisfactory performance of the sector inspite of substantial increases in producer prices, was characterised by late, inadequate and unevenly distributed

GROSS DOMESTIC PRODUCT. 1987 - 1991

Table 2.1 K£million

	Current Prices					Constant (1982) Prices				
	1987	1988	1989	1990	1991*	1987	1988	1989	1990	1991*
A. NON-MONETARY ECONOMY										
Forestry	43.68	52.60	59.27	62.83	68.04	28.62	29.53	30.46	31.37	32.19
Fishing	1.85	2.11	2.85	3.01	3.28	1.50	1.53	1.54	1.49	1.36
Building and Construction	77.07	90 98	88.87	90.78	99.06	67.65	68.24	71.50	72.93	74.39
Water Collection	35.78	40.73	44.4	46.13	49.04	21.72	22.56	23.44	24.14	24.87
Ownership of Dwellings	139.00	162.29	199.00	218.93	245.42	89.33	92.89	9641	99.71	101.70
TOTAL NON-MONETARY ECONOMY	297.38	348.71	394.46	421.68	464.84	208.82	214.75	223.35	229.64	234.51
MONETARY ECONOMY										
1. Enterprises and Non-Profit Institutions										
Agriculture**	1,669.26	1,902.69	2,088.39	2,235.46	2,366.34	1,062.57	1,109.25	1,152.51	1,192.16	1,179.04
Forestry	49.57	61.60	93.42	107.43	131.07	33.64	36.47	40.62	42.65	46.23
Fishing	17.50	20.09	27.39	32.59	37.48	10.93	12.27	12.83	13.39	13.10
Mining and Quarrying	13.27	15.69	18.62	22.96	28.03	9.12	10.15	10.62	11.25	11.97
Manufacturing	652.47	752.96	855.36	987.40	1,167.40	474.34	502.80	532.47	560.34	581.63
Building and Construction	210.81	284.13	386.93	539.38	749.20	116.68	121.68	128.25	135.10	138.21
Electricity and Water	55.24	57.63	64.03	79.40	100.20	33.61	36.47	39.53	43.69	45.97
Trade. Restaurants and Hotels	628.25	712.03	829.07	947.63	1,133.37	412.53	436.27	455.47	465.95	472.05
Transport. Storage& Communications	393.35	433.74	517.95	598.17	681.91	224.90	234.02	241.06	249.74	255.98
Finance. Insurance.										
Real Estate and Business Services	418.65	501.83	594.82	686.69	806.86	274.52	291.27	313.11	333.15	353.47
Ownership of Dwellings**	303.58	355.62	393.87	480.52	545.97	205.63	212.20	220.63	229.35	235.31
Other Services**	181.66	197.92	228.00	251.48	292.22	111.74	119.72	127.86	135.93	141.11
Less: Imputed Bank Service Charges	-172.98	-245.95	-281.62	-262.50	296.19	-113.43	-121.81	129.12	-134.03	-138.59
TOTAL	4,420.63	5,049.98	5,816.23	6,706.61	7,743.86	2,856.78	3,000.76	3,145.84	3,278.6	3,335.48
2. PRIVATE HOUSEHOLDS (DOMESTIC SERVICES)	71.78	83.94	97.49	113.56	132.40	48.71	55.30	62.36	70.52	78.28
3.Producers of Government Services										
Public Administration	168.50	211.39	270.18	317.07	363.98					
Defence	25.49	27.54	32.48	42.03	40.59					
Education	411.66	479.59	528.19	590.31	681.13					
Health	87.20	96.93	114.35	134.79	154.44					
Agricultural Services	49.12	53.55	54.50	59.34	55.27					
Other Services	116.47	128.99	143.46	154.97	163.34					
TOTAL	858.44	997.99	1.143.16	1,298.51	1,458.75	554.13	586.16	618.40	645.72	669.10
TOTAL MONETARY ECONOMY	5,350.85	6,131.91	7,056.88	8,118.68	9,335.01	3,459.62	3,642.22	3,826.60	3,994.91	4,082.86
TOTAL NON-MONETARY AND MONETARY ECONOMY	5,648.23	6,480.62	7,451.34	8,540.36	9,799.85	3,668.44	3,856.97	4,049.95	4,224.55	4,317.37
GR GROSS DOMESTIC PRODUCT PER CAPITA K£	261.23	289.45	321.55	356.09	394.78	169.67	172.27	174.77	176.14	173.92

GROWTH OF GROSS DOMESTIC PRODUCT, 1987 - 1991

Table 2.2

Percentages

	Current Prices						Constant (1982) Prices					
	1986-87	1987-88	1988-89	1989-90	1990-91*	1987-91**	1986-87	1987-88	1987-88	1989-90	1990-91*	1987-91**
A NON-MONETARY ECONOMY												
Forestry	17.2	20.4	12.7	6.0	8.3	11.8	3.2	3.2	3.1	3.0	2.6	2.9
Fishing	2.8	14.1	35.1	5.6	8.9	15.3	3.4	2.0	0.7	-3.0	-9.0	0.3
Building and Construction	7.4	18.0	-2.3	2.1	9.1	6.6	3.6	0.9	4.8	2.0	2.0	2.4
Water Collection	13.3	13.8	9.2	3.7	6.3	8.2	2.8	3.9	3.9	3.0	3.0	3.6
Ownership of Dwellings	14.5	16.8	22.6	10.0	12.1	15.3	3.8	4.0	3.8	3.4	2.0	3.3
TOTAL NON-MONETARY ECONOMY	12.7	17.3	13.1	6.9	10.2	11.8	3.5	2.8	4.0	2.8	2.1	2.9
B MONETARY ECONOMY												
1 .Enterprises and Non-Profit Institutions												
Agriculture**	4.5	14.0	9.8	7.0	5.9	9.2	3.8	4.4	3.9	3.4	-1.1	2.6
Forestry	30.8	24.3	51.7	15.0	22.0	27.5	14.5	8.4	11.4	5.0	8.4	8.2
Fishing	16.0	14.8	36.3	19.0	15.0	21.0	14.0	12.3	4.6	4.4	-2.2	4.7
Mining and Quarrying	15.9	18.2	18.7	23.3	22.1	20.5	8.6	11.3	4.6	5.9	6.4	7.0
Manufacturing	7.3	15.4	13.6	15.4	18.2	15.7	5.7	6.0	5.9	5.2	3.8	5.3
Building and Construction	20.4	34.8	36.2	39.4	38.9	37.2	4.1	4.3	5.4	5.3	2.3	4.2
Electricity and Water	5.9	4.3	11.1	24.0	26.2	13.2	7.7	8.5	8.4	10.5	5.2	8.4
Trade. Restaurants and Hotels	12.0	13.3	16.4	14.3	19.6	15.8	5.8	5.8	4.4	2.3	1.3	3.3
Transport. Storage and Communications	15.3	10.3	19.4	15.5	14.0	14.7	4.4	4.1	3.0	3.6	2.5	3.3
Finance. Insurance. Real Estate and Business Services	14.6	19.9	18.5	15.4	17.5	16.8	5.2	6.1	7.5	6.4	6.1	6.8
Ownership of Dwellings	15.4	17.1	10.8	22.0	13.6	15.7	4.6	3.2	4.0	4.0	2.6	3.3
Other Services***	18.2	9.0	15.2	10.3	16.2	12.6	7.4	7.1	6.8	6.3	3.8	6.0
Total (Excluding imputed bank service charges)	9.6	14.2	15.2	15.3	15.5	14.9	4.9	5.0	4.8	4.2	1.7	4.2
2.Private Households (Domestic Services)	14.0	16.9	16.1	16.5	16.6	16.5	10.7	13.5	12.8	13.1	11.0	12.6
3.Producers of Government Services												
Public Administration	17.2	25.5	27.8	17.4	14.8	21.2						
Defence	40.3	8.0	17.9	29.4	-3.4	12.3						
Education	10.3	16.5	10.1	11.8	15.4	13.3						
Health	12.5	11.2	18.0	17.9	14.6	15.3						
Agricultural Services	13.7	9.0	1.8	8.9	-6.9	3.1						
Other Services	15.9	10.7	11.2	8.0	5.4	8.8						
TOTAL	13.5	16.3	14.5	13.6	12.3	14.2	4.8	5.8	5.5	4.4	3.6	4.9
TOTAL MONETARY ECONOMY	10.3	14.6	15.1	15.0	15.0	14.9	4.9	5.3	5.1	4.4	2.2	4.4
TOTAL NON-MONETARY AND MONETARY ECON	10.4	14.7	15.0	14.6	14.7	13.3	4.9	5.1	5.0	4.3	2.2	4.4
GROSS DOMESTIC PRODUCT PER CAPITA	6.6	10.8	11.1	10.7	10.9	10.9	1.2	1.5	1.5	0.8	-1.3	1.0

* Provisional

*Cummulative

rains. In addition, decreases in output of some major agricultural products were a consequence of delayed payments by marketing boards. The delay in payments resulted in farmer's inability to purchase essential farm inputs.

2.11. The overall picture is reflected by substantial declines in the output of most agricultural products. Aggregate cereal output, which had fallen by 18 per cent in 1990, declined further by 14 per cent in 1991. Overall maize production is estimated to have fallen from 29.2 million bags in the 1989/90 agricultural year to 25.4 million bags in 1990/91 and further to 22.1 million bags in 1991/92. Coffee deliveries to the marketing authority decreased by over 22 per cent from 112 thousand tonnes in 1990 to 87 thousand tonnes in 1991. Other major agricultural produce which recorded decreases in total sales and production in 1991 included sugar and milk output which dropped by 2 per cent and 8 per cent, respectively. The volume of exports of fresh horticultural produce declined by 10 per cent to 169,000 tonnes.

2.12. Inspite of a sharp rise of 28 per cent in domestic prices offered to coffee farmers, coffee production contracted by 17 per cent in 1991. This adverse performance was occasioned by erratic rainfall and delays in payments to farmers leading to reduced use of fertilizer.

2.13. Among the good performers in agricultural sector during 1991 were livestock and tea. The prolonged dry weather in the last two years, compelled farmers to dispose of a significant proportion of their livestock. Total cattle slaughters in the country rose by over 10 per cent and 17 per cent in 1990 and 1991, respectively. Over the same respective period, the combined slaughter of sheep and goats increased by 21 per cent and 12 per cent, respectively. The improvement in livestock slaughter may also be attributed to the favourable prices and prompt cash payments offered to farmers by private slaughter houses.

2.14. The continued increase in the volume of tea output over the preceding two years may be attributable to several factors. International tea prices remained strong moving up by around 15 per cent and 13 per cent in 1990 and 1991, respectively. Additional tea output came on stream from Nyayo Tea Zones. Improved tea husbandry and application of new high yielding clones helped to increase production. As a result, output of tea grew by 9.1 per cent and 3.3 per cent in 1990 and 1991, respectively. The slower growth in 1991 is mainly attributable to the inadequate rainfall in the tea growing zones.

2.15. Sugar production fell from 434 thousand tonnes in 1990 to 426 thousand tonnes in 1991. Besides poor weather, the farmer's may have been discouraged by delayed payments leading to inadequate financial resources to purchase needed inputs. Over the same period, sugar imports declined sharply by over 40 per cent. Consequently, aggregate sugar available for consumption decreased by 13 per cent from 538 thousand tonnes in 1990 to 467 thousand 1991, the lowest level in three years resulting in the sugar shortage that was experienced in the second half of 1991.

2.16. *Manufacturing:* Manufacturing real value added rose by some 3.8 per cent in 1991 compared with a growth rate of 5.9 per cent and 5.2 per cent observed in

1989 and 1990, respectively. This is a reflection of weak domestic demand, the reduced supply of agricultural raw materials and declining imports of machinery and intermediate inputs.

2.17. Judging by the quantum index of industrial production, the main sources of the slump in growth of manufacturing output in 1991 were declines in outputs of textiles, leather and footwear, clothing, milk, beverages and tobacco. Other significant declines in output were observed in the manufacturing of furniture, electrical machinery and transport equipment. In real terms, overall investment in manufacturing sector decreased by 15 per cent. Output of transport equipment declined by about 2 per cent. Low production of transport equipment is also reflected in the stagnant growth in loanable funds allocated to the transport sector and delays in import approvals of knocked-down kits for the local vehicle assembly plants. As shown in Table 5.9 commercial banks loans to this sector declined by 1.5 per cent.

2.19. *Forestry:* The forestry sector experienced a remarkable real growth rate of 8.4 per cent in 1991, compared with the 5.0 per cent recorded in the previous year. This growth was principally a consequence of increased afforestation activity in the public sector. The public sector expenditure on forestry development rose from K£0.4 million during the fiscal year 1990/91 to K£8.1 million in the 1991/92 fiscal year. Over half of the expenditure went towards establishment of the Indigenous Forest Conservation Project. The balance of the expenditure was in programmes such as rural afforestation, Cyprus aphids control and forest extension schemes.

2.20. *Fishing:* The real growth rate of the fishing sector declined to its lowest level since 1984. The sector experienced a negative growth of 2.2 per cent in 1991, compared to the positive growth of 4.4 per cent observed in 1990. Factors which contributed to the slow-down in the output of fish over the past few years include the drying up of Lake Turkana due to damming of River Omo in a neighbouring country, over-fishing in the past, inefficient marketing and inadequate rains.

2.21. *Mining and Quarrying:* There was a significant improvement in the value added for the mining and quarrying sector. Its GDP, at constant prices grew by 6.4 per cent in 1991. This compares more favourably with moderate growth rates of 4.6 per cent and 5.9 per cent witnessed during 1989 and 1990, respectively. This welcome performance may be accounted for by the improved exports of gemstones. The value of total mineral production rose by some 15 per cent in 1991, owing to favourable international prices combined with the continuing depreciation of the Shilling.

2.21. *Building and Construction:* The growth rate of real value added in the building and construction sector fell sharply from 5.3 per cent in 1990 to 2.3 per cent in 1991. Cement consumption, a leading indicator for the construction activity registered a negative growth rate of 5.2 per cent in 1991 over 1990. This fall may be attributable to the slowdown in the output of rental dwellings and owner occupied houses, which account for nearly 30 per cent of the sector's gross fixed investment. At constant prices, output of residential buildings displayed negative

growth rates of 12 per cent and 10.7 per cent in 1990 and 1991, respectively. High interest rates charged on mortgage loans and prices of construction materials were the contributory factors to the poor performance. Output of non-residential buildings also displays a downward trend in the past three years, mainly due to the sluggish growth of the overall economy.

2.22. *Transport Storage and Communications:* The low performance of the economy had adverse effects on the transport, storage and communications sector. In 1991, the sector's value added grew by 2.5 per cent, down from the growth of 3.6 per cent experienced the year before. The 1991 downturn is reflected in the 5.8 per cent fall in the registration of new vehicles, a 5.2 per cent decline in total freight handled at Kilindini harbour and a slump of 7.2 per cent in throughput of petroleum products.

2.23. *Distribution:* The distribution sector (i.e. trade, restaurants and hotels) also exhibited slower growth for the third successive year. The sector's GDP growth rate fell from 4.4 per cent in 1989 to 2.3 per cent and 1.3 per cent in 1990 and 1991, respectively. Depressed aggregate demand was responsible for this slowdown.

Production Accounts

2.24. The principal aggregates for production accounts for each sector for the years 1990 and 1991 are presented in Table 2.3. Gross output is valued at approximately basic prices which exclude indirect taxes and subsidies. Gross output at nominal prices grew by over 16 per cent in 1991. The ratio of GDP to gross output declined by one percentage point from 44 per cent in 1990 to 43 per cent in 1991. This overall ratio masks wide sectoral variations, the lowest being 11.3 per cent registered in manufacturing and the highest being 97.5 per cent in fishing. Overall wage labour cost as a ratio of GDP was 41 per cent in 1991, while that in 1990 was 43 per cent. The lowest ratio of labour cost to GDP was in agriculture, basically because the sector engages a large number of unpaid family workers.

2.25. As presented in Table 2.4, the downward trend in the share of agriculture to GDP, which began in 1982, continued in 1991. In real terms, agriculture's share of GDP declined from 29.0 per cent in 1987 to 27.3 per cent in 1991. In contrast, the ratio of manufacturing value added to GDP has gradually risen from about 12.9 per cent in 1987 to 13.5 per cent in 1991. The financial sector has also shown a gradual upward trend with its ratio increasing from 7.5 per cent in 1987 to 8.2 per cent in 1991, respectively. These developments partly reflect the changes brought about by the on-going trade liberalisation and structural adjustment policies.

Terms of Trade Effects

2.26. Table 2.5 presents the adjusted GDP estimates which show the impact of foreign trade on per capita GDP. The economy experienced high export prices of coffee, tea, petroleum and mineral products. These favourable export prices signalled an upturn of the country's terms of trade. The index of terms of trade increased from 71 in 1990 to 82 in 1991. The marked improvement in the terms of

PRODUCTION ACCOUNTS, 1990 AND 1991

Table 2.3 K£million

	1990					1991*				
			Gross Domestic Product (at Factor Cost)					Gross Domestic Product (at Factor Cost)		
	Gross Output at approx. Basic Prices***	Inter-mediate Con-sumption	Total	Labour Costs	Operating Surplus**	Gross Output it approx Basic Prices***	Inter-mediate Con-sumption	Total	Labour Costs	Operating Surplus**
A. NON-MONETARY ECONOMY	536.13	109.39	421.68	1.06	420.62	557.82	92.98	464.84	1.14	463.70
B. MONETARY ECONOMY										
1 .Enterprises and Non-Profit Institutions										
Agriculture	2,519.32	283.86	2,235.46	174.88	2,060.58	2,646.46	280.12	2,366.34	210.37	2,155.97
Forestry	117.79	10.36	107.43	53.88	53.55	143.09	12.02	131.07	65.73	65.34
Fishing	33.79	1.20	32.59	8.49	24.10	38.45	0.97	37.48	11.46	26.02
Mining and Quarrying	76.41	53.45	22.96	11.55	11.41	89.50	61.47	28.03	14.55	13.48
Manufacturing	8,449.88	7,462.48	987.40	420.52	566.88	10,346.25	9,178.85	1,167.40	424.73	742.67
Building and Construction	927.43	388.05	539.38	413.93	125.45	1,203.22	454.02	749.20	418.07	331.13
Electricity and Water	193.82	114.42	79.40	61.03	18.37	244.37	144.17	100.20	74.46	25.74
Trade, Restaurants and Hotels	1,307.50	359.87	947.63	384.37	563.26	1,558.02	424.65	1,133.37	438.18	695.19
Transport. Storage and Communications	1,292.98	694.81	598.17	264.95	333.22	1.473.99	792.08	681.91	288.80	393.11
Finance. Insurance, Real Estate and Business Services	874.82	188.13	686.69	260.30	426.39	1,023.21	216.35	806.86	286.33	520.53
Ownership of Dwellings	529.82	49.30	480.52	0.00	480.52	606.61	60.64	545.97	0.00	545.97
Other Services	485.01	233.53	251.48	189.29	62.19	551.44	259.22	292.22	208.22	84.00
Less: Imputed Bank Service Charges	0.00	262.50	-262.50	0.00	-262.50	-296.19	0.00	-296 19	0.00	-296.19
	16,808.57	10,101.96	6,706.61	2,243.19	4,463.42	19,628.42	11,884.56	7,743.86	2,440.90	5,302.96
2.Private Households (Domestic Services)	113.56	0.00	113.56	113.56	0.00	132.40	0.00	132.40	132.40	0.00
3.Producers of Government Services	1,930.32	631.81	1,298.51	1,286.44	12.07	2,211.46	752.71	1,458.75	1,452.99	5.76
TOTAL MONETARY ECONOMY	18,852.45	10,733.77	8,118.68	3,643.19	4,475.49	21,972.28	12,637.27	9,335.01	4,026.29	5,308.72
TOTAL MONETARY AND NON-MONETARY ECONOMY	19,388.58	10,843.16	8,540.36	3,644.25	4,896.11	22,530.10	12,730.25	9,799.85	4,027.43	5,772.42

* 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, 1987 - 1991

Table 2.4 Percentage

	1987	1988	1989	1990	1991*
A. NON-MONETARY ECONOMY					
Forestry	0.8	0.8	0.8	0.7	0.7
Fishing	0.0	0.0	0.0	0.0	0.0
Building and Construction	1.8	1.8	1.8	1.7	1.7
Water Collection	0.6	0.6	0.6	0.6	0.6
Ownership of Dwellings	2.4	2.4	2.4	2.4	2.4
TOTAL NON-MONETARY ECONOMY	5.7	5.6	5.6	5.4	5.4
B. MONETARY ECONOMY					
1. Enterprises and Non-Profit Institutions					
Agriculture	29.0	28.8	28.5	28.2	27.3
Forestry	0.9	0.9	1.0	1.0	1.1
Fishing	0.3	0.3	0.3	0.3	0.3
Mining and Quarrying	0.2	0.3	0.3	0.3	0.3
Manufacturing	12.9	13.0	13.1	13.3	13.5
Building and Construction	3.2	3.2	3.2	3.2	3.2
Electricity and Water	0.9	0.9	1.0	1.0	1.1
Trade, Restaurants and Hotels	11.2	11.3	11.2	11.0	10.9
Transport, Storage and Communications	6.1	6.1	6.0	5.9	5.9
Finance, Insurance, Real Estate and Business Services	7.5	7.6	7.7	7.9	8.2
Ownership of Dwellings	5.6	5.5	5.4	5.4	5.5
Other Services	3.0	3.1	3.2	3.2	3.3
Less: Imputed Bank Service Charges	-3.1	-3.2	-3.2	-3.2	-3.2
TOTAL	77.9	77.8	77.7	77.6	77.3
2. Private Households (Domestic Services).	1.3	1.4	1.5	1.7	1.8
3. Producers of Government Services					
Public Administration					
Defence					
Education					
Health					
Agricultural Services					
Other Services					
TOTAL	15.1	15.2	15.3	15.3	15.5
TOTAL MONETARY ECONOMY	94.3	94.4	94.5	94.6	94.6
TOTAL MONETARY & NON-MONETARY ECONOMY	100.0	100.0	100.0	100.0	100.0

* Provisional

trade had the effect of turning the growth rate of the real GDP per capita, adjusted for terms of trade changes, from negative 3.8 per cent in 1990 to positive 4.9 per cent in 1991 a rise of 9 percentage points.

2.27. Two input factors contributed to the deterioration of the adjusted terms of trade observed during 1989 and 1990. First, weak coffee prices which followed the collapse of the quotas under the International Coffee Agreement in 1989. Second, high world oil price rise resulting from the Gulf crisis. Prices of these. two commodities have pronounced effects on Kenya's terms of trade.

IMPACT OF COMMODITY TERMS OF TRADE ON PER CAPITA GDP, 1987-1991

Table 2.5

		1987	1988	1989	1990	1991*
1	Unadjusted GDP at constant Factor Cost (K£mn.)	3,668.44	3,856.97	4,049.95	4,224.55	4,317.37
2	Adjustment for changes in terms of trade (K£mn.)	-201.16	-161.78	-332.86	-523.61	-306.52
3	Adjusted GDP (K£mn.)	3,467.28	3,695.19	3,717.09	3,700.94	4,010.85
4	Growth in unadjusted per capita GDP	1.20	1.50	1.50	0.80	-1.30
5	Growth in adjusted per capita GDP	-5.38	2.91	-2.79	-3.80	4.87

*Provisional.

Resource Allocation

2.28. Table 2.6 presents aggregate resources available for consumption and domestic investment in Kenya. GDP at market prices, which had risen by 17.2 per cent in 1990, rose by 14.3 per cent in 1991. Following a growth rate of 13.9 per cent in 1990, private consumption increased by 13.4 per cent in 1991. Stock accumulation decreased for a second consecutive year. A principal factor for the weak investment and consumption activity in the country in 1991 seems to be a shift towards financial accumulation. However, the high interest rates and the rapid rise in inflation rate experienced of late appear to indicate that households may be accumulating their net financial gains instead of raising consumption and investment in residential dwellings.

TOTAL USE OF RESOURCES AT CURRENT PRICES, 1987 - 1991

Table 2.6 K£million

		1987	1988	1989	1990	1991*
	G.D.P. at Factor Cost	5,648.23	6,480.62	7,451.34	8,540.36	9,799.85
	Of which:					
	Non-Monetary	297.38	348.71	394.46	421.68	464.84
	Monetary	5,350.85	6,131.91	7,056.88	8,118.69	9,335.01
	Indirect Taxes	910.90	1,079.09	1,191.62	1,399.04	1,562.40
	Subsidies	0.67	0.10	0.05	0.10	0.14
	G.D.P. at Market Prices	6,558.46	7,559.61	8,642.91	9,939.30	11,362.11
+	Import of goods and services**	1,734.12	2,054.30	2,612.37	3,069.55	3,189.05
-	Export of goods and services	1,399.59	1,664.85	1,977.68	2,553.25	3,021.78
=	Import Surplus	334.53	389.45	634.69	516.30	167.27
+	Total Resources available for Domestic					
-	Investment and Consumption	6,892.99	7,949.06	9,277.60	10,455.60	11,529.38
=	Gross Fixed Capital Formation	1,286.74	1,515.97	1,657.82	2,031.34	2,137.98
	Change in Stocks	305.81	370.87	460.43	345.32	217.55
	Gross Investment	1,592.55	1,886.84	2,118.25	2,376.66	2,355.53
	Public Consumption	1,217.70	1,364.64	1,580.46	1,725.86	1,970.35
	Private Consumption	4,082.74	4,697.58	5,578.89	6,354.16	7,203.50
	TOTAL CONSUMPTION	5,300.44	6,062.22	7,159.35	8,078.94	9,173.85

* 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.

2.29. The annual growth rate of nominal disposable income (i.e. GDP at market prices plus import surplus) fell to 10 per cent in 1991 from about 13 per cent in the previous year. This decrease was primarily a consequence of the sluggish aggregate economic activity which resulted in low growth in output and weak growth in revenue from net indirect taxes. Public consumption registered an increase of 14.2 per cent in 1991. This increase may be accounted for by the increases in expenditure on security measures and in civil servants' salaries.

2.30. Table 2.7 details aggregate capital formation and the sources of funds used to financing it. As a proportion of GDP at market prices, the gross investment level declined from 20.4 per cent in 1990 to 18.8 per cent in 1991, while the ratio of domestic savings to the GDP remained stagnant at 15 per cent in 1990 and 1991. Over the past five years, public sector savings have been constrained by the continuing increase in public debt servicing and large increases in wage expenditure occasioned by the implementation of the Mbithi Salary Review Commission Recommendations. Private sector savings may have been discouraged by rising inflation.

FINANCING OF CAPITAL FORMATION, 1987 - 1991

Table 2.7 K£million

	1987	1988	1989	1990	1991*
GROSS CAPITAL FORMATION:					
Gross Fixed Capital Formation	1,286.74	1,515.97	1,657.82	2,031.34	2,137.98
Changes in Stocks	305.81	370.87	460.43	345.32	217.55
TOTAL	1,592.55	1,886.84	2,118.25	2,376.66	2,355.53
FINANCING:					
Grants from Abroad	126.99	205.27	266.57	296.10	330.12
Net borrowing from Abroad	409.47	408.05	596.00	572.53	317.64
Domestic Saving	1,056.09	1,273.52	1,255.68	1,508.03	1,707.77
TOTAL	1,592.55	1,886.84	2,118.25	2,376.66	2,355.53

*Provisional.

Factor Incomes and National Product

2.31. Estimates of the gross national product (GNP) are given in Table 2.8. The GNP has remained lower than the GDP at market prices due to significant increases in net outflow of factor incomes paid abroad, which are basically interest payments and divided remittances to foreign investors. Incomes from the rest of the world increased from K£ 5.5 million in 1990 to K£ 8.2 million in 1991. However, the latter is still lower than the K£ 30.8 million witnessed in 1987. Relaxation of foreign exchange restrictions in the recent past allowed increased outflow of factor payments to non-resident investors. Consequently, growth rate of this component of the GNP has risen from K£ 279 million in 1987 to K£ 598 million in 1991. This targe increase is also attributable to the depreciation of the Shilling over the same period.

GROSS NATIONAL PRODUCT AT CURRENT PRICES 1987 - 1991

Table 2.8 K£million

	1987	1988	1989	1990	1991*
FACTOR INCOMES					
A. Non-Monetary Economy	297.38	348.71	394.46	421.68	464.84
B. 1. Remuneration of Employees					
Enterprises	1,471.03	1,689.38	1,963.35	2,243.19	2,440.90
Private Households	71.78	83.94	97.49	113.56	132.40
Producers of Government Services	854.39	992.79	1,136.56	1,286.44	1,452.99
TOTAL	2,397.20	2,766.11	3,197.4	3,643.19	4,026.29
2. Rental Surplus (including depreciation)	303.58	393.87	480.52	480.52	545.97
3. Other Operating Surplus (including depreciation)	2,650.07	2,971.93	3,378.96	3,994.98	4,762.75
TOTAL MONETARY ECONOMY	5,350.85	6,131.91	7.056.88	8,118.69	9,335.01
TOTAL FACTOR INCOMES GROSS DOMESTIC PRODUCT (AT FACTOR COST)	5,648.23	6,480.62	7,451.34	8,540.37	9,799.85
Add Indirect Taxes	910.90	1,079.09	1,191.62	1,399.04	1,562.40
Deduct Subsidies	0.67	0.10	0.05	0.10	0.14
GROSS DOMESTIC PRODUCT AT MARKET PRICES	6,558.46	7,559.61	8,642.91	9939.31	11,362.11
Add: Factor Incomes Received From Abroad	30.75	17.85	12.32	5.54	8.18
Deduct Factor Incomes Paid Abroad	279.39	324.30	404.07	461.53	597.87
GROSS NATIONAL PRODUCT	6,309.82	7,253.16	8,251.16	9,483.32	10,772.42

*Provisional

Trends in Capital Formation

2.32. As shown in Table 2.9, real gross fixed investment fell from K£ 787 million (in 1982 prices) in 1990 to K£ 764 million in 1991, a decline of nearly 3 per cent. The fall in overall gross fixed investment is largely a result of the marked decline in the Government expenditure on development projects. Public sector investment edged downwards by over 6 per cent in 1991. Implementation of the fiscal austerity programme has entailed large cuts in the Government expenditure on fixed investment. The fall in public investment was particularly sharp in the construction of residential buildings. In 1991, output of public residential buildings declined by 26.6 per cent.

2.33. The period 1990-1991 declined in the private sector's real investment in dwellings. Residential construction fell by about 19 per cent and 2 per cent in 1990 and 1991, respectively. The most affected was private non-residential construction (construction of factories and office buildings), which declined by over 57 per cent in 1990, but improved by a moderate 4 per cent in 1991. Two factors may account for this unfavourable trend. First, consumers have maintained a cautious stance towards the purchase of new dwellings due to the current high costs of servicing mortgage loans. Second, the growth rate of real earnings of the private sector slowed down appreciably in the last two years.

GROSS FIXED CAPITAL FORMATION BY TYPE OF ASSET. 1987 -1991

Table 2.9. K£million

	CURRENT PRICES					CONSTANT (1982) PRICES				
	1987	1988	1989	1990	1991*	1987	1988	1989	1990	1991*
DWELLINGS:										
PRIVATE:										
Non-Monetary	89.51	97.62	109.49	117.85	115.34	55.46	53 37	53.93	49.94	45.05
Monetary	68.10	69.98	73.48	53 48	67.01	42.20	27.99	36.19	22.66	26.18
TOTAL	157.61	167.60	182 97	171.33	182.35	97.66	81.36	90.12	72.60	71.23
PUBLIC	33.35	44.50	48 95	94.93	75.55	20 66	17.80	24.11	40.22	29 51
TOTAL	190.96	212.10	231.92	266.26	257.90	118.32	99.16	114.23	112.82	100.74
NON-RESIDENTIAL BUILDINGS:										
PRIVATE	62.42	84.93	110.41	56 77	64.21	38.75	47.34	55.95	23.85	24.89
PUBLIC	71.75	151.70	138.56	188.21	201.01	44.54	84 56	70.21	79.08	77.91
TOTAL	134.17	236.63	248.97	244.98	265.22	83.29	131.90	126.16	102.93	102.80
OTHER CONSTRUCTION WORKS:										
PRIVATE	16.16	15.92	27.00	47.00	35.35	9.51	8.47	13.24	20.89	14.79
PUBLIC	185.50	247.31	256.06	355.01	406.44	109.12	131.55	125.53	157.78	170.06
TOTAL	201.66	263.23	283.06	402.01	441.79	118.63	140.02	138.77	178.67	184.85
LAND IMPROVEMENT AND PLANTATION DEVELOPMENT										
PRIVATE	12.74	12.19	12.33	18.99	15.52	7.57	6.37	6 37	9 41	8.08
PUBLIC	0.07	0.06	0.15	1.68	0.09	0.07	0.02	0.02	0.02	0.03
TOTAL	12.81	12.25	12.48	20.67	15.61	7.64	6.39	6.39	9.43	8.11
TRANSPORT EQUIPMENT										
PRIVATE	146.49	169.29	166.13	181.37	226.49	65.93	65.92	63.61	61.27	61.88
PUBLIC	60.40	73.84	68.22	133.95	84.24	36.19	28.75	26.12	45.25	23.02
TOTAL	226.89	243.13	234.35	315.32	310.73	102.12	9467	89.73	106.52	84.90
MACHINERY AND OTHER EQUIPMENT										
PRIVATE	417.01	436.60	459.26	595.92	656.48	221.63	233.14	200.86	209.09	218.10
PUBLIC	96.42	107.33	182.37	182.41	187.67	51.24	57. 36	79.76	64.00	62.35
TOTAL	513.43	543.93	641.63	778.33	844.15	272.87	290.50	280.62	273.09	280.45
BREEDING STOCK AND DAIRY CATTLE										
PRIVATE	6.82	4.70	5.42	3.77	2.58	5.09	4.07	4.07	3.05	2.0
TOTAL:										
Non Monetary Dwellings	89.51	97.62	109.49	117.85	115.34	55.46	53.37	53.93	49.94	45.05
Other	729.74	793.61	854.03	957.30	1067.64	390.68	393.30	380.29	350.22	356.01
TOTAL PRIVATE	819.25	891.23	963.52	1,175.15	1,182.98	4446.14	446.67	434.22	400.16	401.06
TOTAL PUBLIC**	467.49	624.74	694.31	956.19	955.00	261.82	320.04	325.75	386.35	362.88
TOTAL PRIVATE AND PUBLIC	1,286.74	1,515.97	1,657.83	2,031.34	2,137.98	707.96	766.71	759.97	786.51	763.94

*Provisional.

**Includes Central Government. Municipalities. Councils and Parastatals

2.34. There was a significant decline in aggregate public sector's investment in transport equipment. Private sector investment in transport equipment has also been sluggish, having registered a negative annual growth rates during 1988-1990, and a modest growth of about 1 per cent in 1991. Gross investment in plant and machinery had declined by 3.4 per cent and 2.7 per cent in 1989 and 1990, but turned positive in 1991. Several Factors which may explain the slump in investment include the decline in availability of foreign exchange, high interest rates and the fiscal budget adjustment which sharply reduced public sector investment.

2.35. Gross fixed investment by industry is given in Table 2.10. Monetary sector's real gross fixed capital formation declined by 2.4 per cent in 1991, compared with a positive growth rate of 4.3 per cent in 1990. For reasons explained earlier, the public sector suffered the heaviest decline, 24 per cent in 1991. As a result of this steep decline, the share of the public sector's investment to overall gross fixed investment dropped from around 23 per cent in 1990 to 18 per cent in 1991. Manufacturing sector's real fixed investment fell steeply by some 15 per cent in 1991. This heavy fall in manufacturing sector investment is not surprising given the very large increase in 1990. The transport, storage and communication sector was among the few sectors which showed positive growth in investment, recording a growth of over 20 per cent in 1991. Especially encouraging is the large increase of investment in Trade, Restaurants and Hotels, which may auger well for this sector's growth and employment creation in 1992.

GROSS FIXED CAPITAL FORMATION BY INDUSTRY, 1987 - 1991

Table 2.10 K£million

	CURRENT PRICES					CONSTANT (1982) PRICES				
	1987	1988	1989	1990	1991*	1987	1988	1989	1990	1991*
A. NON-MONETARY ECONOMY:										
Non-Monetary Dwellings	89.51	97.62	109.49	117.85	115.34	55.46	53.37	53.93	49.93	45.06
B. MONETARY ECONOMY:										
Enterprises and Non-Profit Institutions:										
Agriculture	106.36	111.37	117.56	142.83	141.03	58.87	59.34	54.45	55.11	51.20
Forestry	0.31	1.66	1.08	1.54	2.63	0.18	0.78	0.50	0.55	0.88
Fishing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mining and Quarrying	12.74	10.19	10.15	15.67	14.16	6.73	5.43	4.44	5.50	4.70
Manufacturing	171.83	218.27	253.86	363.28	341.64	89.64	112.35	110.52	130.90	111.47
Building and Construction	70.19	70.54	85.22	111.64	90.63	37.19	37.10	37.15	40.27	32.18
Electricity and Water	62.21	81.70	121.12	173.29	254.07	35.68	43.40	58.79	75.19	98.67
Trade, Restaurants and Hotels	24.88	37.47	26.00	40.21	136.60	13.36	19.42	11.50	14.65	47.24
Transport,Storage and Communications	306.67	259.19	280.80	321.48	418.12	151.08	115.69	117.20	113.62	137.45
Finance,Insurance,Real Estate and Business Services	21.60	44.64	54.50	69.07	64.82	11.86	23.17	25.48	27.26	24.64
Ownership of Dwellings	104.55	115.85	123.98	154.18	144.07	64.51	46.34	60.98	64.91	56.19
Other Services	85.80	104.84	124.28	72.87	44.40	49.55	57.40	59.99	27.22	15.74
TOTAL	967.12	1,055.72	1,198.56	1,466.07	1,652.17	518.65	520.41	540.98	555.18	580.36
Producers of Government Services										
Public Administration	77.30	56.98	128.19	162.05	170.26	44.46	29.50	58.85	62.24	62.76
Defence	0.02	0.05	0.02	0.02	0.02	0.01	0.02	0.01	0.01	0.01
Education	31.30	87.41	54.33	88.64	80.19	18.28	47.92	26.33	36.42	30.38
Health	12.60	21.48	12.38	20.08	30.20	7.51	11.63	5.76	8.08	10.90
Agricultural Services	13.43	19.49	21.38	28.07	30.30	7.96	9.97	9.78	11.11	11.22
Other Services	95.46	177.21	133.47	148.55	59.49	55.64	93.89	64.33	63.57	23.26
TOTAL	230.11	362.62	349.77	447.42	370.46	133.86	192.94	165.06	181.41	138.53
NON-MONETARY ECONOMY	89.51	97.62	109.49	117.85	115.34	55.46	53.37	53.93	49.93	45.06
MONETARY ECONOMY	1,197.23	1,418.35	1,548.33	1,913.49	2,022.63	652.51	713.34	706.05	736.59	718.89
TOTAL	1,286.74	1,515.97	1,657.82	2,031.34	2,137.97	707.94	766.71	759.98	786.52	763.95
C PERCENTAGE RATES OF GROWTH:										
Non-Monetary Economy	9.31	9.06	12.16	7.63	-2.13	-2.14	-3.76	1.05	-7.42	-9.75
Monetary Economy	11.75	18.47	9.16	23.58	5.70	6.72	9.33	-1.02	4.33	-2.40
TOTAL	11.58	17.81	9.36	22.53	5.25	5.97	8.30	-0.88	3.49	-2.87

* Provisional.

CHAPTER 3 - COMPILATION OF THE CONSUMER PRICE INDEX : *OLD AND REVISED*

Introduction

3.1. Inflation is a measure of the rate of increase of prices in an economy. Since net all prices change identically, different rates of inflation can be estimated depending on the goods and services incorporated in the group or "basket". The three indices which can be used to determine inflation rates are the Consumer Price Index, the Wholesale Price Index and the GDP Implicit Price Deflator. Each of these is based upon a different basket of goods and services and is used to determine the inflation rate for a particular purpose. Theoretical definitions of the three measures are outlined in paragraphs 3.2 to 3.5.

3.2. The *Wholesale Price Index (WPI)* shows price changes for all commodities sold in the primary market. The primary market refers to prices before transportation costs, received by producers, wholesalers, distributors, etc. The WPI is used to determine price inflation of goods purchased by businesses, excepting primary factor payments (wages, rent, and interest).

3.3. The *GDP Implicit Price Deflator (IPD)* measures the price level of final goods and services entering the GDP, including those of the Government sector. It is not derived directly from price data, but is a ratio of nominal to the real GDP. It is calculated as follows:

$$\text{GDP Deflator} = \frac{\text{GDP at current price}}{\text{GDP at constant price}}$$

In line with UN System of National Accounts (SNA), current GDP estimates are derived from a production account for each major economic activity or sector showing the current value of production and intermediate purchases. On the other hand, estimates of GDP at constant prices are calculated from changes in the volume of physical output of each sector. Indices of freight handled, for instance, passenger miles travelled, are some of the measures that are used to estimate the GDP at constant prices for Transport Storage and Communications Sector. The GDP at constant prices for the whole economy is found as the summation of the GDP of each sector.

3.4. The GDP deflator is essentially a deflator of value added, and is complementary to the Wholesale Price Index in representing price changes on the productive side of the economy. It excludes all imported final goods and services, and implicitly gives more weight to a country's major exports compared to the Wholesale and Consumer Price Indices. It also reflects changes in factor incomes like wages, interest rates and profits. Significant differences in the rate of change in the prices of the goods and services included in the GDP deflator and the Consumer Price Index will be evident in periods when the international terms of trade and the exchange rate are changing rapidly.

3.5. ***The Consumer Price Index (CPI)*** is a general indicator of the rate of change in prices paid by household consumers for goods and services they purchase. It is based upon a weighted basket of goods and services purchased by consumers, as determined by expenditure surveys. The prices are updated through a monthly price survey covering goods and services in the basket. This chapter details the CPI since it is considered to be the most appropriate measure of inflation to consumers, and of the effect of inflation on the cost of living and real wages. It is based upon an expenditure survey undertaken in Nairobi during 1974. CBS has recently revised the expenditure weights and some other aspects of the CPI using results of the 1982 Urban Household Budget Survey. In 1990, CBS began collecting price data for the new system. The methodology in constructing the old and new CPI is reviewed in the rest of this chapter in detail. **Plans are under way to conduct another household expenditure survey during 1992/93.**

Consumer Price Indices

3.6. The Consumer Price Index is a statistical measure of price movement in goods and services purchased for consumption by a designated population. It is based upon the cost of a "market basket" of goods and services purchased at some time compared with the cost of the same basket in a base period. The market basket is representative of the goods and services purchased by the designated population. Since the CPI is generally used in the determination of wages, through the collective bargaining processes, it is important to compute reliable indices.

3.7. The CPI is calculated using the Laspeyres formula:

$$\text{Index} = \sum_{i=1}^{n} \frac{P_{1i}\, w_i}{P_{0i}} \times 100$$

where: $$w_i = \frac{P_{0_i}\, Q_{0i}}{\sum_{i=1}^{n} P_{oi}\, Q_{0}i}$$

P_{1i} = Current price of commodity i

P_{oi} = Base-year price of commodity i

Q_{0i} = Quantity of commodity i in base year

In short, price ratios are first calculated for the commodities included in the index. These are then multiplied by appropriate weights (base-year value weights) to obtain a weighted average consumer price index. Notice that both the weights and price ratios are dimensionless, and so are the price indices.

3.8. At present, the CBS computes a CPI for target populations as follows:

(a) monthly for Nairobi's lower, middle and upper income groups.

(b) combined quarterly for lower and middle income groups of Mombasa, Kisumu and Nakuru towns.

(c) combined annually for lower/middle income groups in the other urban areas of Coast, Nyanza, Western, Rift Valley, Central and Eastern Provinces.

The estimates for Coast Province are based upon price data collected in Mombasa and Malindi towns; Nyanza upon Kisumu and Kisii towns; Eastern upon Embu, Meru and Machakos towns; Central upon Nyeri town; Western upon Kakamega and Bungoma towns; and Rift Valley upon Nakuru, Kitale and Eldoret towns. Only the Nairobi price indices are published annually in the *Statistical Abstract.* The *Economic Survey* covers price indices for Nairobi, Mombasa, Kisumu and Nakuru. However, Nairobi price indices are taken as a barometer of the national situation.

Methodology for the Old CPI

3.9. The market baskets of goods and services for the old CPI for Nairobi, Mombasa, Kisumu and Nakuru were based on details of expenditures obtained from the 1974 Household Budget Survey. The 1970/71 Rural Household Budget Survey of Nyanza province was used to obtain weights for compiling the indices for all the provinces.

3.10. The income brackets used for the old indices were as follows:

Income Group	Monthly Household Earnings
Lower	Kshs. 0 - 699
Middle	Kshs. 700 - 2,499
Upper	Kshs. 2,500 and above

The expenditure weights used for the different income groups were ratios of expenditure for representative households with income in 1974 in the ranges indicated above. These income definitions should, therefore, be seen as measures of household income in 1974 Shillings rather than current Shillings. Since the weights used from the 1974 surveys are dimensionless ratios, the income range for each income group in current Shillings changes over time.

3.11. The CPI for a given year was calculated by taking the arithmetic average of the CPI in the twelve months. The rate of inflation for any income group in a given year was calculated as the percentage increase in the annual CPI between the given year and the previous year. It is given as:

$$F_i = \frac{CPI_i - CPI_{i-1}}{CPI_{i-1}} \times 100$$

where: F_i = the inflation rate in year i, and

CPI_i = average consumer price index for year i.

CPI_{i-1} = lagged average consumer price index (i.e CPI in previous year)

The overall rate of inflation is given as a simple arithmetic mean of the inflation rates for the three income groups.

Limitations of the Old CPI

3.12. The old CPI was based on results of Household Budget Surveys carried out in the early 1970's. Since then, relative prices of various commodities have changed markedly leading to significantly different consumption patterns. New goods have been introduced into the market basket, new outlets have been introduced and subsequently the weights of goods have also changed, reflecting changes in consumption patterns. The weighting system, therefore, needed to be revised.

3.13. The income brackets used in the old indices were also outdated. With economic growth and development, and in response to inflation, wages and salaries have risen over the years. Classifying the upper income group as households earning Ksh. 2,500 and above per month is no longer realistic. The old income brackets needed to be revised taking into account inflation and per capita income growth.

3.14. In the case of the provincial CPIs, the consumption patterns were assumed to be the same as those for Nyanza Province in 1971 whereas available data indicate large differences in provincial socio-economic profiles. In addition, only prices of food items were collected monthly (by the 'market information' section of the CBS), while other prices for the provinces were collected annually. The indices for the other three quarters were calculated using price data from just three urban centres (Nairobi, Mombasa and Nakuru) or simply carrying forward the prices. All these biases made the indices of the provinces less accurate and reliable.

3.15. Since controlled prices were used in the computation of the indices, the actual rise in prices may be underestimated when there is a supply shortage. This bias, however, may not be very significant in recent times since the Government is gradually adopting price decontrol measures. There is no generally accepted method of dealing with items subject to shortages in constructing price indices.

3.16. With technological advancement, new products, e.g. video and radio cassette recorders, school books, etc are constantly appearing in the market, while quality and specifications of older products are continuously changing e.g. multi-system television sets. With economic growth, a product may provide higher satisfaction in later years. In general, new products are initially high priced and their prices fall when mass-produced. The indices are unable to correct quoted prices for improvements in product quality and fail to include new products before they are mass-produced, so that the phase of falling prices is not reflected.

3.17. Retail prices of the market basket are collected from pre-selected outlets. Overtime, new shopping centres and retail outlets e.g. Sarit Centre, Yaya Centre, Buruburu shopping centre, Donholm, etc., have developed, and households have shifted to shopping from these new outlets due to convenience of location. Since price variation exist by outlet, this contributes to the outdating of the indices.

3.18. The coverage of CPI is limited to Nairobi, three urban centres and the six provinces represented by selected towns. Ideally, coverage should be extended

to more urban centres and rural areas in all the provinces. An index for North-Eastern province should also be computed. However, the extension of the coverage will usually be limited by both financial and manpower constraints.

3.19. Inflation rates are calculated using annual average consumer price indices. A simple arithmetic average of Nairobi's inflation rates for the three income groups is used to represent the inflation rate for Kenya as a whole. However, this is not truly representative of Kenya as a whole since about 80 per cent of Kenya's population lives in rural areas, while the rest live in Nairobi and other urban centres. In addition, various studies have shown that Kenya's income distribution varies regionally. Moreover the national CPI should reflect the relative share in total expenditure of the three income groups rather than be calculated as a simple average.

3.20. Due to the above limitations, a revision of the CPI became urgent. The CBS began the creation of a new CPI with the revision of the Nairobi indices which are widely used. This will later be followed by revision of the indices for other urban centres and provinces. In absence of a more recent expenditure survey, the revision exercise is based on details of expenditure obtained from the 1982 Urban Household Budget Survey (UHBS).

The Revised CPI

3.21. *The Market Basket of Goods and Services* : The existing income brackets were first revised so that the sampled households could be classified and details of expenditures obtained. Taking into consideration inflation and per capita income growth in Nairobi, the existing brackets were revised as follows:

Income Group	Monthly Household Earnings	
	From	To
Lower	Below Kshs.700	Below Kshs.2,000
Middle	Kshs.700 - 2,499	Kshs.2,000 - 7,999
Upper	Kshs. 2,500 +	Kshs.8,000 +

3.22. The market basket of goods and services used in the computation of the new indices represents consumption patterns of the households in each income group as reported by the 1982 Urban Household Budget Survey.

3.23. Inclusion of all expenditure items reported by households would increase the cost of price collection and delay the timely computation of the indices without any noticeable gain in the accuracy of the index. Therefore, all goods and services were grouped into expenditure categories for each income group. At this stage the expenditure categories listed all goods and services reported purchased by households in the survey. Expenditure categories were based upon items which are close substitutes and/or which have similar raw material inputs, since the prices of substitutes tend to move together. Items were then selected to represent each expenditure category. Price data are now gathered systematically for all of these

representative items and used to estimate the price ratios using the Laspeyres formula described above.

3.24. The number of selected items have been increased by about 50 percent over those used in the old index to help improve the accuracy of the index. This increase in coverage entailed only a small increase in the cost of price collection. For the lower income group, 186 items have been selected compared with 126 in the old index; for the middle income group, 297 items compared with 197; and for the upper income group, 334 items compared with 209.

3.25. The new expenditure categories are similar to those used in the old index and in accordance with the recommendations in the United Nations System of National Accounts. The ten major categories into which expenditures were grouped are: food, drinks and tobacco; clothing and footwear; rent; fuel and power; household equipment and operations; health and personal care; transport and communications; recreation, entertainment and education; and miscellaneous goods and services. The number of items in each category varies from 13 to 33 depending upon the income group.

3.26. *The Weighting System* : The weights for the new CPI are also derived from details of expenditure obtained through the 1982 Household Budget Survey. A weight is first calculated for each category as the proportion of expenditure on that category to total expenditure. Within a category, each group of close substitutes was first allocated a weight equivalent to the proportion of expenditure on all goods and services within the group to all commodities in the category. Each group weight was then allocated to the representative items. This procedure ensures that the sum of all weights for all the items within a category is equal to unity, making it possible to calculate price indices for each category: food, drinks and tobacco; clothing and footwear; etc. Table 3.1 shows the weighting systems for the old and revised indices. Food and rent, in that order, have the highest weights for lower income groups, while the orders are reversed for the middle and upper income groups.

WEIGHTING SYSTEM FOR NAIROBI C P I

Table 3.1

SECTION	LOWER		MIDDLE		UPPER	
	Old	Revised	Old	Revised	Old	Revised
Food	0.41	0.44	0.36	0.21	0.25	0.14
Drink and Tobacco	0.04	0.02	0.04	0.03	0.02	0.04
Clothing and Footwear	0.10	0.05	0.12	0.05	0.05	0.04
Rent	0.23	0.25	0.16	0.30	0.27	0.32
Fuel and Power	0.04	0.03	0.04	0.08	0.05	0.10
Household Equipment and Operations	0.06	0.05	0.08	0.10	0.09	0.11
Health and Personal Care	0.02	0.03	0.02	0.04	0.03	0.03
Transport and Communications	0.04	0.04	0.08	0.06	0.14	0.08
Recreation Entertainment and Education	0.04	0.06	0.05	0.08	0.06	0.10
Miscellaneous Goods and services	0.03	0.02	0.05	0.04	0.05	0.04
TOTAL	1.00	1.00	1.00	1.00	1.00	1.00

3.27. ***Choice of Base Year, Retail Outlets and Price Collection*** : The base period chosen is usually a recent year with normal economic performance and relatively few price fluctuations. The base year selected for the revised index is the period

February-March, 1986. During this period, an International Comparison Project (ICP) was conducted, collecting retail prices of a large number of selected items in 15 major urban centres of Kenya. The CBS, therefore, had all the base year prices of the selected items in the market basket from this survey.

3.28. For continuity and consistency, selected items have to be specified so that prices can be regularly collected for the same items. Items were specified in line with the ones used in the 1986 ICP survey. This ensured that base year prices for the selected items were available. The enumerators visited retail outlets to ensure that the selected items were still on the market for routine price collection. A small number of items were specified that were not included in the 1986 survey. In such cases, enumerators obtained 1986 prices through additional visits to retail outlets.

3.29. Prices of selected items are obtained from pre-selected retail outlets ranging from shops, supermarkets, markets, schools, hospitals, etc. However, new retail outlets had to be selected for the revised index, partly because respondents from the old outlets had become weary of the exercise, and also, households had shifted to outlets which are located near their residence. Moreover, many new shopping centres and outlets have also grown over time. In the absence of a survey for retail outlets, the new outlets were selected based on general observation. A fair representation was given to all the popular shopping areas for all income groups. In many cases, the enumerators had to do a physical listing of outlets in some shopping areas.

3.30. To get information that reflects changing times, the price collection questionnaires had to be redesigned. Separate questionnaires were designed for each income group and for selected groups of items whose prices were to be obtained from the same retail outlets. The questionnaires also contained item specifications to ensure prices were collected for specified items only. The questionnaires have also been given a CBS reference number to increase efficiency in price collection and minimize enumerator errors. For example, "CPI/LI/1: Retail prices of fruits and vegetables" is a questionnaire on prices of fruits and vegetables from outlets in the lower income group. A total of 57 questionnaires have been designed. Price collection for the revised index commenced in March, 1990.

3.31. The prices collected are the market prices at which households purchase the selected items. At least five price quotations are obtained for each item in the market basket. Prices of all items are collected monthly, except for household durables whose prices vary less frequently and hence are collected quarterly. Food items sold in heaps and debes are purchased and then converted to equivalent unit prices. Actual market prices rather than controlled prices are used for price controlled items.

3.32. Ideally, prices of items should be collected for each day of the month. However, this is not feasible and would be costly with little increase in the accuracy of the index. Therefore, sample price collection days have to be selected. Price collection is done during the first week of every month for the lower income group and during the third week for the middle and upper income groups. Quarterly price collection is spread throughout the month. The rent component of the index is computed based on the annual 'Rent Surveys in Urban areas of Kenya.'

Compilation of the Revised Index

3.33 The old and the revised indices were being computed simultaneously for a period of two years, from February, 1990 to January, 1992, after which the old series were discontinued. Tables 3.2, 3.3., and 3.4 show the revised Nairobi CPI for the period March, 1990 to December, 1991. Spliced indices for the intermediate period, January, 1986 to February, 1990, are shown in Chapter 4.

REVISED LOWER INCOME GROUP NAIROBI CPI

Table 3.2: Base:Feb/March 1986=100

YEAR	Food	Drinks & Toba-cco	Cloth-ing & Foot wear	Rent	Fuel & Power	H/hold Equip. & Oper.	Health & Per-sonal Care	Trans-port & Comm.	Rec. & Enter. & Educ.	Misc Goods & Ser-vices	Avg. excl. Rent	Avg. incl. Rent
Weights	0.442	0.021	0.050	0.250	0.031	0.053	0.030	0.041	0.062	0.020	0.750	1.000
1990												
MARCH	136.65	160.02	134.45	184.53	154.52	148.31	150.20	153.29	130.99	151.34	140.10	151.21
APRIL	139.34	160.19	134.45	186.99	154.52	149.05	150.80	153.29	133.44	151.34	141.96	153.22
MAY	140.66	160.19	134.45	188.07	154.52	149.29	151.33	153.29	133.44	151.34	142.78	154.11
JUNE	144.67	162.49	136.46	191.58	154.52	149.76	153.07	153.29	133.44	151.34	145.45	156.98
JULY	144.69	162.49	136.46	191.76	154.52	149.76	153.07	153.68	133.44	151.34	145.58	157.13
AUGUST	147.29	162.49	136.46	193.94	154.52	150.11	155.34	153.68	134.74	151.34	147.24	158.91
SEPTEMBER	149 86	162.49	151.07	200.12	187.05	154.58	159.21	159.92	135.38	151.34	151.93	163.98
OCTOBER	153.55	178.75	151.07	203.60	187.05	154.58	159.39	159.92	135.38	151.34	154.57	166.83
NOVEMBER	159.54	181.28	151.07	210.61	187.05	157.82	164.19	181.70	136.72	151.34	159.89	172.57
DECEMBER	159.90	184.27	154.17	213.53	189.74	166.28	164.74	183.83	144.96	158.19	162.11	174.97
ANNUAL AVERAGE	147.62	167.47	142.01	196.47	167.80	152.95	156.13	160.59	135.19	152.03	149.16	160.99
1991												
JANUARY	160.51	184.27	154.17	213.59	189.74	166.28	164.74	178.13	144.96	158.19	162.16	175.01
FEBRUARY	168.51	184.27	154.17	220.28	189.74	169.65	165.69	179.80	144.96	158.19	167.24	180.50
MARCH	171.92	185.14	161.00	224.24	189.74	173.14	167.26	182.19	145.13	160.60	170.24	183.74
APRIL	171.92	185.14	161.00	223.77	189.74	173.14	168.03	182.19	145.13	160.60	169.89	183.36
MAY	178.88	185.14	161.00	230.18	191.36	177.48	168.03	182.19	145.13	160.60	174.75	188.61
JUNE	179.51	193.07	161.51	231.60	188.89	184.42	168.36	183.13	145.13	160.60	175.83	189.77
JULY	183.59	193.07	162.50	235.06	188.89	184.89	168.36	183.13	146.61	160.60	178.46	192.61
AUGUST	184.81	193.07	162.50	236.03	188.89	184.89	168.82	183.13	146.61	160.60	179.19	193.40
SEPTEMBER	191.59	193.07	162.76	241.42	188.89	184.89	170.66	183.13	146.61	160.60	183.28	197.81
OCTOBER	191.59	193.07	162.76	241.71	188.89	185.46	170.66	183.13	148.80	160.60	183.50	198.05
NOVEMBER	191.59	193.07	165.74	243.36	199.51	190.03	170.66	184.37	150.14	164.96	184.76	199.41
DECEMBER	192.44	194.41	165.74	244.27	199.51	190.03	170.66	187.15	150.14	164.96	185.45	200.15
ANNUAL AVERAGE	180.57	189.73	161.24	232.13	191.15	180.36	168.49	182.64	146.61	160.93	176.23	190.20

REVISED MIDDLE INCOME GROUP NAIROBI CPI

Table 3.3: Base:Feb/March 1986=100

YEAR	Food	Drinks & Tobacco	Clothing & Food Wear	Rent	Fuel & Power	H/hold Equip. & Oper.	Health & Personal Care	Transport & Comm.	Rec. & Enter. & Educ.	Misc Goods & Services	Avg. excl. Rent	Avg. incl. Rent
Weight	0.212	0.031	0.052	0.302	0.810	0.099	0.040	0.062	0.081	0.040	0.698	1.000
1990												
MARCH	149.45	144.91	155.90	216.44	137.05	164.20	144.75	157.94	155.06	133.71	150.61	170.49
APRIL	151.93	145.06	155.90	218.47	137.05	165.49	146.08	160.45	156.12	134.52	152.03	172.09
MAY	153.41	146.26	155.90	219.47	137.05	166.33	147.39	160.45	156.12	134.52	152.73	172.88
JUNE	158.00	147.95	160.77	223.84	138.31	170.91	150.65	160.45	156.12	138.48	155.77	176.32
JULY	158.03	147.95	160.77	224.08	138.31	170.91	150.65	160.65	157.34	138.48	155.93	176.52
AUGUST	159.55	147.95	160.77	225.49	138.31	170.91	156.51	160.78	157.41	141.25	156.91	177.62
SEPTEMBER	159.84	147.95	173.99	231.92	150.36	178.46	156.51	171.29	157.41	141.25	161.38	182.69
OCTOBER	165.77	160.93	173.99	236.87	150.69	182.38	157.83	175.73	157.41	141.25	164.83	186.58
NOVEMBER	171.23	164.60	173.99	240.84	150.69	183.65	160.11	182.59	157.41	141.63	167.59	189.71
DECEMBER	175.04	166.47	181.69	248.83	156.30	187.77	172.62	187.20	161.99	156.63	173.16	196.01
ANNUAL AVERAGE	160.22	152.00	165.37	228.62	143.41	174.10	154.31	167.75	157.24	140.17	159.09	180.09
1991												
JANUARY	175.72	166.47	181.69	249.39	156.30	187.77	172.84	189.11	161.98	156.63	173.54	196.45
FEBRUARY	177.44	167.70	181.69	252.15	156.51	195.13	179.56	187.74	161.98	156.86	175.47	198.63
MARCH	184.29	168.14	187.34	257.57	156.51	201.51	185.05	187.97	162.04	156.86	179.23	202.89
APRIL	188.64	169.60	187.33	259.71	156.51	202.18	185.20	187.97	162.04	156.86	180.72	204.58
MAY	189.56	170.01	187.33	264.47	167.04	213.69	188.03	187.97	162.04	156.86	184.04	208.33
JUNE	190.44	175.17	202.57	269.02	166.74	221.51	188.22	190.88	162.04	160.17	187.20	211.91
JULY	193.19	175.17	202.57	270.52	166.74	222.88	188.48	190.88	162.04	160.17	188.25	213.09
AUGUST	193.46	175.29	202.57	270.88	166.74	223.95	188.70	190.88	162.04	160.17	188.50	213.38
SEPTEMBER	200.64	176.05	215.34	281.54	166.74	242.94	193.89	190.88	162.04	182.21	195.92	221.78
OCTOBER	201.03	176.34	215.34	282.03	166.74	243.01	195.18	190.88	163.10	182.21	196.26	222.16
NOVEMBER	201.22	176.34	215.34	282.29	166.74	242.87	195.18	192.30	163.23	182.21	196.44	222.36
DECEMBER	202.23	176.34	222.03	285.39	168.02	247.68	199.47	195.43	163.23	182.21	198.60	224.81
ANNUAL AVERAGE	191.49	172.72	200.10	268.75	163.44	220.43	188.31	190.24	162.32	166.12	187.01	211.70

REVISED UPPER INCOME GROUP NAIROBI CPI

Table 3.4: Base:Feb/March 1986=100

YEAR	Food	Drinks & Tobacco	Cloth-ing & Food wear	Rent	Fuel & Power	H/hold Equip & Oper	Health & Personal Care	Trans port & Comm.	Rec. & Enter. & Educ.	Misc Goods & Service$	Avg. excl. Rent	Avg. incl. Rent
Weight	0.139	0.041	0.041	0.324	0.097	0 107	0.034	0.079	0.099	0.039	0.676	1.000
1990												
MARCH	140.43	167.47	180.77	194.10	148.63	143.59	154.49	175.47	149.29	148.65	152.77	166.16
APRIL	143.91	167.47	180.76	195.14	148.63	144.19	157.12	175.81	147.70	149.94	153.59	167.05
MAY	146.50	168.56	180.76	196.05	148.63	144.52	158.40	175.81	147.70	149.98	154.31	167.83
JUNE	149.95	170.30	183.63	200.42	158.26	146.72	161.95	180.04	147.70	150.77	157.75	171.57
JULY	150.25	170.43	183.63	200.88	158.45	146.72	162.19	180.19	149.30	150.77	158.11	171.97
AUGUST	152.21	170.91	163.63	202.66	158.45	146.95	166.13	186.48	149.30	150.77	159.51	173.49
SEPTEMBER	154.47	177.06	189.50	208.90	168.73	152.81	167.53	191.33	153.67	151.41	164.42	178.83
OCTOBER	157.46	192.36	190.91	214.83	169.82	155.43	170.51	211.14	153.67	151.41	169.08	183.91
NOVEMBER	161.08	193.30	190.91	217.03	169.82	156.11	171.52	215.81	155.21	151.41	170.81	185.79
DECEMBER	163.03	193.30	201.19	225.35	174.32	159.00	190.58	218.67	166.41	177.28	177.37	192.92
ANNUAL AVERAGE	151.93	177.11	186.57	205.54	160.37	149.60	166.04	191.07	151.99	153.24	161.77	175.95
1991												
JANUARY	168.08	201.57	201.19	227.96	174.32	160.63	191.09	220.59	166.41	177.32	179.42	195.14
FEBRUARY	166.77	203.75	201.19	229.25	175.01	164.25	194.50	223.27	166.41	177.32	180.44	196.25
MARCH	172.35	204.87	204.30	232.99	175.01	165.29	216.50	224.85	166.74	177.83	183.38	199.45
APRIL	176.70	205.67	204.30	234.90	175.01	168.19	217.68	225.20	166.74	177.83	184 88	201.08
MAY	178.66	208.78	204.30	242.70	193.56	185.84	218.95	225.48	166.74	177.83	191.02	207.76
JUNE	179.69	212.25	207.95	246.62	193.22	190.10	219.13	239.81	167.63	177.89	194.11	211.12
JULY	179.23	212.25	207.95	246.79	193.22	191.33	219.82	239.81	167.63	177.89	194.24	211.27
AUGUST	179 35	216.56	207.95	247.46	193.22	192.28	221.52	239.81	167.63	177.89	194.76	211.84
SEPTEMBER	181.30	216.52	211.34	251.14	193.22	193.73	223.09	256.07	167.69	179.15	197.66	214.99
OCTOBER	183.49	216.52	211.34	252.00	193.22	194.08	224.31	256.07	168.45	179.15	198.34	215.72
NOVEMBER	185.42	218.38	211.35	254.40	195.25	194.40	224.40	263.00	169.99	179.15	200.23	217.78
DECEMBER	184.78	233.31	221.21	258.77	195 25	207.27	224.68	263.00	170.02	179.31	203.67	221.52
ANNUAL AVERAGE	177.98	212.54	207.86	243.75	187.46	183 95	216.31	239.75	167.67	178.21	191 84	208.66

CHAPTER 4 - EMPLOYMENT, EARNINGS AND CONSUMER PRICES

Overview

Poor performance was recorded during the year 1991 in both employment creation and inflationary tendencies. The economy generated a total of 96,900 new jobs and increased employment by 5.1 per cent. The modern sector generated 32,300 new jobs in wage employment and 4,000 new jobs in self-employment, representing 2.3 per cent and 8.3 per cent increases, respectively. On the other hand, a large proportion of the surplus labour in the economy continued to join the expanding informal sector, which created an impressive 60,600 jobs, and absorbed 25.0 per cent of total employment.

4.2. Inflationary pressures accelerated due to adverse effects of the Gulf crisis, the depreciation of the Kenya Shilling, the introduction of Value Added Tax (VAT) on various commodities and decontrol of prices. The inflation rate, estimated by the revised Nairobi Consumer Price Indices, rose significantly from 15.8 per cent in 1990 to 19.6 per cent in 1991. As a result real average earnings declined by 8.3 per cent during the year, despite an improvement of 9.7 per cent in nominal average earnings.

Employment

4.3. An estimated 2.0 million persons were engaged outside small scale agriculture in 1991, with a total of 96,900 new jobs being created. The overall growth rate of 5.1 per cent recorded for 1991 was slightly lower than 5.5 per cent growth recorded in 1990, largely due to a significant slowdown in the growth in wage employment in the modern sector. Table 4.1 shows that the wage employed in the modern sector increased by 32,300 jobs growing by 2.3 per cent compared with 41,000 new jobs at a growth rate of 3.0 per cent, in 1990: The informal sector created 60,600 new jobs, which were over 60 per cent of the all the new jobs created outside of small scale agriculture and accounted for 25 per cent of total persons engaged in 1991, underscoring its potential in absorbing the growing labour force. Self employed and unpaid family workers within the modern sector, usually engaged in agricultural and trade activities, recorded an increase of 4,000 jobs or at 8.3 per cent compared with an increase of 3,900 jobs or at 8.8 per cent in 1990.

PERSONS ENGAGED: RECORDED TOTALS, JUNE, 1988 - 1991

Table 4.1 '000's

	1988	1989	1990	1991*
Modern Establishments - Urban and Rural Areas:				
Wage Employees	1,345.9	1,368.4	1,409.4	1,441.7
Self-employed and unpaid family workers	43.9	44.3	48.2	52.2
Informal Sector	346.4	383.5	436.6	497.2
TOTAL	1,736.2	1,796.2	1,894.2	1,991.1

* Provisional.

4.4. *Modern Sector* - The sluggish performance of the domestic economy during 1991 coupled with restrictive Government policy on employment in the public sector

adversely affected growth in employment within the modern sector. As shown in Table 4.2, the rate of growth in total wage employment declined from 3.0 per cent in 1990 to 2.3 per cent in 1991. Sectoral analysis shows that the private sector created 17,800 new jobs in 1991, at a growth rate of 2.5 per cent, lower than the 26,100 new jobs created in 1990. This was largely attributable to depressed levels of activity in some important sub-sectors of the economy. With the exception of

mining and quarrying, hotels and distributive trades and transport and communications, all other sub-sectors in the private sector registered lower rates of growth of employment in 1991 compared to previous year. Wage employment in agriculture and forestry, which is the largest employer in the private sector, declined by 0.7 per cent; mainly due to decline in coffee industry and adverse weather conditions. Mining and quarrying in the private sector recorded a growth rate of 5.9 per cent but had negligible impact on overall growth because of its small size. Employment in private sector manufacturing expanded at a modest rate of 2.3 per cent, creating 3,400 new jobs. The other significant changes in employment within the private sector were in the transport and communications sub-sector, which grew by 8.3 per cent compared with a growth rate of 4.0 per cent recorded in 1990. The 2,100 new jobs created by the sector were largely attributed to expansion in road transport and other services incidental to transport.

WAGE EMPLOYMENT BY INDUSTRY AND SECTOR, 1988-1991

Table 4.2 '000's

	1988	1989	1990	1991*
PRIVATE SECTOR:				
Agriculture and Forestry	198.4	195.1	202.4	200.9
Mining and Quarrying	3.3	3.4	3.4	3.6
Manufacturing	141.1	141.8	146.1	149.5
Electricity and Water	0.2	0.2	0.5	0.5
Building and Construction	31.1	33.4	36.8	40.7
Wholesale and Retail Trade, Restaurants and Hotels	98.0	101.4	104.6	108.8
Transport and Communications	23.2	24.5	25.5	27.6
Finance,Insurance, Real Estate and Business services	44.2	45.3	47.1	47.3
Community, Social and Personal Services	137.1	137.7	142.5	147.7
TOTAL PRIVATE SECTOR	676.6	682.8	708.9	726.6
PUBLIC SECTOR:				
Agriculture and Forestry	68.4	66.7	67.3	71.2
Mining and Quarrying	0.6	0.6	0.7	0.8
Manufacturing	39.1	41.0	41.6	39.3
Electricity and Water	20.9	22.1	21.9	21.9
Building and Construction	38.4	35.3	34.6	31.7
Wholesale and Retail Trade, Restaurants and Hotels	8.4	8.9	9.3	7.9
Transport and Communications	50.4	51.3	49.0	48.6
Finance, Insurance, Real Estate and Business	17.1	18.4	18.2	19.0
Community, Social and Personal Services	426.0	441.2	457.8	474.6
TOTAL PUBLIC SECTOR	669.3	685.5	700.4	715.0

* Provisional.

4.5. In line with Government's policy of reducing the size of the public sector in recent past, the rate of growth of employment has been gradually declining from 2.4 per cent in 1989 to 2.2 per cent in 1990 and 2.1 per cent in 1991. Likewise, the

public sector's share in total employment declined from 37.0 per cent in 1990 to 35.9 per cent in 1991. Hotels and distributive trade institutions under the majority control of the public sector suffered a 15.1 per cent decline in employment. Employment in manufacturing, within the public sector, declined by 5.5 per cent, largely due to lay-off of workers in some establishments such as Kenya Cashewnuts Company; while laying off of casual employees in public works resulted to a decline of 8.4 per cent in employment within the building and construction industry. The number of employed in electricity and water activities and transport and communications sub-sectors stagnated at the 1990 levels. Nevertheless, there was a 3.7 percent expansion in employment in community, social and personal services within the public sector, mainly attributed to an increase in the number of teachers and paramedical staff; a growth of 4.4 per cent in the financial sector, due to opening of new branches of the publicly owned banks; a growth of 5.8 per cent in agriculture and forestry, mainly attributed to expansion of extension services; and a growth of 14.3 per cent in mining and quarrying.

4.6. Table 4.3 presents data on employment in the public sector by type of employer. Due to Government's effort to trim the Civil Service by freezing unfilled and unauthorized posts, the size remained at the 1990 level, registering a zero growth rate. Also, growth in employment in the parastatals stagnated as a result of their restructuring programme, while institutions in which the public sector holds a majority control, recorded a negative growth of 2.2 per cent. The Teachers Service Commission (TSC) registered the highest growth rate of 7.6 per cent, attributable to continued implementation of the 8.4.4 education system.

WAGE EMPLOYMENT IN THE PUBLIC SECTOR, 1988 - 1991

Table 4.3

000's

	1988	1989	1990	1991*	Annual Percentage Change 1991/1990
Central Government	270.6	277.6	273.7	273.7	0.0
Teachers Service Commission	185.1	195.1	203.6	219.1	7.6
Parastatal Bodies**	103.9	107.9	117.1	117.3	0.2
Majority Control by the Public Sector	45.3	50.5	54.0	52.8	-2.2
Local Government	64.4	54.4	51.7	52.1+	0.8
TOTAL	669.3	685.5	700.1	715.0	2.1

* Provisional.

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

4.7. As shown in Table 4.4, Nairobi Province, with 6.2 per cent of population according to 1989 population Census accounted for the highest share of 26.0 per cent of the paid work force in 1991, similar to the proportion recorded in 1990.

However, its employment creation has been remarkably slow in the recent past, and grew by 1.1 per cent in 1991, the lowest expansion in wage employment among the eight provinces. This trend was attributable to freeze in Central Government employment which would mostly affect Nairobi and Government's

interventions to encourage growth of other urban centers through diversification policies and incentives. Rift Valley Province recorded the second largest share of 21.3 per cent in 1991, expanding at an average growth rate of 2.3 per cent, compared with a modest growth of 0.6 per cent and 0.9 per cent recorded in 1989 and 1990, respectively. On the other hand, Western Province with 11.9 per cent of population recorded 6.5 per cent of wage employment, which grew at a slow rate of 1.4 per cent in 1991. There was a notable stagnation in job creation in Coast Province, whose share in total wage employment stood at 12.6 per cent in both 1990 and 1991, and its rate of growth rate of in wage employment decreased from 4.4 per cent in 1990 to 2.3 per cent in 1991.

WAGE EMPLOYMENT BY PROVINCE, 1988-1991

Table 4.4 000's

Province	1988	1989	1990	1991*	Percentage Change 1991/1990
Nairobi	363.7	367.8	370.4	374.4	1.1
Coast	166.5	170.1	177.6	181 6	2.2
North Eastern	11.8	12.2	12.5	12.9	3.2
Eastern	107.4	111.5	116.2	123.4	6.2
Central	197.3	199.3	203.2	205.8	1.3
Rift Valley	296.1	298.0	300.8	307.6	2.3
Nyanza	123.5	127.9	136.3	142.3	4.4
Western	79.6	81.6	92.4	93.7	1.4
TOTAL	1,345.9	1,368.4	1,409.4	1,441 7	2.3

* Provisional

4.8. Table 4.5 presents wage employment in major towns by the six dominant industries for both 1986 and 1991. Over the last five years some 56,700 jobs were generated in the urban areas, giving an overall increase of 8.9 per cent. With the exception of Thika and Malindi where employment declined by 37.9 per cent and 3.7 per cent, respectively, wage employment expanded in all other towns. Rapid growths were registered in Kisumu and Kericho towns which reported above average increases of 27.1 per cent and 23.7 per cent, respectively. Most activities recorded increases in employment in 1991 over the 1986 position. The financial sector, manufacturing, trade restaurants and hotels, recorded largest increases in employment of 15.8 per cent, 15.3 per cent and 15.3 per cent, respectively. The development of tourism facilities in North coast over the last five years has had a substantial impact on employment creation in both the hotels and restaurants, and building and construction industries in Malindi.

4.9. Female participation in wage employment, as shown in Table 4.6, still remains low although there was some evidence of increase. Female wage employment rose by 3.0 per cent, slightly higher than 2.1 per cent increase in male employment. The proportion of females employed in the modern sector increased from 21.9 per cent in 1990 to 22.1 per cent in 1991. Females also absorbed 28.2 per cent of the new jobs created in 1991. Analysis of employment status shows that regular employment increased by 2.4 per cent, while the number of casual employees declined by 3.8 per cent, mainly due to the laying off of Government casuals. However the proportion of female casuals to total casual employees went up from 23.6 per cent in 1990 to 25.3 per cent in 1991.

WAGE EMPLOYMENT BY MAJOR TOWNS AND SELECTED INDUSTRIES, 1986 AND 1991

Table 4.5 '000's

	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	
Towns	1986	1991*	1986	1991*	1986	1991*	1986	1991*	1986	1991*	1986	1991*	1986	1991*
Nairobi	61.9	66.5	28.5	36.8	42.3	46 4	29.1	27.7	38.1	41.2	116.9	134.9	316.8	353.5
Mombasa	20.5	24.9	4.6	5.7	14.7	16.6	24.4	24.7	7.5	9.1	32.1	38.7	103.8	119.7
Kisumu	4.1	5.0	1.9	2.4	2.3	2.9	1.5	1.5	1.9	2.1	11.9	16.1	23.6	30.0
Nakuru	5.7	6.2	1.9	1.8	3.8	3.9	1.2	1.1	1.0	1.2	8.6	8.7	22.2	22.9
Thika	9.6	11.7	0.4	0.4	1.3	2.0	0.2	0.2	0.5	1.2	3.3	4.0	15.3	9.5
Eldoret	7.7	9.3	1.0	1.2	1.4	2.8	0.7	0.8	1.2	1.9	4.7	3.3	16.7	19.3
Malindi	0.2	0.3	0.1	0.2	1.1	1.9	0.2	0.2	0.3	0.3	3.5	2.3	5.4	5.2
Kericho	2.4	2.9	0.3	0.8	0.6	0.7	0.1	0.1	0.2	0.2	4.2	4.7	7.6	9.4
Others	13.9	18.5	16.5	11.3	11.1	13.4	3.7	5.3	3.2	5.2	74.3	67.6	122.7	121.3
TOTAL	126.0	145.3	55.2	60.6	78.6	90.6	61.1	61.6	53.9	62.4	259.5	280.3	634.1	690.8

* Provisional.

WAGE EMPLOYMENT BY INDUSTRY AND SEX, 1990 AND 1991

Table 4.6 '000's

INDUSTRY	MALES		FEMALES		TOTAL	
	1990	1991*	1990	1991*	1990	1991*
Agriculture and Forestry	205.3	207.0	64.4	65.0	269.7	272.0
Mining and Quarrying	3.3	3.4	0.9	0.9	4.2	4.3
Manufacturing	166.5	167.5	21.2	21.4	187.7	188.9
Electricity and Water	19.3	19.2	3.1	3.2	22.4	22.4
Building and Construction	67.4	68.3	4.0	4.1	71.4	72.4
Trade, Restaurants and Hotels	95.5	97.8	18.5	18.9	114.0	116.7
Transport and Communications	63.8	65.2	10.7	11.0	74.5	76.2
Finance, Insurance, Real Estate and Business Services	50.8	51.5	14.4	14.8	65.2	66.3
Community, Social and Personal Services-						
Public Administration	142.8	144.6	41.4	42.0	184.2	186.6
Education Services	162.5	172.3	74.1	78.6	236.6	250.9
Domestic Services	0.6	0.6	0.3	0.3	0.9	0.9
Other Services	122.7	126.3	55.9	57.8	178.6	184.1
TOTAL	1,100.5	1,123.7	308.9	318.0	1,409.4	1,441.7
Of which: Regular	962.6	983.9	265.8	274.0	1,228.4	1,257.9
Casual	137.9	139.8	42.7	44.0	180.6	173.8

* Provisional

4.10. Sectoral analysis of wage employment shows a significant concentration of female employment in activities traditionally considered to be their domain. Thus, 24.7 per cent of the employed females were engaged in educational services in 1991, while the corresponding proportion for males was 15.3 per cent. Medical services (falling under the "other services" category in Table 4.6), absorbed 18.2 per cent of all females against 11.2 per cent of males. On the other hand, the proportion of females employed in industries traditionally dominated by males remained low. Only 1.3 per cent of all the employed females were engaged in building and construction activities compared to the corresponding proportion of 6.1 per cent of males.

4.11. ***Wage Earnings in the Modern Sector*** - Total Wage payments by industry and sector are set out in Table 4.7. The overall nominal wage bill amounted to K£ 2,649 million, and expanded by 12.2 per cent in both 1990 and 1991. Total payments for wage employment in the private sector amounted to K£ 1,296 million in 1991, expanding by 12.9 per cent over the 1990 level, largely due to an improvement in average nominal earnings. Within the private sector, total wage payments in mining and quarrying and building and construction activities recorded the highest growths of 17.9 per cent and 23.4 per cent, respectively; which were also higher than the corresponding rates recorded in 1990. Total earnings in other activities within the private sector increased less rapidly than in 1990 levels. Public Sector wage payments amounted to K£ 1,353 million, increasing by 11.5 per cent, with agriculture and forestry recording the highest growth of 15.9 per cent. Total wage payments for the community, social and personal services, which accounted for 62.6 per cent of total public sector wage bill, expanded more rapidly by 13.3 per cent.

ESTIMATED TOTAL WAGE PAYMENTS BY INDUSTRY AND SECTOR, 1988-1991

Table 4.7 K£million

	1988	1989	1990	1991*
PRIVATE SECTOR:				
Agriculture and Forestry	91.9	99.5	115.4	130.1
Mining and Quarrying	3.1	3.6	3.9	4.6
Manufacturing	218.2	243.4	276.3	307.6
Electricity and Water	0.3	0.4	1.0	1.1
Building and Construction	37.0	44.5	52.1	64.3
Wholesale and Retail Trade Restaurants and Hotels	197.2	225.9	260.0	291.9
Transport and Communications	51.3	62.2	72.7	84.8
Finance, Insurance,Real Estate and Business Services	132.5	150.7	174.4	194.0
Community, Social and Personal Services	156.5	170.0	191.4	217.3
TOTAL PRIVATE SECTOR	888.0	1,000.2	1,147.2	1,295.7
PUBLIC SECTOR:				
Agriculture and Forestry	56.9	56.6	60.3	69.9
Mining and Quarrying	1.5	1.7	1.9	2.0
Manufacturing	57.9	63.4	68.8	69.1
Electricity and Water	43.2	53.0	59.4	64.7
Building and Construction	35.7	37.8	44.8	49.6
Wholesale and Retail Trade, Restaurants and Hotels	16.9	19.5	22.0	20.2
Transport and Communications	109.9	117.6	118.4	130.7
Finance, Insurance,Real Estate and Business Services	67.7	76.4	90.0	100.1
Community, Social and Personal Services	613.1	676.7	747.4	846.8
TOTAL PUBLIC SECTOR	1,002.8	1,102.7	1,213.0	1,353.1
TOTAL PUBLIC AND PRIVATE	1,890.8	2,102.9	2,360.2	2,648.8

* Provisional.

4.12. Table 4.8 summaries the total wage payments by the public sector. The wage bill of the TSC recorded the highest increase of 22.6 per cent; while the Central Government wage bill increased by 8.2 per cent in 1991 compared with 1.8 per cent in 1990. Growth in wage bill of the TSC was attributed to an increase in employment coupled with a salary increase for Job Groups "A" to "G". That of Central Government is attributed to an upward salary revision as part of continued implementation of recommendations of the Mbithi Commission. The wage bill for Local Government had the second largest increase of 14.4 per cent, mainly attributed to a significant increase in average earnings. Parastatals and corporations controlled by the public sector recorded slower growth in wage payments of 6.5 per cent and 9.1 per cent, respectively; much lower than the corresponding growth rates of 23.9 per cent and 19.6 per cent in 1990. The slow growth was attributable to Government's efforts in restructuring inefficient corporations through, amongst other things, curbing their employment.

4.13. Table 4.9 shows that average earnings increased by 9.7 per cent in 1991, up from 9.0 per cent rise recorded in 1990. Average earnings per person in the private sector expanded by 10.2 per cent in 1991 at almost the same level as that of 10.5

TOTAL WAGE PAYMENTS IN THE PUBLIC SECTOR, 1988 - 1991

Table 4.8 K£million

	1988	1989	1990	1991*
Central Government	445.3	504.9	514.2	556.5
Teachers Service Commission	219.8	241.1	272.3	333.8
Parastatal Bodies**	183.8	197.0	244.1	260.0
Majority Control by the Public Sector	79.7	91.4	109.3	119.2
Local Government	74.2	68.3	73.1	83.6
TOTAL	1,002.8	1,102.7	1,213.0	1,353.1

* Provisional.

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

per cent recorded in 1990. There were significant wage differentials within and among different activities in the private sector. Earnings in the financial and transport and communications sectors were on the average higher than those in other activities. On the other hand, earnings from wage employment in primary industries and activities, such as agriculture and forestry, mining and quarrying, and building and construction, were lower than the national average. The wage differentials are generally attributed to income-generating capacity of activities, specialization levels and collective bargaining. Average earnings in the public sector registered a significant rise of 9.3 per cent in 1991 compared with a growth rate of 7.7 per cent recorded for 1990, mainly due to general salary awards to civil servants and teachers employed by the TSC. Sectoral analysis shows that in 1991, with the exception of building and construction, manufacturing, trade restaurants and hotels and transport and communication industries, average earnings in the public sector were higher than those in the private sector. Average earnings for employees of TSC and Local Government recorded the highest growths rate of 13.9 per cent and 13.6 per cent, respectively. The parastatal bodies recorded a slower rate of growth in average earnings of 6.6 per cent in 1991 compared with an increase of 14.0 per cent in 1990.

4.14. Table 4.10 shows that between 1986 and 1991 average earnings in the private sector increased by 87.9 per cent. Notable increases were recorded in agriculture and forestry which rose by 100.9 per cent, mining and quarrying by 160.0 per cent and community, social and personal services by 151.2 per cent. The average earnings in the public sector increased by 65.0 per cent between 1986 and 1991; 26.1 per cent lower than the growth rate in the private sector. Within the public sector, electricity and water recorded the highest growth rate of 124.8 per cent. Employment in the private sector rose by 21.1 per cent over the five year period, while employment in the public sector recorded an increase of 24.4 per cent. An impressive increase of 57.7 per cent in employment was recorded in the building and construction activity in the private sector, while in the public sector, mining and quarrying declined by 52.9 per cent over the last five years.

4.15. Real average earnings per employee by sector and industry are shown in Table 4.11 and changes in real average earnings are shown in Table 4.12. Persistent inflationary pressures intensified by decontrol of prices and the

AVERAGE WAGE EARNINGS PER EMPLOYEE, 1988-1991

Table 4.9 K£ per annum

	1988	1989	1990	1991*
PRIVATE SECTOR:				
Agriculture and Forestry	463.2	510.0	570.3	647.8
Mining and Quarrying	952.1	1,064.3	1,139.5	1,297.4
Manufacturing	1,546.5	1,717.0	1,890.8	2,057.0
Electricity and Water	1,537.8	1,790.2	1,987.1	2,122.3
Building and Construction	1,189.4	1,331.8	1,414.9	1,580.2
Trade, Restaurants and Hotels	2,011.9	2,227.4	2,484.9	2,682.0
Transport and Communications	2,212.6	2,541.7	2,856.5	3,073.1
Finance, Insurance,Real Estate and Business Services	2,996.7	3,326.3	3,703.6	4,099.9
Community, Social & Personal Services	1,141.3	1,234.6	1,343.2	1,470.8
TOTAL PRIVATE SECTOR	1,312.4	1,464.9	1,618.3	1,783.0
PUBLIC SECTOR:				
Agriculture and Forestry	832.4	848.8	896.0	982.1
Mining and Quarrying	2,335.2	2,573.4	2,578.5	2,655.6
Manufacturing	1,480.8	1,545.4	1,656.0	1,757.1
Electricity and Water	2,072.8	2,388.6	2,709.7	2,953.8
Building and Construction	929.3	1,070.8	1,296.4	1,564.2
Trade, Restaurants and Hotels	2,024.6	2,207.9	2,351.7	2,548.9
Transport and Communications	2,180.2	2,291.7	2,414.5	2,690.0
Finance, Insurance ,Real Estate and Business Services	3,951.3	4,162.9	4,957.3	5,265.6
Community, Social & Personal Services	1,439.1	1,533.8	1,632.6	1,784.2
TOTAL PUBLIC SECTOR	1,498.3	1,608.5	1,731.8	1,892.6
TOTAL PRIVATE AND PUBLIC SECTOR	1,404.8	1,536.9	1,674.7	1,837.4
MEMORANDUM ITEMS IN PUBLIC SECTOR:				
Central Government	1,645.9	1,819.0	1,879.0	2,033.3
Teachers Service Commission	1,187.8	1,235.8	1,337.5	1,523.7
Parastatal Bodies**	1,768.0	1,824.8	2,079.8	2,216.5
Majority Control by the Public Sector	1,761.0	1,808.3	2,021.3	2,257.3
Local Government	1,150.5	1,256.1	1,412.7	1,605.0
TOTAL PUBLIC SECTOR	1,498.3	1,608.5	1,731.8	1,892.6

* Provisional.

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

PERCENTAGE CHANGES IN WAGE EMPLOYMENT AND AVERAGE EARNINGS, 1991/86 - 1991/90

Table 4.10

	EMPLOYMENT		AVERAGE EARNINGS	
	1991*/1986	1991*/1990	1991*/1986	1991*/1990
PRIVATE SECTOR:				
Agriculture and Forestry	8.0	-0.7	100.9	13.6
Mining and Quarrying	12.1	4.1	160.0	13.9
Manufacturing	21.0	2.3	76.5	8.9
Electricity and Water		1.2		6.8
Building and Construction	57.7	10.5	86.9	11.7
Trade, Restaurants and Hotels	29.9	4.0	58.2	7.9
Transport and Communications	34.6	8.3	53.0	7.6
Finance, Insurance,Real Estate and Business Services	18.0	0.5	62.4	10.7
Community, Social & Personal Services	26.5	3.7	151.2	9.5
TOTAL PRIVATE SECTOR	21.1	2.5	87.9	10.2
PUBLIC SECTOR:				
Agriculture and Forestry	29.6	5.6	77.7	9.6
Mining and Quarrying	-52.9	4.3	27.5	3.0
Manufacturing	11.7	-3.4	58.2	6.1
Electricity and Water	23.8	0.0	124.8	9.0
Building and Construction	31.7	-8.1	61.0	20.7
Trade, Restaurants and Hotels	34.2	-15.3	83.4	8.4
Transport and Communications	38.1	-0.3	49.7	11.4
Finance, Insurance,Real Estate and Business Services	43.0	4.7	51.1	6.2
Community, Social and Personal Services	22.7	3.7	42.1	9.3
TOTAL PUBLIC SECTOR	24.4	2.1	65.0	9.3
TOTAL PUBLIC AND PRIVATE	22.8	2.3	68.2	9.7
MEMORANDUM ITEMS IN PUBLIC SECTOR:				
Central Government	8.6	0.0	85.5	8.2
Teacher's Service Commission	45.1	7.6	53.9	13.9
Parastatal Bodies**	29.8	0.2	43.2	6.6
Majority Control by the Public Sector	48.4	-2.3	74.5	11.7
Local government	14.3	0.6	56.4	13.6
TOTAL PUBLIC SECTOR	24.4	2.1	65.0	9.3

*Provisional

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

introduction of Value Added Tax occasioned the decline in real average earnings. In general, real average earnings declined by 8.3 per cent in 1991 compared with 5.8 per cent in 1990. Real earnings were in general higher in the public sector than in the private sector. Private sector's real average earnings declined by 7.9 per cent, with all activities recording significant declines. The public sector real average earnings recorded a higher rate of decline at 8.6 per cent. However building and construction in the public sector recorded a marginal increase of 0.9 per cent.

4.16. *Informal Sector* - As opportunities for finding employment in the modern sector have become increasingly scarce, a large proportion on the increase in employment have been in the informal sector. Therefore, employment creation registered very high annual growth rates in the informal sector in the recent past. The rate of growth of employment remained high and constant at about 14 per cent

ESTIMATED REAL AVERAGE WAGE EARNINGS* PER EMPLOYEE, 1988 - 1991

Table 4.11 K£ per annum

	1988	1989	1990	1991**
PRIVATE SECTOR:				
Agriculture and Forestry	372.7	361.7	349.6	332.0
Mining and Quarrying	766.1	754.8	698.6	664.9
Manufacturing	244.4	1,217.7	1,159.2	1,054.2
Electricity and Water	237.4	1,269.6	1,218.2	1,087.7
Building and Construction	957.1	944.5	867.4	809.9
Trade, Restaurants and Hotels	1,618.9	1,579.7	1,523.4	1,374.6
Transport and Communications	1,780.4	1,802.6	1,751.2	1,575.0
Finance, Insurance,Real Estate & Business Services	2,411.3	2,359.0	2,270.5	2,101.2
Community, Social & Personal Services	918.4	875.6	823.5	753.8
TOTAL PRIVATE SECTOR	1,056.0	1,038.9	992.1	913.8
PUBLIC SECTOR:				
Agriculture and Forestry	669 8	602.0	549.3	503.3
Mining and Quarrying	1,879.0	1,825.1	1,580.8	1,361.0
Manufacturing	1,191.5	1,096.0	1,015.2	900.5
Electricity and Water	1,667.9	1,694.0	1,661.2	1,513.9
Building and Construction	747.8	759.4	794.8	801.7
Trade, Restaurants and Hotels	1,629.1	1,565.9	1,441.7	1,306.3
Transport and Communications	1,954.3	1,625.3	1,480.2	1,378.7
Finance, Insurance,Real Estate & Business Services	3,179.5	2,952.4	3,039.1	2,698.7
Community, Social & Personal Services	1,158.0	1,087.8	1,000.9	914.4
TOTAL PUBLIC SECTOR	1,205.6	1,140.8	1,061.7	970.0
TOTAL PRIVATE AND PUBLIC	1,130.4	1,090.0	1,026.7	941.7
MEMORANDUM ITEMS IN PUBLIC SECTOR:				
Central Government	1,324.4	1,290.1	1,151.9	1,042.1
Teacher's Service Commission	955.8	876.4	820.0	780.9
Parastatal Bodies***	1,422.6	1,294.0	1,275.1	1,136.0
Majority Control by the Public Sector	1,417.0	1,282.5	1,239.2	1,156.9
Local government	925.8	890.8	866.1	822.6
TOTAL PUBLIC SECTOR	1,205.6	1,140.8	1,061.7	970.0

*Average current earnings adjusted for the rise in consumer prices. Real Earnings and the consumer price indices, are based on January-June, 1986 Revised Series

**Provisional.

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

in 1990 and 1991. The high employment generation potential in the informal sector principally results from the multiplicity of the informal sector activities, the use of simple and inexpensive technologies which do not require specialized skills, its higher labour intensity and ease of entry. These factors permit the informal sector to generate more jobs rapidly with very little capital investment. Moreover, Government policy encouraging the sector to provide additional employment has enhanced its growth.

4.17. The distribution of employment by province in the informal sector is given in Table 4.13. Urban centres accounted for nearly two thirds of the total employed

CHANGES IN WAGE EMPLOYMENT, PRICES AND REAL EARNINGS, 1988- 91

Table 4.12 Percentage

	1988	1989	1990	1991*
Wage employment	4.3	1.7	3.0	2.3
Average earnings at current prices	11.8	9.4	9.0	9.7
Consumer prices**	12.3	13.3	15.8	19.6
Real average earnings	6.9	-3.6	-5.8	-8.3

* Provisional.

** Percentage increases are derived from revised Nairobi consumer price indices and are a weighted average of the three income groups.

in the informal sector in 1991. Nairobi contributed a quarter of all employment in this sector and recorded the highest increase of 16.5 per cent. Informal sector employment in Western province is the lowest, while Eastern province recorded the lowest increase of 10.9 per cent.

INFORMAL SECTOR, 1988-1991

NUMBER OF PERSONS ENGAGED BY PROVINCE

Table 4.13 Number

Province	1988	1989	1990	1991
Nairobi	83,350	89,856	104,952	122,308
Central	56,507	61,949	69,949	78,325
Nyanza	43,023	47,756	53,917	61,034
Western	23,382	26,422	29,936	33,675
Rift Valley	63,093	71,674	81,852	94,048
Eastern	35,937	39,609	43,639	48,403
Coast	41,070	46,245	52,349	59,364
TOTAL	346,362	383,511	436,594	497,157
Of which				
Urban	223,057	245,636	284,812	331,542
Rural	123,305	137,875	151,782	165,615

4.18. The sectoral contribution to employment in the informal sector is presented in Table 4.14. Two major activities, wholesale and retail trades, hotels and restaurants together with manufacturing, accounted for over 82.4 per cent of employment in informal sector. Manufacturing is the fastest growing activity in terms of employment in the informal sector. In 1991, the manufacturing sector registered a growth rate of 19.1 per cent. The rapid growth is due to the activity's ability to provide cheap basic goods and services which are consumed by a majority of the workers in the low income group. The goods and services produced here include all types of light manufacturing and related repairs such as food processing, tailoring, wood work products and metal fabrication.

Wage Awards and Registered Collective Agreement

4.19. The Government increased the minimum wage for workers in the private sector by 16 per cent by raising the minimum monthly wage from Ksh.831 to Ksh.964 with effect from 1st May, 1991. However, for workers whose

INFORMAL SECTOR, 1988-1991

NUMBER OF PERSONS ENGAGED BY ACTIVITY

Table 4.14 Number

Activity	1988	1989	1990	1991
Manufacturing	66,096	73,167	84,876	101,109
Construction	128	144	170	200
Wholesale and Retail Trade, Hotels and Rest	219,131	242,574	274,585	308,455
Transport and Communications*	5,540	6,187	7,047	8,015
Community, Social and Personal Services	55,467	61,439	69,916	79,378
TOTAL	346,362	383,511	436,594	497,157

* Includes mainly support services to transport activity

remunerations fell under the regulations of Agricultural Industry Wages Order, minimum wage was raised from Ksh.468 to Ksh.542, a 15.8 per cent increase.

4.20. In 1991 the Industrial Court registered 372 collective agreements compared with 379 and 307 registered in 1990 and 1989, respectively. The small number of registered collective agreements reflect the ability of trade unions to negotiate with employers for improved working conditions without recourse to the industrial court or going on strike, thus reflecting a high degree of industrial stability.

Consumer Prices

4.21. Nairobi inflation rates as measured by the revised Nairobi Consumer Price Indices are presented in Table 4.15. The revision of the Nairobi Consumer Price Index is detailed in Chapter 3. The revised series show that after slowing down between 1988 and 1989, the inflation rate, measured on the average of twelve month-on-month changes for a calendar year, rose significantly from 15.8 per cent in 1990 to 19.6 per cent in 1991. The first quarter of the year was marked by an increase in prices of school fees, soft drinks, postal services telephone, tea, milk, cooking fat and cigarettes. The prolonged drought conditions also had an adverse impact on prices of essential commodities leading to the acceleration of inflationary pressures towards the end of 1991. As stated in paragraph 4.24 of the Economic Survey 1991, the revised series reveal that the old series under - stated inflation rates.

PERCENTAGE INCREASES IN NAIROBI CONSUMER PRICES*, 1987/86 -1991/90

Table 4.15

Income Group **	1987/86	1988/87	1989/88	1990/89	1991/90
Nairobi Lower Income Index	7.6	11.2	12.9	15.6	19.8
Nairobi Middle Income Index	12.4	15.9	14.6	16.5	18.9
Nairobi Upper Income Index	11.8	15.8	14.9	14.5	19.9
Weighted Average Increases for 12 Months***	8.7	12.3	13.3	15.8	19.6

* The figures are derived from Revised Nairobi Consumer Price Indices.

** The Income Groups are re - defined as :

1. The lower income group comprises households with monthly earnings below KSh 1,999.
2. The middle income group comprises households with monthly earnings between KSh 2,000 - KSh 7,999.
3. The upper income group comprises households with monthly earnings KSh 8,000 and above.

*** The annual average month on month increases are weighted as 0.768, 0.209 and 0.023 lower, middle and upper income groups, respectively.

4.22. Tables 4.16, 4.17 and 4.18 show a six year series of the revised Nairobi Consumer Price Indices for *lower, middle and upper* income groups, respectively. Prices for the middle income group increased the most followed by prices for the upper income group. Between 1986 and 1991, prices for the middle and prices for upper income group increased an 100 per cent change while the lower income group increased by 90 per cent.

NAIROBI REVISED LOWER INCOME GROUP CONSUMER PRICE INDEX,* 1986-1991

Table 4.16 Base: Feb/March 1986= 100

Months	1986	1987	1988	1989	1990	1991
January	98.79	105.39	114.53	129.23	146.99	175.01
February	99.87	106.40	115.19	129.92	147.95	180.50
March	100.13	107.51	116.34	132.42	151.21	183.74
April	100.29	107.65	117.71	133.90	153.22	183.36
May	100.57	108.03	118.65	135.73	154.11	188.61
June	101.03	109.01	121.20	137.00	156.98	189.77
July	101.35	109.37	121.98	138.10	157.13	192.61
August	101.79	109.68	124.31	138.76	158.91	193.40
September	101.98	110.97	126.14	141.22	163.98	197.81
October	103.69	111.78	126 77	142.92	166.83	198.05
November	104.72	112.59	127.73	143.66	172.57	199.41
December	105.06	113.76	128.55	145.12	174.97	200.15
Annual average	101.61	109.34	121.59	137.33	158.74	190.20

*Provisional

NAIROBI REVISED MIDDLE INCOME GROUP CONSUMER PRICE INDEX, * 1986-1991

Table 4.17 Base: Feb/March 1986=100

Months	1986	1987	1988	1989	1990	1991
January	97.32	109.49	124.37	144.46	166.94	196.45
February	99.69	110.58	125.09	145.15	168.05	198.63
March	100.31	111.73	127.84	148.04	170.49	202.89
April	100.63	112.31	129.38	149.42	172.09	204.58
May	101.06	112.79	130.19	151.03	172.88	208.33
June	101.98	114.16	132.82	153.47	176.32	211.91
July	102.15	114.56	133.41	154.24	176.51	213.09
August	102.68	115.23	135.45	154.96	177.62	213.38
September	103.64	116.75	138.17	156.76	182.68	221.78
October	104.30	118.27	139.43	157.65	186.58	222.16
November	104.96	119.52	140.28	158.88	189.71	222.36
December	108.38	123.66	142.86	165.31	196.01	224.81
Annual average	102.26	114.92	133.27	153.28	177.99	211.70

*Provisional

4.23. The high inflationary pressures were partly due to significant increases in money supply, which grew by 20 per cent during each of the last two years. Other contributory factors include the introduction of VAT on various commodities, increases in producer prices for food items and decontrol of prices under the Structural Adjustment Programme. Inflationary pressures were also abetted by the persistent depreciation of the Kenya Shilling, which led to rise in prices of imported goods and consequently final consumer prices. The effects of the steep increase in retail prices of petroleum products following the Gulf crisis in August 1990 were also felt over the year.

NAIROBI REVISED UPPER INCOME GROUP CONSUMER PRICE INDEX, * 1986-1991

Table 4.18 Base: Feb/March 1986= 100

Months	1986	1987	1988	1989	1990	1991
January	97.50	107.77	123.51	142.26	163.46	195.14
February	99.51	108.37	124.27	143.43	165.39	196.25
March	100.49	110.53	128.22	145.92	166.16	199.45
April	100.88	111.67	129.06	147.88	167.05	201.08
May	101.48	112.36	129.65	149.02	167.83	207.76
June	102.60	114.20	131 48	152.37	171.57	211.12
July	102.36	114.99	132.08	153.39	171.97	211.27
August	102.84	115.41	133.88	154.36	173.49	211.84
September	103.58	116.71	137.19	156.61	178.83	214.99
October	104.27	118.38	138.15	157.49	183.91	215.72
November	104.83	119.09	138.94	160.01	185.79	217.78
December	106.02	121.24	140.68	161.66	192.85	221.52
Annual average	102.20	114.23	132.26	152.03	174.03	208.66

*Provisional

REVISED NAIROBI CONSUMER PRICE INDICES

TABLE 4.19: Base: Feb/March 1986=100

Year	Income Group		Food	Rent	Others	All Groups
	LOWER INCOME	Weights	0.442	0.250	0.308	1.000
1990		March	136.65	184.53	145.04	151.21
		June	144.67	191.58	146.56	156.98
		September	149.86	200.12	154.91	163.98
		December	159.91	213.53	165.28	174.97
1991		March	171.92	224.24	167.84	183.74
		June	179.51	231.60	170.55	189.77
		September	191.59	241.42	171.35	197.81
		December	192.44	244.27	175.41	200.15
	MIDDLE INCOME	Weights	0.21	0.30	0.48	1.00
1990		March	149.45	216.44	153.01	170.49
		June	158.00	223.84	156.73	176.32
		September	159.84	231.91	164.09	182.68
		December	175.04	248.83	174.49	196.01
1991		March	184.29	257.56	179.24	202.89
		June	190.44	269.02	188.11	211.91
		September	200.64	281.54	196.28	221.78
		December	202.23	285.39	199.47	224.81
	UPPER INCOME	Weights	0.14	0.32	0.54	1.00
1990		March	140.43	194.10	155.96	166.16
		June	149.95	200.42	159.76	171.57
		September	154.47	208.90	166.99	178.83
		December	163.03	225.35	181.08	192.92
1991		March	172.35	232.99	186.23	199.45
		June	179.69	246.62	197.84	211.12
		September	181.30	251.13	201.89	214.99
		December	184.78	258.77	208.55	221.52

4.24. Table 4.19 sets out the revised Nairobi indices for food, rent and all other groups combined. The decontrol of food items and the upward revision of the producer prices subsequently leading to increased consumer prices have caused the increase in the food index. Price increases of milk, sugar, tea and rice were announced in February, 1991 while price increases of cooking oils and margarine followed in April. Cooking oil prices were increased for the second time during the year in September. Also included in September were price increases for wheat and maize flour.

4.25. The highest increase for all three income groups were recorded during the first quarter of the year attributable to the effect of the Gulf crisis. During the year, marked increases were recorded in drinks and tobacco; clothing and footwear; fuel and power; and transport and communications groups. The increase in drinks and tobacco was partly due to rise in prices of soft drinks and the decontrol of tusker premium beer during the June Budget. Increased electricity charges during the first quarter and a rise in petrol price in the last quarter of the year also contributed to the high increase in fuel and power index. The price increase of petrol also led to higher bus fares. Marked increase in transport and communication index was also caused by price increase in postal charges in the first quarter and third quarter of the year.

CONSUMER PRICE INDICES* FOR MOMBASA,KISUMU AND NAKURU, 1987-1990

Table 4.20 Base: 1976 = 100

YEAR		Mombasa	Kisumu	Nakuru
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	Annual Average	454.6	429.2	411.9
1991	March	496.7	465.9	441.6
		500.5	480.9	459.0
	September	504.9	492.3	463.0
	December	512.1	499.0	482.9
	Annual Average	503.6	484.5	461.6

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

4.26. Consumer price indices for the three urban centres of Mombasa, Kisumu and Nakuru are set out in Table 4.20. Inflation rates of 10.8 per cent, 12.9 per cent and 12.1 per cent were recorded for Mombasa, Kisumu and Nakuru, respectively. Highest increases were recorded for food, drinks and tobacco, clothing and footwear and furniture and furnishing equipment.

CHAPTER 5 - MONEY, BANKING AND FINANCE

Overall Trends

The central aim of the monetary policy currently pursued by the Government is to control rates of growth in money supply and credit so as to achieve economic growth without undue inflationary pressures. Money supply grew by 19.7 per cent in 1991, almost equal to the 20 per cent growth observed in 1990. Growth in domestic credit decelerated to 19 per cent compared with a 27 per cent increase registered in 1990. On the other hand, net foreign assets position worsened from a deficit of K£ 232 million at the end of 1990 to a deficit of K£ 361 million in December 1991. Interest rates charged by banks and non-bank financial institutions were decontrolled in July, 1991.

5.2. Table 5.1 summarises the key monetary indicators. The net foreign asset position deteriorated throughout 1991, declining by K£ 130 million from a negative K£232 million in 1990 to negative K£ 361 million in 1991. This compares favourably with a decline of K£ 144 million registered in 1990. The position was much worse during the third quarter when holding of net foreign assets attained a high negative value of K£ 443 million. These changes are reflected in developments in the balance of payments deficit. For the year as a whole, the balance of payments deficit, which equals change in net foreign assets, was somewhat less than in 1990, due mainly to sluggish growth in imports.

MONETARY INDICATORS, 1988- 1991

Table 5.1

Date	Net Foreign Assets K£mn	DOMESTIC CREDIT K£m			Money** Supply K£mn	Commer-_ cial Bank Liquidity Ratio per cent	Advances/ Deposits Ratio Per cent
		Private*	Gover- nment	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
1991 December	-361.44	2,634.14	1,542.95	4,177.09	3,473.32	22	85
1991 March	-308.43	2,235.90	1,401.11	3,637.01	2,941.77	21	81
June	-395.35	2,34248	1,480.12	3,822.60	3,016.45	18	87
September	-442.63	2,489.28	1,631.20	4,120.48	3,197.52	22	87
December	-361.44	2,634.14	1.542.95	4,177.09	3,473.32	22	85

Source: Central Bank of Kenya

* Includes parastatal bodies

** See Table 5.2 for Coverage

5.3. Total domestic credit increased from K£3,509 million as at December, 1990 to K£ 4,177 million at the end of 1991. This represented a growth of 19 per cent, lower than the 27 per cent registered in 1990, but much higher than the 7 per cent growth attained in both 1988 and 1989. The slowdown was largely due to a significant deceleration in the rate of growth of banking system credit to the Government, up by 13 per cent from K£ 1,362 million in 1990 to K£ 1,543 million in 1991, compared with 59 per cent increase in 1990. This is partially explained by the Government's monetary policy, aimed at reducing its borrowing from the

banking system to leave more resources available for use by the private sector. Borrowing by the private sector, shown in Table 5.3, rose by 23 per cent in the course of 1991 compared with 12 per cent increase registered in 1990. Bank credit to other public bodies stood at K£ 200 million at the end of December, 1991, increasing by 24 per cent compared with 17 per cent recorded in 1990.

5.4. In the course of 1991, the liquidity ratio of commercial banks dropped to 18 per cent at the end of June; 2 percentage points below the statutory requirement, but finally rose to 22 per cent at the end of December, a low level last attained in 1985. Compared with 30 per cent registered in 1990, the ratio at the end of 1991 shows a decline of 8 percentage points, reflecting largely an active public debt policy, which resulted in general tightness of the liquidity situation. The advance to deposit ratio remained high at 85 per cent in 1991. This was 3 percentage points above the level in 1990. The expansion of the ratio was more significant in June and September, being 4 and 5 percentage points above that recorded in December 1990, respectively.

5.5. Money supply expanded from K£ 2,902 million in 1990 to K£ 3,473 million in 1991. This represents a growth of 20 per cent, which is way above the growth in nominal GDP, but about the same as the 19.7 per cent inflation rate registered in 1991, as measured by the revised CPI. Seasonal fluctuations were recorded in the growth of money supply during 1991, with a low 4 per cent registered during the first half of the year, and 15 per cent in the second half.

5.6. Growth in money supply as shown in Table 5.2 was mainly in quasi-money component. Narrow money (M1) increased by 15 per cent in 1991 compared with 28 per cent in 1990, while quasi money on the other hand, increased by 26 per cent compared with 11 per cent growths registered in the previous two consecutive years. Share of narrow money (M1) in total money supply (M2) was 56 per cent in 1991, compared to shares of 54 per cent and 58 per cent in 1989 and 1990, respectively.

5.7. Analysis of consolidated accounts of the banking system shown in Table 5.3 reveals that the liabilities/assets registered growth rates of 16 per cent in 1991 compared with 12 per cent and 22 per cent registered in 1989 and 1990, respectively. The three main components of money supply (M2) namely demand deposits, savings and time deposits recorded growth rates of 13 per cent, 12 per cent, respectively. The 52 percent growth of time deposits was significantly higher than the 8 per cent registered in 1990. This large growth in time deposits reflects response by depositors to the improved interest rates and attractive securities offered by the banks after the liberalisation of interest rates. The large increase in time deposits was mainly due to the introduction of Bearer Certificates of Deposits in the money market by the commercial banks, aimed at tapping savings that would otherwise evade the banking system. Currency outside banks recorded 18 per cent increase. Domestic credit rose by 19 per cent in 1991. The improvement in the position of the net foreign assets in the fourth quarter compared with third quarter was due mainly to a capital inflow in form of loans for the expansion of education facilities under the IDA Education Sector Adjustment Credit.

MONEY AND QUASI-MONEY SUPPLY, 1988 - 1991

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	1,678.17	1,223.63	2,901.80
1991	December	1,935.21	1,538.11	3,473.32
1991	January	1.685.89	1,277.79	2,963.68
	February	1,697.30	1,271.34	2,968.64
	March	1,700.69	1,241.08	2,941.77
	April	1,677.44	1,288.74	2,966.18
	May	1,662.53	1,311.77	2,974.30
	June	1,702.73	1,313.72	3,016.45
	July	1,774.34	1,340.64	3,114.98
	August	1,803.61	1,388.92	3,192.53
	September	1,783.58	1,413.94	3,197.52
	October	1,874.85	1,439.43	3,314.28
	November	1,923.28	1,542.32	3,465.60
	December	1,935.21	1,538.11	3,473.32

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

CONSOLIDATED ACCOUNTS OF THE BANKING SYSTEM, 1987 - 1991

Table 5.3 K£Million

	AS AT THE END OF							
					1991			
	1987	1988	1989	1990	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
LIABILITIES-								
1. Money:								
1.1 Demand Deposits	564.06	532.34	603.01	836.95	836.86	798.61	889.78	949.70
Call and 7 days deposits	195.97	252.32	230.04	299.75	321.13	369.00	339.22	347.48
1.2 Currency outside banks	384.38	426.81	482.73	541.47	542.70	535.12	554.58	638.02
Sub-Total	1,144.41	1,211.47	1,315.78	1,678.17	1,700.69	1,702.73	1,783.58	1,935.20
2. Quasi-Money:								
2.1 Savings Deposits	564.77	618.25	705.29	796.79	801.94	829.34	845.90	891.19
2.2 Time Deposits	274.13	311.13	396.56	426.84	439.14	484.38	568.04	646.92
Sub-Total	838.90	929.38	1,101.85	1,223.63	1,241.08	1,313.72	1,413.94	1,538.11
3. Other Items (Net)	381.62	256.59	265.21	375.79	386.71	410.80	480.33	342.34
TOTAL	2,364.93	2,397.44	2,682.84	3,277.59	3,328.48	3,427.25	3,677.85	3,815.65
ASSETS-								
4. Net Foreign Assets	-64.15	-193.73	-87.92	-231.51	-308.43	-395.35	-442.63	-361.44
5. Domestic Credit								
5.1 Central Govern-ment(Net)	967.73	883.50	857.32	1,361.94	1,401.01	1,480.12	1,631.20	1,542.95
5.2 Private Sector	1,284.42	1,535.75	1,775.58	1,985.70	2,033.71	2,124.17	2,286.04	2,433.77
5.3 Other Public Bodies	176.93	171.92	137.86	161.46	202.19	218.31	203.24	200.37
TOTAL	2,364.93	2,397.44	2,68284	3,277.59	3,328.48	3,427.25	3,677.85	3,815.65

Source:Central Bank of Kenya

5.8. Table 5.4 presents the analysis of the changes in money supply and the sources of these changes. Total money supply increased by K£ 572 million in 1991 compared with K£ 484 million in 1990. Net foreign assets declined by K£ 130 million in 1991 compared with an increase of K£ 106 million recorded in 1989 and a decrease of K£ 144 million in 1990. Government domestic borrowing increased by K£ 181 million in 1991 significantly below the K£ 505 million registered in 1990. This slowdown underscores success in containing Government borrowing from the banking system in 1991. Meanwhile, credit to the private sector more than doubled in 1991 compared to the previous year. Domestic credit expanded by K£ 668 million in 1991, largely reflecting an increase of K£ 448 million in private sector borrowing.

CHANGES IN MONEY SUPPLY AND SOURCES OF CHANGES, 1987 - 1991

Table 5.4 K£million comparing year-end values

	1987	1988	1989	1990	1991
MONEY SUPPLY-					
1. Currency plus demand deposits	+ 100.87	+ 67.06	+ 104.31	+ 362.38	+ 257.04
2. Quasi-money	+ 98.16	+ 90.48	+ 172.47	+121.78	+ 314.48
3. Total money supply	+ 199.03	+ 157.54	+ 276.78	+484.16	+ 571.52
SOURCES OF CHANGES-					
4. Net foreign assets	-72.89	-129.58	+ 105.81	-143.59	-129.94
5. Domestic credit —					
(a) to Central Government(net)	+ 233.37	-84.23	-26.18	+ 504.61	+181.01
(b) to other public sector	+ 37.46	-5.01	-34.05	+ 23.60	+ 38.91
(c) to private sector	+150.22	+ 251.34	+ 239.81	+ 210.12	+448.07
(d) all domestic credit	+411.05	+ 162.10	+ 179.58	+ 738.33	+ 667.99
6. Other Items (Net)	-139.13	+125.02	-8.61	-110.58	+33.47
7. Total sources of changes	+199.03	+ 157.54	+ 276.78	+ 484.16	+ 571.52

5.9. The real values of selected financial aggregates deflated by the Nairobi Consumer Price Index are shown in Table 5.5. Narrow money (M1) declined by 4 per cent while quasi money recorded real growth of 5 per cent. Total liabilities of the banking system in real terms dropped by 3 per cent, compared with an increase of 6 per cent growth recorded in 1990. However, commercial banks' credit to private sector and total commercial bank credit, in real terms, increased by 4 per cent and 6 per cent, respectively. In real terms, total liabilities of non-bank financial institutions declined by 4 per cent in 1991 compared with a growth of 11 per cent recorded in 1990.

Interest Rates

5.10. Principal interest rates for the last three years are presented in Table 5.6. Interest rates for 1989 and 1990 were fixed by the Central Bank while from July, 1991 interest rates offered by commercial banks and non-bank financial institutions were determined by market forces. In 1991, all the rates fixed by the Central Bank, except interest rate on Treasury bonds which remained unchanged, increased marginally. In 1991, market determined interest rates of commercial banks and non-bank financial institutions increased compared with 1990. The maximum

interest rate on commercial bank's loans and advances was as high as 29.0 per cent in 1991, compared with 18 per cent and 19 per cent in 1989 and 1990, respectively. Interest rates on Kenya Post Office Savings Bank deposits and on loans from Agricultural Finance Corporation remained unchanged.

TRENDS IN THE REAL VALUE OF CERTAIN FINANCIAL AGGREGATES*, 1987 - 1991

Table 5.5 K£million at constant (1982)prices

	1987	1988	1989	1990	1991
1. Money	1,014.3	938.8	891.8	985.7	950.9
2. Quasi-money	743.5	720.2	746.8	718.7	755.8
3. Total liabilities of banking system	2,096.0	1,857.9	1,818.3	1,924.6	1,874.8
4 Commercial bank credit to private sector	1,042.7	1,059.9	1,100.4	1,055.5	1,101.6
5. Total commercial bank credit	1,234.5	1,221.4	1,262.8	1,217.7	1,294.2
6. Total liabilities of non-bank financial institutions	988.1	1,048.2	1,124.9	1,249.1	1,202.8
Memorandum Item:					
7. Line 6 as per cent of line 3	47.1	56.4	61.9	64.9	64.2

* Deflated by average Consumer Price Indices

5.11. Table 5.7 sets out the trends in real interest rates obtained after the nominal interest rates have been adjusted for the rate of inflation. High inflation rates recorded since 1988, have resulted in negative real interest rates on deposits held by both commercial banks and the Post Office Savings Bank. On the other hand interest rates charged on loans and advances from commercial banks and building societies were above the inflation rates, thus resulting in positive real interest rates during the last five years.

Central Bank of Kenya - Assets and Liabilities

5.12. Assets and liabilities of the Central Bank of Kenya, as presented in Table 5.8, rose by 19 per cent in 1991 compared with 17 per cent and 22 per cent recorded in 1989 and 1990, respectively. Steady growth in assets and liabilities has been observed over the last five years. Foreign exchange reserves of the Central Bank, which declined from K£ 335 million in 1989 to K£ 301 million in 1990, declined further to a low record of K£ 234 million at the end of 1991. Balances with external banks declined by 31 per cent, wholly off-setting increases in other foreign exchange assets. Holdings of foreign Treasury Bills rose from a position of K£ 3 million in 1990 to K£ 13 million in 1991. Other Investment and Special Drawing Rights rose by K£ 6.26 million or 22 per cent in 1991, compared to a decline of 36 per cent in 1990. Remarkable growth rates on advances to Kenya Government and in the banks holdings of other assets including Kenya Treasury Bills and Bonds were registered.

5.13. On the liabilities side, currency in circulation and total deposits increased by 17 per cent and 16 per cent respectively in 1991, compared with 13 per cent and 33 per cent recorded in 1990. Deposits of local Banks rose to a peak of K£193 million in the second quarter of 1991, but gradually declined to K£ 151 million in December, which was K£ 2 million above the level in December, 1990. Deposits of external banks increased from K£ 564 million in 1990 to K£ 666 million in 1991,

PRINCIPAL INTEREST RATES, 1989 - 1991

Table 5.6 Percentage

	AS AT 31st DECEMBER		
	1989	1990	1991
CENTRAL BANK OF KENYA			
Discount Rate for Treasury Bills	14.00	15.93	16.77
Advances against Treasury Bills	15.50	18.43	19.27
Bills and Notes under Crop Finance Scheme:			
Discounts	16.50	19.43	20.27
Advances	16.50	19.43	20.27
Other Bills and Notes:			
Discounts	16.50	19.43	20.27
Advances	16.50	19.43	20.27
Treasury Bonds (Coupon Rates):			
One Year	14.50	15.00	15.00
Two Years	15.00	16.50	16.50
Five Years	16.00	17.00	17.00
KENYA COMMERCIAL BANKS			
Time Deposits:			
12 months (Ksh.250,000-1,000,000)	12.50 - 13.00	14.50- 15.75	19.00 - 20.0
Savings Deposits	12.50 - 13.50	13.50-14.50	13.50- 16.50
Loans and Advances(Maximum)*	18.00	19.00	29.00
OTHER FINANCIAL INSTITUTIONS			
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
HIRE-PURCHASE COMPANIES AND MERCHANT BANKS			
Deposits(time)	12.00 - 15.00	13.50-18.00	13.50-19.00
Loans	18.00	19.00	19.00-21.00
Building Societies:			
Deposits	11.75 - 14.00	13.00-15.00	13.00-15.00
Loans	16.50 - 18.00	19.00	19.00

Source: Central Bank of Kenya

*Loans and advances for less than 3 years.

TRENDS IN SELECTED REAL INTEREST RATES, 1987-1991 +

Table 5.7

Percentage

	Year	Nominal Interest	Inflation Rate*	Real Interest**
1. Commercial bank savings deposits (min)				
	1987	11.0	8.7	+ 2.3
	1988	10.0	12.3	-2.3
	1989	12.5	13.3	-1.8
	1990	13.5	15.8	-2.3
	1991	13.5	19.6	-6.1
2. Commercial bank loans and advances (max)				
	1987	14.0	8.7	+ 5.3
	1988	15.0	12.3	+ 2.7
	1989	15.5	13.3	+ 2.2
	1990	19.0	15.8	+ 3.2
	1991	29.0	19.6	+ 9.4
3. POSB deposits***				
	1987	11.0	8.7	+ 2.3
	1988	11.0	12.3	-1.3
	1989	11.0	13.3	-2.3
	1990	11.0	15.8	-4.8
	1991	11.0	19.6	-8.6
4. Building society loans (max)				
	1987	14.5	8.7	+ 5.8
	1988	14.5	12.3	+ 2.2
	1989	18.0	13.3	+ 4.7
	1990	19.0	15.8	+ 3.2
	1991	19.0	19.6	-0.6

*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, 1987-1991

Table 5.8 K£million

ASSETS	1987	1988	1989	1990	1991 1st Qr	1991 2nd Qr	1991 3rd Qr	1991 4th Qr
1. Foreign Exchange-								
1.1 Balances with External Banks	171.79	224.32	288.73	268.85	169.62	168.80	158.83	185.70
1.2 Treasury Bills	10.83	11.98	2.25	3.41	3.02	14.45	7.49	13.16
1.3 Other Investments	24.99	22.13	32.79	24.30	24.23	29.44	29 82	30.28
1.4 Special Drawing Rights	11.98	0.65	11.50	4.22	1.06	3.67	3.48	4.50
TOTAL	219.59	259.08	335.27	300.78	197.93	216.36	199.62	233.64
2. Securities issued or Guaranteed by Kenya Government, Advances & Discounts	261.61	272.76	212.54	172.00	164.76	166.14	165.82	204.82
3. Advances to Kenya Government	449.28	497.54	410.27	814.34	991.32	995.73	993.96	945.45
4. Other Assets including Kenya Treasury Bills & Bonds	74.67	89.14	346.38	305.59	263.54	433.31	539.52	512.63
TOTAL ASSETS	1,005.15	1,118.52	1,304.46	1,592.71	1,617.55	1,811.54	1,898.92	1,896.54
LIABILITIES:								
1. Capital and General Resources Fund	33.87	41.41	50.42	62.95	62.95	79.97	79.97	79.97
2. Currency in Circulation								
2.1 Notes	425.08	474.96	545.67	620.23	598.42	588.93	625.95	729.90
2.2 Coins	13.70	14.37	17.25	17.49	17.46	18.16	18.20	19.15
TOTAL CURRENCY	438.78	489.33	562.92	637.72	615.88	607.09	644.15	749.05
3. Deposits-								
3.1 Kenya Government								
3.2 Kenya Banks	115.07	110.23	126.95	149.09	180.97	192.38	167.08	151.20
3.3 External Banks	296.34	405.35	446.15	563.72	559.24	653 35	699.83	666.06
3.4 Other	53.44	18.70	35.26	94.43	71.60	103.01	94.48	121.18
TOTAL	464.85	534.28	608.36	807.24	811.81	948.74	961.39	938.44
4. Revaluation Account	7.63							
5. Other Liabilities	60.02	53.50	82.76	84.80	126.91	175.74	213.41	129.08
TOTAL LIABILITIES	1,005.15	1,118.52	1,304.46	1,592.71	1,617.55	1,811.54	1,898.92	1,896.54

Source: Central Bank of Kenya.

an increase of 18 per cent. During the first quarter of 1991, Capital and General Resources Fund remained at the same level as at December, 1990, but it finally rose to K£ 80 million and remained at that level for the rest of the year. Other liabilities fluctuated over the period to finally settle at K£129 million in December 1991 compared with K£ 85 million in 1990, an increase of 52 per cent.

Commercial Banks - Credit and Liquidity

5.14. The tight liquidity position prevailing by mid-1991 eased somewhat in the latter half of the year due to increased Government borrowing from the Central Bank, enabling the banks to expand credit. Total lending by Commercial banks rose by 28 per cent in 1991 compared with 18 per cent and 11 per cent recorded in 1989 and 1990, respectively. Total lending stood at K£ 2,645 million in December 1991, with the public sector receiving a share of 13 per cent compared with 11 per cent in 1990. Bank lending to the public sector increased from K£ 218 million in 1990 to K£ 334 million in December 1991, a 54 per cent increase compared with 11 per cent in 1990. Details on commercial banks bills, loans and advances are presented in Table 5.9.

5.15. On the other hand, Commercial Bank lending to private sector increased from K£ 1,853 million in 1990 to K£ 2,310 million in 1991, or 25 per cent increase compared with 11 per cent in 1990. In 1991 lending increased to all private sector activities except transport, storage and communications. Agriculture, manufacturing and trade received increases of 12 per cent, 23 per cent and 21 per cent, respectively. Out of the total lending to private sector in 1991, agriculture received a share of 15 per cent, manufacturing 24 per cent, and trade 19 per cent, almost the same proportions as those recorded in 1990. Lending to financial institutions increased significantly by 118 per cent from K£ 50 million in 1990 to K£ 109 million in 1991.

5.16. Table 5.10 shows deposit liabilities and liquid assets of commercial banks. During 1991, deposit liabilities fluctuated and stood at K£ 2,763 in December 1991, 31 per cent above the K£ 2,117 registered at the end of 1990. Liquid assets declined by 4 per cent from K£ 633 million in 1990 to K£ 607 million in December 1991. In the middle of 1991, the liquidity ratio dropped to 18 per cent, 2 percentage points below the minimum requirement but recovered to finally settle at 22 per cent. The interbank rate rose from 9.3 per cent in December, 1990 to 19.7 per cent in December, 1991.

Non-Bank financial institutions

5.17. Assets and liabilities of Non-Bank Financial Institutions (NBFIs) are shown in Table 5.11. The increase in total liabilities of NBFIs decelerated to 15 per cent in 1991 compared with 28 per cent in 1990. The slower growth was partly in total deposits of NBFIs which rose by 11 per cent in 1991 compared with 30 per cent growth recorded in the previous year. Deposits of the Central and Local Governments declined by 26 per cent while deposits of the other public and private sectors recorded increases of 11 per cent and 12 per cent respectively. All other liabilities grew by 31 per cent from K£ 465 million in 1990 to K£ 609 million in 1991. NBFIs' total liabilities were 64 per cent of those of the Commercial Banks.

COMMERCIAL BANKS - BILLS, LOANS AND ADVANCES*, 1987 - 1991

Table 5.9 K£million

	1987 Dec.	1988 Dec.	1989 Dec.	1990 Dec.	1991 Dec.
PUBLIC SECTOR:					
Central Government	3.62	0.04	59.09	58.98	137.25
Local Government	2.13	3.84	2.47	3.12	3.22
Enterprises, Parastatal bodies and other Public entities	173.18	166.66	134.11	155.96	194.38
TOTAL PUBLIC SECTOR	178.93	170.54	195.67	218.06	334.85
PRIVATE ENTERPRISES:					
Agriculture	204.72	256.02	291,73	300.73	336.24
Mining and Quarrying	4.56	5.82	9.67	9.80	23.58
Manufacturing	302.65	360.66	420.16	450.97	556.81
Building and Construction	65.90	7896	105.97	121.71	142.77
Transport, Storage and Communication	43.94	55.75	63.65	84.01	82.75
Trade:					
Exports**					
Imports**					
Domestic	236.02	285.23	323.79	355.68	431.96
Financial Institutions	23.87	15.45	37.72	49.75	108.55
Other Business	293.47	309.15	369.56	422.88	559.37
TOTAL PRIVATE ENTERPRISES	1,175.13	1,367.04	1,622.24	1,795.53	2,242.03
COMMUNITY AND PERSONAL SERVICES*** (including non-profit making institutions)	37.53	37.90	43.97	57.95	68.42
TOTAL BILLS, LOANS AND ADVANCES	1,328.59	1,575.48	1,861.88	2,071.54	2,645.30

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".

COMMERCIAL BANKS- DEPOSIT LIABILITIES AND LIQUID ASSETS*, 1988 - 1991

Table 5.10

		Deposit Liabilities K£mn	Liquid Assets** K£mn	Current Liquidity Ratio*** per cent
1988	December	1,594.28	375.44	24
1989	December	1,896.30	490.68	26
1990	December	2,116.94	633.06	30
1991	December	2,763.19	607.11	22
1991-				
	January	2,116.83	611.93	29
	February	2,414.64	530.72	22
	March	2,532.79	528.26	21
	April	2,426.82	464.01	19
	May	2,452.59	448.69	18
	June	2,441.51	429.49	18
	July	2,383.41	427.94	18
	August	2,421.88	434.34	18
	September	2,535.93	546.30	22
	October	2,591.29	547.68	21
	November	2,591.42	572.98	22
	December	2,763.19	607.11	22

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.

ASSETS AND LIABILITIES OF NON-BANK FINANCIAL INSTITUTIONS, 1987 - 1991

Table 5.11 K£million

	AS AT END OF				1991			
	1987	1988	1989	1990	1st Qr	2nd Qr	3rd Qr*	4th Qr
LIABILITIES:								
Deposits-								
Central & Local Government	32.58	30.22	32.75	62.34	47.27	50.64	53.15	46.18
Other Public Sector	136.97	144.28	190.53	296.95	279.79	314.22	302.73	330.03
Other Depositors	714.18	863.36	1,051.00	1,302.30	1,358.16	1,354.10	1,403.79	1,463.21
Other Liabilities	231.17	314.68	385.52	465.02	503.48	534.97	575.27	608.76
TOTAL LIABILITIES	1,11490	1,352.54	1,659.80	2,126.61	2,188.70	2,253.93	2,334.94	2,448.18
ASSETS:								
Cash and Banks	66.22	114.33	142.25	201.65	212.80	228.99	216.87	219.56
Other Financial Institutions	68.3	91.82	140.4	145.08	149.06	134.20	143.30	163.11
Associated Companies	13.59	12.65	21.95	58.20	33.76	45.33	43.59	59.37
Investments, Bills,								
Loans & Advances,-								
Public Sector	170.80	160.82	184.36	189.45	222.04	209.35	251.22	262.44
Private Sector	742.22	897.15	1,079.13	1,423.71	1,455.36	1,507.89	1,536.60	1,587.24
Other Assets	53.71	75.77	91.64	108.52	115.68	128.17	143.36	156.46
TOTAL ASSETS	1,114.90	1,352.54	1,659.80	2,126.61	2,188.70	2,253.93	2,334.94	2,448.18

Source: Central Bank of Kenya.

* Provisional

5.18. On the assets side, cash, bank holding, assets in other financial institutions and assets in associated companies, all combined, grew by 9 per cent in 1991 compared with 33 per cent growth in 1990. Investments, bills, loans and advances made to public sector recorded a higher growth of 39 per cent in 1991, compared with 3 per cent growth recorded in 1990. This high growth can be attributed to the success in the sale of Government securities to the non-bank sector. Credit extended to the private sector recorded growth rate of 11 per cent in 1991 compared to 32 per cent in 1990. Other assets increased by 44 per cent from K£ 109 million in 1990 to K£ 156 million in 1991.

Developments in The Financial Sector in 1991

5.19. The Government continued to undertake measures to encourage the development and the stability of the financial sector. This included the development of an active money market covering the inter-bank markets and secondary markets for Government securities. The Government continued to take steps to strengthen the capital base of weak financial institutions. During 1991 three commercial banks and four non-bank financial institutions were licensed and became operational.

5.20. During the year the Capital Markets Authority (CMA), which was established in 1990 to stimulate the development of long-term debt and equity markets, took steps to enhance the development of the stock market. These included the establishment of a trading floor and training of staff to increase their technical expertise. A total of 16,742,753 shares worth K£ 15 million were traded in the Nairobi Stock Exchange (NSE) in 1991. The NSE price index rose from 915.34 in December, 1990 to 958.29 in December, 1991.

5.21. Commercial banks in Kenya reached a decision in July, 1991 to join the Society for World-wide International Financial Telecommunications (SWIFT) to speed up and safeguard their international financial transactions. Exchange Risk Assumptions Fund was established under the Exchequer and Audit Regulations of 1991 to provide the financial resources required to meet exchange risks from foreign borrowings contracted by the Industrial Development Bank (IDB), the Industrial and Commercial Development Corporation (ICDC) and Development

Finance Company of Kenya (DFCK). Credit restrictions which had been in place since 1986, were relaxed.

5.22. The year 1991 witnessed the beginning of liberalization of Foreign Exchange Control. In November, 1991, Central Bank partially relaxed Exchange Control Act by withdrawing the clause covering declaration of foreign currency held by in-coming travellers. New convertible Foreign Exchange Bearer Certificates (FOREX-Cs) were introduced in the financial market. Also enterprises engaged in domestic tourism operations were for the first time allowed by the Government to accept payment for their services in foreign currency. All these developments are aimed at encouraging foreign currency inflows into the country.

5.23. In July 1991, the Government decontrolled interest rates which was a big step towards full liberalization of the financial sector.

CHAPTER 6 - PUBLIC FINANCE

Since the last budget the Government has continued with its efforts to curb the growth in expenditure and to raise more revenue in order to reduce the deficit. Measures were taken to mobilise resources necessary to sustain economic growth under adverse conditions.

6.2. During the year total revenue collected on the recurrent account is expected to be K£ 2,888 million while the expected total expenditure will be K£ 4,404 million resulting in a deficit of K£ 1,316 million. Net external financing, including grants, is expected to be K£ 464 million. Therefore, the Government has had to increase domestic borrowing to finance the deficit, thus reducing the investible funds available to the private sector. This led to inflationary pressures and partly caused a rise in interest rates.

Overall Results

6.3. The budget out-turn for the last five fiscal years is presented in Table 6.1. Provisional figures indicate that Government efforts to broaden the tax base and to increase the elasticity of the tax system has continued to yield positive results. During 1991/92 current revenue is expected to expand by K£ 483 million while current expenditure is expected to grow by K£ 373 million resulting in an improved position of the current deficit which is expected to stand at K£ 163 million. The increase in current expenditure is partly due to the implementation of salary reviews as recommended by the Mbithi Commission and intensifying internal and external security.

6.4. Capital expenditure is likely to drop by 25.9 per cent from K£ 552 million in 1990/91 to K£ 409 million in 1991/92. This is mainly due to a drop in expected capital inflows from donors. Despite the cut in capital inflows, the ongoing public projects which continued being implemented during the year included expansion of National Youth Service (NYS) engineering institute and other training units, rehabilitation of airports, construction of police stations and police lines, construction of district headquarters, rehabilitation of Kenyatta National Hospital, construction in other hospitals, rural health centres and dispensaries, forest masterplan preparation and indigenous forest conservation project, and research projects undertaken by Kenya Agricultural Research Institute (KARI).

6.5. The actual deficit in 1990/91 exceeded the original budget estimates substantially because of both a shortfall in revenue collection and an increase in expenditure. The shortfall in revenue came about mainly on account of the Gulf crisis and consequent increase in petroleum prices and fall in tourism earnings which reduced the level of imports and generated domestic industrial recession. Expenditure, on the other hand, rose due to higher debt redemption on account of high interest rates, exchange depreciation and large payments by Government on guaranteed parastatal debt. There was also some rise in expenditure due to unanticipated spending in the expansion of university education and strengthening of regional security.

CENTRAL GOVERNMENT OUT-TURN OF REVENUE AND EXPENDITURE*, 1987/88 - 1990/92

Table 6.1 K£million

	1987/88	1988/89	1989/90	1990/91**	1991/92**	Percentage Increases 1987/88 to 1991/92
Current Revenue	1,614.31	1,887.39	2,049.96	2,395.24	2,878.31	78.30
Current Expenditure***	1,731.02	1,967.24	2,210.21	2,667.93	3,041.39	75.70
Current Surplus	-116.71	-79.85	-160.25	-272.69	-163.08	39.73
Capital Revenue	4.14	31.16	6.15	15.76	9.21	122.46
Capital Expenditure***	281.90	418.94	525.38	551.58	408.92	45.06
Net Lending***	29.32	61.72	70.82	75.84	59.58	103.21
External Grants	159.40	186.65	217.25	208.25	296.75	86.17
OVERALL DEFICIT	-264.39	-342.70	-533.05	-676.10	-325.62	23.16
FINANCING OF DEFICIT:						
External Loans (Net)	71.45	200.00	301.20	206 50	167.15	
Total Domestic Borrowing	225.85	88.00	265.25	454.35	597.30	164.47
Long-term (net)	220.80	119.10	96.25	331.35	585.15	
Short-term (net)	5.05	-31.10	169.00	123.00	12.15	
CHANGES IN CASH BALANCES:						
Increase = +	32.91	-54.70	33.40	-15.25	438.83	
MEMORANDUM ITEMS:						
Public Debt Redemption	180.20	502.83	453.34	772.73	894.60	396.45
(a) External	163.00	212.27	212.15	391.25	390.68	139.68
(b) Internal	17.20	290.56	241.19	381.48	503.92	2,829.77

* This Table details Kenya Government's 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 and memorandum item equals total Expenditure in Table 6.9.

** Provisional.

*** For details, see Table 6.9.

6.6. The overall deficit for 1991/92 is projected to be K£ 326 million, down from K£ 676 million in 1990/91. This is due to improvements in revenue arising from widening of the tax base, some increase in rates and greater efficiency in tax collection on the one hand, and measures instituted by the Government to control growth in expenditure on the other. As usual, the Government resorted to various instruments for financing deficit, with a stress on non-inflationary sources in order to avoid excessive growth in domestic liquidity and money supply. The contribution of net external loans to finance the deficit has been on the decline for the last two financial years and is expected to be K£167 million in 1991/92. On the other hand, net total domestic borrowing has been on the increase in the last three financial years and will contribute K£ 597 million in 1991/92. Public debt redemption is expected to grow by 15.8 per cent in 1991/92 mainly due to a substantial growth in internal public debt redemption reflecting repayment of bonds which had matured.

6.7. An analysis of key fiscal trends between 1987/88 and 1991/92 is given in Table 6.2. Due to an improvement in the current deficit and growth in current revenue, the ratio of the current deficit to current revenue is expected to drop from 11.4 per cent in 1990/91 to 5.7 per cent in 1991/92. The ratio of capital

expenditure to current expenditure has been declining in the last three fiscal years. After increasing from 16.3 per cent in 1987/88 to 23.8 per cent in 1989/90, it is estimated at 13.5 per cent in 1991/92. This is mainly because, in the recent years, the Government has directed its resources more towards a smaller number of high-priority projects. There has also been a decline in the contribution of net short-term borrowing in financing capital expenditure plus net lending in the last three fiscal years.

ANALYSIS OF KEY FISCAL TRENDS, 1987/88 - 1991/92

Table 6.2

	1987/88	1988/89	1989/90	1990/91*	1991/92*
1. Current surplus/deficit as % of Current Revenue	-7.2	-4.2	-7.8	-11.4	-5.7
2. Current surplus/deficit as % of Capital Expenditure plus Net Lending	-37.5	-16.6	-26.9	-43.5	-34.8
3. Ratio of Capital Expenditure to Current Expenditure	16.3	21.3	23.8	20.7	13.5
4. Overall deficit as % of Current Revenue	-16.4	-18.2	-26.0	-28.2	-11.3
5. Overall Deficit as % of Total Expenditure	-11.9	-11.6	-16.4	-16.6	-7.4
6. External Grants and Loans as % of Capital Expenditure plus Net Lending	74.2	80.5	87.0	66.1	99.0
7. Net Short-Term Borrowing as % of Capital Expenditure plus Net Lending	1.6	-6.5	28.4	19.6	2.6
8. Current Revenue as % of GDP at Current Market Prices	24.6	25.0	24.2	24.1	25.3
9. Total Government Expenditure as % of GDP at Current Market Prices	33.9	39.0	38.4	40.9	38.8
10. Overall Deficit as % of GDP at Current Market Prices	-4.0	-4.5	-6.3	-6.8	-2.9

* Provisional

6.8. Table 6.3 presents comparisons between budget forecasts with actual outturns. The Government's efforts to raise revenue are expected to be fruitful as recurrent revenue is projected to exceed the budgeted by K£19 million in 1991/92. Recurrent expenditure is expected to be at a higher level than budgeted mainly due to increased public debt redemption and security measures taken during the year. External financing as stated above, is expected to fall sharply due to a drop in capital inflows from abroad.

6.9. Details of gross receipts on the recurrent account by the Central Government are given in Table 6.4. Gross receipts are expected to grow by 78.4 per cent from K£ 1,618 million in 1987/88 to K£ 2,888 million in 1991/92. Provisional results indicate that indirect taxes are expected to increase by 27.8 per cent in 1991/92 and contribute 60.6 per cent of the gross receipts in comparison with 59.9 per cent and 56.8 per cent share in 1989/90 and 1990/91, respectively. This can be attributed to the on-going tax reforms with emphasis on indirect taxes. Value Added Tax (VAT) on imports increased by K£ 227 million, while collection from excise duties are expected to increase by K£157 million in 1991/92, The increase in VAT on imports is due to the higher rate of VAT on petroleum products and raising of VAT from 5 per cent to 18 per cent for some imported goods. The increase in excise duties may be attributed to extension of excise duties to all types

CENTRAL GOVERNMENT

COMPARISON OF BUDGET ESTIMATES WITH ACTUAL OUT-TURNS. 1988/89 - 1991/92

Table 6.3. K£million

	1988/89			1989/90		
	Budget	Actual	Difference	Budget	Actual	Difference
Recurrent Revenue	1,796.49	1,918.55	122.06	2,222.26	2,056.11	-166.15
Recurrent Expenditure	1,851.89	1,967.24	115.35	2,457.44	2,501.75	44.31
Recurrent Balance	-55.40	-48.69	6.71	-235.18	-445.64	-210.46
Development Expenditure + Net Lending	765.44	480.66	-284.78	922.10	1,075.16	153.06
External Financing (Net)**	555.50	386.65	-168.85	555.50	518.45	-37.05
Balance for Domestic Financing (Net)	-265.34	-142.70	122.64	-601.78	1,002.35	-400.57
	1990/91*			1991/92*		
	Budget	Actual	Difference	Budget	Actual	Difference
Recurrent Revenue	2.,406.52	2,411.00	4.48	2,868.94	2,887.52	18.58
Recurrent Expenditure	2,899.38	2,943.86	44.48	3,336.76	3,443.90	107.14
Recurrent Balance	-492.86	-532.86	-40.00	-467.82	-556.38	-88.56
Development Expenditure + Net Lending	1,045.07	1,096.08	51.01	1,149.83	1,157.81	7.98
External Financing (Net)**	628.44	414.75	-213.69	768.46	463.90	-304.56
Balance for Domestic Financing (Net)	-909.49	-1,214.19	-304.70	-849.19	-1,250.29	-401.10

*Provisional.

**Includes external grants.

CENTRAL GOVERNMENT

GROSS RECEIPTS ON RECURRENT ACCOUNT*, 1987/88 - 1991/92

Table 6.4 K£million

	1987/88	1988/89	1989/90	1990/91**	1991/92**
DIRECT TAXATION:					
Income Tax	454.48	512.02	599.15	713.08	791.82
Other					
Total	454.48	512.02	599.15	713.08	791.82
INDIRECT TAXATION:					
Sales Tax/VAT on Domestic Manufactures	301.25	351.30	323.74	421.58	389.57
Sales Tax/VAT on imports	218.71	236.98	316.61	344.22	570.72
Import Duties***	273.69	300.28	347.96	313.88	366.34
Excise Duties	123.06	137.45	149.36	185.16	342.11
Export Duties	16.46	26.55	0.73	0.01	0.06
Trading Licences	5.49	869	9.05	10.24	10.18
Licences and Fees Under Traffic Act	13.19	16.62	16.61	16.09	19.04
Other Taxes, Licences and Duties	47.00	54.58	67.42	77.37	50.58
TOTAL	998.85	1,132.45	1,231.48	1,368 55	1,748.60
OTHER REVENUE AND INCOME:					
Compulsory Fees, Fines and Penalties	26.68	40.47	20.86	44.19	43.42
Income From Property	69.55	94.87	104.09	149.51	163.61
Current Transfers	8.27	12.91	12.39	18.01	15.35
Sales of Goods and Services	51.05	76.52	57.98	73.78	88.16
Other	9.57	49.31	30.16	43.88	36.56
TOTAL	165.12	274.08	225.48	329.37	347.10
TOTAL	1,618.45	1,918.55	2,056.11	2,411.00	2,887.52
MEMORANDUM ITEM:					
Loan Repayments to Government	5.12	15.97	3.40	4.82	7.00

* 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.

of beer, wines, champagnes and sodas during the last budget. Export duty receipts have continued to be negligible in the last three financial years due to the abolition of export tax on tea and coffee.

6.10. Import duty collection by end-use category are shown in Table 6.5. Import duty receipts declined by 10.5 per cent in 1991 due to a reduction in both import tariffs and the fall in merchandise imports. Duty collections from food, drinks and tobacco have been on a gradual decline since 1989; a consequence of declining imports to supplement local production. The 23.9 per cent decline in import duties on machinery in 1991 was mainly due to a drop in imports of industrial machinery from K£ 597 million in 1990 to K£ 570 million in 1991. Although imports of passenger motor vehicles increased by K£ 10 million in 1991, total imports of transport equipment fell from K£ 316 million in 1990 to K£ 293 million in 1991.

CENTRAL GOVERNMENT

IMPORT DUTY COLLECTIONS, 1987 - 1991

Table 6.5 K£million

END-USE CATEGORY	1987	1988	1989	1990	1991*
Food, drinks and tobacco	10.58	9.22	16.94	12.63	6.82
Basic materials	14.80	14.72	13.31	13.30	20.17
Fuels	30.02	30.14	29.53	34.00	32.19
Chemicals	42.20	54.52	58.31	60.57	62.73
Textiles	6.89	5.28	14.35	6.04	5.63
Semi-manufactures	16.26	25.16	25.66	24.86	26.14
Metals	28.77	34.78	32.68	34.58	30.10
Transport Equipment	44.52	42.61	42.70	53.79	41.20
Machinery	43.68	59.97	63.20	65.94	50.19
Miscellaneous commodities	8.47	11.08	12.34	12.04	9.16
TOTAL	246.19	287.48	309.02	317.75	284.33

*Provisional

6.11. Table 6.6 shows excise revenue for selected commodities between 1987 and 1991. While excise revenue from cigarettes fell by 15.9 per cent, excise revenue from beer and spirits grew by K£ 31 million in 1991 and was the main contributor to the K£ 18 million growth in total excise revenue. This may be attributed to measures taken during the last budget to give equal tax treatment to all types of beer, hence closing of the tax gap between malt and non-malt beers.

6.12. Further details of the financing of capital expenditure and net lending are given in Table 6.7. As stated above, capital expenditure is projected to drop by K£ 143 million mainly due to a drop in capital inflows from abroad. Net lending to parastatals and other entities is expected to drop by K£ 16 million in 1991/92 after an increase of K£ 5 million from K£ 71 million in 1989/90 to K£ 76 million in 1990/91. Net long-term domestic borrowing is expected to overtake net external loans and grants in financing capital expenditure and net lending in 1991/92 with the former contributing K£ 585 million and the latter K£ 464 million.

CENTRAL GOVERNMENT

EXCISE REVENUE BY COMMODITIES, 1987 - 1991

Table 6.6 K£'000

	1987	1988	1989	1990	1991*
Beer and spirits	23,889	25,975	27,929	23,781	54,581
Sugar	18,178	18,894	30,590	19,392	17,844
Cigarettes	70,701	89,803	95,711	108,540	91,321
Other commodities**	1,162	1,511	1,572	252	6,385
TOTAL	113,930	136,183	155,802	151,965	170,131

* Provisional.

** Includes transfer adjustments not allocated by commodity.

CENTRAL GOVERNMENT

FINANCING OF CAPITAL EXPENDITURE AND NET LENDING, 1987/88 - 1991/92

Table 6.7 K£million

	1987/88	1988/89	1989/90	1990/91*	1991/92*
EXPENDITURE:					
Capital Expenditure	281.90	418.94	525.38	551.58	408.92
Net Lending	29.32	61.72	70.82	75.84	59.58
TOTAL	311.22	480.66	596.20	627.42	468.50
FINANCING:					
Surplus on Current Account	-116.71	-79.85	-160.25	-272.69	-163.08
Capital Revenue	4.14	31.16	6.15	15.76	9.21
External Loans (Net)	71.45	200.00	301.20	206.50	167.15
External Grants	159.40	186.65	217.25	208.25	296.75
Long-Term Domestic Borrowing (Net)	220.80	119.10	96.25	331.35	585.15
SHORT TERM BORROWING:					
Cereals and Sugar Finance Corporation (Net)	-6.00	11.30	-0.35	-2.05	-
Treasury Bills (Net)	4.10	-37.15	-107.75	-109.35	31.95
Other Short-Term Borrowing (Net)	6.95	-5.25	277.10	234.40	-19.80
Change in Cash Balances (decrease = +)	-32.91	54.70	-33.40	15.25	-438.83
TOTAL	311.22	480.66	596.20	627.42	468.50

*Provisional.

Analysis of Government Expenditure

6.13. The Government has recently established an expenditure control monitoring system in the Treasury to monitor non-wage, non-pension and non-interest commitments of the major ministries. At the same time, expansion of the civil service has been curtailed in a bid to control recurrent outlays. Total Central Government expenditure on main services as shown in Table 6.8 is expected to increase by 48.7 per cent from K£ 2,967 million in 1988/89 to K£ 4,411 million in 1991/92. The shares in total expenditure in 1991/92 are: general public administration 15.2 per cent, education 17.3 per cent, agriculture, forestry and fishing 5.7 per cent, health 4.8 per cent; compared with 13.7 per cent, 16.7 per cent, 4.8 per cent and 4.2 per cent, respectively, in 1990/91. Expenditure on education has been the major component of the recurrent expenditure, demonstrating the high priority that the Government continues to attach to the growth of education. However, this level of Government expenditure is fiscally unsustainable in the long run. Already parents, local communities, harambee efforts and non-governmental organisations have had to extend their contribution to various levels of educational activity, including university education.

6.14. As shown in Table 6.9 current expenditure increased by 75.7 per cent from K£ 1,731 million in 1987/88 to K£ 3,041 million in 1991/92, while capital expenditure increased by 45.1 per cent over the same period. The high growth in current expenditure may be accounted for by the continued increase in personnel emoluments and the high debt service payments. The surge in domestic debt service payments is already exerting pressure on the control of current expenditure, while external debt service payments are exerting pressure on the country's ability to import essential intermediate goods and capital equipment.

CENTRAL GOVERNMENT EXPENDITURE ON MAIN SERVICES, 1988/89 - 1991/92

Table 6.8 K£million

	1988/89			1989/90			1990/91*			1991/92*		
	Recurrent Account	Development Account	Total	Recurrent Account	Development Account	Total	Recurrent Account	Development Account	Total	Recurrent Account	Development Account	Total
GENERAL PUBLIC ADMINISTRATION:												
General Administration	121.38	91.08	212.46	116.48	173.92	290.40	157.18	163.23	320.41	239.28	182.26	421.54
External Affairs	34.13	3.20	37.33	42.68	3.31	45.99	51.40	2.24	53.64	38.40	1.62	40.02
Public Order and Safety	134.19	11.55	145.74	146.11	16.19	162.30	160 96	23.49	184.45	188.83	21.78	210.61
TOTAL	289.70	105.83	395.53	305.27	193.42	498.69	369.54	188.96	558.50	466.51	205.66	672.17
Defence	171.29	29.76	201.05	243.89	25.37	269.26	261.57	33.92	295.49	223.01	43.51	266.52
Education	477.98	55.10	533.08	523.09	41.84	564.93	615.09	64.09	679.18	687.33	78.03	765.36
Health	117.47	21.52	138.99	119.37	24.96	144.33	133.39	39.52	172.91	165.11	47.94	213.05
Housing and Community Welfare	4.21	16.71	20.92	3.27	9.37	12.64	4.60	13.09	17.69	5.01	6.03	11.04
Social Welfare	37.04	35.97	73.01	38.38	30.84	69.22	42.44	39.53	81.97	49.91	40.32	90.23
ECONOMIC SERVICES:												
General Administration	20.99	83.07	104.06	39.05	147.82	186.87	23.02	121.15	144.17	29.51	89.44	118.95
Agriculture. Forestry and Fishing	82.71	92.17	174.88	96.07	72.80	168.87	90.21	103.60	193.81	107.09	142.26	249.35
Mining,Manufacturing & Construction	39.23	35.11	74.34	42.34	45.03	87.37	37.50	39.85	77.35	43.12	19.13	62.25
Electricity. Gas, Steam and Water	24.28	54.49	78.77	23.50	71.17	94.67	25.81	57.78	83.59	28.68	50.06	78.74
Roads	10.11	96.61	106.72	11.41	88.16	99.57	13.11	94.58	107.69	17.67	117.79	135.46
Other Transport & Communications	10.48	2.17	12.65	11.93	7.26	19.19	11.42	18.60	30.02	9.35	40.00	49.35
Other Economic Services**	52.52	1.91	54.43	51.12	4.64	55.76	85.80	6.72	92.52	113.97	4.60	118.57
TOTAL ECONOMIC SERVICES	240.32	365.53	605.85	275.42	436.88	712.30	286.87	442.28	729.15	349.39	463.28	812.67
OTHER SERVICES; INCLUDING PUBLIC DEBT	998.27	0.00	998.27	991.78		991.78	1,537.99		1,537.99	1,580.43		1580.43
TOTAL***	2,336.28	630.41	2,966.70	2,500.47	762.68	3,263.15	3,251.49	821.39	4,072.88	3,526.70	884.77	4411.47

* Provisional.

** Includes Export Compensation.

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

CENTRAL GOVERNMENT
ECONOMIC ANALYSIS OF EXPENDITURE, 1987/88 - 1991/92

Table 6.9 K£million

	1987/88	1988/89	1989/90	1990/91*	1991/92*
CURRENT EXPENDITURE:					
CONSUMPTION EXPENDITURE ON GOODS AND SERVICES--					
Labour Costs	453.59	541.48	575.61	635.26	702.64
Other Goods and Services	483.72	526.27	618.47	729.57	916.88
TOTAL	937.31	1,067.75	1,194.08	1,364.83	1,619.52
SUBSIDIES**	28.96	31.10	46.20	62.02	82.94
INTEREST:					
Foreign	120.85	156.55	160.89	223.00	242.64
Domestic	249.50	306.87	339.33	491.69	441.51
TRANSFERS TO:					
Households and Unincorporated Enterprises					
including Private Non-profit Institutions	39.16	41.96	70.76	67.98	
Financial and Non-Financial Enterprises	6.95		0.01		}
General Government	324.38	353.50	386.22	443.91	} 654.77
Rest of the World	10.25	7.00	7.22	11.05	}
Funds	13.65	2.29	4.83	2.50	}
TOTAL TRANSFERS	394.39	404.75	469.04	525.44	654.77
OTHERS	0.01	0.22	0.67	0.95	
1. TOTAL CURRENT EXPENDITURE	1,731.02	1,967.24	2,210.21	2,667.93	3,041.38
2. CAPITAL EXPENDITURE:					
Gross Fixed Capital Formation	242.00	374.46	490.59	493.93	349.76
Capital Transfers	39.90	44.48	34.79	57.65	59.16
TOTAL	281.90	418.94	525.38	551.58	408.92
3. NET LENDING:					
Purchase of Equity in Enterprises	7.13	16.72	9.37	4.60	4.50
Loans to Households, Enterprises and					
General Government Agencies	27.30	60.97	64.85	76.06	62.08
Less Loan Repayments to Government	-5.11	-15.97	-3.40	-4.82	-7.00
TOTAL	29.32	61.72	70.82	75.84	59.58
4. PUBLIC DEBT REDEMPTION	180.20	502.83	453.34	772.73	894.60
5. Total Expenditure (1+2+3+4)	2,222.44	2,950.73	3,259.75	4,068.08	4,404.48
MEMORANDUM ITEM:					
Export Compensation	28.70	31.00	46.15	62.00	82.80

*Provisional.

**Includes Export Compensation.

Public Debt

6.15. Total Government liability on domestic and foreign debts, both funded and unfunded, increased by 88.1 per cent from K£ 3,216 million as at June 1987 to K£ 6,048 million as at June, 1991 as shown in Table 6.10. However, the proportion of total internal debt has remained at about 26.9 per cent over the period. This shows the level of reliance on donor funds in development activities.

6.16. Table 6.11 details sources of unfunded debt, both external and internal, between June 1987 and June 1991. External debt contributions from bilateral sources increased by 25.8 per cent from K£ 1,599 million to K£ 2,011 million between June, 1990 and June, 1991. The World Bank, and its subsidiary the

CENTRAL GOVERNMENT

PUBLIC DEBT, 1987 - 1991

Table 6.10 K£million

As at 30th June	Public Debt								
	Funded			Unfunded			Total		
	External	Internal	Total	External	Internal**	Total	External	Internal	Total
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
1991		525.10	525.10	4,418.23	1104.61	5,522.84	4,418.23	1,629.71	6,047.94

* Excludes Short-term borrowing.

** Includes Treasury bonds.

CENTRAL GOVERNMENT

SOURCES OF UNFUNDED DEBT, 1987 - 1991

Table 6.11 K£million

Outstanding as at 30th June	1987	1988	1989	1990	1991
EXTERNAL DEBT:					
Lending Countries:					
West Germany	241.37	279.56	0.00	15.44	30.76
Japan	179.80	235.61	299.62	428.03	702.38
France	121.14	201.19	163.41	61.91	123.37
U.S.A.	139.05	149.58	76.10	120.42	148.45
Netherlands	88.33	87.18	93.74	120.94	133.83
Denmark	43.42	38.61	55.81	74.99	85.18
Finland	3.04	4.16	2.13	5.89	6.74
Other	606.73	546.16	731.98	771.05	780.07
Total	1,422.88	1,542.05	1,422.79	1,598.67	2,010.78
International Organizations:					
I.D.A	399.83	515.06	628.66	1,018.17	1,513.87
I.B.R.D	380.00	391.89	398.82	493.20	525.33
African Development Bank	67.18	86.10	105.75	156.28	179.72
O.P.E.C	9.07	11.31	13.77	16.19	91.33
E.E.C	42.47	50.45	63.34	74.06	20.20
I.M.F	10.54	65.80	4.73	0.41	
Arab League	2.37	2.39	2.53	2.50	2.75
Badea	0.34	3.57	3.96	5.01	5.87
I.F.A.D	3.05	3.12	6.58	9.27	16.14
C.D.C	5.00	7.83	7.44	7.90	7.21
A.D.F		11.36	17.89	37.34	45.03
Total	919.85	1,148.88	1,253.47	1,820.33	2,407.45
Total External	2,342.73	2,690.93	2,676.26	3,419.00	4,418.23
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	1,094.61
TOTAL INTERNAL	166.25	468.00	668.45	783.55	1,104.61
TOTAL UNFUNDED DEBT	2,508.98	3,158.93	3,344.71	4,202.55	5,522.84

International Development Agency (IDA), continued to be the major multilateral lenders accounting for 84.7 per cent of all such funds in 1991. The other international organisations who are major sources of funds are the African Development Bank, OPEC, ADF and IFAD. Internal unfunded debt increased more than five-fold from K£ 166 million as at June 1987 to K£ 1,105 million as at June 1991. It accounted for 20.0 per cent of total unfunded debt in 1991 compared with 6.6 per cent in 1987.

6.17. Holders of public funded debt are outlined in Table 6.12. Total funded debt continued to decline and registered a drop of 25.7 per cent from K£ 707 million as at June, 1987 to K£ 525 million as at June, 1991. The major holders of funded debt continued to be the National Social Security Fund (NSSF), the Central Bank and the Central Government accounting for 46.7 per cent, 31.0 per cent and 13.2 per cent of the total, respectively. Borrowing from the private sector has been on a steady decline.

ANALYSIS OF PUBLIC FUNDED DEBT AT BOOK VALUE BY HOLDERS

ON LOCAL REGISTER AS AT 30TH JUNE, 1987- 1991

Table 6.12 K£million

	1987	1988	1989	1990	1991
PUBLIC BODIES:					
National Social Security Fund	297.08	294.77	276.97	263.28	245.08
Central Government	76.73	75.79	74.46	72.20	69.42
Local Government	0.45	0.40	0.25	0.25	0.22
Kenya Post Office Savings Bank	8.91	8.86	5.12	4.47	4.37
Former E.A.Community Institutions*	21.45	20.84	15.37	15.37	15.37
Central Bank	262.76	262.76	162.76	162.76	162.76
Other Public Sector	1.16	1.16	1.16	1.11	1.10
OTHER INTERNAL:					
Commercial Banks	9.07	5.43	5.43	5.43	5.03
Insurance Companies	8.73	8.20	9.11	8.84	8.46
Other Companies	20.49	18.08	21.83	21.79	13.20
Private Individuals	0.10	0.10	0.09	0.09	0.09
TOTAL	706.93	696.39	572.55	555.59	525.10

*And their successors

Source: Central Bank of Kenya.

6.18. Details of the debt service charges are shown in Table 6.13. Total net servicing charges more than trippled from K£ 479 million in June 1987 to K£ 1,471 in June 1991. Cost of servicing internal debt increased substantially by K£ 636 million over the same period, reflecting the volume of medium term Treasury bonds that matured and required redemption. The Treasury bonds were initially targeted at the non-bank sector but they have also been bought by commercial banks and non-bank financial institutions. External debt servicing charges increased by K£ 241 million while export of goods and services increased by K£ 468 million compared with respective increases of K£ 4 million and K£ 576 million in 1990. Consequently, the external debt service charge as a percentage of export of goods and services as shown in Table 6.14 increased from 14.6 per cent in 1990 to 20.3 per cent in 1991.

CENTRAL GOVERNMENT
DEBT SERVICING CHARGES*, 1987 - 1991

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
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	571.76	940.57
1990	373.04	580.52	953.56		7.01	7.01	373.04	573.51	946.55
1991	614.25	873.17	1,487.42		16.51	16.51	614.25	856.66	1,470.91

* 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, 1987- 1991

Table 6.14

	Debt Service Charges on External Debt* (Financial Year)	Export of Goods and Services (Calender Year)	External Debt Service Charges as a Percentage of Export of Goods and Services
	K£million	K£million	
1987	258.31	1,399.59	18.46
1988	283.85	1,664.85	17.05
1989	368.82	1,977.68	18.65
1990	373.04	2,553.25	14.61
1991**	614.25	3,021.78	20.33

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

Local Authorities

6.19. Despite Government efforts in improving Local Authorities revenue earning capacities, their services continue to be below the levels of demand. The recently introduced local service charge has been used to improve existing services and at the same time initiate new ones. Local Authorities expenditures have increased substantially in the last three years mainly due to up-grading of various centres.

6.20. Total expenditure of Local Authorities comprising of 29 municipalities (including Nairobi), 24 towns, 39 county and 25 urban councils is shown in Table 6.15. Expenditure by the city of Nairobi is provisionally expected to drop by 26.4 per cent due to partial or near completion of major projects undertaken like the on-going Third Nairobi Water Project (Ndakaini). On the other hand, expenditure by other municipalities is expected to rise by 69.1 per cent due to increased operational and capital expenditures. Urban, Town and County Councils expect a growth of 19.6 per cent. In the last five fiscal years the overall expenditure by all Local Authorities has more than doubled from K£ 139 million to K£ 371 million.

6.21. Table 6.16 gives details of analysis of expenditure on main services for municipal councils for the last five fiscal years. Expenditure on administrative services is expected to increase by 32.3 per cent in 1991/92 compared with

growths of 9.5 per cent and 22.1 per cent observed in 1989/90 and 1990/91, respectively. The main contributors to growth in expenditure on community services were road construction and maintenance and introduction of sanitation services. Despite the drop in expenditure on economic services from K£ 142 million in 1990/91 to K£ 106 million in 1991/92, water undertakings and housing estates continued to contribute the major component of the total. The most significant individual items in capital expenditure in 1991/92 were funded from local service charge and donor agencies.

6.22. An economic analysis of expenditure by municipal councils is shown in Table 6.17. Current expenditure continued on an upward trend and is expected to increase by 11.5 per cent in 1991/92 compared with 6.2 per cent and 26.3 per cent growth observed in 1989/90 and 1990/91, respectively, mainly due to increased operational cost caused by inflationary pressures and population growth. Gross

EXPENDITURE ON LOCAL AUTHORITIES, 1987/88 - 1991/92

Table 6.15 K£million

	MUNICIPALITIES			Town, Urban and County Councils	Total
	Nairobi City Council	Other Municipal Councils	Sub-Total		
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	208.79	69.33	278.12	33.86	311.92
1990/91*	168.17	103.28	271.45	60.38	331.83
1991/92*	123.71	174.62	298.33	72.22	370.55

*Provisional.

fixed capital formation improved slightly by K£ 7 million in 1991/92 after dropping by K£ 21 million in 1990/91 from a peak K£ 182 million in 1989/90. Generally, capital expenditure has improved significantly since the introduction of the Local Authorities' service charge.

6.23. Total revenue by municipal councils increased marginally by 2.0 per cent in 1991/92 due to a 15.0 per cent drop in capital revenue against a 18.8 per cent growth in current revenue. As shown in Table 6.18, direct taxes and sale of goods and services have continued to be the major sources of current revenue for municipal councils. In the last three years local service charge has become the dominant source of revenue. After increasing by K£ 88 million in 1990/91, loans raised by municipal councils for capital projects dropped by K£ 17 million in 1991/92.

6.24. Information on economic analysis of expenditure and revenue by town, urban and county councils is given in Table 6.19. The councils expect a deficit of about K£ 4 million in 1991/92 after registering surpluses of K£ 22 million, K£ 3 million and K£ 1 million in 1988/89, 1989/90 and 1990/91, respectively. Growth in expenditure could be mainly attributed to increases in the number of capital projects undertaken and upgrading of trading centres to urban councils. On the other hand, revenue growth was due to the introduction of the local service charge. Licenses, rates,

and cesses continue to be other major sources of revenue to town, urban and County Councils.

MUNICIPAL COUNCILS: CURRENT AND CAPITAL EXPENDITURE ON MAIN SERVICES, 1987/88-1991/92

Table 6.16 K£million

	1987/88	1988/89	1989/90	1990/91*	1991/92*
Administration	22.36	27.31	29.91	36.53	48.33
COMMUNITY SERVICES:					
Roads	7.02	8.72	11.12	27.60	52.81
Sanitation	10.88	11.10	84.65	36.81	43.04
Other	1.58	1.52	17.60	2.70	15.87
Total	19.48	21.34	113.37	67.11	111.72
SOCIAL SERVICES:					
Education	7.95	7.75	8.81	9.15	10.08
Health	10.90	13.21	17.26	14.51	21.24
Other	0.69	1.56	0.60	2.53	0.83
Total	19.54	22.52	26.67	26.19	32.15
ECONOMIC SERVICES:					
General Administration	4.32	2.40	3.17	3.35	4.55
Water Undertakings	24.90	20.05	64.89	97.54	55.38
Housing Estates (including					
Staff Housing)	18.82	15.86	4.45	29.12	24.02
Other	7.71	11.80	35.66	11.61	22.18
Total	55.75	50.11	108.17	141.62	106.13
TOTAL EXPENDITURE	117.13	121.28	278.12	271.45	298.33

* Provisional.

MUNICIPAL COUNCILS: ECONOMIC ANALYSIS OF EXPENDITURE, 1987/88 - 1991/92

Table 6.17 K£million

	1987/88	1988/89	1989/90	1990/91*	1991/92*
CURRENT EXPENDITURE:					
Labour Cost	37.09	42.32	41.54	53.27	65.03
Other Goods and Services	27.31	28.83	32.32	43.77	40.72
Transfer to Households & Enterprises	0.32	1.80	3.67	0.51	3.32
Transfer to Funds (Current)	4.78	0.29	0.24	0.38	0.52
Interest				0.33	
Total	69.50	73.24	77.77	98.26	109.59
CAPITAL EXPENDITURE:					
Gross Fixed Capital Formation	32.09	31.08	182.41	161.00	167.54
Loan Repayment**	15.18	16.72	16.72	12.15	17.59
Transfer to Funds (capital)	0.36	0.24	1.22	0.04	3.61
Total	47.63	48.04	200.35	173.19	188.74
TOTAL EXPENDITURE	117.13	121.28	278.12	271.45	298.33

* Provisional.

** Includes interest.

MUNICIPAL COUNCILS: ECONOMIC ANALYSIS OF REVENUE, 1987/88 - 1991/92

Table 6.18 K£million

	1987/88	1988/89	1989/90	1990/91*	1991/92*
CURRENT REVENUE:					
Direct Taxes (Rates**)	27.39	33.11	34.02	33.79	40.94
Indirect Taxes (Licences and cesses)	3.07	1.61	2.38	2.34	4.07
Income from Property	1.40	0.85	2.20	1.04	3.02
Current Transfers	0.19	0.29	0.00	0.17	0.08
Sale of Goods and Services***	45.89	63.06	69.73	83.91	95.94
TOTAL	77.94	98.92	108.33	121.25	144.05
CAPITAL REVENUE:					
Loans Raised	18.73	13.78	31.92	118.71	101.40
Loan Repayment	0.14	0.91	0.12	0.97	0.28
TOTAL	18.87	14.69	32.04	119.68	101.68
TOTAL REVENUE	96.81	113.61	140.37	240.93	245.73

* Provisional.

** Paid by households and enterprises

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

TOWN, URBAN AND COUNTY COUNCILS:

ECONOMIC ANALYSIS OF EXPENDITURE AND REVENUE, 1987/88 - 1991/92

Table 6.19 K£million

	1987/88	1988/89	1989/90	1990/91*	1991/92*
CURRENT EXPENDITURE:					
Labour Cost	11.51	14.83	18.24	22.02	29.89
Other Goods and Services	5.55	5.05	9.68	16.64	16.79
Transfer to households & Enterprises	0.30	0.06	0.35	0.81	0.10
Transfer to Funds (Current)	0.16	0.03	0.24	0.78	0.35
Interest					
Total	17.52	19.97	28.51	40.25	47.13
CAPITAL EXPENDITURE:					
Gross Fixed Capital Formation	4.26	4.21	4.50	19.34	24.09
Loan Repayments**	0.24	0.71	0.36	0.77	1.00
Transfer to Funds (capital)	0.00	0.30	0.00	0.02	0.00
Total	4.50	5.22	4.86	20.13	25.09
TOTAL EXPENDITURE	22.02	25.19	33.37	60.38	72.22
CURRENT REVENUE:					
Direct Taxes (Rates***)	1.19	2.27	1.39	4.56	6.10
Indirect Taxes (Licences and cesses)	7.88	9.75	8.10	12.58	9.10
Income from Property	3.73	7.87	0.35	2.80	0.82
Current Transfers	0.64	0.84	1.30	0.43	2.00
Sale of Goods and Services +	5.48	24.62	23.07	38.27	39.47
Total	18.92	45.35	34.21	58.64	57.49
CAPITAL REVENUE:					
Loans Raised	2.23	1.91	2.41	2.50	11.14
Loans Repayments	0.02	0.01	0.00	0.01	0.00
Total	2.25	1.92	2.41	2.51	11.14
TOTAL REVENUE	21.17	47.27	36.62	61.15	68.63

* 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

There were some improvements in the international trade and balance of payments situation during 1991. The deficit on the current account of the balance of payments was reduced from K£ 573 million in 1990 to K£ 318 million in 1991. The balance of trade deficit decreased by 22 per cent from K£ 1,302 million in 1990 to K£ 1,016 million in 1991. The overall balance of payments deficit contracted from K£ 169 million in 1990 to K£ 153 million in 1991. The improvements were attributable to increased export earnings and slower growth in imports. The depreciation of the Kenya Shilling also made exports relatively cheaper while discouraging imports.

Balance of Trade

7.2. As shown in Table 7.1, in 1991 export earnings increased by 31.0 per cent over 1990. The increase was occasioned by a sharp rise in exports of gold and other related jewellery, transport equipment, animal and vegetable oils and fats and crude materials, inedible. For the first time since 1986, all export categories in 1991 registered some increase in quantities exported. While exports recorded the highest growth rate in recent years, the rate of growth of imports fell from 13.7 per cent in 1990 to 3.9 per cent in 1991. High world prices and depreciation of the Kenya Shillings dampened domestic demand for imported goods. Government imports were down by 2.1 per cent while commercial imports were up by 4.3 per cent.

BALANCE OF TRADE, 1987 -1991

Table 7.1 K£million

		1987	1988	1989	1990	1991*
EXPORTS	(f.o.b):					
	Domestic Exports	753.41	917.72	999.84	1,232.36	1,611.18
	Re-exports	36.45	34.16	19.90	11.65	18.29
	Total	789.86	951.88	1,019.74	1,244.01	1,629.47
IMPORTS	(c.i.f):					
	Commercial	1,346.33	1,654.45	2,097.27	2,397.55	2,500.91
	Government	84.56	110.70	141.70	148.08	145.00
	TOTAL	1,430.89	1,765.15	2,238.97	2,545.63	2,645.91
BALANCE OF TRADE		-641.03	-813.27	-1,219.23	-1,301.62	-1,016.44

*Provisional

7.3. The sharp rise in exports and sluggish growth in imports resulted in a 21.9 per cent improvement in the balance of trade deficit from K£ 1,302 million in 1990 to K£ 1,016 million in 1991.

Price Changes and the Terms of Trade

7.4. Some better prices for exports were witnessed in 1991. The price for manufactured goods, for example, increased by 37.4 per cent. This was

attributable to increases in the prices of manufactures of metals and textiles. As a result of these rises, the total export price index rose by 27.8 per cent and that of non-oil items by 27.5 per cent as shown in Table 7.2.

PRICE INDICES, 1987- 1991

	1987	1988	1989	1990	1991
EXPORTS:					
Food and live animals	137	171	162	167	218
Beverages and tobacco	146	185	209	256	300
Crude materials, inedible	128	138	198	213	244
Mineral fuels	88	84	104	136	184
Animal and vegetable oils and fats	139	137	205	284	323
Chemicals	162	161	178	212	234
Manufactured goods	117	129	154	155	213
Machinery and transport equipment	202	293	314	365	368
Miscellaneous manufactured articles	177	184	200	224	257
All Exports	126	145	156	169	216
Non-oil Exports	138	165	171	178	227
IMPORTS:					
Food and live animals	126	150	171	176	188
Beverages and tobacco	262	269	322	381	484
Crude materials, inedible	145	164	220	237	262
Mineral fuels	86	79	106	144	163
Animals and vegetable oils and fats	136	147	192	179	243
Chemicals	214	256	308	357	393
Manufactured goods	184	216	262	329	340
Machinery and transport equipment	198	208	239	289	321
Miscellaneous manufactured articles	152	193	202	278	307
All imports	149	164	198	238	265
Non-oil Imports	185	209	246	287	318

7.5. Changes in world price levels, coupled with exchange depreciation influenced the import price index, where price increases ranged from 3.3 per cent for manufactured goods to 35.8 per cent for animal and vegetable oils and fats. Consequently, the import price index for non-oil items rose by 10.8 per cent while the total import price index rose by 11.3 per cent.

7.6. As can be observed in Table 7.3, terms of trade for all commodities rose by 15.5 per cent and for non-oil items by 14.5 per cent but both remained unfavourable to Kenya.

TERMS OF TRADE, 1987- 1991

Table 7.3 1982 = 100

	1987	1988	1989	1990	1991
All Items	85	88	79	71	82
Non-oil Items	75	79	70	62	71

Volume Changes

7.7. Agriculture remains the core foreign exchange earning sector, therefore, any decline in export quantities of agricultural commodities has a negative effect on the performance of exports. As shown in Table 7.4., food and live animals export index declined by 14.3 per cent, resulting mainly from the fall in exports of coffee and fresh vegetables. Declines in quantities exported were also recorded in hides and skins and butter and ghee, which also contributed further to the fall in quantum indices of exports. Export markets, especially in the Middle East, have not fully recovered from the effects of the Gulf War thereby reducing export potential for meat and meat products. Petroleum products registered increases in both price and quantity of 51 per cent and 20 per cent respectively resulting in 28 per cent rise in their export value. Non-oil quantum index rose marginally by 0.7 per cent while the index for all items rose by 8.2 per cent.

QUANTUM-INDICES, 1987 - 1991

Table 7.4 1982 =100

	1987	1988	1989	1990	1991
EXPORTS:					
Food and live animals	125	120	133	154	132
Beverages and tobacco	235	180	186	275	302
Crude materials, inedible	121	153	113	111	120
Mineral fuels	78	96	76	75	96
Animal and vegetable oils and fats	116	150	250	146	183
Chemicals	99	88	108	100	137
Manufactured goods	98	130	133	170	162
Machinery and transport equipment	84	53	59	25	34
Miscellaneous manufactured articles	107	122	130	181	635
All Exports	110	116	115	122	132
Non-oil Exports	119	121	127	143	144
IMPORTS:					
Food and live animals	113	69	107	217	148
Beverages and tobacco	54	63	59	62	85
Crude materials, inedible	158	178	157	158	176
Mineral fuels	100	98	101	104	94
Animals and vegetable oils and fats	117	165	141	150	154
Chemicals	122	126	118	97	113
Manufactured goods	105	125	127	108	112
Machinery and transport equipment	102	134	152	135	95
Miscellaneous manufactured articles	107	107	128	98	114
All imports	106	119	125	119	111
Non-oil Imports	109	128	135	126	119

7.8. The drop in the food imports index was occasioned by a decrease in sugar imports while reduced imports of crude oil and refined petroleum products caused a 9.6 per cent fall in the quantum index for mineral fuels; drop in imports of motor vehicle caused a decline by 29.6 per cent in the index for machinery and transport equipment; beverage and tobacco imports recorded a 37.1 per

cent rise, mainly because of imports of unmanufactured tobacco from Zaire. Increased imports of pulp and waste paper, crude minerals and crude fertilizers caused a rise in crude inedible materials index by 11.4 per cent. The changes were attributable to the 6.7 per cent and 5.6 per cent declines in the total imports and non-oil items indices.

Composition of Exports

7.9. Table 7.5 sets out values of exports by Broad Economic Category (BEC). Despite a 9.9 per cent rise in value of exports of food and beverages in 1991, their share of total exports declined by 15.9 per cent. The share of exports of

industrial supplies declined for a third year, although there was a 30.5 per cent rise in value from K£ 246 million in 1990 to K£ 321 million in 1991. After a marginal decline in 1989, exports of fuels (mainly jet fuel) and lubricants, rose by 31.4 percent in 1990 and 76.9 per cent in 1991. Fuels and lubricants were the third most important source of export earnings with a share of 16.5 per cent.

7.10. Although the export value of consumer goods (including gold ornaments) more than doubled from K£ 82 million in 1990 to K£ 191 million in 1991, their share of total exports remained low at 11.8 per cent. Exports of machinery, capital equipment and transport have remained low with their share of exports in the last five years below 1 per cent.

Quantities of Principal Exports

7.11. Reduced demand for some principal exports in the world market curtailed their exports. There was a slump in quantities exported except for tea, petroleum, meat products, animal feeds and soda ash. Export quantities given in Table 7.6 show that in 1991 the quantities of pyrethrum, sisal hides and skins, raw maize, butter and ghee and horticulture registered declines ranging between 7.9 per cent for sisal to 88.3 per cent for butter and ghee. The drop in exports of butter and ghee is attributable to domestic decline in production of milk and its derivatives.

7.12. A decline in exports of preserved leguminous vegetables led to a 10.3 per cent fall in export of horticulture. Animal feeds exports made a remarkable recovery by registering 337.0 per cent increase above the 1990 exports. Animal feeds were mainly exported in the third quarter of 1991 to the United Arab Emirates and Qatar.

Export Prices

7.13. Table 7.7 gives the 1991 average export prices for some selected commodities. Tea prices like those of pyrethrum products, wattle extract, soda ash, fluorspar, cement, and horticulture have steadily improved since 1987. Coffee prices, which had steadily declined since 1988 made a dramatic recovery in 1991, rising by 34.4 per cent over 1990 prices to record a high KSh 51.94 per kg, but the price was still 3.6 per cent below the 1988 record price. Although

TOTAL EXPORTS* BY BROAD ECONOMIC CATEGORY, 1987- 1991

Table 7 5 K£million

	1987	1988	1989	1990	1991**
1 FOOD AND BEVERAGES	451.85	546.37	598.18	744.06	817.73
Primary	402.81	492.58	525.16	637.74	678.06
For Industry	196.97	248 00	208.70	226.27	228.93
For Household Consumption	205.84	244.58	316.46	411.47	449.13
Processed	49.04	53.79	73.03	106.32	139.67
For Industry	3.03	5.49	4.98	4.41	9.26
For Household Consumption	46.01	48.30	68.05	101.91	130.41
2 INDUSTRIAL SUPPLIES (Non-Foodl	147.20	194.38	219.49	245.59	320.58
Primary	85.04	113.71	110.47	118.59	121.46
Processed	62.16	80.66	109.02	127.00	199.12
3 FUEL AND LUBRICANTS	101.20	118.34	114.47	150.42	266.09
Primary	0.03	.	0.03	0.03	0.01
Processed	101.18	118.34	114.45	150.39	266.08
Motor Spirit	24.56	25.45	9.06	18.24	28.82
Other	76.62	92.89	105.39	132.15	237.26
4 MACHINERY & OTHER					
CAPITAL EQUIPMENT	4.06	5.61	6.53	6.90	10.52
Machinery & Other Capital Equipment	3.36	4.55	5.94	5.79	9.34
Parts and Accessories	0.70	1.06	0.59	1.11	1.18
5 TRANSPORT EQUIPMENT	4.14	5.34	4.52	2.62	4.35
Passenger Motor Vehicles	0.38	0.09	0.06	0.15	0.40
Other	0.89	1. 63	2.12	0.39	0.26
For Industry	0.78	1.61	2.07	0.36	0.20
Non-Industrial	0.11	0.02	005	0.03	0.06
Parts and Accessories	2.87	3.63	2.34	2.07	3.69
6. CONSUMER GOODS NOT					
ELSEWHERE SPECIFIED	44.72	47.52	56.54	82.23	190.80
Durable	1.30	1.36	1.31	9.11	79.03
Semi-Durable	9.13	12.71	12.15	18.54	28.61
Non-Durable	34.29	33.45	43.07	54.57	83.15
7 GOODS NOT ELSEWHERE SPECIFIED	0.24	0.18	0.10	0.56	1.11
TOTAL	753.41	917.74	999.83	1,232.38	1,611.18
PERCENTAGE SHARES					
1 Food and Beverages	59.97	59.53	59.84	60.36	50.75
2 Industrial Supplies (Non-Food)	19.54	21.18	21.95	19.93	19.90
3 Fuel and Lubricants	13.43	12.90	11.45	12.21	16.52
4. Machinery and other Capital Equipment	0.54	0.61	0.65	0.56	0.65
5 Transport Equipment	0.55	0.58	0.45	0.21	0.27
6 Consumer Goods not elsewhere specified	5.94	5.18	5.65	6.67	11.84
7 Goods not elsewhere specified	0.03	0.02	0.01	0.05	0.07
TOTAL	100.00	100.00	100.00	100.00	100.00

*Excluding Re-exports

**Provisional

QUANTITIES OF PRINCIPAL EXPORTS, 1987-1991

Table 7.6

Commodity	unit	1987	1988	1989	1990	1991*
Coffee	Tonnes	99,977	90,831	98,041	114,384	84,104
Tea		134,627	138,201	163,279	166,405	175,557
Petroleum Products	Mn. Lt	684	828	646	638	767
Pyrethrum Products	Tonnes	459	488	540	453	442
Meat products		87	71	401	1,585	2,153
Sisal		27,913	30,937	32,856	30,125	27,743
Hides and Skins		16,052	17,580	10,153	1,093	274
Soda Ash		196,684	228,384	206,812	185,179	197,427
Fluorspar		45,681	98,105	81,204	88,229	55,679
Cement		353,249	346,640	313,884	329,539	304,917
Maize(raw)		247,688	167,237	110,241	159,883	18,720
Horticulture		146,602	161,754	134,178	188,825	169,292
Butter and ghee		315	225	262	418	49
Cotton (raw)		56				
Wool		1,024	795	445		2
Animal feeds		9,723	7,532	11,238	7,938	34,692

*Provisional.

world coffee prices fell further in 1991, the improvement in the case of Kenya was due to the depreciation of the Kenya Shilling and better quality composition of Kenya sales. Wattle bark price also recovered by 18.9 per cent from 1990 prices, although it was 58.8 per cent below the 1987 record price.

EXPORT PRICES, 1987-1991

Table 7.7 KSh./Unit

Commodity	Unit of Quantity	1987	1988	1989	1990	1991*
Coffee, unroasted	Kg	38.93	53.89	41.62	38.64	51.94
Tea	Kg	24.27	26.81	33.30	37.80	43.48
Petroleum Products	1,000 Lt.	2,784.78	2,664.42	3,155.53	4,398.86	6,644.80
Maize(raw)	100Kg.	157.12	259.13	282.40	258.56	513.23
Meat and meat products	Kg	49.68	52.64	63.47	70.45	39.67
Pyrethrum Extract	Kg.	996.60	693.59	1,619.75	1,936.82	2,214.15
Sisal	100Kg.	708.19	771.48	989 66	1,257.49	1,273.51
Hides and Skins(undressed)	Kg.	21.02	29.70	26.76	21.71	46.22
Wattle extract	Kg.	11.32	12.98	14.38	17.52	21.77
Soda Ash	100Kg.	138.54	163.00	213.92	263.04	313.72
Fluorspar	100Kg.	105.55	119.29	156.08	190.88	251.01
Cement	100Kg.	55.88	60.02	69.77	76.60	106.65
Horticulture	Kg.	12.84	14.14	16.72	16.94	21.84
Wool	Kg.	28.73	48.75	57.26		93.84
Animal feeds	100Kg.	132.40	164.50	199.70	189.31	193.05
Cotton (raw)	Kg.	17.86	39.04		38.00	25.41
Butter and ghee	Kg.	32.89	30.05	34.34	32.15	32.33
Wattle bark	100Kg.	980.74	878.33	320.40	339.29	403.67

*Provisional.

7.14. Meat export prices fell by 43.7 per cent in 1991 due to collapse of the Middle East market resulting from the Gulf war. Export price for cement

registered 39.2 per cent rise resulting from increased exports to Uganda. Although Kenya was a net importer of raw materials for the textile industry, the fall in prices and domestic demand did not encourage raw cotton exports. Exports of wool were negligible, although the price was substantially higher.

7.15. Changes in export value, quantity and price shown in Table 7.8 indicate that the highest absolute increase in value and quantity were registered in animal feeds, while the largest absolute increase in price was in hides and skins (undressed). Highest declines in export value were registered by fluorspar, butter and ghee, meat and meat products. Only raw cotton registered declines in all of value, quantity and price.

EXPORT CHANGE IN VALUE, QUANTITY AND PRICE*, 1990-1991

Table 7.8

Commodity	VALUE K£'000			PERCENTAGE CHANGE IN		
	1990	1991**	Changes	Value	Quantity	Price
Coffee, unroasted	220996.3	218428.4	-2567.9	-1.16	-26.47	34.42
Tea	314505.4	381630.5	67125	21.34	6	15.03
Petroleum products	140240.6	254959.4	114718.8	81.8	20.35	51.03
Meat and meat products	5583.1	4269.6	-1313.5	-23.53	35.82	-43.69
Pyrethrum extract	20930.5	32239.2	11308.7	54.03	34.74	14.32
Sisal	18940.9	17665.3	-1275.4	-6.73	-7.96	0.99
Hides and skins (undressed)	1186.4	633.8	-552.6	-46.58	-74.91	112.9
Wattle extract	687.0	7375.8	505.8	7.36	-13.6	24.26
Soda ash	24355.1	30969.2	6614.1	27.16	6.61	19.27
Fluorspar	8420.5	6988	-1432.5	-17.01	-36.89	31.5
Cement	12621.9	16260.7	3638.8	28.83	-7.48	39.23
Horticulture	159922.4	184833.6	24911.2	15.58	-10.34	28.93
Animal feeds	751.4	3348.8	2597.4	345.67	337.02	1.98
Cotton (raw)	0.6	0.1	-0.5	-83.33	-66.67	-33.13
Wood carvings	2382.4	2760.9	378.5	15.89	25.42	-7.6
Metal scrap	2693.6	3723.9	1030.3	38.25	-9.58	52.9
All other Commodities	291958.9	445091.6	153132.6	52.78		
TOTAL	1232360	1611178.8	378818.8	30.74		

*Excluding Re-exports

**Provisional

Composition of Imports

7.16. Table 7.9 shows that industrial supplies of non-food items, which dominate Kenya's imports, with a share of 37.6 per cent of total imports, grew by 17.8 per cent over 1990 share. Imports of primary products of industrial supplies rose by 29.6 per cent because of increased imports of cotton and hops extracts for the brewing industry. Processed imports of industrial supplies rose by 22.1 per cent because of higher imports of acrylic, viscose, petroleum jelly, paraffin wax, bituminous mixtures and crude oil.

7.17. There was a decrease in imports of machinery and capital equipment which fell from K£ 634 million in 1990 to K£ 609 million in 1991. Imports of spares and machinery in the category fell by 6.4 per cent and 3.2 per cent, respectively. The third largest category of imports was fuels and lubricants whose value of imports rose by K£ 5 million, but whose share of total imports declined by 2.8 per cent. Increased imports of rice and alcoholic beverages occasioned the 23.9 per cent rise in imports of processed products for household consumption.

7.18. Overall, there were substantial falls in imports of primary foods and beverages of 20.9 per cent and processed foods and beverage products of 41.0 per cent. Reduced imports of wheat, hops, cones and cocoa caused the fall in imports of primary industrial goods. Lower imports of sugar and palm oil were the major contributors to the decline in processed industrial imports by K£ 53 million. As a result of these declines, the share of imports of foods and beverages as a proportion of all imports fell from by 7.1 per cent in 1990 to 4.5 per cent in 1991.

7.19. There was mixed performance in imports of food and industrial requirements in 1991. The value of imported crude petroleum, as indicated in Table 7.10, rose by 4.7 per cent while imports of refined petroleum products declined by 20.7 per cent. While there was a huge increase in rice imports, there was a sharp fall in the imports of wheat. Agricultural machinery recorded a rise of 20.9 per cent whereas imports of motor vehicles and chassis declined by 5.5 per cent. Value of fertilizer imports registered 88.2 per cent rise to K£ 62.6 million in 1991, but still below the 1989 imports.

Direction of Trade

7.20. Table 7.11 provides data on the destination of exports while Table 7.12 gives a breakdown of origin of imports. The largest volume of trade, 38.8 per cent of exports and 42.0 per cent of imports, was conducted between Kenya and the EEC member countries with the latter enjoying a favourable balance of trade during the period under review. Exports to the EEC rose by 14.7 per cent from the 1990 level while imports from the EEC declined marginally by 2.9 per cent.

TOTAL IMPORTS BY BROAD ECONOMIC CATEGORY, 1987- 1991

Table 7.9 K£million

	1987	1988	1989	1990	1991*
1. FOOD AND BEVERAGES	98.10	100.97	141.30	179.58	119.76
Primary	35.34	28.82	30.33	68.74	54.38
For Industry	21.63	13.95	28.00	68.32	53.44
For Household Consumption	13.71	14.87	2.34	0.42	0.94
Processed	62.76	72.14	110.97	110.84	65.39
For Industry	40.68	60.21	70.77	77.85	24.51
For Household Consumption	22.07	11.93	40.20	32.98	40.87
2. INDUSTRIAL SUPPLIES (Non-Food)	468.97	641.60	757.80	812.68	994.98
Primary	16.51	21.86	29.50	33.84	43.85
Processed	452.46	619.74	728.30	778.83	951.13
3. FUEL AND LUBRICANTS	282.42	245.91	346.68	489.74	494.66
Primary	248.27	215.75	305.42	430.90	449.25
Processed	34.15	30.17	41.27	58 84	45.41
Motor Spirit	3.15	5.93	3.04	5.83	9.09
Other	31.00	24.24	38.22	53.01	36.31
4. MACHINERY AND OTHER CAPITAL EQUIPMENT	319.67	414.27	476.48	634.14	608.65
Machinery and Other Capital Equipment	214.76	259.57	342.20	476.14	460.77
Parts and Accessories	104.91	154.70	134.28	158.00	147.88
5. TRANSPORT EQUIPMENT	190.72	267.19	393.92	315.50	293.03
Passenger Motor Vehicles	34.61	43.24	62.74	69.57	80.46
Other	90.84	137.98	237.49	142.89	118.73
Industrial	87.98	132.44	231.88	136.01	108.73
Non-Industrial	2.86	5.54	5.61	6.88	10.00
Parts and Accessories	65.27	85.98	93.69	103.04	93.84
6. CONSUMER GOODS NOT ELSEWHERE SPECIFIED	70.60	93.91	116.86	110.51	132.55
Durable	12.22	20.96	28.62	22.13	24.11
Semi-Durable	11.76	16.66	17.68	19.63	20.20
Non-Durable	46.63	56.29	70.55	68.75	88.25
7. GOODS NOT ELSEWHERE SPECIFIED	0.41	1.30	5.93	3.49	2.28
TOTAL	1,430.88	1,765.14	2,238.97	2,545.64	2,645.91
PERCENTAGE SHARES:					
1. Food and Beverages	6.86	5.72	6.31	7.05	4.53
2. Industrial Supplies (Non-Food)	32.77	36.35	33.86	31.93	37.60
3. Fuel and Lubricants	19.74	13.93	15.48	19.24	18.70
4. Machinery and other Capital Equipment	22.34	23.47	21.28	24.91	23.00
5. Transport Equipment	13.33	15.14	17.59	12.39	11.07
6 Consumer Goods not elsewhere specified	4.93	5.32	5.22	4.34	5.01
7. Goods not elsewhere specified	0.03	0.07	0.26	0.14	0.09
TOTAL	100.00	100.00	100.00	100.00	100.00

*Provisional.

SELECTED IMPORTS. 1987- 1991

Table 7.10 K£million

	1987	1988	1989	1990	1991*
Crude Petroleum	245.06	210.43	299.10	421.97	441.71
Industrial Machinery (including Electrical)	278.21	395.45	460.20	596.77	569.97
Iron and Steel	84.49	120.64	151.96	164.82	177.2
Motor Vehicle and Chassis	107.77	138.06	174.96	195.16	184.46
Petroleum Products refined	33.78	30.02	40.14	55.61	44.12
Artificial Resins and Plastic Materials and Cellulose Esters and Ethers	56.36	80.92	75.66	83.46	105.90
Pharmaceauticals	38.22	43.73	56.18	57.61	75.38
Fertilizers	38.96	49.18	69.41	33.28	62.63
Agricultural Machinery and Tractors	26.70	29.48	26.92	27.99	33.83
Wheat	17.51	10.00	22.81	62.68	48.70
Paper and Paper Products	21.84	36.22	47.60	40.95	46.38
Rice	5.33	2.71	10.54	9.03	29.36

* Provisional

7.21. Exports to the United Kingdom increased by 22.2 per cent attributable to horticulture, tea and coffee. Germany, Belgium and France imported fresh beans, France imported avocados while Italy and Spain bought substantial quantities of pineapples. Trade with The Netherlands was in Kenya's favour with exports at K£ 66 million, made up mainly of tea, coffee and cut flowers, while imports stood at K£ 60 million. Exports to Eastern Europe fell dramatically due to economic problems in the region.

7.22. Imports from Japan rose by 32.8 per cent in 1991 as Kenya imported motor vehicles, spare parts, electrical machinery, television and radio broadcasting equipments. Exports to Japan, however, increased only moderately resulting in an increase in the trade deficit with Japan from K£ 213 million in 1990 to K£ 288 million in 1991. Balance of trade in favour of the oil exporting countries increased while exports of coffee, cashewnuts and macadamia nuts to the USA were not sufficiently large to offset imports of manufactured goods.

7.23. Trade with African countries improved with exports rising from K£ 270 million in 1990 to K£ 380 million in 1991 while imports increased by K£ 3 million only as shown in Table 7.13. Trade with African countries was in Kenya's favour except for Zambia, Zimbabwe and Swaziland. The deficit with the latter countries was attributable to increased imports of zinc from Zambia, iron and steel from Zimbabwe and coal from Swaziland. Exports to PTA countries rose by 36.8 per cent while imports declined by 17.5 per cent. Elsewhere in Africa the trend was a little different, with exports rising by 52.6 per cent and imports by 272.4 per cent resulting from increased imports of semi-milled rice, and footwear from Egypt. Trade with the rest of Africa has remained low with exports accounting for 23.3 per cent of total exports while imports account for 3.0 per cent of all imports.

DESTINATION OF TOTAL EXPORTS*, 1987-1991

Table 7.11 K£million

	1987	1988	1989	1990	1991**
E.E.C.					
United Kingdom	133.13	186.93	198.71	218.34	266.88
West Germany	76.19	114.65	88.75	137.87	123.54
Italy	17.01	32.76	27.07	27.83	39.20
France	15.47	17.54	21.36	30.37	40.35
Netherlands	56.88	48.82	49.74	69.92	66.38
Other	36.06	52.56	61.78	67.07	96.27
TOTAL	334.74	453.26	447.41	551.40	632.62
Other Western Europe, Total	25.17	43.64	42.01	52.80	136.77
Eastern Europe, Total	8.87	5.97	20.12	19.78	2.92
U.S.A	42.61	46.24	49.38	42.60	57.83
CANADA	6.27	8.61	10.02	10.85	10.33
AFRICA:					
Tanzania	19.55	24.28	27.48	32.26	54.13
Uganda	69.69	83.70	65.92	64.04	107.25
Zambia	2.09	5.58	2.82	3.29	4.02
Other	128.40	130.32	130.91	170.24	214.89
TOTAL	219.73	243.88	227.13	269.83	380.29
MIDDLE EAST:					
Saudi Arabia	14.62	9.73	8.93	10.51	11.04
United Arab Emirates	2.20	2.15	2.71	5.67	5.04
Iran	2.91	0.23	0.72	3.40	5.01
Other	10.44	11.46	16.90	28.67	25.76
TOTAL	30.17	23.57	29.26	48.25	46.85
FAR EAST AND AUSTRALIA:					
Australia	3.52	4.73	5.68	4.35	6.84
Japan	7.03	13.72	12.17	15.13	15.85
India	4.28	5.46	8.59	19.46	9.07
China(Mainland)	2.75	2.63	2.68	0.46	1.12
Other	62.25	50.40	97.54	116.29	142.00
TOTAL	79.83	76.94	126.66	155.69	174.88
ALL OTHER COUNTRIES	0,16	0.75	0,67	1.77	6.72
Aircraft and Ships Stores	42.32	49.04	67.09	91.04	180,26
ALL EXPORTS	789.87	951.90	1,019.75	1,244.01	1,629.47

*Excluding gold and currency but including Re-Exports.

**Provisional

ORIGIN OF TOTAL IMPORTS, 1987-1991

Table 7.12 K£million

	1987	1988	1989	1990	1991*
E.E.C:					
United Kingdom	244.12	333.69	351.04	466.71	430.33
West Germany	118.29	167.31	198.77	199.69	228.99
France	98.09	108.87	196.66	141.79	150.71
Italy	48.40	63.92	100.13	119.59	91.92
Netherlands	41.76	86.22	64.78	87.48	60.43
Other	71.08	82.20	101.51	129.10	148.99
TOTAL	621.74	842.21	1,012.89	1,144.36	1,111.37
Other Western Europe, Total	73.23	98.22	121.05	138.33	111.06
Eastern Europe, Total	10.72	18.75	25.57	17.95	24.09
U.S.A	101.11	88.31	164.21	114.36	132.06
CANADA	10.87	8.80	5.64	15.71	24.41
AFRICA:					
Tanzania	3.44	6.04	13.26	12.51	11.29
Uganda	0.91	1.27	1.06	1.31	2.65
Zambia	3.14	3.80	8.89	10.42	11.03
Other	35.74	41.72	49.96	51.42	54.04
TOTAL	43.23	52.83	73.17	75.66	79.01
MIDDLE EAST:					
United Arab Emirates	228.88	201.44	253.33	339.24	328.84
Saudi Arabia	16.48	15.66	42.45	123.35	133.03
Iran	-	14.90	0.13	36.16	39.84
Other	34.43	21.32	53.79	25.39	26.63
TOTAL	279.79	253.32	349.70	524.14	528.34
FAR EAST AND AUSTRALIA:					
Japan	155.66	216.56	245.53	228.51	303.55
Australia	6.69	7.83	11.30	8.15	9.75
India	18.72	28.76	41.76	44.99	50.35
Chlna(Malnland)	14.15	19.72	19.53	22.15	24.85
Other	85.13	123.22	159.70	160.33	209.19
TOTAL	280.35	396.09	477.82	464.13	597.69
ALL OTHER COUNTRIES	9.84	6.61	8.93	50.99	37.88
Parcel Post and Special Transactions	.	.	.	.	-
TOTAL	1,430.88	1,765.14	2,238.98	2,545.63	2,645.91

*Provisional.

TRADE WITH AFRICAN COUNTRIES, 1987- 1991

Table 7.13 K£'000

	EXPORTS					IMPORTS				
	1987	1988	1989	1990	1991*	1987	1988	1989	1990*	1991*
Preferential Trade Area**										
Uganda	69,687	83,696	65,919	64,043	107,250	910	1,266	1,063	1,314	2,651
Tanzania	19,554	24,284	27,476	32,264	54,126	3,438	6,044	13,263	12,508	11,286
Zambia	2,091	5,584	2,822	3,292	4,023	3,143	3,803	8,894	10,419	11,034
Ethiopia	8,886	6,355	8,993	11,762	14,192	2,700	1,278	153	57	72
Burundi	11,769	11,643	6,344	7,938	14,548	2,875	3,043	365	1,050	139
Somalia	7,831	6,988	7,996	23,433	17,554	38	68	1,002	62	69
Rwanda	23,793	23,405	16,865	18,259	29,347	7,997	9,961	1,584	431	59
Malawi	473	2,495	1,032	1,667	2,425	68	286	57	743	217
Mauritius	2,184	2,327	2,867	8,823	6,258	334	325	285	373	2,585
Swaziland	1,715	1,355	1,320	1,280	2,437	2,203	4,836	5,694	9,167	8,173
Zimbabwe	5,783	9,337	10,706	12,566	6,796	11,040	16,291	26,945	26,839	19,545
Comoros	899	481	401	2,385	5,952	-	-	-	-	-
Djibouti	1,490	1,096	1,025	1,089	4,899	490	55	1	1,095	183
Mozambique	10,424	9,065	2,239	1,378	2,132	2,327	2,163	409	4,321	1,667
Angola	3,834	1,019	860	8,649	28			3	-	1
Lesotho	937	11	262	47	48	.	.	1	1,561	37
TOTAL P.T.A	171,350	189,141	157,127	198,875	272,015	37,563	49,419	59,719	69,940	57,718
Other African Countries:										
Sudan	22,229	21,774	20,970	20,110	28,848	332	62	7	62	83
Zaire	11,575	10,734	6,742	6,365	16,251	963	586	150	419	3,177
Egypt	6,855	10,045	10,844	27,224	46,151	202	524	374	69	8,549
Algeria and Libya	228	227	206	400	367	2	10	1	5	63
Ghana and Nigeria	1,066	1,436	2,117	3,060	3,563	41	753	197	4,450	537
Reunion	3,093	5,795	7,477	7,024	5,521	▪	-	-	139	
Madagascar and Seychelle	1,153	1,860	17,838	2,659	2,711	1,928	23	117	145	244
All Other African Countries	2,177	2,869	3,814	4,109	4,859	2,199	1,451	12,606	429	8,642
TOTAL	48,376	54,740	70,008	70,951	108,268	5,667	3,409	13,452	5,718	21,295
TOTAL AFRICA	219,726	243,881	227,135	269,826	380,283	43,230	52,828	73,171	75,658	79,013
Percentage of all Exports/Imp	27.8	25.6	22.3	21.7	23.3	3.0	3.0	3.3	3.0	3.0

*Provisional.

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

Balance of Payments

7.24. There was an improvement in the balance of payments position out-turn in 1991 over 1990 as shown in Tables 7.14 and 7.15. The current account deficit was sharply reduced in 1991 to K£ 318 million in comparison with K£ 573 million and K£ 596 million in 1990 and 1989, respectively. Reduction in the current account deficit led to an improvement in the overall balance of payments deficit to K£ 153 million in 1991 compared to K£ 169 million recorded in 1990. This was mainly due to contraction by K£ 233 million in the deficit on the merchandise account which In turn resulted from increased value of export earnings and slow growth in imports. Tourism, foreign grants and other inflows also contributed to the reduction in the deficit.

7.25. Table 7.14 shows an improvement in invisible transactions from a surplus balance of K£ 567 million in 1990 to a surplus of K£ 592 in 1991. This surplus on invisible transactions is accounted for mainly by tourism earnings and increased inflows of grants. Tourism earnings increased by 15.0 per cent in 1991 and grants increased by 12.0 per cent.

KENYA BALANCE OF PAYMENTS, 1989-1991

Table 7.14

K£million

	1989+			1990*			1991*		
	Debits/ Assets	Credits/ liabilities	Net	Debits/ Assets	Credits/ liabilities	Net	Debits/ Assets	Credits/ liabilities	Net
A. -CURRENT ACCOUNT									
1. Merchandise (f.o.b.)	2,019.62	952.65	Dr. 1,066.97	2,297.61	1,157.75	Dr.1,139.86	2,355.91	1.449.21	Dr. 906.70
2. Shipment	329.38	52.29	Dr.277.09	367.83	58.37	Dr. 309.46	377.17	66.77	Dr. 310.20
3. Other Transportation	75.65	217.53	141.88	122.13	322.83	200.70	162.75	441.75	279.00
4 Foreign Travel	27.58	432.05	404 47	43.86	533 30	489.44	33.06	596.80	560.74
5. International Investment Income	339.57	12.10	Dr.327.47	456.77	5 30	Dr. 451.47	593.15	7.90	Dr. 585.25
6. Other goods, services and income : Government	106.40	305.98	199.58	116.88	417.80	300.92	124.95	378.33	253.38
7. Other goods, services & income Private	81.34	17.40	Dr.63.94	155.64	63.44	Dr. 92.20	180.48	92.20	Dr.88.28
8. Unrequited transfers-Government	5.25	294.35	289.10	6.03	243.03	237.00	6.35	287.65	281.30
9. Unrequited transfers-Private	45.50	149.94	104.44	58.07	250.47	192.40	64.43	263.00	198.57
TOTAL CURRENT ACCOUNT	3,030.29	2.434.29	Dr.596.00	3,624.82	3,052.29	Dr. 572.53	3,898.25	3,580.61	Dr. 317.64
of which: Visible Balance	2,019.62	952.65	Dr. 1,066.97	2,297.61	1,157.75	Dr. 1,139.86	2,355.91	1,449.21	Dr. 905.50
Invisible Balance	1,010.67	1,481.64	470.97	1,327.21	1,894.54	567.33	1,539.47	2,131.40	591.93
B. CAPITAL ACCOUNT									
10.Government Long-term		389.55	389.55		105.13	105.13		115.30	115.30
11.Private Long-term	1.37	68.96	62.59	3.26	57.86	54.60	6.05	59.59	53.54
12.Parastatals Long-term		166.89	166.89		72.64	72.64		19.25	19.25
13 Short-term	28.60	84.63	56.03		162.90	162.90		Dr -23.7	Dr. 23.7
TOTAL CAPITAL ACCOUNT	29.97	705.03	675.06	3.26	398.53	395.27	6.05	170.44	164.39
C. -ERRORS AND OMISSIONS	-		1.46			8.32			Dr. 0.03
D. OVERALL BALANCE			80.52			Dr. 168.94			Dr. 153.22
E. MONETARY MOVEMENTS									
14.Change in reserves**	114.15		Dr.114.15	Cr 25.16		25.16	Cr.45.17		45.17
15.Transactions with I.M.F		20.89	20.89		117.00	117.00		120.55	120.55
16.Change in other liabilities		12.74	12.74		26.78	26.78		Dr. 12.50	Dr. 12.50
TOTAL MONETARY MOVEMENTS..	114.15	33.63	Dr.80.52	Cr 25.16	143.78	168.94	Cr.45.17	98.15	153.22

* Provisional.

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

\+ Revised.

7.26. Details in Table 7.15 indicate an expansion of export earnings to K£ 291 million in 1991 compared with that of K£ 205 million in 1990. The sharp increase can be accounted for by exports of gold and other jewellery, which were negligible in 1990.

7.27. Increased earnings coupled with the other foreign inflows led to an improvement in the basic balance of K£ 211 million in 1991, compared to a deterioration of K£ 363 million in 1990.

Changes In Kenya Balance Of Payments Magnitudes*, 1989 1991

Table 7.15 K£million

	1989	1990	1991
1. Exports (f.o.b.)* *	+ 49.81	+205.10	+ 291.46
2. Imports(f.o.b.) **	+ 420.42	+277.99	+ 58.30
3. Services (net)	+ 96.17	+ 60.50	+ 28.54
4. Transfers (net)	+ 86.49	+ 35.86	+ 50.47
5. Change on current account	+ 187.95	+ 23.47	+ 255.09
6. Private long term capital (net)	+ 64.18	+ 7.99	+ 1.06
7. Public long term capital (net)	+ 260.63	-378.67	+ 43.22
8. Change on basic balance (net balance on lines 5-7)	+ 136.86	+363.19	+ 210.81
9. Short term capital, errors and omissions (net)	+11.37	+113.73	+ 195.09
10. Net change on all above items (Monetary movements)	+ 148.23	+ 249.46	+ 15.72

*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 importsor reduction In exports are marked as negative entries.

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

International liquidity

7.28. Table 7.16 shows that despite capital inflows of US $ 60 million from the World Bank and Japan with respect to the Financial Sector Adjustment Credit, foreign reserves declined to K£ 229 million at the end of 1991, compared to

K£ 297 million at the end of 1990. This may be attributed to increased official debt servicing. The decline reflects the unfavourable balance of payments position despite financial receipts under the IMF'S three year Enhanced Structural Adjustment Facility (ESAF) of May, 1989 due to end in May, 1992. Special Drawing Rights (SDR) continued to fluctuate, with peaks in January, August and November, 1991. This shows receipt and subsequent utilisation of about SDR 35 million under the ESAF arrangement.

Central Monetary Authorities: Foreign Exchange Reserves. 1987 - 1991

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
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	4.22	296.56	24.65	276.13	9.23	281.14	241.67	441.08	-199.41	62.95
1991										
January	12.79	281.62	24.39	270.02	9.71	279.73	251.49	459.00	-207.51	65.51
February	1.06	269.46	24.91	245.61	9.76	255.37	254.01	455.09	-201.08	66.17
March	1.06	196.87	27.33	179.60	9.76	189.36	255.28	457.36	-202.08	66.50
April	1.13	164.28	26.98	138.43	9.42	147.85	261.71	465.28	-203.57	68.17
May	1.17	225.22	27.71	198.68	10.12	208.80	265.66	464.74	-199.08	69.20
June	3.67	212.69	26.63	189.73	9.91	199.64	268.31	465.04	-196.73	69.89
July	3.70	192.36	27.23	168.83	10.14	178.97	271.00	465.97	-194.97	70.59
August	7.08	242.38	26.91	222.55	10.41	232.96	276.46	466.08	-189.62	72.02
September	3.48	196.14	26.64	172.98	11.22	184.20	276.46	462.28	-185.82	72.02
October	3.72	216.18	6.52	213.38	10.94	224.32	279.23	463.06	-183.83	72.74
November	4.63	203.01	6.53	201.11	10.92	212.03	279.23	460.97	-181.74	72.74
December	4.50	229.15	6.47	227.18	11.39	238.57	284.83	461.49	-176.66	74.20

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.

Exchange Rates

7.29. As result of adjustments the Kenya Shilling depreciated against the SDR from SDR 1 = Kshs 34.04 in December 1990 to SDR 1 = Kshs 40.31 in December 1991. The SDR has same value with the Unit of Account in the Preferential Trade Area (UAPTA).

7.30. The nominal value of the Shilling continued to depreciate against major currencies. The highest depreciation was against the Japanese Yen by 20 per cent. The Shilling depreciated against the US$ by 14 per cent, the German Mark by 13 per cent, French Franc by 12 per cent and the Sterling £ by 11 per cent. The trade weighted index of the Kenya Shilling against major currencies continued to increase, moving from 244 in 1990 to 282 in 1991. There has been a loss of 41 per cent in the value of the Kenya Shilling since 1987, 14 per cent of which occurred 1991.

FOREIGN EXCHANGE RATES OF KENYA SHILLING FOR SELECTED CURRENCIES, 1987- 1991

Table 7.17

CURRENCY	MEAN RATES IN KENYA SHILLINGS				
	31st Dec. 1987	31st Dec. 1988	31st Dec. 1989	31st Dec. 1990	31st Dec 1991
1 US Dollar	16.515	18.599	21.601	24.084	28.074
1 Pound Sterling	30.685	33.302	34.670	46.470	52.428
1 Deutsche Mark	10.357	10.408	12.812	16.131	18.486
1 French Franc	3.059	3.051	3.747	4.743	5.410
1 Swiss Franc	12.802	12.293	14.036	18.904	20.711
1 Dutch Guilder	9.203	9.217	11.341	14.298	16.401
1 Swedish Kroner	2.830	3.023	3.485	4.288	5.060
1 Norwegian Kroner	2.632	2.825	3.286	4.115	4.697
1 Zambian Kwacha**	2.912		1.033	0.509	0.314
1 Austrian Schilling	1.472	1.480	1.821	2.287	2.627
1 Belgian Franc	0.493	0.496	0.608	0.781	0.897
1 Danish Kronor	2.683	2.694	3.289	4.175	4.752
1 Canadian Dollar	12.686	16.606	18.681	20.764	24.246
1 Finish Marka	4.158	4.447	5.352	6.673	6.788
1 Australian Dollar	11.911	15.897	17.162	18.598	21.331
100 Japanese Yen	13.400	14.800	15.032	17.860	22.352
100 Italian Lira	1.404	1.414	1.710	2.134	2.441
1 Indian Rupee	1.286	1.240		1.326	1.085
1 Pakistan Rupee					
100 Burundi Francs**	16.475	17.615	12.552	14.663	14.691
100 Rwanda Francs**	22.474	24.032	27.829	19.885	23.436
Overall Weighted Index* 1982=100	165.3	177.6	199.0	243.6	282.1

* 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 year 1991 was more difficult than 1990 for the agricultural sector. The weather conditions were generally unfavourable to farming, discouraging farmers from expanding areas under most principal crops. Harvests and marketing of output of some commodities declined. Input use for some crops like sugarcane, maize, beans, rice, and wheat also declined, thereby causing a further reduction in the output of these commodities. Export crops like coffee and sisal also noted reduced output. The reduction in output of food crops led to a shortage of common household commodities. Overall performance of the agricultural sector was considerably weaker in 1991 than in 1990.

8.2. Table 8.1 presents changes in output, input and value added in agriculture for the last five years. It is seen that value added at current prices increased in 1991 by 4.8 per cent compared to the growth rate by 6.8 per cent in 1990. However, value added in real terms deteriorated by 1.1 per cent, compared with a growth of 3.4 per cent in 1990.

AGRICULTURAL OUTPUT AND INPUT, 1987-1991

Table 8.1 K£million

	1987	1988	1989	1990	1991*
AT CURRENT PRICES-					
Total Output	1,873.38	2,189.03	2,381.57	2,519.32	2,646.46
Less Inputs	238.29	286.34	293.18	289.66	308.77
Value Added	1,635.09	1,902.69	2,088.39	2,229.66	2,337.69
AT CONSTANT (1982) PRICES-					
Total Output	1,246.43	1,297.84	1,345.14	1,347.19	1,321.81
Less inputs	183.86	188.59	192.63	155.15	142.88
Value Added	1,062.57	1,109.25	1,152.51	1,192.04	1,178.93

* Provisional.

Marketed Production

8.3. Table 8.2 shows an increase in revenue earned from recorded marketed production despite a fall in output of major commodities including maize, cotton, coffee, sugar-cane and dairy products. The increase in revenue is attributed to the general upward movement in commodity prices during the period under review. Liberalization of cereals marketing was expected to reduce the quantum of sales to grain marketing boards. However, a high turnover from barley crop caused a rise in value of cereals marketed during 1991. Barley production in 1991 rose by 118.0 per cent while price increased by 67.3 per cent. Sales of other cereals particularly sorghum and millet rose by 17.9 per cent. Increased production of barley and other cereals explain the sharp increase in value of cereals marketed during 1991. Except pulses, all other temporary industrial crops recorded increased sales revenue. Sugar-cane and pyrethrum realised higher turnover by 17.5 per cent and 31.3 per cent, respectively. Revenue from sales of permanent crops increased by

7.6 per cent from K£ 571.4 million during 1990 to K£ 614.9 in 1991. Livestock and livestock products sector recorded a growth rate of 10.2 per cent in terms of value of marketed production during 1991.

RECORDED MARKETED PRODUCTION AT CURRENT PRICES, 1987-1991

Table 8.2 K£million

	1987	1988	1989	1990	1991*
CEREALS-					
Maize	68.09	54.18	69.89	56.87	37.94
Wheat	21.88	35.12	39.96	31.97	49.93
Others	11.07	10.23	6.98	2.07	35.09
Total	101.04	99.53	116.83	90.91	122.96
TEMPORARY INDUSTRIAL CROPS-					
Sugar-cane	55.47	68.77	78.41	91.40	107.37
Pyrethrum	5.64	6.63	10.05	12.60	16.54
Others	42.26	18.04	14.15	22.67	15.71
Total	103.37	93.44	102.61	126.67	139.62
OTHER TEMPORARY CROPS	18.83	11.90	24.04	18.71	13.22
PERMANENT CROPS-					
Coffee	192.16	278.11	243.90	203.35	202.70
Tea	194.76	203.72	245.32	346.86	390.02
-Sisal	13.54	13.76	16.63	18.05	18.84
Others	4.34	6.02	3.82	3.10	3.34
Total	404.80	501.61	509.67	571.36	614.90
TOTAL CROPS	628.04	706.48	753.15	807.65	890.70
LIVESTOCK AND PRODUCTS-					
Cattle and Calves	103.87	138.88	148.98	164.03	193.80
Dairy Produce	62.08	60.67	66.21	84.33	78.89
Others	23.71	39.71	34.86	43.06	48.31
Total	189.66	239.26	250.05	291.42	321.00
GRAND TOTAL	817.70	945.74	1,003.20	1,099.07	1,211.70

*Provisional.

8.4. Table 8.3 shows that the overall quantum index of marketed production fell during 1991. This is due to a reduced volume of sales to marketing boards which formerly maintained a monopolistic role in crop marketing. Particularly, the Cereals Sector Reform Programme has contributed to a rather sharp decline in sales of cereals to National Cereals and Produce Board (NCPB). The crops quantum index fell from 131.4 in 1990 to 129.4 during 1991. However, livestock sector registered higher sales as reflected by the increase in the index from 94.9 to 98.9. Rising cost of production and constant review of prices paid to farmers have continued to push up prices of various agricultural commodities. As Table 8.3 shows, during 1991 there was an overall increase of 9.7 per cent in the combined index for crops and livestock and products sold to marketing boards.

8.5. As indicated in Table 8.4, prices of major export crops, particularly coffee and tea, improved. Price of coffee recovered during the first half of 1991, reaching a

VOLUME AND PRICE INDICES OF SALES TO MARKETING BOARDS, 1987-1991

Table 8.3 1982=100

	1987	1988	1989	1990	1991*
QUANTUM INDICES-					
Cereals	92.4	86.5	97.0	79.9	68.8
Temporary Industrial Crops	89.1	90.9	100.1	99.3	131.1
Permanent Crops	134.0	149 4	149.5	155.9	143.2
TOTAL CROPS	120.7	129.8	134.3	131.4	129.4
Livestock and Products	76.3	83.6	85.8	94.9	98.9
TOTAL GROSS MARKETED PRODUCTION	112.0	120 8	124.7	125.0	123.4
PRICE INDICES-					
Cereals	179.5	193.6	198.8	242.0	253.2
Temporary Industrial Crops	150.3	173.9	189.8	242.2	244.9
Permanent Crops	131.0	146.6	150.2	154.3	181.1
TOTAL CROPS	141.6	158.1	163.9	184.2	209.2
Livestock and Products	150.2	157.4	181.0	197.6	211.6
TOTAL GROSS MARKETED PRODUCTION	144.0	157.7	164.5	193.5	212.3

*Provisional

peak of Kshs.4,880 per 100kgs in September. On average, the price of coffee increased by 28.0 per cent from Kshs.3,636 per 100kgs during 1990 to Kshs.4,654 during 1991. Tea prices displayed an increasing trend throughout the year, with the average registered at the local auction being Kshs.3,848 per 100kgs compared to Kshs.3,521 during 1990. Other commodities also registered increased prices as a result of regular price reviews by the Government as well as demand pull effects attributed to liberalization programmes for certain crops. Despite price adjustments for milk, farmers still complained of inadequate compensation for the costs of milk production. Deliveries to KCC declined as shown in Table 8.2.

AVERAGE GROSS COMMODITY PRICES* TO FARMERS. 1987 - 1991

Table 8.4 KSh. per stated unit

	UNIT	1987	1988	1989	1990	1991**
Coffee	100kg	3,662.00	4,465.00	4,312.00	3,636.00	4,654.00
Tea		2,500.00	2,037.19	2,717.00	3,521.00	3,848.00
Sisal		705.00	744.80	892.00	918.20	944.00
Sugar-cane	tonne	300.00	358.30	368.00	447.50	521.06
Pyrethrum(extract equivalent)	Kg	1,210.00	1,250.00	1,675.00	1,800.00	1,800.00
Seed Cotton	100Kg	482.00	585 89	570.50	981.00	998.00
Maize		209.00	214.23	223.32	239.00	287.01
Wheat		295.00	340.57	342.80	450.00	500.00
Rice Paddy +		372.00	388.00	388.00		
Beef(third grade)		2,115.00	2,300.00	2,380.00	2,200.00	2,500.00
Bacon Pigs		2,432.00	2,200.00	2275.00	2,345.20	2,911.25
Milk	100 litre	325.00	340.00	375.00	435.00	440.00

* The prices are for calendar year & 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 in 1990 and 1991.

8.6. Subdivision of large farms into small-scale enterprises, continued, thereby raising the proportion of sales of agricultural output to marketing boards from small farms. During 1991, contribution of large farms to gross farm revenue showed a marginal increase by 1.6 per cent whereas that of small farms increased by 17.0 per cent. The share of small farms in total revenue has continued to increase since 1987 and stood at 59.6 per cent, up by 3.4 percentage points over 1990.

SALE TO MARKETING BOARDS FROM LARGE AND SMALL FARMS, 1987-1991

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
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	481.77	-5.20	617.30	24.73	1,099.07	9.60	56.17
1991*	489.53	1.61	722.17	16.99	1,211.70	10.24	59.60

*Provisional.

8.7. As shown in Table 8.6 fertilizers, fuel, and power were used less intensively during 1991 as indicated by the fall in their quantum indices. However, the quantum

AGRICULTURAL INPUT INDICES*, 1987 - 1991

Table 8.6 1982=100

	1987	1988	1989	1990	1991**
QUANTUM INDICES-					
Fertilizers	224.1	271.7	158.4	146.6	144.7
Fuel and Power	131.9	128.3	103.6	121.1	115.7
Bags	139.1	109.9	97.3	94.1	96.2
Manufactured Feeds	280.9	257.4	258.7	260.1	269.4
Purchased Seeds	109.3	92.9	125.6	107.4	98.8
Other Material Inputs	106.1	106.5	90.5	92.2	93.5
Total Material Input	162.9	165.0	133.3	134.9	134.0
Service Inputs	121.2	121.6	118.0	105.2	106.7
TOTAL INPUTS	157.9	.159.9	131.6	131.0	130.8
PRICE INDICES-					
Fertilizers	151.4	155.7	167.2	202.3	212.4
Fuel and Power	127.9	140.7	147.3	224.1	303.6
Bags	159.0	159.8	158.8	162.4	171.0
Manufactured Feeds	136.5	151.6	176.6	188.3	226.6
Purchased Seeds	175.0	266.0	222.1	238.2	279.1
Other Material Inputs	102.0	117.6	129.4	154.6	173.7
TOTAL MATERIAL INPUT	129.4	147.2	154.3	188.8	222.1
NON-FACTOR SERVICE INPUTS	131.7	132.2	136.2	153.2	160.3
TOTAL NON-FACTOR INPUTS	129.6	145.5	152.2	186.7	216.1

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

**Provisional.

index for manufactured feeds rose by 3.6 per cent from 260.1 in 1990 to 269.4 in 1991, reflecting an increasing preference for zero-grazing. Service input also increased by 1.4 per cent. The overall quantum index for inputs fell slightly from 131.0 in 1990 to 130.8 during 1991. Price indices for all inputs increased with fuel and power and manufactured feeds rising by 35.5 per cent, and 20.3 per cent, respectively.

8.8. Data in Table 8.7 show that the value of purchased inputs increased by 7.0 per cent from K£205.39 million in 1990 to K£219.73 million in 1991. Price increases for all inputs during the year explain the rise in the value of purchased inputs.

PURCHASED AGRICULTURAL INPUTS*, 1987-1991

Table 8.7

	1987	1988	1989	1990	1991
MATERIAL INPUTS-					
Fertilizers	43.28	53.51	69.23	48.47	51.40
Other Agricultural Chemicals	14.97	12.03	13.50	11.13	12.90
Livestock Drugs and Medicines	15.47	16.11	19.57	18.82	20.44
Fuel and Power	27.85	30.17	25.49	34.58	36.21
Bags	12.59	11.15	11.86	11.47	12.64
Manufactured Feeds	20.91	20.63	23.39	31.18	32.07
Purchased Seeds	20.09	26.03	25.40	27.09	29.25
Other Material Inputs	7.45	9.89	8.08	8.47	9.07
Total	162.61	179.52	196.52	191.21	203.98
SERVICE INPUTS	15.84	17.11	15.87	14.18	15.75
TOTAL INPUTS	178.45	196.63	212.39	205.39	219.73

*Except labour.

**Provisional.

8.9 Local factors coupled with unfavourable external prices dealt a further blow to the sectoral terms of trade during 1991. Indices of prices paid rose by 9.1 per cent while output prices index rose by 7.1 per cent, thereby reducing the terms of trade index from 95.2 to 93.4.

PRICE AND TERMS OF TRADE INDICES FOR AGRICULTURE, 1987-199

Table 8.8 1982 = 100

	1987	1988	1989	1990	1991*
General Index of Agricultural Output Prices**	150.3	168.7	177.0	187.0	200.2
PRICE PAID-					
Purchased Inputs	129.6	145.5	152.2	186.7	216.1
Index of Purchased Consumer Goods-Rural Areas	167.8	178.6	188.4	205.9	228.6
INDICES OF PRICES PAID	158.8	170.5	181.2	196.5	214.4
Agricultural Sector terms of Trade	94.7	98.9	97.7	95.2	93.4

*Provisional.

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

8.10. Estimates of production of maize, beans and potatoes from the Crop Forecast Survey point to a reduction in output compared to the previous year which was also not a good year. The main factor contributing to this decline was the poor weather conditions prevailing during the two main cropping seasons. First, the 1991 long rains were generally poor in many parts of the country. This is evident from comparisons of the accumulated actual rainfall amounts during the long rains season (i.e. from 1st March, to 30th June, 1991) with the normal for the same period. Out of 32 stations 18 recorded large rainfall deficits. The greatest deficit of 423.8 mm was observed at Kisii Agricultural Research Station. However, a few places in Rift Valley, Central and Coast Provinces experienced surpluses. The short rains in 1991 were also unfavourable for agricultural production. The accumulated rainfall for the season, 1st October to 31st December, 1991 indicate that out of 22 stations with representative and continuous records, 18 experienced deficits. The greatest deficit was 404.7 mm at Meru meteorological station in the Eastern Province. The only surpluses were 34.6 mm, 28.4 mm, 2.3 mm and 1.1 mm at Kakamega, Dagoretti, Narok and Kisii, respectively.

8.11. Estimated production of maize, beans and potatoes from bi-annual crop forecast surveys is presented in Table 8.9. The 1991 output of maize was 22 million bags, reflecting a 13.3 per cent drop from 1990/91 production of 25 million bags. The reduction is attributable to erratic and below normal rainfall obtained in major maize growing zones, low planted area and low input use. Production of beans and potatoes dropped by 10.3 per cent and 8.5 per cent, respectively.

ESTIMATED PRODUCTION OF SELECTED AGRICULTURAL COMMODITIES IN AGRICULTURE

YEARS, 1987/88-1991/92

(Based on Crop Forecast Surveys)

Table 8.9 million bags

CROP	1987/88	1988/89	1989/90	1990/91	1991/92*
Maize	26.84	30.68	29.23	25.44	22.05
Beans	2.31	2.70	2.85	2.34	2.10
Potatoes	2.43	2.55	2.59	2.13	1.95

*Provisional.

8.12. Table 8.10 shows rural retail market prices for selected commodities during the months of March and September each year for the four years, 1988 through 1991. Comparing prices in 1990 and 1991, it is evident that they were nearly all higher in 1991. Maize prices in September, 1991 had risen by 18 per cent in Coast and by 23 per cent in Eastern Province, by 49 per cent in Nyanza and by 45 per cent in Central, 78 per cent in Rift Valley and 74 per cent in Western Province, respectively. The national average retail price per kilogramme of maize in September, 1991 stood at KShs. 4.50, an increase of about 46 per cent compared to the price of KShs. 3.08 in the same month in 1990. This meant that a 90 kg. bag could fetch over KShs.400 in open markets, a price that is much higher than the gazetted producer price. The shortfall in production and high open market prices contributed to rapid depletion of stocks held by the National Cereals and Produce Board.

RURAL MARKET PRICES FOR SELECTED FOOD CROPS

BY PROVINCE, 1988-1991

Table 8.10 KSh. per Kg

CROP	Province	1988		1989		1990		1991	
		March	September	March	September	March	September	March	September
Maize	Coast					3.75	3.80	3.80	4.50
	Eastern	2.93	2.74	2.67	2.74	2.86	3.00	3.05	3.70
	Central	3.11	2.93	2.75	3.27	3.44	3.30	3.60	4.78
	Rift Valley	2.73	2.35	2.66	2.63	2.56	3.02	3.70	5.39
	Nyanza	2.79	2.72	2.64	2.85	2.89	2.60	3.10	3.88
	Western	2.69	2.64	3.42	2.78	3.06	2.76	3.20	4.80
Beans	Coast	9.03	10.67	11.28	9.11	11.71	12.67	12.70	12.90
	Eastern	6.97	5.55	6.02	4.74	5.29	6.10	6.50	6.50
	Central	7.53	4.75	7.54	8.33	7.60	7.44	8.11	9.00
	Rift Valley	7.57	7.06	7.66	6.67	7.75	7.54	8.00	10.60
	Nyanza	7.73	6.92	7.27	6.91	6.65	7.55	7.22	7.60
	Western	5.96	5.44	7.16	7.14	7.38	6.94	7.26	7.21
Potatoes	Coast	6.00	5.30	5.98	11.00	7.73	7.68	8.05	8.45
	Eastern	4.34	3.67	4.14	4.03	3.78	3.57	3.80	4.20
	Central	3.19	2.50	5.12	4.64	3.48	5.56	3.65	5.90
	Rift Valley	2.71	2.85	3.37	2.62	2.56	3.48	3.00	3.20
	Nyanza	5.87	2.90	6.78	4.98	7.91	7.66	8.20	8.35
	Western	4.02	3.90	4.03	3.71	3.25	3.53	3.70	4.35

8.13. The supply situation for beans was slightly different and except for Rift Valley which recorded 41 per cent and Central 21 per cent price increases respectively, prices in other provinces were relatively stable. In September, 1991 the national average retail price of beans for all varieties stood at KSh. 8.88 per Kg compared with KShs.8.04 for the same month in 1990. Observed retail price patterns for potatoes were similar to those of beans with the exception of Central and Western provinces which recorded over 6 per cent and 23 per cent price increases, respectively.

Production by Crop

8.14. The Government has continued to liberalize marketing of cereals, other crops, livestock and livestock products to improve efficiency in production and encourage healthy competition which are expected to benefit both producers and consumers. This policy has in turn influenced to a large extent the volume of sales delivered to marketing boards and agents. As a result, it will be necessary to review information gathering methodologies so as to be able to capture both quantities and values handled by the private sector more fully. Table 8.11 presents data on recorded sales of some major crops to marketing boards. The observed decline in sales of some of the crops in part is due in part to this opening up of alternative private sector outlets.

8.15. ***Maize*** - The quantity of maize purchases by the National Cereals and Produce Board (NCPB) has continued to fall since 1989 due mainly to reduced participation of the board in cereal marketing. Purchases fell from 527.7 thousand tonnes in 1990 to 303.5 thousand tonnes in 1991. This drop by 42.5 per cent,

SALE OF SOME MAJOR CROPS TO MARKETING BOARDS, 1987-199

Table 8.11

CROP	UNIT	1987	1988	1989	1990	1991*
Maize	000 tonnes	698.9	502.5	648.7	*527.7*	303.5
Wheat	"	149.2	220.6	233.2	78.5	199.0
Rice Paddy +		30.1	31.7	31.5	▪	▪
Cotton		23.8	10.9	13.8	18.8	8.4
Coffee		104.9	124.6	113.1	111.9	87.1
Tea		155.8	164.0	180.6	197.0	203.6
Sisal		37.0	36.9	37.4	39.3	38.8
Sugar-cane	mn. tonnes	3.7	3.8	4.3	4.2	4.0
Pyrethrum (Extract Equivalent)	tonnes	93.0	102.0	124.1	136.4	183.8

* Provisional.

\+ No purchases of paddy by NCPB in 1990 and 1991.

compared to estimated fall in production of 13.3 per cent, is explained by an increase in disposal through other marketing channels. The Government has also gazetted a de-scheduling of beans, millet, sorghum, dried capsicums and other produce to promote movement of grains through market mechanisms.

8.16. ***Wheat*** - Table 8.12 indicates a 2.6 per cent increase in wheat production in 1991. Even with the increased production, it was necessary to import 450 thousand tonnes to offset domestic deficit.

PRODUCTION AND IMPORTS OF WHEAT, 1987-1991

Table 8.12 '000 Tonnes

YEAR	PRODUCTION*	IMPORTS	TOTAL
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	512.7
1991**	195.0	450.0	645.0

*Includes rentention for seed.

**Provisional.

8.17. ***Coffee*** - During 1991, the coffee industry suffered a further slump in berry production as a result of poor weather and increase in prices of agricultural inputs. The first half of 1991 saw a rebound of prices of Kenyan coffee on the world market. While a 50Kg- bag of coffee traded at KSh. 2,000 during the early part of the year, the price rose to Ksh. 2,300 per 50Kg- bag by the middle of the year. However, coffee output in the short run was unresponsive to the price incentive. Deliveries to Kenya Planters Corporation Union dropped from 111.9 thousand tonnes to 87.1 thousand tonnes during 1991, a decrease by 22.2 per cent. Table 8.13 shows that production in the crop year 1990/91 dropped by 16.8 per cent compared to 1989/90.

8.18. ***Tea*** - Overall made tea production increased by 6.6 thousand tonnes in 1991 over 1990 production to stand at 203.6 thousand tonnes. Further growth was inhibited by dry weather experienced in the early months of the year. Of the total

COFFEE PRODUCTION BY AREA, EXPORT QUOTA AND AVERAGE YIELD PER GROWER, 1986/87-1990

Table 8.13

	1986/87	1987/88	1988/89	1989/90	1990/91*
AREA (Ha) '000-					
Co-operatives	116.1	117.7	116.4	116.4	117.4
Estates	38.4	38.6	36.7	36.7	38.0
TOTAL	154.5	156.3	153.1	153.1	155.4
Production (tonnes) '000-					
Co-operatives	67.9	84.3	78.3	69.5	51.3
Estates	36.4	44.4	38.6	34.4	35.1
TOTAL	104.3	128.7	116.9	103.9	86.4
Quota (tonnes) '000-	-	72.0	80.0	-	.
Average yield (kg./Ha.)-					
Co-operatives	577.0	710.0	673.0	595.0	440.0
Estates	942.0	1,150.0	1,054.0	937.0	930.0

*Provisional.

production, local consumption accounted for 17.5 thousand tonnes while 186.1 thousand tonnes were exported. The major export destinations were the United Kingdom, Pakistan, Egypt, Sudan, Nertherlands, Ireland, U.S.A., Iran and Canada, while the Far East and Australia bought small quantities. There was, however, a comparative drop in local consumption due to increase in tea prices. Smallholder production continues to account for a larger share in total production with output in 1991 taking up 55.4 per cent of gross production. Yields have continued to increase for both sectors. Tea prices remained firm in the local auction market, displaying an upward trend throughout the year and settling at Kshs. 39.57 per kg. by close of the year.

TEA PRODUCTION BY AREA, PRODUCTION AND AVERAGE YIELD - 1987 TO 1991

Table 8.14

	1987	1988	1989	1990	1991*
AREA (HA)'000					
Smallholder	56.90	57.70	57.90	67.00	67.70
Estates	28.50	29.10	29.50	30.00	30.30
Total	85.40	86.80	87.40	97.00	98.00
PRODUCTION (Tonnes)'OOO					
Smallholder	76.90	84.70	100 60	110.00	112.70
Estates	78.90	79.30	80.00	87.00	90.90
Total	155.80	164.00	180.60	197.00	203.60
AVERAGE YIELD (KG/HA)					
Smallholder	1,399.60	1,499.00	1,779.80	1,945.30	1,981.70
Estates	2,968.90	2,952.30	2,929.30	3,123.80	3,184.40

*Provisional

8.19, ***Cotton*** - The restructuring of cotton lint marketing has led to a reduction of raw cotton purchased directly by the Cotton Lint and Seed Marketing Board. The volume sold to the Board decreased by 55.3 per cent from 18.8 thousand tonnes to 8.4 thousand tonnes. In addition to the effects of market reforms, the Board's purchases declined due to poor harvests in Tana River district attributable to the

change in the course of irrigation water. Western, Nyanza and some parts of Coast Province reported low buying during the year. Shortfalls in local production was aggravated by reduced area under cotton since the Government withdrew part of assistance previously given to farmers to procure seeds and chemicals.

8.20. ***Sugarcane*** - Table 8.15 analyses sugarcane production by type of grower. Production of sugarcane also fell in 1991, with increases realised only by factory estates and large scale farms. Smallholders, settlement schemes and cooperative societies experienced a reduction in output.

SUGAR CANE PRODUCTION BY TYPE OF GROWER, 1997-1991

TYPE OF GROWER	1987	1988	1989	1990	1991*
Factory Estates	692.8	695.7	728.2	547.6	561.6
Large Farms	607.5	630.0	699.9	172.8	227.1
Small-Holders	1,824.2	1,891.9	2,185.7	3,108.3	3,016.8
Co-operative Societies	315.9	327.6	363.9	149.1	65.3
Settlement Schemes	257.6	290.0	283.6	222.2	177.1
TOTAL	3,698.0	3,835.2	4,261.3	4,200.0	4,047.9

* Provisional.

8.21. Sugar production recorded a small reduction from 434.0 thousand tonnes during 1990 to 426.5 thousand tonnes, a decrease by 1.7 per cent. Imports at 38.6 thousand tonnes were also considerably lower than in 1990. As a result, consumption fell by 12.8 per cent.

PRODUCTION, IMPORTS, CONSUMPTION AND EXPORTS OF SUGAR, 1987-1991

YEAR	PRODUCTION	IMPORTS	CONSUMPTION	EXPORTS
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	
1991 *	426.49	38.64	468.98	

* Provisional.

8.22. ***Horticulture*** - Exports of horticultural products have shown an erratic performance over the last five years. Their exports decreased from 188.8 thousand tonnes in 1990 to 169.3 thousand tonnes, a significant 10.3 per cent decline, attributable to declines in exports of preserved leguminous vegetables. The 15.6 per cent improvement in revenue earned in 1991 compared against the drop in volume of exports, was of course, a result of price increase; which rose by over 20 per cent in 1991 compared to 1990.

8.23. ***Pyrethrum*** - Stable world market demand for pyrethrin products used in the manufacture of insecticides helped maintain favourable returns to domestic production of pyrethrum. Despite bad weather in 1991, deliveries of the crop to

EXPORTS OF FRESH HORTICULTURAL PRODUCE, 1987 - 1991

Table 8.11

YEAR	VOLUME 000 Tonnes	VALUE K£million
1987	136.9	77.1
1988	151.5	94.8
1989	134.2	112.1
1990	188.8	159.9
1991*	169.3	184.8

* Provisional.

Pyrethrum Marketing Board increased significantly. Pyrethrin extract production shot up by 34.8 per cent to 183.8 tonnes.

8.24. ***Sisal*** - Total sisal production during 1991 was 38.8 thousand tonnes, 1.3 per cent lower than 39.3 thousand tonnes registered in 1990. A reduction in area under UHDS grade sisal especially contributed to the decline. Bad weather also hit most estates, leading to a further reduction in output. Prices in shillings remained generally stable during the year though slightly lower compared to 1990 prices. However, prices fell in terms of US dollar. By close of the year, the f.o.b price per tonne of Grade 1 sisal was US$ 500 compared to US$ 650 by the end of 1990

Irrigation

8.25. Irrigation activities, especially along river Tana in Coast Province, registered a decline during 1990/91. Available data indicates a large drop in total crop area and the number of plot operators. Tana and Bura irrigation schemes did not realise any crop production while West Kano scheme produced no sugarcane for the second year running. Rice paddy production in four schemes, Mwea, Ahero, West Kano and Bunyala reported an increase of 0.7 per cent from 32,561 tonnes during 1990 to 32,783 tonnes. However, domestic demand for rice outstrips local production.

Livestock and Livestock Products

8.26. Inadequate rains during 1991 coupled with increased sales of milk to local markets and households led to a drop in deliveries to Kenya Co-operative Creameries Ltd (KCC). Similarly, utilization of milk for production of several milk derivatives declined in 1991. Total sales to KCC dropped from 392 million litres during 1990 to 359 million litres during 1991, representing a decrease of 8.4 per cent. Production of Dried Whole Milk Powder registered the highest drop as much more milk was consumed directly, leaving no surplus for conversion into powder for future use. Consumption outstripped production as evidenced by a serious shortage of the commodity towards the end of the year.

8.27. Owing to vulnerability of cattle to changes in pasture availability, slaughter during 1991 were largely dictated by the prevailing dry weather. Slaughters countrywide increased by 17.0 per cent to 969 thousand head as farmers disposed

PROGRESS AND PRODUCTION AT SEVEN IRRIGATION SCHEME AREAS, 1986/87- 1990/91

Table 8.18

	1986/87	1987/88	1988/89	1989/90	1990/91*
MWEA-					
Area cropped-Hectares	5,799	5,795	5,818	5,820	5,802
Plot-holders-Number	3,236	3,236	3,238	3,248	3,240
Gross value of output-K£'000.	4,477	4,643	5,366	5,605	5,668
*Payments to plot-holders-K£'000	2,499	2,701	3,225	3,239	3,099
ALL (7) SCHEME AREAS-					
Area cropped-Hectares	11,212	11,422	10,789	10,893	7,725
Plot-holders-Number	7,646	7,949	7,602	7,776	5,433
Gross value of output-K£'000	7,599	8,017	8,913	9,108	7,835
Payments to plot-holders-K£'000	3,911	4,345	5,044	5,056	4,079
CROPS PRODUCED - Tonnes					
Mwea-Paddy	25,236	27,163	27,555	26,713	25,504
Ahero-Paddy	3,894	4,213	2,983	2,783	2,986
W.Kano-Paddy	2,319	1,728	2,387	2,124	3,890
Bunyala-Paddy	1,209	1,379	1,379	941	403
Total Paddy	32,658	34,483	34,304	32,561	32,783
W. Kano - Sugar-cane	4,463	16,995	3,339		
Tana-Cotton	1,966	1,952	1,938	1,324	-
Bura-Cotton	5,504	5,500	5,519	5,519	-
Pekera-Onions	492	254	939	1,218	1,630
-Chillies	217	68	-	234	368

*Provisional.

Note: 1990/91 data from Bura Irrigation Project excluded.

of livestock. However, Kenya Meat Commission (KMC) slaughtered fewer animals during 1991. Some 59 thousand head of cattle and 6 thousand sheep and goats were delivered to KMC for slaughter. The drop was occasioned by higher sales to the private sector which offers better prices to farmers and pays cash on delivery. Also contributing to lower slaughters at the KMC was reduced demand from graduate educational institutions during the long recess. Pig slaughter by Farmers Choice Limited stagnated at 47 thousand head while national slaughters dropped slightly from 84 thousand head to 83 thousand, a decrease of 1.2 per cent.

Agricultural Training

8.28. Total student enrolment in the three Agricultural Training Institutions run by the Ministry of Agriculture has remained constant at 1,200 students since 1988. However, an imminent transformation of Embu Institute of Agriculture to an entirely in-service training institution for staff of the Ministry of Agriculture and other Government departments reduced students for pre-service courses during 1991. Intake was halved from 400 to 200 students. Enrolment in Animal Health and Industry Training Institutes declined further by 9.3 per cent from 718 to 651 students. A shift from short-term to long-term courses at Naivasha Dairy Training School continues to attract students. Enrolment at Athi River Meat Training School

PRODUCTION AND SALE OF LIVESTOCK AND DAIRY PRODUCTS, 1987- 1991

Table 8.11

	UNIT	1987	1988	1989	1990	1991*
KENYA CO-OPERATIVE CREAMERIES						
Recorded Milk Production***	Mn. Litres	347	359	353	392	359
Milk Processed:						
Wholemilk and cream	Mn. Litres	302	346	373	340	321
Butter and ghee	Tonnes	4,754	4,187	4,195	4,550	3,479
Cheese		207	247	215	172	250
Dried wholemilk powder		2,346	1,717	1,030	1,396	975
Dried skim-milk powder		2,040	2,387	3,200	2,992	3,035
Other products		319	451	610	399	387
Livestock slaughtered						
Cattle and Calves	'000 Head	524	701	752	828	969
Sheep and Goats		875	942	998	1,206	1,345
Pigs		60	63	73	84	83
KENYA MEAT COMMISSION						
Intake of:						
Cattle and Calves	000 Head	4	10	27	68	59
Sheep and Goats		-	-	-	10	6

*Provisional.

**Including sale licensed by the Kenya Dairy Board.

during 1991 increased from 61 to 112 students due to increased capacity. The meat training school offers courses including meat inspection, slaughter-house attendance and slaughter-house supervision.

ENROLMENT IN AGRICULTURAL TRAINING INSTITUTIONS*, 1987- 199

Table 8.20 Number

	1987	1988	1989	1990	1991**
CERTIFICATE LEVEL-					
Bukura Institute of Agriculture	400	400	400	400	400
Embu Institute of Agriculture	400	400	400	400	200
Kilifi Institute of Agriculture	203	400	400	400	400
Animal Health & Industry Training Institutes-					
Kabete	290	292	294	233	186
Nyahururu	210	207	200	161	137
Ndomba	396	396	400	324	328
SHORT-TERM VOCATIONAL COURSES-					
Naivasha Dairy Training School	1,045	111	80	135	143
Athi River M.T. School	80	87	69	61	112

*Institutions under the Ministries of Agriculture and Livestock Development.

**Provisional.

Co-operatives

8.29. New registration of cooperatives has been limited to the absorption of viable secondary activities into already existing societies. The total number of societies increased by 3.6 per cent from 5,400 in 1990 to 5,594 in 1991. The increase was

accounted for mainly by registration of non-agricultural societies. Out of 194 societies registered during the year, savings and credit and other non-agricultural societies were 129 or 66 per cent.

NUMBER OF SOCIETIES AND UNIONS BY TYPE, 1987 - 1991

Table 8.21 Number

TYPE OF SOCIETY	1987	1988	1989	1990	1991
Coffee	203	203	206	207	208
Sugar-cane	82	85	89	91	91
Pyrethrum	54	53	56	56	56
Cotton	60	60	81	81	81
Dairy	153	157	190	192	194
Multi-produce	532	561	905	942	971
Farm Purchase	217	218	198	198	212
Other Agricultural Societies	359	395	500	522	539
Fisheries	56	57	61	62	64
TOTAL	1,716	1,789	2,286	2,351	2,416
Savings and Credit	1,608	1,723	2,141	2,251	2,339
Other Non-Agricultural Societies	419	445	680	722	763
TOTAL	2,027	2,168	2,821	2,973	3,102
Unions & Country-wide Co-operatives*	66	67	66	76	76
TOTAL	3,809	4,024	5,183	5,400	5,594

*Includes KCC and KGGCU.

8.30. Despite the increase in number of co-operative societies, the share in Gross Farm Revenue attributed to co-operatives declined for a second year by 18.1 per cent, which was a somewhat steeper decline than the 14.5 per cent decline recorded in 1990. All commodities experienced reduced sales as indicated in Table 8.22. Dairy products recorded 53.6 per cent reduction in sales attributable to the break up of most primary societies that formerly marketed milk on behalf of farmers.

SALE OF SELECTED AGRICULTURAL PRODUCE BY CO-OPERATIVE AND THEIR CONTRIBUTION TO GROSS FARM REVENUE*, 1987- 1991

Table 8.22

YEAR	COFFEE	SUGAR-CANE	PYRETHRUM	COTTON	DAIRY PRODUCTS	TOTAL
	Sale K£million					
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
1991**	124.45	40.02	7.40	4.00	21.13	197.00
	Percentage Share					
1987	64.02	-62.30	47.52	100.00	74.03	65.00
1988	64.00	64.00	47.96	100.00	81.00	67.00
1989	66.77	66.51	63.68	100.00	86.01	71.00
1990	64.42	48.65	65.24	100.00	57.69	60.21
1991**	61.50	37.27	44.74	100.00	26.78	48.06

*Marketed Production in Table 8.2.

**Provisional

CHAPTER 9 - ENVIRONMENT AND NATURAL RESOURCES

In view of the inter-dependence between environment and development, the Kenya Government has over the years put in place various strategies aimed at not only achieving sound environmental management, but also in the development of water supply systems, extension of timber producing areas, conservation of wildlife and creation of infra-structure for the fishing industry.

Water supplies

9.2. The Ministry of Water Development in conjunction with the National Water Conservation and Pipeline Corporation (NWC & PC), Local Authorities and donor agencies continued to take overall responsibility for the conservation, development, operation and maintenance of water supply systems to meet domestic, agricultural, livestock and industrial needs. In recognition of this role, the Ministry continued to embark on the expansion of water supply systems, sinking of additional boreholes and shallow wells, construction of dams and protection of springs while the NWC & PC embarked on the design, construction and management of major water projects. The notable projects include:- the Mzima, Baricho, Nol Turesh, the two Greater Nakuru Water Projects (east and west), Ndia, Mathira, Kandara, Embu and Kiambere Water Projects.

9.3. In view of the enormous costs involved for the development and maintenance of water supply systems, the government decided to introduce cost-sharing for both rural and urban water consumers. As a result of implementing requisite financial reforms including revived schedule of water rates and tariffs, the Ministry realized a total of K£ 1.35 million in water revenue during 1990/91 financial year and expects to collect slightly over K£ 2.2 million at the end of 1991/92.

9.4. Between 1990/91 and the second half of 1991/92 fiscal years, the Corporation managed to implement 7 schemes in Rift Valley, 5 schemes each in Southern and Coastal regions, 10 in Western and 9 in Central. The total outlay for implementing the 36 water projects amounted to K£ 16.8 million while an income of K£ 24.0 million was realized during the same period.

9.5. In 1991/92 financial year, the Ministry alone was operating a total of 769 water supply projects. Out of these, 330 were gazetted rural water supplies while over 400 water projects were at various stages of implementation. A further 800 water supply systems were either donor assisted or operated on community self-help basis or by Non-Governmental Organizations.

9.6. Table 9.1 depicts development expenditure on water supplies and related services since 1987/88 fiscal year. During 1991/92 fiscal year, the Ministry recorded the highest drop of 13.2 per cent in overall development expenditure from K£ 49.1 million in 1990/91 to K£ 42.6 million in 1991/92. This drop is largely attributed to

the government's policy to re-direct development funds to high priority projects with greater social and economic returns while at the same time passing the operational and maintenance costs to the consumers.

DEVELOPMENT EXPENDITURE ON WATER SUPPLIES AND RELATED SERVICES, 1987/88 - 1991/92

Table 9.1 K£'000

	1987/88	1988/89	1989/90	1990/91	1991/92*
Water Development	1,839	86	102	1,410	2,141
Training of Water Development Staff	-	1,255	250	229	258
Rural Water Supplies'	7,599	26,397	47,456	18,101	15,136
Self-Help Water Supplies**	1,139	709	365	106	96
County Council and Urban Water Supplies	16,640	18,525	14,464	15,431	2,293
Miscellaneous and Special Water Programmes	1,651	7,519	7,993	3,537	5,856
Water Conservation and Pipeline Corporation	-	-	544	10,255	16,807
TOTAL	28,868	54,491	71,174	49,069	42,587

Source: Ministry of Water Development, National Water Conservation and Pipeline Corporation

*Provisional.

**Includes contributions by the Ministry of Water Development.

9.7. Rural Water Supplies and the National Water Conservation and Pipeline Corporation continued to receive the largest proportion of total development outlay; thus underlining the continued Government's commitment to provide water to most rural households.

Fisheries

9.8. The Fisheries Department continued to be responsible for the development, management, and supply of inland and marine fish resources. Its basic aim is to ensure optimal production and utilization of both fresh water and marine resources by initiating such projects as fish breeding grounds, fish nurseries, conducting research on new species and encouraging cross breeding of indigenous and other palatable species. Although fish farming made notable progress for three successive years, the general performance of the fishing sector in 1991 was relatively poor as shown in Table 9.2. Inland sources other than lake Victoria, namely Turkana, Naivasha, Baringo and Jipe declined in their contribution of total output from 3.3 per cent in 1990 to 2.5 per cent in 1991. The depreciation of fishery yields, though quite small, was attributable to continued financial instability caused by poor and inefficient marketing outlets, unrestricted overfishing in the past, reluctance by banks to extend commercial loans to farmers due to high rate of defaulters and withdrawal of programme aid by donor agencies.

9.9. Table 9.2 shows the quantity and value of fish landings between 1987 and 1991. Overall, the country realized 182.3 thousand tonnes in fish catches in 1991, representing a decline of 9.6 per cent over the 1990 level. Out of this, 172.4 thousand tonnes, representing 94.6 per cent, were from inland waters while the

marine fish and other marine products represented 5.4 per cent of the total fish output. For the first time since 1987, Lake Victoria registered a decline of 9.3 per cent, from 185.1 thousand tonnes recorded in 1990 to 167.9 thousand tonnes in 1991. However, its share of contribution to total output remained appreciably high at 92.1 per cent.

QUANTITY AND VALUE OF FISH LANDED, 1987-1991

Table 9.2

	1987	1988	1989	1990	1991*
Quantities - Tonnes:					
Freshwater fish-					
Lake Victoria	113,452	125,071	135,431	185,101	167,867
Lake Turkana	7,240	4,128	990	3,180	2,137
Lake Naivasha	316	52	236	223	251
Lake Baringo	116	96	233	380	384
Lake Jipe	101	99	93	110	112
Fish Farming	1,094	1,149	922	973	1,008
Other areas	1,115	434	861	1,839	671
TOTAL	123,434	131,029	138,766	191,806	172,430
Marine fish	6,755	6,027	6,708	9,031	8,914
Crustaceans	812	887	915	733	767
Other marine products	180	185	187	208	219
GRAND TOTAL	131,181	138,128	146,576	201,778	182,330
Value - K£'000:					
Freshwater fish	18,749	27,080	35,016	80,174	77,582
Marine fish	2,544	2,497	3,760	6,824	7,018
Crustaceans	2,184	2,481	1,834	3,189	3,421
Other marine products	332	352	343	345	346
TOTAL	23,809	32,410	40,953	90,532	88,367

*Provisional.

Source : Fisheries Department

9.10. Output from the marine landings, however, depicted a mixed trend. Whereas an increase of 37.7 per cent in the total volume of marine landings was recorded in 1990, there was a decline of 9.6 per cent in 1991.

9.11. Revenue from the sale of fish declined slightly by 2.3 per cent from K£ 90.5 million in 1990 to K£ 88.4 million in 1991. This slump in revenue is mainly attributed to several factors; a decline in fish output particularly in lakes Victoria and Turkana; curtailment of extension services due to lack of transport; substantial cuts in Government funded programmes; and institutional problems within the Sagana Fish Culture Project leading to shortfalls in the production of tilapia and fingerlings

required for restocking fish farming dams particularly in hydroelectric production areas. The withdrawal of NORAD from Turkana and Bungoma districts and withholding of Coastal Development Aid by Japan not only prevented the exploitation of capture fisheries within the Exclusive Economic Zone, but also led to the collapse of several commercial fishing projects.

9.12. Cautious felling of trees for various economic and industrial uses and subsequent replacement through planting continued to be the guiding principle in resource management activity of the Forestry Department. The Department continued to co-ordinate all matters pertaining to environmental management, degeneration processes and, within certain ecological limits, tried to restore the productivity of various vulnerable zones. The implementation and co-ordination processes was facilitated through desertification control, determining the rate of degeneration and working out effective remedial degradation measures connected with development.

9.13. Table 9.3 presents the status of recorded forest plantation area since 1987. Total forest area has continued to increase marginally since 1987 with mixed performance of specific forest types. Forest area under indigenous softwood recorded a modest increase of 7.3 per cent from 11.0 thousand hectares in 1990 to 11.8 thousand hectares in 1991. Exotic hardwoods for timber continued the decline which was first observed in 1990. The diminishing trend in total forest plantation area is attributed to the expansion of Nyayo Tea zones leading to excision of gazetted plantation area and the Government's directive to step-down plantation area of those species which are threatened by the aphid pest.

FOREST PLANTATION AREA, 1987-1991

Table 9.3 000 Hectares

Type of Forest	1987	1988	1989	1990	1991*
Indigenous softwood	7.2	10.2	11.0	11.0	11.8
Indigenous hardwood	8.7	7.4	8.0	8.0	6.4
Exotic softwoods-					
Cypress	73.9	75.2	75.6	79.5	78.4
Pines	59.6	58.2	57.0	53.7	54.2
Exotic hardwoods-					
Timber	4.0	4.0	4.9	4.9	4.6
Fuel	11.8	12.2	11.8	11.9	9.5
TOTAL AREA	165.2	167.2	168.3	169.0	164.9

*Provisional.

Source : Ministry of Environment and National Resources

9.14. Table 9.4 presents data on changes in plantation area between 1987 and 1991. The total plantation area made dropped by 2.4 per cent from 169.0 thousand hectares in 1990 to 164.9 thousand hectares in 1991. However, the area felled for timber and other uses was low accounting for 4.7 per cent of the total forestry resources in 1991. This is in line with the Rural Afforestation and Extension Service (RAES) commitment to regulate adequate forest cover through discouraging indiscriminate felling of trees.

9.15. Table 9.5 presents the sales of forest products by the Forest Department for the period 1987 to 1991. The sale of soft and hard woods continued with the decline first registered in 1988. However sale of pulpwood, fuelwood/charcoal and

CHANGES IN PLANTATION AREA. 1987 - 1991

Table 9.4 '000 Hectares

	1987	1988	1989	1990	1991*
Previous Plantation Area	164.1	165.2	167.2	168.3	169.0
Area Planted	5.4	5.5	4.7	4.1	3.6
Total	169.5	170.7	171.9	172.4	172.6
Area Clear felled	4.3	3.5	3.6	3.4	7.7
Total Area	165.2	167.2	168.3	169.0	164.9

* Provisional

Source Ministry of Environment and Natural Resources.

poles increased marginally. Increase in power and telegraph poles was due to the extension of telephone and electricity services to the rural areas.

RECORDED SALE OF FOREST PRODUCTS. 1987-1991

Table 9.5

Forest Product	1987	1988	1989	1990	1991*
Timber - 000 true cu. metres-					
Soft wood	474	462	446	437	430
Hardwood	13	8	4	3	2
TOTAL	487	470	450	440	432
Fuel - 000 stacked cu. metres-					
Peels\Veener logs	60	79	80	85	80
Pulpwood	320	341	340	350	355
Fuelwood /Charcoal	201	210	215	200	215
Power &Telegraph Poles - Cu Metres	30,000	30,060	32,000	32,800	33,800

*Provisional.

Source : Ministry of Environment and Natural Resources.

Mining

9.16. Table 9.6 gives details of quantity and value of mineral production during the period 1987 to 1991. Mineral production in 1991 continued to decline, despite efforts by the respective firms to boost production. The decline was registered on soda ash, fluorspar and limestone products with a significant 74.6 of total production.

9.17. Production of soda ash, fluorspar and salt continued to dominate, accounting for more than 83.7 per cent of the total mineral output in 1991. Salt production grew by 3.0 per cent, from 70.3 thousand tonnes in 1990 to 72.4 thousand tons in 1991 while soda ash and fluorspar outputs declined by 5.1 per cent and 3.9 per cent, respectively. Output of other mineral products remained more or less at the 1990 levels.

9.18. The drop in production of soda ash is mainly attributed to the recent re-structuring of Magadi Soda Company and the transfer of constraints from Imperial

QUANTITY AND VALUE OF MINERAL PRODUCTION. 1987 - 1991

Table 8.11

Mineral	1987	1988	1989	1990	1991*
Quantities - Tonnes:					
Minerals-					
Soda Ash	231,800	220,300	242.900	231,900	220,000
Fluorspar	46,568	67,351	95,625	80,529	77,402
Salt	72.269	88,193	66,830	70,318	72,449
Limestone Products**	37.460	28,601	32,167	35,733	32,017
Other	37,705	38,459	38,921	39,388	39,963
TOTAL	425,802	442,904	476,443.	457,868	441,831
Value - K£'000:					
Soda Ash***	18,050	18,950	30,000	34,900	42.550
Fluorspar***	2,802	3,399	5,594	8,018	7.849
Salt	2.583	2,900	2,568	3,938	4,057
Limestone Products	1,173	924	1,241	1,556	1,394
Other	1,779	1,783	1,865	1,951	1,979
TOTAL	26,387	27,956	41,268	50,363	57,829

Source : Department of Mines and Geology

*Provisional

**Excluding limestone used as input into cement product.

***Including Export Value.

Chemical Industries (ICI) PLC to Brunner Mond Holdings Ltd. However, with the Company's current programme to update one of the Calciner Machines, annual production capacity is expected to go up by 25 thousand tons. The decline in fluorspar, on the other hand, is mainly attributed to a glut in the world market and subsequent fluctuations in export prices. Despite this shortfall, prospects for long run growth in fluorspar output are good as the Company has embarked on pit mining exploration programme aimed at ascertaining fluorspar crude ore reserves.

9.19. As observed from Table 9.6, the value of soda ash expanded significantly by 21.9 per cent from K£ 34.9 million in 1990 to K£ 42.6 million in 1991 while fluorspar recorded a slight decline of 2.1 per cent from K£ 8.0 million in 1990 to K£ 7.8 million in 1991. Table 9.7 presents average export prices for soda ash and fluorspar for the period 1987 to 1991. The average export price for soda ash increased by over 60 per cent to K£ 203.3 per tonne in 1991 while fluorspar went up by 2.2 per cent to attain K£ 101.4 per tonne.

AVERAGE EXPORT PRICES OF SODA ASH AND FLUORSPAR. 1987 - 1991

Table 9.7 K£ per tonne

Mineral	1987	1988	1989	1990	1991*
Soda Ash	83.30	90.10	125.00	127.00	203.30
Fluorspar	68.80	67.60	82.20	99.20	101.40

* Provisional

9.20. In 1991, the quantity of soda ash exported was 196 thousand tonnes, while 70.8 thousand tonnes recorded for fluorspar. The corresponding export earnings from soda ash and fluorspar were K£ 39.85 million and K£ 7.18 million, respectively.

Wildlife conservation

9.21. The Government, through the Kenya Wildlife Service (KWS), attaches great importance in the conservation of wildlife and has thus continued to direct more attention and financial support towards its development and conservation. Towards this end, the KWS in conjunction with Department of Resource Surveys and Remote Sensing (DRSRS) continued to conduct wildlife inventory surveys through wildlife counts and the assessment of vegetation cover in the fragile zones, early detection of environmental degradation and estimation of the available forage. Monitoring the extent and impact of poaching and human encroachment which interfere with animal numbers, migration patterns and their distribution was a major activity undertaken by the two departments.

9.22. As can be derived from Table 9.8, the entire wildlife has continued to grow over the last three years. The elephant population which seems to have stagnated at around 17 thousand since 1987, has started showing signs of recovery while other species particularly zebra, wildbeast, oryx, eland, kudus, warthog and ostrich registered moderate growth rates averaging more than 10 per cent. Several reasons explain this performance in wildlife numbers. First, the Government's decision to step-up anti-poaching measures and rehabilitate the entire wildlife sector not only increased the carrying capacity of game parks and reserves but also provided adequate forage and water for wildlife use. Secondly, there is renewed interest by the Kenya Wildlife Service (KWS) to pressurize the International Communities to maintain African elephant on Appendix I of CITES. However the increasing conflict between wildlife and human population, severe environmental degradation and the element of poaching remain a big challenge of the future.

WILDLIFE POPULATION IN THE KENYA RANGELANDS FOR SELECTED YEARS

Table 9.8 '000 Number

SPECIES	1987	1988	1989	1990	1991*
Elephant	17.4	17.3	17.2	17.1	17.0
Buffalo	36.9	39.4	42.2	45.1	48.2
Giraffe	44.5	48.2	52.1	56.4	60.5
B. Zebra	141.2	156.9	174.3	193.7	215.1
G. Zebra	4.3	4.9	5.5	6.2	7.0
Topi	102.5	104.9	107.3	109.8	112.3
Kongoni	19.6	20.8	22.0	23.3	24.7
Wildebeest	67.6	77.1	87.9	100.2	114.2
Oryx	25.5	29.2	33.3	38.1	43.5
Eland	17.0	20.8	25.5	31.3	38.4
H. Hartbeest	1.9	21.0	23.4	2.6	2.9
Waterbuck	7.7	7.1	6.5	6.0	5.5
Kudus	7.6	9.1	11.0	13.2	15.9
Gerenuk	24.6	24.1	235	23.0	22.5
Impala	111.4	109.1	106.8	104.5	102.3
G Gazelle	126.6	143.5	162.6	184.3	208.6
T. Gazelle	107.1	104.2	101.4	98.7	96.0
Warthog	11.8	14.5	17.9	22.0	27.1
Ostrich	25.5	29.2	33.4	38.3	43.8

Source : DRSRS

Provisional

Resource assessment and monitoring activities

9.23. The Department of Resource Surveys and Remote Sensing (DRSRS), continued to use ecological monitoring techniques aimed at establishing reliable and continuous flow of information on both temporal and spatial distribution of livestock and wildlife population. Special emphasis was directed towards the assessment and monitoring of vegetation changes within the rangeland areas as well as determining the extent, type and impacts of human activities. In 1991, the DRSRS undertook and implemented a range of projects/programmes. Notable among them was the mounting of livestock/wildlife surveys in some parts of Northern and Southern Kenya. This project was aimed at providing information on livestock/wildlife population, their spatial distribution and the influencing environmental factors. The Department was also involved in the development of data analytical capabilities using the Geographical Information System (GIS).

9.24. Resulting from the use of the Geographical Information System (GIS) and National Oceanic and Atmospheric Administration (NOAA) facilities, the DRSRS was able to provide estimates of changes in forest cover, type, volume, growth and composition besides giving general assessment of plant species in various regions, their abundance and use. Other projects which were implemented by the department, and which were planned to run into 1992, included the Assessment of Nairobi and Amboseli National Parks and the Range Biomass Assessment Project. This latter project, however, made little progress due to problems in the acquisition of equipment, difficulties in choosing of test sites and in establishing a suitable vegetation classification system. Despite this shortcoming, the department plans to continue using remote sensing techniques in the assessment of renewable and non-renewable natural resources.

9.25. In keeping with its policy to co-ordinate and develop strategies for achieving sound environmental management, the National Environment Secretariat (NES) carried out a number of programmes and projects in 1991. These included the Monitoring and Decertification Control Project (MDCP), the National Environment Action Plan (NEAP), District Environment Assessment Plan (DEAP), Environment Education and Information (EEI), Village Assessment Project (VAP) and the Participatory Rural Appraisal Project (PRAP).

9.26. The Monitoring and Desertification Control Project was conducted in Meru, Garissa, Turkana, Samburu, Kisii, Kajiado and Kitui districts. The Project was aimed at providing valuable information which could assist in arresting land degradation process and possibly restore the productivity of those districts.

9.27. The NEAP Project was initiated in collaboration with the Ministry of Environment and Natural Resources and aimed at finding effective solution to developmental problems and providing a strategic framework for dealing with policy and institutional changes. Besides providing a sound environmental data base for use in the preparation and implementation of district development plans, the NEAP project aimed at not only identifying environmental pressure points and danger signals upon which immediate preventive and/or corrective measures could be taken, but also at enhancing both the carrying and assimilative capacity of the

environment. The programme was, however, affected by lack of funds and was only able to cover Taita Taveta district.

9.28. NES, with assistance from UNEP/UNICEF also managed to carry out Participatory Rural Appraisal Study in Baringo district and plans to extend the same study to Coast and Nyanza Provinces are underway. The aim of the project was to train the community, particularly women groups, on the right management skills and proper resource utilization. In addition, the Secretariat staff has been carrying out general inspection of factories with the aim of ensuring proper environmental controls. Towards this end, an impact assessment study was conducted on the construction of Magwagwa Hydroelectric Power on the Sondu River. Other matters related to the management of toxic and hazardous chemicals have also been keenly followed by the Secretariat.

9.29. Refuse collection by the Nairobi City Commission (NCC) in 1991 did not seem to show signs of improvement despite efforts by the Commission and private companies to intensify collection. The rate of garbage accumulation particularly vegetable materials has reached crippling proportions, contributing over 54.2 per cent of the total garbage generated. Toxic materials, which pose greater danger to human life, accounted for a low 0.2 per cent. Out of a total of 292.8 thousand tonnes of garbage built-up during the year, the Commission and private companies combined only managed to dispose 138 thousand tonnes, representing less than half the total garbage turnover.

CHAPTER 10 - ENERGY

Overview

The tension that gripped the Gulf Region towards the end of 1990, when Iraq invaded Kuwait led to the scrapping of the oil production cartel. The United Nations (U.N.) placed a trade embargo against Iraq while at the same time giving a withdrawal deadline. This embargo forced Organisation of Petroleum Exporting Countries (OPEC) to pump crude oil to capacity to make for the production shortfall. When the war finally broke out in early 1991, crude oil prices which had been fluctuating between US$ 16-20 per barrel went as high as US $40 per barrel; the highest since the oil shock of 1980. Concerted efforts by OPEC members lowered the price to US $ 25 per barrel, a trend that continued due to increased crude oil production. The production cartel was however re-imposed on members to stop price from tumbling down due to over-production. By the close of 1991, OPEC had yet to remove production quotas and with limited crude output from Iraq and Kuwait, production stood at about 22 million barrels per day.

Petroleum

10.2. Table 10.1 depicts quantity and value of imports and exports of petroleum products between 1987 and 1991. Since 1987, the year 1991 recorded the lowest imports of crude and refined petroleum products when 2,150 thousand tonnes worth K£ 502 million were imported: 7.5 per cent lower than 2,324 thousand tonnes imported in 1990. However, the 1991 import bill was higher than the bill paid in 1989, due to the depreciation of the Kenya Shilling against major trading currencies and escalation of crude oil prices. Crude petroleum accounted for almost all of total oil imports and 88 per cent of the total oil import bill. Whereas the total import bill of finished oil products was K£ 46 million in 1990, in the year 1991 it had increased by 32 per cent to K£ 61 million.

QUANTITY AND VALUE OF IMPORTS AND EXPORTS OF PETROLEUM PRODUCTS. 1987- 1991*

Table 10.1

	Quantity ('000 Tonnes)					Value (K£ Mn)				
	1987	1988	1989	1990	1991**	1987	1988	1989	1990	1991**
IMPORTS:										
Crude Petroleum	2,130.50	2,010.84	2,102.56	2,178.28	2,059.38	245.06	210.43	299.10	421.97	441.71
Petroleum Fuels	92.30	106.80	45.15	132.64	66.99	14.39	18.43	11.16	39.09	39.44
Lubricating Oils	46.00	38.20	31.69	13.09	23.02	15.41	12.77	13.77	6.62	20.33
Lubricating Greases	2.30	0.10	0.21	0.07	0.23	2.38	0.95	0.37	0.13	0.73
TOTAL	2,271.10	2,155.94	2,179.61	2,324.08	2,149.62	277.24	242.58	324.40	467.81	502.21
EXPORTS:										
Petroleum Fuels	571.90	689.90	515.89	534.16	584.87	96.43	109.16	88.79	141.13	235.55
Lubricating Oils	6.50	6.90	16.38	9.01	7.03	4.88	5.38	10.52	8.57	9.33
Lubricating Greases	0.40	0.50	0.68	0.34	0.34	0.43	0.51	0.76	0.46	0.63
TOTAL	578.80	697.30	532.95	543.51	592.24	101.74	115.05	100.07	150.16	245.51
NET BALANCE	1,692.30	1,458.64	1,646.66	1,780.57	1,557.38	175.50	127.53	224.33	317.65	256.70

* Excludes other light and medium petroleum oils and preparations and residual petroleum products n.e.s., which are included in Chapter 7.

** Provisional

10.3. Exports of petroleum products, mainly to the neighbouring countries, increased significantly by 9.0 per cent in 1991 compared to only 2.0 per cent registered in 1990. The major contributor in the increase in exports was petroleum fuels which increased by 9.5 per cent. Export earnings increased by 63.5 per cent from K£ 150 million in 1990 to K£ 246 million in 1991.

10.4. Table 10.2 shows crude oil intake by type during the period 1987-1991. Whereas, in the year 1990 crude intake at the refinery was 2,225 thousand tonnes, 2,078 thousand tonnes were refined in 1991, a drop of 147 thousand tonnes. Murban and Zakum from United Arab Emirates despite being more expensive continued to be the refinery's main crude oil input. The refinery intake of the two crudes in 1989, 1990, and 1991 were 1,731 thousand tonnes, 1,974 thousand tonnes and 1,811 thousand tonnes accounting for 81 per cent, 89 per cent and 87 per cent of the total intake, respectively.

CRUDE OIL INTAKE AT THE REFINERY BY TYPE, 1987 - 1991

'000 Tonnes

Crude intake	A.P.I. Gravity	1987	1988	1989	1990	1991*
Arabian Light	33.4	0.1	.	.	.	.
Arabian Medium	31.0	.	.	.	.	.
Arabian Heavy	27.9	26.9	.	45.2	55.4	76.5
Arabian Light Berri	.	.	.	0.1	.	.
Iranian Light	33.9	.	65.0	.	108.8	50.5
Iranian Medium	.	85.6	69.1	87.0	86.2	139.7
Qatar Marine	36.7	.	.	.	.	.
Qatar Durkhan	41.2	.	.	.	.	.
Kuwait	32.0	30.8	.	.	.	.
Zakum	40.1	562.8	227.7	262.8	201.6	249.0
Murban	39.6	1,318.6	1.659.8	1,468.5	1,772.4	1,561.9
Dubai	32.4	.	.	68.2	.	.
Oman	.	84.4	.	.		.
Marib Light	.	.	.	212.8	0.1	.
Slop		0.5	0.4	0.9	0.3	
TOTAL		2,109.7	2,022.0	2,145.5	2,224.8	2,077.6

* Provisional.

10.5. Table 10.3 shows that output of finished petroleum products in the year 1991 fell by 7 per cent from 2,225 thousand tonnes recorded in 1990 to 2,078 thousand tonnes in 1991. This was, however, slightly higher than the 2,022 thousand tonnes processed in 1988. As can be derived from the table, with the exception of premium motor spirits, all other products recorded significant decreases. This factor is attributable to decreased imports of crude oil.

10.6. Output of liquified petroleum gas (LPG) and kerosene (useful urban and rural household fuels) decreased by 7 per cent and 15 per cent, respectively. Production of LPG decreased from 28 thousand tonnes in 1990 to 26 thousand tonnes in 1991, while that of kerosene fell from 492 thousand to 421 thousand tonnes. This decrease for liquified petroleum gas, was a result of the plant being closed for rehabilitation and maintenance. An important product which registered a decline was bitumen from 31 thousand tonnes in 1990 to 24 thousand tonnes in 1991, a

OIL REFINERY : THROUGHPUT AND OUTPUT OF FINISHED PETROLEUM PRODUCTS * *. 1987 - 1991

Table 10.3 000 Tonnes

	1987	1988	1989	1990	1991*
OUTPUT-					
Liquefied petroleum gas	26.2	27.7	27.6	28.4	26.4
Motor gasoline premium	138.3	135.3	159.0	143.9	145.8
Motor gasoline regular	198.0	192.7	202.9	190.9	182.3
Illuminating kerosene and Jet/turbo fuel	412.8	410.1	454.0	492.2	420.5
Light diesel oil	547.1	516.7	534.8	533.0	512.1
Heavy diesel oil and Marine diesel oil	33.8	32.6	26.8	30.1	29.9
Fuel oil	372.8	392.2	369.6	411.3	391.7
Export residues	260.2	228.3	261.2	258.2	256.7
Bitumen	31.1	5.9	21.3	31.2	24.0
Intermediates	5.7	1.8	-5.2	4.2	-3.8
Refinery usage	83.8	78.7	93.3	101.1	91.9
THROUGHPUT=TOTAL OUTPUT	2,109.8	2,022.0	2,155.7	2,224.5	2,077.5

* Provisional.

** Excludes lubricants.

23 per cent fall due to a slowdown in road construction activity. Production of export residues dropped marginally from 258.2 thousand tonnes in 1990 to 256.7 thousand tonnes in 1991.

10.7. Supply and Demand balances for petroleum products for the period 1987-1991 are shown in Table 10.4. The domestic demand for petroleum products in 1991 was 1,755 thousand tonnes compared to 1,830 thousand tonnes in 1990, a 4 per cent decline attributable to price increases. Demand for all products, with the exception of light diesel oil, registered decreases.

10.8. Table 10.5 shows net domestic sales of petroleum products' by consumer category. The transport sector (rail, road marine and aviation) was the largest consumer accounting for 73 per cent of total sales of petroleum products. The total sale was, however, less than the total sales to the sector in 1990. Sales to retail outlets and road transport declined slightly but still accounted for nearly 50 per cent of overall sectoral consumption. Despite the reduction in the price of jet fuel from US$ 1.75 to US$ 1.45 per litre, in 1991, fuel consumption in the aviation industry fell by 84 thousand tonnes. This decline is attributable to reduced air travel due to the fear of terrorism and risks during the Gulf crisis.

10.9. Consumption by the agricultural sector declined by 14 per cent from 65 thousand tonnes in 1990 to 56 thousand tonnes in 1991 due to the sluggish performance of the sector. Fuel sales for power generation which had been declining during the last 3 years, increased by a significant 25 per cent in 1991 due to the commissioning of the Turkwell project. Fuel sales to large industrial and commercial consumers increased marginally partly due to the resumption in operation of some large consumers, such as Miwani Sugar factory, and the completion and rehabilitation of some projects like Tropical Food Processors. Sales

PETROLEUM SUPPLY AND DEMAND BALANCE. 1987 - 1991

Table 10.4 '000 Tonnes

	1987	1988	1989	1990	1991*
DEMAND-					
Liquefied petroleum gas	25.3	26.9	26.4	27.4	25.0
Motor spirit (premium and regular)	321.8	325.0	376.7	339.9	339.3
Aviation spirit	6.3	6.5	6.7	7.1	6.8
Jet/turbo fuel	249.5	254.6	274.3	302.4	253.5
Illuminating kerosene	133.7	154.7	181.1	184.2	174.5
Light diesel oil	572.7	537.3	543.6	555.4	559.9
Heavy diesel oil	27.7	32.7	26.8	36.5	30.5
Fuel oil	410.8	392.7	371.0	377.4	365.6
TOTAL	1,747.8	1,730.4	1,806.6	1,830.3	1,755.1
Refinery usage	83.8	78.7	93.3	101.1	91.9
TOTAL DOMESTIC DEMAND	1,831.6	1,809.1	1,899.9	1,931.4	1,847.0
Exports of petroleum fuels	571.9	689.9	515.9	534.2	584.9
TOTAL DEMAND**	2,403.5	2,499.0	2,415.8	2,465.6	2,431.9
SUPPLY-					
Imports:					
Crude oil	2,130.5	2,041.8	2,100.9	2,178.3	2,059.4
Petroleum fuels	92.3	106.8	45.2	132.6	67.0
TOTAL	2,222.8	2,148.6	2,146.1	2,310.9	2,126.4
Adjustment***	180.7	350.4	269.7	154.7	305.5
TOTAL SUPPLY**	2,403.5	2,499.0	2,415.8	2,465.6	2,431.9

* Provisional.

** Difference is due to rounding.

** Adjustment for inventory changes and losses in production.

NET DOMESTIC SALE OF PETROLEUM FUELS BY CONSUMER CATEGORY. 1987 - 1991

Table 10.5 '000 Tonnes

User	1987	1988	1989	1990	1991*
Agriculture	71.2	72.7	63.5	64.9	55.7
Retail pump outlets & road transport	762.2	781.0	847.3	863.5	857.1
Rail transport	31.1	22.2	26.0	35.3	38.8
Tourism**	11.0	11.6	12.4	13.0	11.7
Marine (excl. Naval Forces)	168.5	106.3	158.4	215.3	128.1
Aviation (excl. Government)	249.5	255.1	273.2	302.0	253.7
Power Generation	87.2	50.1	39.8	27.9	35.0
Industrial. Commercial and Other	483.4	489.8	459.5	452.9	454.4
Government	127.7	47.7	49.0	70.8	44.1
Balancing Item	-244.0	-106.1	-122.6	-215.4	-123.5
TOTAL	1,747.8	1,730.4	1,806.5	1,830.2	1,755.1

* Provisional

** Comprises sales to tour operator

to the Government decreased by 27 thousand tonnes from 71 thousand tonnes in 1990 to 44 thousand tonnes in 1991, due to the cut in Government expenditure and stricter control in vehicle movements.

10.10. Table 10.6 shows wholesale prices for petroleum products at Mombasa. Over the years the prices have tended to move upwards in line with international oil prices and the appreciation of the US$ against the Shilling. With the exception of liquified petroleum gas, whose price has since 1973 increased sevenfold, all other petroleum products have increased in price thirteenfold or more with the price of light diesel oil increasing twenty times.

WHOLESALE PRICES* OF PETROLEUM PRODUCTS AT MOMBASA. 1973 -1991

Table 10.6 KSh. per tonne

	30-9-73	17-6-88	30-9-89	9-8-90	29-11-91	Ratio 1991/73 (per cent)
Liquefied petroleum gas	2,060	6,400	7,820	14,129	14,843	720.5
Premium motor gasoline	1,551	11,831	13,441	18,715	20,535	1,324.0
Regular motor gasoline	1,468	11,337	13,551	18,533	20,375	1,387.9
Illuminating kerosene	736	4,012	5,033	9,053	10,052	1,365.8
Light diesel oil	892	6,005	7,227	11,764	12,929	1,449.4
Industrial diesel oil	471	3,982	4,668	9,034	10,369	2,201.5
Fuel oil	334	2,408	3,164	5,405	6,628	1,984.4

* Including duties and VAT.

10.11. With the exception of 1987 and 1990, both having two oil retail price increases in a single year, all other years experienced increases of prices of petroleum once a year. Adjustments of pump prices of petroleum products were last effected on 29th November 1991, when prices moved from Ksh 14.41, Ksh 14.11 and Kshs 10.90 to Kshs 15.79, Kshs 15.49 and Kshs 11.96 for premium, regular and gas oil, respectively. Previous price increases were for lubricants in March, 1991 when prices were increased by between 10 per cent and 30 per cent. The price increases have been necessitated by the escalation of crude oil prices and domestic inflationary pressures. Data on Nairobi retail prices of petrol and gas oil are shown in Table 10.7.

NAIROBI RETAIL PRICES. 1986 - 1991

Table 10.7 KSh. per litre

Date	MOTOR SPIRIT		Gas Oil
	Premium/ Gasohol*	Regular	
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
29-11-91	15.79	15.49	11.96

* Gasohol was introduced from 1983

Electricity

10.12. Kenya Power and Lighting Company (KPLC) registered a modest growth in energy sales in 1991. This was attributable to weak performance of the various sectors of the economy leading to low consumption of electricity. Despite the modest growth, revenue collection increased due to upward tariff adjustments in May, 1991. The tariff increase was necessitated by the ever rising operating and development expenditure of various electricity projects, the major ones being the drilling of additional wells for geothermal and the completion of the Mai South Lake Road.

10.13. As can be seen from Table 10.8 total installed capacity rose by 15 per cent to 829 MW in 1991, after remaining at the same level of 723 MW in both 1989 and 1990. The increase was due to the commissioning of Turkwell Hydro Power Station, which added 106 MW to the national grid. Despite the overall increase in installed capacity, only hydro based electricity accounted for the increase with both thermal-based and geothermal-based electricity remaining at the previous levels of 180 and 45 MW respectively. Due to increased hydro-based generation, generated electricity increased by 183 GHW between 1990 and 1991. Thermal-based generation decreased by 7 per cent from 171 GWH in 1990 to 159 GHW in 1991, due to rehabilitation of the Kipevu plant. On the other hand generation of geothermal-based electricity declined by 11 per cent.

INSTALLED CAPACITY AND GENERATION OF ELECTRICITY, 1987 - 1991

Table 10.8

	INSTALLED CAPACITY MW**				GENERATION * GWH ***			
	Hydro	Thermal Oil	Geothermal	Total	Hydro	Thermal Oil	Geothermal	Total
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
1991+	603.5	180.1	45.0	828.6	2.770.0	159.3	298.0	3,227.3

* Includes estimates for industrial establishment with generation capacity.

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

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

* Provisional

10.14. Electricity energy supply and demand balance is shown on Table 10.9. The table shows that electricity consumption rose by 4 per cent as compared to 7 per cent in 1990. This slowdown in growth is attributed to the adverse economic conditions occasioned by tension in the Gulf which led to reduced consumption. Consumption by domestic and small commercial consumers had a modest growth of 6 per cent, while consumption by large consumers grew almost by 4 per cent due to the rehabilitation of some large consumers such as the sugar firms. Consumption by the large commercial and industrial consumers accounted for 66 per cent of the total consumption - the same as the previous year. Off peak consumption which since 1988 has been having modest growth fell by 8 million KWH from 117 million KWH in 1990 to 109 million KWH in 1991 while street lighting has remained at a constant level of 14 million KWH in 1991, since 1987.

ELECTRICITY ENERGY SUPPLY AND DEMAND BALANCE. 1987 - 1991

Table 10.9 Million KWH

	1987	1988	1989	1990	1991*
DEMAND-					
Domestic and Small Commercial	616	709	729	780	823
Large Commercial and Industrial	1,580	1,574	1,632	1,754	1,832
Off-peak	162	110	113	117	109
Street Lighting	14	14	14	14	14
TOTAL	2,372	2,407	2,488	2,665	2,778
Transmission losses and unallocated demand	367	475	482	486	507
TOTAL DEMAND = TOTAL SUPPLY	2,739	2,882	2,970	3,151	3,285
of which imports from Uganda	176	110	112	174	134
Net generation	2,563	2,772	2,858	2,977	3,151

* Provisional

10.15. Imports from Uganda which increased by 55 per cent in 1990 decreased by 23 per cent in 1991 from 174 million KWH to 134 million KWH. These imports constituted approximately 4 per cent of the total domestic electricity demand. It is expected that when development of Sondu Miriu Power Station, Magwagwa Multipurpose project, Munyu Dam Project and Ewaso Nyiro Project are completed, the country will be self sufficient in electricity. The overall demand for electricity is expected to grow in response to intensified rural electrification programme. To ensure efficient implementation of the programme during the year, a rural electrification division was set up within the Kenya Power and Lighting Company.

Total Energy Supply and Demand Balance

10.16. The reliance of Kenya's modern sector on imported energy is shown on Table 10.10. This source of energy accounted for 72 per cent of total energy used in 1991 compared to 74 per cent in 1990. Considerable efforts have been made towards the reduction of dependence on imported energy especially petroleum products. As a result the percentage share of domestically produced energy has been on the increase and was 28 per cent in 1991 compared to 26 per cent in 1990. The consumption of coal and coke mainly used in cement production lines, which increased by 16 per cent in 1990, fell by 11 per cent attributable to marginal growth in the output of cement. The decline in total energy use since 1989, though not as significant as the decrease in oil consumption, has nevertheless been important. From an increase of 5 per cent in 1989, total consumption fell by 1 per cent in 1990 and 2 per cent in 1991 as a result of improved energy management in the industrial sector. Energy consumption per capita expressed in kilograms of oil equivalent fell by 7 per cent in 1991 compared to a drop of 5 per cent in 1990.

Woodfuel Resources

10.17. Since about 70 cent of the country's total domestic energy requirements is in the form of fuel-wood and charcoal which is also the traditional source of energy for the rural population, it is important to have in place a woodfuel policy which would ensure adequate supplies of wood to satisfy the demand through

PRODUCTION. TRADE AND CONSUMPTION OF ENERGY** EXPRESSED IN TERMS OF PRIMARY SOURCES. 1987 - 1991

Table 10.10 '000 Tonnes Oil Equivalent

	1987	1988	1989	1990	1991*
COAL AND COKE CONSUMPTION	82.2	79.0	91.6	105.8	93.7
	2,130.5	2,041.8	2,100.9	2,178.3	1,910.6
Net exports of petroleum	-479.6	-583.1	-470.8	-425.7	-436.8
Stock changes and balancing item	180.7	350.4	269.7	77.7	231.3
TOTAL CONSUMPTION OF LIQUID FUELS	1,831.6	1,809.1	1.899.8	1,830.3	1,755.1
HYDRO AND GEOTHERMAL ENERGY:-					
Local production of hydro power	435.1	557.5	592.6	608.9	664.8
Local production of geothermal power	89.8	77.5	77.3	80.6	71.5
Imports of hydro power	50.6	26.4	26.9	41.8	32.2
TOTAL CONSUMPTION OF HYDRO AND GEOTHERMAL ENERGY	575.5	661.4	696.8	731.3	768.5
TOTAL LOCAL ENERGY PRODUCTION	524.9	635.0	669.9	689.5	736.3
TOTAL NET IMPORTS	1,783.7	1,564.1	1,748.6	1,900.2	1,599.7
TOTAL ENERGY CONSUMPTION	2,489.3	2,549.5	2,688.2	2,667.4	2,617.3
LOCAL PRODUCTION AS PERCENTAGE OF TOTAL	21.1	24.9	24.9	25.8	28.1
PER CAPITA CONSUMPTION IN TERMS OF KILOGRAMS OF OIL EQUIVALENT	113.0	115.0	117.0	111.0	103.0

* Provisional.

** Modern sector only: fuelwood and charcoal are excluded.

sustained yields, while at the same time preserving the environment. To achieve this objective, programmes aimed at encouraging the use of efficient jikos and charcoal production kilns and on-farm wood energy production methods continue to be implemented. Public information and educational programmes continued to be encouraged to ensure farmers were fully informed of the opportunities which on-farm tree planting offered both in terms of enhanced overall productivity of the land and wood availability.

Renewable Energy Resources

10.18. Alternative sources of energy include solar, wind, power alcohol and biogas. These sources help to conserve and supplement, where appropriate, the three major sources of energy-namely woodfuel, electricity and petroleum. The use of the alternative sources of energy in Kenya is rather limited despite the fact that some of them like wind and solar have been in use for some time. The role played by solar energy is becoming increasingly important and various residences and hotels are using solar water heating systems while rural health institutions are using solar lighting systems. Major constraints affecting development of these sources of energy in Kenya continue to be high capital costs and lack of effective promotional campaign and skilled manpower. However the overall policy objective is to continue encouraging exploitation of the renewable sources of energy.

Energy Conservation

10.19. The depreciation of the Kenya Shilling against the major currencies has led to high import bills for crude petroleum. This has given rise to the need for proper use and management of the imported crude and in particular the need for energy conservation. Consequently the overall energy policy relating to energy conservation has continued being implemented including: reduction of the cost of using both imported and domestic energy through elimination of wasteful consumption and maximization of the efficiency with which energy is used throughout all sectors of economy and for all forms of energy; promotion of substitution of domestic for imported and substitution of low costs for expensive resources; continued working with Kenya Association of Manufacturers (KAM) to effectively implement Kenya Industrial Energy Management Programme (KIEMP) whose aim is to promote energy conservation in the industrial sector; working towards establishment of Transport Energy Management Programme (TEMP) for promotion of energy conservation in the transport sector; and expansion of energy conservation information programmes.

CHAPTER 11 - MANUFACTURING

Overview

Growth in physical output of the manufacturing sector declined significantly to a rate of 3.8 per cent in 1991, compared to 5.9 per cent and 5.3 per cent registered in 1989 and 1990, respectively. Global economic recession, limited availability of foreign exchange, inflationary pressures and uncertainties of oil supply occasioned by the Gulf crisis, contributed to the slower growth in the manufacturing sector. This slower growth, coupled with the depreciation of the Kenya Shilling against major trading currencies, resulted in reduced imports of spare parts, intermediate inputs and raw materials needed for domestic manufacturing. Although a modest recovery of the sugar processing sub-sector, resulting from price incentives from the government, had a positive effect on manufacturing production, poor weather conditions constrained output of the food processing sub-sector.

Employment

11.2. The sluggish performance in domestic manufacturing in 1991, resulted in virtual stagnation in employment in the sector. A total of 188,874 persons were engaged in manufacturing jobs compared to 187,701 employees during the year 1990. However, appreciable gains in employment were recorded in the miscellaneous foods manufacturing sub-sector, fruit processing and manufacture of plastics. There was noticeable decline in employment in the textile industry. The continued closure of a firm involved in manufacture of gunny bags and a textile firm in Kisumu led to significant loss of employment in the textile manufacturing sub-sector.

Sales Value and Stocks

11.3. Data from the Business Expectations Enquiry (BEE) show that sales of manufactured goods increased by nearly 19 per cent, from a revised K£ 4,270 million in 1990 to K£ 5,071 million in the year 1991. Manufactured stocks as well as the manufactured exports increased by more than half their levels in 1990.

Industrial Output

11.4. Data on the value of output, intermediate consumption, value added and wages paid out in the manufacturing sector are set out in Table 11.1. Over the last four years, while both output and intermediate consumption have risen by over 20 per cent per annum, value added has risen by an average of 16 per cent.

MANUFACTURING SECTOR - OUTPUT, WAGES AND PRODUCT, AT CURRENT PRICES, 1987-1991

Table 11.1 K£million

YEAR	Value of Output	Intermediate Consumption	Value Added	Total Wages Paid
1987	5,089.68	4,399.54	690.14	233.64
1988	6,102.68	5,305.12	797.56	266.68
1989*	7,282.57	6,375.66	906.91	309.62
1990	8,816.31	7,774.96	1,041.35	345.12
1991**	10,817.57	9,583.31	1,234.26	440.64

* Revised.

** Provisional

Quantum Indices

11.5. Despite weak growth in the manufacturing sector in 1991, sub-sectoral performance was mixed. Table 11.2 sets out the trends registered by quantum indices of manufacturing production, measuring real changes in the physical output of domestic manufacturing. The sugar industry, whose rehabilitation has been going on for the last two years, recovered from a negative growth of 3.3 per cent in 1990 to register a positive growth of 1.0 per cent in 1991. Due to entry of more producers into the market, the canned vegetables, fish, oils and fats sub-sector continued to perform well with a growth rate of 13.2 per cent. Reduced output of beer and mineral waters, on the other hand, led to the overall decline of 3.2 per cent in the quantum index for the beverages and tobacco industry; while structural changes in the textiles and clothing industry depressed output growth in the two sub-sectors significantly. Good performance was recorded in the metallic products industry, basic industrial chemicals, and manufacture of plastics. However, the poor international economic environment prevailing in 1991, coupled with the foreign exchange constraints, adversely affected the motor vehicle assembly industry.

QUANTUM INDEX OF MANUFACTURING PRODUCTION, 1987- 1991

Table 11.2 1976=100

INDUSTRY	1987	1988	1989	1990	1991*	Percentage Change 1991/1990
Meat and Dairy Products	115.3	127.9	130.9	139.9	125.1	-10.6
Canned Vegetables, Fish, Oils and Fats	268.1	267.7	291.1	320.9	363.4	13.2
Grain Mills Products	198.3	224.7	175.5	177.9	178.1	0.1
Bakery Products	151.5	155.4	155.1	158.1	166.1	5.1
Sugar and Confectionery	189.5	201.5	210.0	203.1	205.2	1.0
Miscellaneous Foods	189.7	224.7	225.6	226.8	227.9	0.5
Food Manufacturing	157.8	167.5	171.0	173.2	174.8	0.9
Beverages	196.9	207.9	210.3	218.0	210.8	-3.3
Tobacco	170.8	178.1	178.6	178.2	173.5	-2.6
Beverages and Tobacco	194.3	201.9	204.1	210.7	203.9	-3.2
Textiles	192.5	197.2	202.3	227.8	218.5	-4.1
Clothing	359.8	368.3	378.6	347.2	323.9	-6.7
Leather and Footwear	83.5	88.1	94.7	99.2	90.8	-8.5
Wood and Cork Products	68.1	66.4	68.1	70.2	73.1	4.1
Furniture and Fixtures	73.5	72.7	72.9	73.7	70.8	-3.9
Paper and Paper Products	170.0	189.3	194.7	203.9	214.6	5.3
Printing and Publishing	372.2	389.1	392.9	401.8	405.8	1.0
Basic Industrial Chemicals	170.0	182.1	198.1	211.3	233.9	10.7
Petroleum and Other Chemicals	303.5	342.9	396.0	457.8	510.7	11.6
Rubber Products	277.0	286.3	308.7	325.9	322.4	-1.1
Plastic Products	212.3	202.8	219.1	227.4	262.2	15.3
Clay and Glass Products	291.7	306.5	338.1	367.2	359.8	-2.0
Non-Metallic Mineral Products	142.7	140.7	147.0	167.1	170.5	2.0
Metallic Products	116.2	133.1	154.6	177.0	205.5	16.1
Non-Electrical Machinery	127.9	138.7	132.8	103.8	101.0	-2.7
Electrical Equipment	168.4	189.3	193.8	190.3	193.4	1.6
Transport Equipment	547.4	612.4	638.0	673.5	662.0	-1.7
Miscellaneous Manufactures	336.0	360.3	375.0	406.1	441.0	8.6
TOTAL MANUFACTURING	199.4	211.3	223.8	235.6	244.6	3.8

11.6. The slow rate of growth of output in the food manufacturing industry continued in the year 1991. After growing at a rate of 6.1 per cent in the year 1988. Since then the food industry has grown at an average rate of 1.4 per cent only. However, efforts have been initiated by the Government to rehabilitate sugar and meat industries.

11.7. Poor weather conditions in the maize growing districts led to a considerable drop in output of sifted maize meal in the year 1991 as shown in Table 11.3 . During the period 227.3 thousand tonnes of maize meal were milled in the factories compared to 241.4 thousand tonnes produced during the previous year. Similarly, relaxation of controls by the Government on transportation of maize from producing districts and an increase in the number of posho mills in the country, led to decreased deliveries of maize to the National Cereals and Produce Board (NCPB) and consequently to main millers. Output of wheat flour increased by 7.9 per cent while that of whole rice fell from 19.8 thousand tonnes in 1990 to 15.2 thousand in 1991. Considerable increases in energy and packaging costs had a negative impact on the grain milling industry. Consequently millers were compensated through waiver of VAT on packaging materials.

11.8. Prolonged drought in beef-cattle production areas enabled the meat industry to receive adequate supplies of animals for slaughter. Similarly the meat industry restructuring process aimed at privatising the industry resulted in more meat business with the private sector. Output of pork decreased by 20 per cent from 1,159 tonnes in 1990 to 927 tonnes in 1991. Production of sausages declined slightly while that of both hides and skins and processed chicken more than doubled.

11.9. While the drought conditions resulted in increased supply of beef animals, it had adverse impact on the domestic dairy industry. Output of liquid milk in 1991 was 429 million litres, 12 per cent below the 486 million litres recorded in 1990. Production of cheese increased by 7.6 per cent, while that of ice cream rose by 13.4 per cent. Output of both butter and baby foods fell significantly. Due to

PRODUCTION OF GRAIN MILLING PRODUCTS, 19867- 1991

Table 11.3 '000 tonnes

YEAR	COMMODITY			
	Sifted Maizemeal	Wheat Flour	Whole Rice	Broken Rice
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
1991*	227.3	185.5	15.2	2.2

* Provisional

increased input prices in dairy industry, the Government increased producer prices for milk deliveries, with a view to sustaining output.

11.10. Despite high overhead costs inherent in the canned fruit and vegetables industry, the sub-sector continued to record satisfactory growth. Production of squashes increased by 22 per cent from 2.7 million litres in 1990 to 3.3 million in 1991. Production of canned vegetables increased by 8.6 per cent, while output of fruits and vegetable juices were virtually unchanged. Output of fats and edible oils was adversely affected by increased costs of production, on account of increased prices of petroleum and other imported inputs. However, entry of more producers of fats and oils in the industry prevented further fall in output. Production of edible oils in 1991 was 4.3 million litres, more than one and a half times the 2.6 million litres output in the previous year. The production of edible fats and margarine, cotton seed oil and coconut oil fell.

11.11. The rehabilitation process in the sugar industry continued with the revival of Miwani Sugar factory, and expansion of operations in other factories. Production of sugar fell from 434.0 thousand tonnes in 1990 to 432.0 thousand tonnes in 1991. However, output of molasses increased by 18 per cent from 142 thousand tonnes in 1990 to 168 thousand in 1991. A three year program to expand crushing capacity of Nzoia Sugar is underway, while Associated Sugar factory is likely to be revived. Imports of sugar in 1991 were 38.6 thousand tonnes, well below the 105 thousand imported in 1990.

11.12. Depressed world economic growth had an adverse impact on the demand for Kenyan tea and coffee, and hence the miscellaneous food processing industry. However, demand for tea was strong in the United Kingdom and the Middle East. Output of made tea rose by only 3.3 per cent from 197 thousand tonnes in 1990 to 203.6 thousand in 1991. Output of milled coffee remained unchanged, at around 86 thousand tonnes. However, tea processing factories could not cope with tea deliveries. Plans were underway to construct four additional factories in the tea producing areas to help ease congestion and wastage. The restructuring process of the Malindi Cashewnut factory led to a near doubling of the output of cashewnut kernels in 1991 compared to 1990. Production of milo rose by 7 per cent, while significant decline occurred in production of cocoa and curry powder.

11.13. High production costs due to higher prices of raw materials led to a fall in the growth rate of the beverages and tobacco manufacturing industry to negative 3.2 per cent in 1991, the lowest growth rate in the last five years. In particular, intermittent shortages of water in 1991 dealt a severe blow to beer and stout manufacturing, while instability in export markets led to uncertainties in the tobacco manufacturing industry. As shown in Table 11.4, production of beer, in 1991, was 314 million litres, 5.2 per cent below the 331.1 million output of 1990. Production of mineral waters fell by 3.7 per cent while output of cigarettes declined by 2.6 per cent in the period under review.

11.14. Structural changes in the textile manufacturing industry which has allowed more competition between local products and imported fabrics, led to significant decline in manufacture of textiles and wearing apparel. However, the second phase of the structural reforms in the industry is expected to improve production with more private enterprise participation. Output of cotton woven fabrics in 1991 was 27.3 million square metres, down from the 45 million square

PRODUCTION OF BEVERAGES AND TOBACCO, 1987-1991

Table 11.4

YEAR	COMMODITY			
	Spirits '000 Litres	Beer Million litres	Mineral Waters Million litres	Cigarettes Million sticks
1987	981.4	307.5	200.9	6372
1988	956.0	314.4	186.7	6642
1989	1,274.1	315.4	169.8	6661
1990	1,192.9	331.1	150.0	6648
1991*	1,688.3	314.0	144.5	6473

* Provisional

metres produced in the previous year. Production of polyester viscose fabrics declined by a significant 16 per cent, while substantial recovery in output of woollen fabrics yielded an increase in output of 17 per cent. Shortages in supply of raw cotton led to a fall in production of ginned cotton from 3.9 thousand tonnes in 1990 to 1.4 thousand tonnes in 1991. Output of overalls and uniforms increased by a significant 24 per cent, while production decline of varying proportions were recorded in manufacture of shirts, trousers and dresses.

11.15. Capacity constraints affecting a local leading shoe manufacturing firm due to a fire accident coupled with the closure of two other shoe producing firms slowed growth of the leather and footwear industry in 1991. However, increased entry of medium and small scale producers of leather footwear helped fill part of the gap in this sub-sector. Output of leather shoes in 1991 was 1.2 million pairs, 26 per cent below the 1.6 million output of 1990. Production of finished leather in 1991 increased significantly by 66.2 per cent from 7,637 square metres in 1990 to 12,693 in the year 1991. Production of PVC leather cloth declined by a marginal 3 per cent; output of unfinished leather fell by a significant 16 per cent, while that of sporting balls rose by a modest 8 per cent.

11.16. Significant loosening of controls by the Government towards felling of trees helped to sustain the wood and cork products industry to a growth of 4.2 per cent in 1991. However effects of the VAT on paper and the waiver of duty on imported packaging materials constrained further growth of the paper and paper products sub-sector. Production of paper was, however, enhanced through installation of a third production line at a leading paper manufacturing firm. This system is expected to increase domestically processed paper and improve local paper varieties. A paper recycling production system is underway. Production of exercise books in 1991 was around 7 million dozen, about 40 per cent more than the output of 5 million in 1990. There was no change in output of carton cardboard, but toilet paper rolls increased by 27 per cent while a small decline was recorded in the output of corrugated paper containers. Increased input prices were attributed to a decline in production of Kraft paper board, from 7,439 thousand tonnes in 1990, to 6,561 thousand in 1991. Waiver of VAT on food packaging materials during 1991 revitalized demand for paper products.

11.17. The basic chemical industry grew at a faster rate in 1991 at 10.7 per cent, compared to a rate of 6.7 per cent achieved in the previous year. This was occasioned by the significant increase in production of pyrethrum powder, and a

33 per cent rise in pyrethrum extract output in response to increased world demand. Production of wattle extract in 1991 was 10.793 tonnes, up from 7.321

tonnes in 1990, a significant 47 per cent increase. The output of electrodes rose by 2 per cent while a modest decline was recorded in acetylene. Manufacture of industrial gases declined by a significant 20 per cent. Output of vaccines fell from 8 million doses in 1990 to 6 million in 1991, while output of aerosols, and cattle dips remained unchanged. Output of liquid insecticides declined by a significant 27 per cent in the period under review.

11.18. The petroleum and other chemical processing industry grew at a rate of 11.6 per cent in 1991, a slower pace than the 15.6 per cent growth achieved in 1990, which was attributable to the Gulf crisis. However, market de-regulation had a favourable impact on the output from the sub-sector. As a consequence, production of laundry soap increased by 9.3 per cent from 22.7 thousand metric tonnes in 1990 to 24.8 thousand in 1991. Production of liquid detergents increased by 24 per cent while output of tooth paste in 1991 was 1.8 metric tonnes, 22 per cent above the 1.5 tonnes in 1990. Production of cream lotions rose by 20 per cent, while that of hair oils and tonics increased by 36 per cent. Output of paints in 1991 was 7.9 million litres, 16 per cent below the 9.3 million manufactured in the previous year. While significant output declines were recorded in production of distempers, varnishes and lacquers, production of thinners rose by nearly 44 per cent. Production of liquid drugs in 1991 was 752 thousand litres, more than 50 per cent above the 501 thousand litres of the year 1990. Production of pharmaceutical rose by 26 per cent and that of shoe polish by 5 per cent. A marginal decline was recorded in production of resin emulsion. Production of safety matches increased somewhat.

11.19. In the year 1991, the plastics products manufacturing industry grew at a fast rate of 15.3 per cent, well above the 3.8 per cent rate recorded in 1990. This increase was attributable to a 65 per cent rise in production of PVC pipes, an important input in the building and construction sector. Output of PVC pipes in 1991 was 4,149 tonnes, compared to 2,511 tonnes manufactured in 1990. Production of polythene packaging bags in 1991 was 1,637 tonnes, 58 per cent above the 1,039 tonnes processed in 1991. This increase was occasioned by the rising demand of the plastic packaging bags as substitutes to paper packaging. Production of plastic shoes declined by a significant 28 per cent, from 1,217 thousand pairs in 1990 to 876 thousand in 1991. Output of plastic crates and bottles remained unchanged, while a 25 per cent reduction in output was recorded in manufacture of PVC floor tiles.

11.20. A general slow down in the domestic economy during the year and higher manufacturing costs dealt a heavy blow on the domestic rubber industry. While the rubber manufacturing sub-sector has consistently achieved positive growth rates of varying levels since 1988, the growth rate slumped to negative 1.1 in 1991. This decline was in response to the slow down in the motor vehicle assembly industry and rising cost of production of rubber products. To help revamp the rubber products industry, higher prices for various rubber products were announced in the year. Production of new motor vehicle tyres was 462



thousand units, 7 per cent below the 495 thousand units produced in of 1990 Production of retreaded tyres rose by a modest 2 per cent while production of bicycle tyres declined by 7 per cent. Manufacture of rubber shoes in 1991 was 5.0 million pairs, less that two thirds the output of 7.7 million pairs in 1990.

11.21. The non-metallic products sub-sector slowed down markedly in 1991, growing at 2.0 per cent, compared to 13.7 per cent recorded in 1990. As shown in Table 11.5, production of cement in 1991 was 1,422.6 thousand tonnes, 6 per cent below the 1,511.5 thousand output of 1990. The decline was attributable to rising energy costs used in production of cement. To sustain the demand for cement, plans are under way to expand with energy saving technology one of the cement production plants at Athi River. Exports of cement to both Uganda and Tanzania have been an average of 54.5 thousand tonnes in the past 5 years, while exports to other countries in the same period have remained at around 275 thousand tonnes. Output of roofing tiles almost doubled in 1991, while production of clinker rose by a marginal one per cent.

CEMENT PRODUCTION AND UTILIZATION, 1987-1991

Table 11.5 '000 tonnes

YEAR	PRODUCTION	IMPORTS	CONSUMPTION AND STOCKS	EXPORT TO	
				Uganda and Tanzania	All Other Countries
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
1991*	1,422.6	1.5	1,119.2	54.1	250.8

* Provisional.

11.22. The metal products industry grew by 16.1 per cent in 1991, faster than the 14.5 per cent growth registered in 1990. Entry into the market by a plant in Mombasa raised output of galvanized sheets by about 61 per cent, and helped sustain growth of the sub-sector. Thus, despite its vulnerability to foreign exchange constraints, the sub-sector continued to provide linkage benefits to the engineering and construction industries. Output of galvanized sheets in 1991 was 88,276 tonnes, far above the 54,889 tonnes produced on 1990. A 2 per cent increase in production was recorded in output of iron bars and rods, while no output change was recorded in production of metal cans and tins. Production of pangas doubled, while that of tabular furniture grew by about 8 per cent. Output of barbed wire increased by 10 per cent.

11.23. Despite comprehensive technological changes and extensive fiscal reforms aimed at the electrical equipment industry, the industry recovered only marginally from a negative growth rate in 1990 to a positive 1.6 per cent in 1991. The recovery was, however, dampened by limitations of foreign exchange required to import completely knocked down components for domestic assembly. Production of motor vehicle batteries in 1991 was 187,860 units, 5.8 per cent above the 177,536 units output of 1990. Production of radios gained a modest 1 per cent

increase from 22,600 units in 1990 to 28,026 units in 1991. Output of electrical lamps increased by more than 14 per cent, while that of gramophone records and radio cassettes increased by 13 per cent and 2 per cent respectively. Production of dry cells was 158 million units, about the same as that in 1990.

11.24. Foreign exchange constraints and rising production costs in motor vehicle assembly impeded growth in the sub-sector. The number of assembled vehicles in 1991 was 7,770 units, 45 per cent below the 14,056 units assembled in the previous year. However, good effective demand for coaches and buses raised their output from 228 units in 1990 to 274 in 1991, a 20.2 per cent rise. Production of lorry bodies declined by a significant 13 per cent. The number of imported completely built up vehicles was 14,198 in 1991 units, 18.2 per cent below the 16,783 units imported in 1990.

11.25. In the miscellaneous manufactures industry, production of ball point pens increased by 4 per cent, while output of house-hold brushes was 610 thousand units, 18.9 per cent above the 513 thousand of 1990. Production of industrial and paint brushes increased by 38 per cent. Output of wheel barrows in the non-electrical machinery industry was 30,186 units in 1991, marginally below the 31,028 units manufactured in 1990.

Industrial Credit

11.26. The general economic slow down of the years 1990 and 1991 was reflected in the decline in project approvals by financial institutes. In the year 1991, a total of 205 industrial projects were approved for loan assistance and equity participation by industrial development banks, less than the 248 projects approved in the previous year. This number was, however, significantly higher than the low 148 project approvals given in 1989. Despite the smaller number of project approvals for 1991 compared to the year 1990, the expenditure approvals of K£ 42.8 million were about three times the approved expenditure of K£ 16.7 million in 1990. This was mainly attributable to inflationary pressures in the economy, alongside depreciation of the Kenya Shilling against foreign currency denominated loans. Analysis of data presented in Table 11.6 shows that, while the Kenya Industrial Estates (KIE) approved finances for 8.2 per cent of the total number of projects in 1991, its financial commitment was the lowest, being only 9 per cent of the total expenditure. This is explained by the fact that the KIE finances small rural-based, cottage type and labour-intensive projects. The ICDC, DFCK and IDB on the other hand, approved relatively heavy financial commitments leading to few industrial ventures but taking 91 per cent of the value of loans.

11.27. The Development Finance Company of Kenya (DFCK) has increased its participation in industrial promotion activities over the last three years, despite the constraint of non-performing projects. During 1991, the DFCK approved a total of K£ 8.9 million for 9 industrial ventures, its highest rate of engagement since 1987. Expansion of existing industrial concerns accounted for 39 per cent of loans from the DFCK, while 36 per cent and 25 per cent of the funds were advanced to new and modernizing firms respectively. Firms engaged in food processing were

advanced 30 per cent of the loans available, while a firm involved in the galvanizing of metal products was allocated 17 per cent. Two firms in the processing of leather and manufacture of wall tiles were together allocated 27 per cent of the loan funds. A modernizing firm in production of yarn received 11 per cent, while both manufacturing of safety matches and plastic containers were allocated the remaining 15 per cent of the loans available. Eight of the firms benefiting from the loans disbursements from the DFCK were located in areas outside Nairobi and Mombasa due to fiscal incentives for rural-based industrial investments. The new

INDUSTRIAL PROJECTS APPROVED BY SELECTED GOVERNMENT OR QUASI-GOVERNMENT INSTITUTIONS, 1987- 1991

Table 11.6

INSTITUTION	NUMBER OF PROJECTS					APPROVED EXPENDITURE K£ MILLION				
	1987	1988	1989	1990*	1991	1987	1988	1989	1990	1991*
Industrial Development Bank Limited (I.D.B.)	18	15	8	8	7	11.3	6.5	3.3	3.4	9.6
Development Finance Company of Kenya (D.F.C.K.)	12	4	3	9	9	6.1	0.7	0.8	5.3	8.9
Kenya Industrial Estates Limited (K.I.E.)	164	205	131	219	169	2.4	3.3	2.5	4.0	3.7
Industrial and Commercial Development Corporation (I.C.D.C.)	15	14	6	12	20	7.6	3.1	7.0	4.0	20.6
TOTAL	209	238	148	248	205	27.5	13.6	13.6	16.7	42.8

* Provisional.

and expansion financing by DFCK in industrial investments are expected to generate employment for 364 persons, while introduction of the Foreign Exchange Risk Assumption Fund is further expected to enhance employment through borrowers' protection from exchange fluctuation risks, since loan approvals will be contracted in local currency.

11.28. Loan facilities offered by the Industrial Development Bank (IDB) declined to 7 approvals in 1991, compared to 8 which were allocated finances in both 1989 and 1990. The seven projects were allocated K£9.6 million, of which 54 per cent was allocated for expansion projects in steel rolling, spinning and weaving, and the plastic industries in Mombasa, Nairobi and Naivasha respectively. Initiation of new projects received 36 per cent of the approved funds for manufacture of laminated tubes, ceramic tiles and pharmaceuticals, located in Eldoret, Athi River and Nairobi, respectively; while 10 per cent of the remaining funds were allocated for modernization of a textile plant in Eldoret. More than 325 new employment opportunities are expected to be created at completion of the industrial ventures.

11.29. Loan approvals by the Kenya Industrial Estates (KIE) in 1991 were 169, down by 23 per cent from the 219 assisted in 1990. This was a result of the KIE's policy of concentrating on reviews and rehabilitation of on going projects aimed at improving their financial viability. The KIE committed 61 per cent of the funds as loans to industrial investments while 29 per cent were in the forms of equity participation. While strong inflationary pressures constrained number of projects assisted by the KIE, the investment cost per project increased from Kshs 340,500 in 1990 to Kshs 437,869 in 1991. Employment generation capacity was roughly 10 persons per project. The Nairobi region remained the leading station in terms of loans approved, followed by Eldoret and Muranga, respectively. However, there has been a significant decrease in the rate of project approvals for both Nairobi and Nakuru regions, a consequence of KIE's rural industrialization priority. The smaller towns and regional centres are expected to feature more prominently in future, with the introduction of Seminars for Business Opportunities (SBOs) by the KIE.

11.30. During the year the Industrial and Commercial Development Corporation (ICDC) approved loans and equity commitment/disbursements to 20 industrial projects, worth K£ 20.6 million, both the physical and financial involvement being the heaviest in the last five years. The ICDC made commitments in the form of equity of K£8.85 million for rehabilitation of existing projects. Medium size loans by ICDC comprised 62 per cent of the funds while 28 per cent were large loans. The beneficiaries of the loans were in mining and quarrying, textiles and food processing industries. On the other hand the ICDC had an equity and loans disbursement portfolio of K£11.78 million, 46 per cent of the funds being in form of large and medium loans; the rest went to equity commitments (4 per cent) and small loans (50 per cent) respectively.

Manufacturing Labour Cost and productivity

11.31. The growth in labour productivity in the manufacturing sector increased to 3.5 per cent in 1991, compared to 2.6 per cent recorded in 1990. The proportion of wage-cost as percentage of gross value of output declined from 4.3 per cent in 1990 to 3.6 per cent in 1991. As shown in Table 11.7, the proportion of wage costs in total manufacturing value added remained at 34 per cent per annum, thus leaving 67 per cent as operating surplus.

INDICATORS OF LABOUR COST AND PRODUCTIVITY IN MANUFACTURING. 1987 - 1991

Table 11.7

INDICATOR	1987	1988	1989	1990	1991*
1. Change in the quantum index of manufacturing	+5.7	+6.0	+5.9	+5.3	+4.1
2. Change in numbers employed in manufacturing	+2.3	+2.6	+2.8	+2.7	+0.6
3. Implicit change in labour productivity	+3.4	+3.4	+3.1	+2.6	+3.5
4. Wage cost as percentage of gross output	4.6	4.1	4.3	3.9	+4.1
5. Wage cost as percentage of value added	33.8	30.7	34.5	33.1	35.7

* Provisional.

CHAPTER 12 - BUILDING AND CONSTRUCTION

The slow-down recorded in building and construction activities in 1990 continued into 1991 as shown by the sector's major indicators namely; employment, cement-consumption and value of receipts by private building and contractors. Price increases, Government financial austerity measures and decrease in growth of loans and advances by commercial banks to private building and construction enterprises contributed to the slow-down in the performance of the sector in 1991.

12.2. Data on real trends on the sectors major indicators since 1987 are presented in Table 12.1. Due to a slow-down in building and construction activities, the sector recorded a marginal growth of 1.4 per cent in employment in 1991 compared with 3.9 per cent and 9.7 per cent in 1990 and 1989, respectively. Building sub-sector performed better in employment creation than other construction, recording a growth of 3.5 per cent compared with a marginal drop in other construction. Estimated cement consumption declined by 5.3 per cent from 1,182 thousand tonnes in 1990 to 1,120 thousand tonnes in 1991.

REAL TRENDS IN BUILDING AND CONSTRUCTION*, 1987 - 1991

Table 12.1 1982=100

	1987	1988	1989	1990	1991**
"Index" of reported private building work completed in main towns***	72.2	81.3	89.9	88.7	
"Index" of reported public building work completed in main towns***	16.3	15.5	12.2	11.3	
"Index" of government expenditure on roads	49.8	65.2	77.1	67.0	73.0
Cement consumption (000 tonnes)	890.3	854.0	1,003.4	1,182.0	1,119.6
"Index"	153.7	147.4	173.2	204.0	193.3
Employment ('000)	58.1	62.6	68.7	71.4	72.4
"Index"	96.2	103.6	113.7	118.2	119.9

* 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. Provisional data from Business Expection Enquiry(BEE) show that total receipts by private contractors rose from revised K£ 386 million in 1990 to estimated K£ 500 million in 1991, with building sub-sector contributing slightly over 60 per cent. Receipts by building contractors rose from K£ 258 million in 1990 to K£ 325 million in 1991, partly attributed to major building works which were in progress in major towns.

12.4. Table 12.2 shows annual percentage changes in building and construction cost indices between 1989 and 1991. The overall building and construction cost index rose by 7.7 per cent in 1991. Labour, a major input in the construction industry rose by 9.7 per cent with 15.5 per cent, 7.7 per cent and 6.7 per cent increases in unskilled, semi-skilled and skilled labour, respectively. In 1991, material inputs recorded modest price increases compared with the large price increases

in the previous year which resulted from higher fuel and oil prices, introduction of VAT, and depreciation of the Kenya Shilling against major currencies. Overall material costs recorded a modest increase of 7.0 per cent in 1991 slightly below the 1989 level but significantly lower than the 25.7 per cent recorded in 1990.

ANNUAL PERCENTAGE INCREASE IN BUILDING AND CONSTRUCTION INDICES*, 1989 - 1991

Table 12.2

	MATERIALS			LABOUR			TOTAL COST		
	1989	1990	1991**	1989	1990	1991**	1989	1990	1991**
Residential Buildings	10.9	24.7	**8.1**	11.5	12.4	9.7	11.0	22.4	8.4
Non-Residential Buildings	9.8	30.8	**8.1**	11.5	12.4	9.7	10.2	26.2	8.5
All Buildings	10.4	27.4	**8.1**	11.5	12.4	9.7	10.6	24.2	8.4
"Other" Construction	6.7	22.0	4.4	11.5	12.4	9.7	8.5	18.2	6.4
TOTAL COST INDEX	9.3	25.7	7.0	11.5	12.4	9.7	9.9	21.9	7.7

* From December to December

* * Provisional.

12.5. As shown in Table 12.3, the total value of plans approved by Nairobi City Commission (NCC) and other towns declined in 1990 but recovered to record a 8.6 per cent increase in 1991. The value of plans approved by other towns rose by 18.7 per cent in 1991 compared with 23.4 per cent in 1990, a drop of 5 percentage points. Mombasa, Kisumu and Eldoret reported increases while Nakuru reported a slight decline in value of plans approved. Major building plans approved included shops and offices for NACICO Co-operative Society and ABN-Bank, Barclays Bank staff training centre and hostel, library block for Utalii College and factory premises for consumer products - all in Nairobi; and a plan for Kenya Ports Authority (KPA) Inland Container Depot in Eldoret.

VALUE OF BUILDING PLANS APPROVED BY NAIROBI AND OTHER TOWNS, 1987 - 1991

Table 12.3

K£million

YEAR	NAIROBI	OTHER TOWNS	TOTAL
1987	111.82	90.81	202.63
1988	148.38	98.93	247.31
1989	212.85	69.26	282.11
1990	186.24	85.44	271.68
1991*	193.45	101.47	294.92

* Provisional.

12.6. Table 12.4 presents a comparison of value of private plans approved and buildings completed in main urban areas since 1987. Comparison between value of completed buildings expressed as a percentage of plans approved reveals that

on average 18.9 per cent of the plans approved are completed, indicating a delay in completion of some of the projects.

COMPARISON OF VALUE OF PRIVATE PLANS APPROVED AND BUILDINGS COMPLETED

IN MAIN URBAN AREAS, 1987 - 1991

Table 12.4

K£million

YEAR	PLANS APPROVED	BUILDING WORK COMPLETED
1987	202.15	33.49
1988	247.31	40.74
1989	282.11	48.59
1990	271.68	66.02
1991*	294.92	55.77

* Provisional.

12.7. An analysis of value of reported private buildings works completed in main towns is set out in Table 12.5. The total value declined from K£ 71.93 million in 1990 to K£ 59.95 million in 1991. Nairobi, which accounts for over 40 per cent of the total value of completions, recorded a rise of K£ 4.41 million, while Mombasa, Nakuru and Malindi recorded decreases. Buildings in progress during the year included; Barclays Bank Plaza, Meridian Hotel, Nation Centre and Post Office Headquarters - all in Nairobi, and Kenya Ports Authority Main Gate in Mombasa.

VALUE OF REPORTED PRIVATE BUILDING* WORKS COMPLETED IN MAIN TOWNS, 1987 - 1991

Table 12.5 K£million

Year	Nairobi	Mombasa	Kisumu	Nakuru	Malindi	Total
1987	21.78	11.73	0.23	2.77		36.51
1988	26.24	14.35	1.10	3.85		45.54
1989	31.19	13.28	4.36	3.90		52.73
1990	30.15	23.61	8.09	6.55	3.53	71.93
1991**	34.56	21.58		1.89	1.93	59.95

* Including the value of extension

** Provisional.

12.8. A breakdown of reported completions of private buildings by residential and non-residential category is shown in Table 12.6. The total number and estimated cost of both residential and non-residential units declined. Residential units still constitute the largest proportion of total number of units completed. This is due to a high demand for residential units in main towns. Reported residential units include: residential units along Mbagathi Way and off Muhoho Avenue in South C; Masai Housing Estate off Langata Road, and residential units for Whispers Estate Development off Limuru road - all in Nairobi. While for non-residential category British American Insurance Company, Impala Glass and Standard Properties Limited buildings were completed.

REPORTED COMPLETIONS OF NEW PRIVATE BUILDINGS* IN MAIN TOWNS, 1987 - 1991

Table 12.6

YEAR	NUMBER		ESTIMATED COST K£million		
	Residential	Non-Residential	Residential	Non-Residential	Total
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	1,148	94	39.02	27.00	66.02
1991**	851	65	35.31	20.46	55.77

* Excluding the value of extensions.

** Provisional.

12.9. Table 12.7 indicates that both the total number of units and value of reported public building in main towns declined in 1991. The total number and value dropped by 54 units and K£ 1.1 million, respectively. A similar trend was recorded in both residential and non-residential units and their corresponding costs.

12.10. Table 12.8 gives a comparison of estimates and actual out-turns on housing during the last five fiscal years. Approved estimates continued to fall since

REPORTED COMPLETIONS OF NEW PUBLIC BUILDINGS* IN MAIN TOWNS, 1987 - 1991

Table 12.7

YEAR	NUMBER		ESTIMATED COST K£million		
	Residential	Non-Residential	Residential	Non-Residential	Total*
1987	150	26	1.65	0.79	2.44
1988	167	22	2.31	0.81	3.12
1989	169	28	2.54	1.18	3.72
1990	156	32	2.97	1.60	4.57
1991**	114	20	2.40	1.10	3.50

* Including the value of extensions.

** Provisional.

1988/89, reaching the lowest level during the current fiscal year. Actual amount spent on housing during a similar period showed a mixed performance. A drop of K£ 9.17 million in 1989/90 and a rise of K£ 4.65 million in 1990/91 were recorded. Increases were recorded in expenditure on pool housing and District Housing Programmes. Loans and grants to the National Housing Corporation (NHC) and municipalities showed a decline. Major housing projects in progress under the urban pool housing included Nairobi West Phase II, and in Kericho and Voi. Lodwar, Nyamira, Vihiga,, Kabarnet, Mombasa and Makueni pool housing were at various planning stages.

APPROVED AND ACTUAL CENTRAL GOVERNMENT EXPENDITURE ON HOUSING, 1987/88-1991/92

Table 12.8

YEAR	K£ Million		Approved Expenditures as Percentage of Development Expenditure
	Approved	Actual	
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	14.66	1.18
1991/92*	5.69		0.52

* Provisional.

12.11. The economic down-turn experienced in the country during the last two years coupled with Government's financial austerity measures and ever rising building costs all had depressing effects in the performance of the NHC in 1991. Despite the above adverse factors, the Corporation continued with its efforts to ensure effective implementation of Government housing policies and programmes throughout the country, through housing schemes which were at various stages of development.

12.12. During the period-under review, the corporation completed a total of 1,310 units at a cost of K£ 13.5 million in seven major towns. This represents a rise of 629 units from 681 units completed during the previous year. The increase in units and value was attributable to the completion of Kibera High Rise flats in Nairobi, comprising of 982 units. Schemes completed during the year also included

Machakos, Malindi, Bungoma, Kerugoya and Maralal. In addition to the above completed units 1,526 units at a cost of about K£ 17 million were at various stages of construction in nine towns. Schemes under construction include Busia, Isiolo and Embu Tenant Purchase comprising of 100 units, 125 units and 99 units, respectively. Data on housing units completed by the NHC and their value during the last five years are presented in Table 12.9.

HOUSING UNITS COMPLETED BY THE NATIONAL HOUSING CORPORATION, 1987 - 1991

Table 12.9

	1987	1988	1989	1990	1991*
Units completed					
PROVINCE-					
Nairobi	85		367	87	984
Coast	50				68
North-Eastern					
Eastern	248				128
Central	111	166	149**	357**	40
Rift valley	41	63	105	25	
Nyanza	40		384		
Western				212	90
TOTAL NUMBER	575	229	1,005	681	1,310
Of which site and service	50		234		
Value of units completed K£'000					
Nairobi	1,350		4,288	2,056	12,095
Coast	116				551
North-Eastern					
Eastern	1,095				389
Central	349	1,010	930**	558**	154
Rift valley	240	524	399	98	
Nyanza	604		878		
Western				644	319
TOTAL VALUE	3,754	1,534	6,495	3,356	13,508

* Provisional

* * Include upgrading of squatter settlement in Nyeri Town.

12.13. In its effort to improve housing conditions in the urban centres, the corporation in 1987 embarked on development of High Rise flats under the urban renewal programme. The primary objective of the programme is to re-develop old housing estates and slum settlements in major towns. Under this programme two schemes have been completed namely; the Pumwani Majengo High Rise Flats Phase I in 1989, and Kibera High Rise Flats Phase I in 1991, comprising of 284 units and 982 units, respectively. Kibera Phase II comprising of 920 units is under construction, while Pumwani-Majengo Phases II and III comprising of 212 units and 244 units, respectively are under planning stages.

12.14. In addition to tenant purchase, mortgage and rental schemes at various stages of development in some major towns. The Corporation also continued to assist individuals to construct better houses in the rural areas through the Rural Housing Loans Scheme. Since 1967, 7,499 householders have been assisted in completing their rural houses at a cost of K£ 13 million. During 1990/91 fiscal year,

the corporation disbursed K£ 0.6 million to 215 applicants. This was an improvement over the previous fiscal year when the scheme registered no disbursement due to lack of funds.

12.15. An improved road network helps economic growth and facilitates inter-regional trade. As at July 1991 the total road network covered 62,600 kilometres of which 13.3 per cent are bitumen. Analysis of total network by surface type shown on Table 12.10 indicate a significant improvement on bitumen roads, recording a growth of 23.9 per cent in length between 1987 and 1991. On the other hand, earth/gravel which constitute bulk of the road network declined marginally, the rise and fall in kilometres of road under bitumen and earth/gravel, respectively, was due to up-grading of the earth/gravel roads to bitumen standard during the last five years. Some of the major roads completed include Bungoma-Chwele-Kimilili, Garsen Causeway - both upgraded to bitumen standard, and repair/recarpeting of Kisumu - Kakamega road.

KILOMETRES OF ROAD AS AT 1st JULY, 1987 AND 1st JULY, 1991 BY TYPE AND CLASSIFICATION

Table 12.10 '000Km

Type of Road	1987		1991	
	Bitumen	Earth/ Gravel	Bitumen	Earth/ Gravel
A- International Trunk	2.3	1.3	2.6	1.0
B- National Trunk	1.2	1.6	1.4	1.4
C- Primary	1.9	5.9	2.4	5.4
D- Secondary	0.7	10.4	1.1	10.0
E- Minor	0.4	25.3	0.6	25.8
F- Special Purpose*	0.2	10.5	0.2	10.7
TOTAL	6.7	55.0	8.3	54.3

* Special purpose roads include Government access, settlement, rural access,sugar, Tea and wheat roads.

12.16. The Government through the Ministry of Public Works continued to put much emphasis on the improvement of the country's road network. The improvement would come about through up-grading various roads to bitumen standard; the minor roads programme; repair, recarpeting and resealing worn out sections; and the Graveling, Bridging and Culverting Programme (GBCP). In the 1990/91 fiscal year, the Government spent K£ 117.9 million on road development and recurrent (repair and maintenance costs) compared with K£ 114.7 million and K£ 89.4 million in 1989/90 and 1988/89 fiscal years, respectively. This represents a growth of 3 per cent in expenditure in 1990/91 compared with 27.9 per cent in the previous fiscal year. Total expenditure on roads is projected to grow by 8 per cent during the current fiscal year. The slow growth in expenditure is attributable to Government's budget rationalization policy of trying to limit the overall growth in expenditure. Data on road development and recurrent expenditures are presented in Table 12.11.

12.17. As at July 1991, the Rural Access Road Programme (RARP), initiated in 1974 with an aim of providing a link between farming areas and market centres,

TOTAL EXPENDITURE ON ROADS, 1989/90 - 1991/92

Table 12.11 K£million

	1989/90	1990/91	1991/92*
DEVELOPMENT:			
Trunk Roads	49.7	49.2	33.8
Primary Roads	12.7	8.4	9.7
Secondary Roads	7.4	16.6	23.8
Unclassified Roads			
Miscellaneous Roads	21.8	18.5	42.4
TOTAL	91.6	92.7	109.7
RECURRENT (maintenance and repair)	23.1	25.2	27.1
TOTAL	114.7	117.9	136.8

* Provisional

had provided about 7,700 kilometres of roads in 29 districts. The programme continues to play an important role in promoting development activities in the rural areas as well as providing employment opportunities to the rural population. Special purpose roads, which include settlement, tourist, sugar, tea and wheat roads, recorded a growth of 2 per cent in mileage. This is in line with Government's commitment to improve agricultural roads to facilitate transportation of agricultural produce to various processing plants and marketing centres.

CHAPTER 13 - TOURISM

Overview

The performance of tourism industry worsened slightly in 1991 as indicated by the decrease in both visitor arrivals and departures. The effects of the Gulf conflict which started in the third quarter of 1990 continued to be felt in the first and second quarters of 1991. High oil prices continued to increase the cost of travel and concern for personal safety was still in the minds of tourists. As a result of these effects, there were decreases in arrivals in the first and second quarters of 1991. However, the situation improved during the third and fourth quarters. This was attributable to re-activation, in both quarters, of bookings which had been cancelled during the first and second quarters. During this time many hotels particularly in the Coast were fully booked. Another factor which encouraged tourists to come to Kenya was the continued depreciation of the Kenya Shilling against the major trading currencies, making holidays in Kenya relatively cheaper.

13.2. The number of international arrivals recorded at various entry points decreased by 1.2 per cent from 814.4 thousand in 1990 to 804.6 thousand in 1991 while departures decreased by 6.4 per cent from 728.3 thousand in 1990 to 681.5 thousand in 1991. Hotel bed-night occupancy, however, rose by some 7.8 per cent over the previous year's level but the average length of stay was slightly shorter by about 1 day. Foreign exchange earnings were K£ 594 million in 1991. This was a modest growth of 11.4 per cent compared with a 23.4 per cent growth recorded in 1990. The earnings were slightly lower in real terms deflated by trade weighted Kenya Shilling.

International Tourism

13.3. International arrivals decreased by 1.2 per cent from 814.4 thousand to 804.6 thousand. As indicated in Table 13.1, there was a decrease of 19.6 per cent during the first quarter but the situation improved during the third and fourth quarters. Arrivals of visitors on holiday continued to be the largest group while arrivals on business realised a modest growth of 5.3 per cent from 73.7 thousand in 1990 to 77.6 thousand in 1991.

13.4. Table 13.2 shows that there was a decrease of 6.4 per cent in the number of visitor departures. Decreases in the number of departures were registered in first, second and third quarters but an increase of 13.0 per cent was registered in the fourth quarter. As in the case of arrivals, visitors on holiday contributed the highest number of departures although the number dropped from 598.0 thousand to 559.5 thousand. The depressed performance in international travel was attributed to fear of risk of travel as a result of the Gulf Crisis which continued from 1990 into 1991.

13.5. Analysis of visitor departures by country of residence and purpose of visit as presented on Table 13.3 shows that Europe is still the major source of tourists. Germany continued to dominate the scene followed closely by the United Kingdom.

QUARTERLY VISITOR ARRIVALS BY PURPOSE OF VISIT, 1987 - 1991

Table 13.1 '000

Quarter/	Purpose	1987	1988	1989	1990	1991*
1st Qr.	Holiday	138.6	155.1	192.6	186.1	149.6
	Business	18.0	20.2	15.8	22.3	17.9
	Transit	13.0	13.0	5.8	9.3	7.5
	Other	2.0	2.1	1.4	1.2	1.0
	TOTAL	171.6	190.4	215.6	218.9	176.0
2nd Qr.	Holiday	100.4	102.6	124.5	158.1	149.4
	Business	18.1	20.4	13.8	17.1	16.6
	Transit	16.9	17.1	6.5	5.4	5.1
	Other	1.8	2.0	1.0	2.5	2.4
	TOTAL	137.2	142.1	145.8	183.1	173.5
3rd Qr.	Holiday	134.0	158.7	158.9	184.6	215.9
	Business	14.1	14.8	9.6	19.8	23.1
	Transit	14.6	17.3	9.5	11.2	13.2
	Other	1.4	2.0	1.3	3.5	4.1
	TOTAL	164.1	192.8	179.3	219.1	256.3
4th Qr.	Holiday	156.1	139.5	166.1	166.8	158.4
	Business	15.9	14.1	14.6	14.5	20.0
	Transit	14.4	14.0	12.7	9.7	12.5
	Other	2.0	2.0	0.6	2.3	7.9
	TOTAL	188.4	169.6	194.0	193.3	198.8
Year	Holiday	529.1	555.9	642.1	695.6	673.3
	Business	66.1	69.5	53.8	73.7	77.6
	Transit	58.9	61.4	34.5	35.6	38.3
	Other	7.2	8.1	4.3	9.5	15.4
	TOTAL	661.3	694.9	734.7	814.4	804.6

Provisional.

However, total departures of visitors resident in Europe decreased by 6.3 per cent and those of North America by 6.0 per cent. These declines could be attributed to the negative publicity on Kenya in the foreign media during 1991. The overall decrease of departures was occasioned by decreases from African countries, Europe and North America. On the Asian scene India, Japan and Israel recorded slight decreases.

13.6. Table 13.4 shows the breakdown of the number of days stayed by purpose of visit. The total number of days stayed decreased from 10.2 million to 9.3 million, a drop of 9.4 per cent. After a recovery in 1990 to 14.4 days from 13.6 days in 1989, the average length of stay declined to 13.7 days. In 1991, therefore, fewer tourists came to Kenya for holiday and stayed for a shorter period.

Hotel Occupancy

13.7. Table 13.5 shows hotel occupancy by country of residence. Since 1987, the bed-night occupancy sustained an upward trend. In 1991, the bed-night occupancy stood at 6.5 million, an increase of 7.8 per cent over the 1990 level. This increase

QUARTERLY VISITOR DEPARTURES BY PURPOSE OF VISIT,1987-1991

Table 13.2 '000

Quarter/	Purpose	1987	1988	1989	1990	1991*
1st Qr.	Holiday	146.6	155.2	165.5	187.3	149.3
	Business	16.4	17.3	22.7	20.6	16.4
	Transit	14.2	15.0	13.8	14.8	11.8
	Other	3.4	3.6	1.0	2.3	1.8
	TOTAL	180.6	191.1	203.0	225.0	179.3
2nd Qr.	Holiday	95.6	92.7	99.6	118.0	111.2
	Business	17.9	17.3	17.8	19.0	17.9
	Transit	19.2	18.6	13.0	11.8	11.1
	Other	3.1	3.0	0.6	1.3	1.2
	TOTAL	135.8	131.6	131.0	150.1	141.4
3rd Qr.	Holiday	136.8	145.0	140.8	166.4	156.2
	Business	18.1	19.2	9.1	19.0	17.8
	Transit	18.8	19.9	14.0	12.5	11.7
	Other	2.7	2.9	0.5	2.3	2.2
	TOTAL	176.4	187.0	164.4	200.2	187.9
4th Qr.	Holiday	131.4	129.7	142.5	126.3	142.8
	Business	17.4	17.2	12.5	16.1	16.4
	Transit	17.9	17.7	13.3	9.0	12.6
	Other	2.6	2.6	0.7	1.6	1.1
	TOTAL	169.3	167.2	169.0	153.0	172.9
Year	Holiday	510.4	522.6	548.4	598.0	559.5
	Business	69.8	71.0	62.1	74.7	68.5
	Transit	70.1	71.2	54.1	48.1	47.2
	Other	11.8	12.1	2.8	7.5	6.3
	TOTAL	662.1	676.9	667.4	728.3	681.5

* Provisional

DEPARTING VISITORS BY COUNTRY OF RESIDENCE AND PURPOSE OF VISIT. 1990 - 1991

Table 13.3 '000

Country of Residence	Holiday		Business		Transit		Total**	
	1990	1991*	1990	1991*	1990	1991*	1990	1991*
West Germany	130.9	122.5	0.9	0.9	1.6	1.6	133.4	125.0
United Kingdom	100.3	93.9	4.5	4.1	4.0	3.9	108.8	101.9
Switzerland	32.2	30.1	0.5	0.5	0.6	0.6	33.3	31.2
Italy	34.2	32.0	0.7	0.6	1.4	1.4	36.3	34.0
France	38.2	35.7	1.0	0.9	1.1	1.1	40.3	37.7
Scandinavia	16.3	15.2	1.0	0.9	1.6	1.6	18.9	17.7
Other Europe	47.8	44.7	1.5	1.4	1.8	1.8	51.1	47.9
TOTAL EUROPE	399.9	374.1	10.1	9.3	12.1	12.0	422.1	395.4
U.S.A	37.8	35.4	2.5	2.3	3.0	3.0	43.3	40.7
Canada	8.8	8.3	0.6	0.5	0.9	0.9	10.3	9.7
TOTAL NORTH AMERICA	46.6	43.7	3.1	2.8	3.9	3.9	53.6	50.4
Uganda	16.0	15.0	28.6	26.2	5.0	4.9	49.6	46.1
Tanzania	66.8	62.5	11.5	10.5	5.8	5.7	84.1	78.7
Other Africa	27.6	25.8	17.3	15.9	14.9	14.7	59.8	56.4
TOTAL AFRICA	110.4	103.3	57.4	52.6	25.7	25.3	193.5	181.2
India	9.2	8.6	1.0	0.9	2.3	2.2	12.5	11.7
Japan	7.7	7.2	0.9	0.8	0.4	0.4	9.0	8.4
Israel	3.8	3.5	0.2	0.2	0.5	0.5	4.5	4.2
Other Asia	9.6	9.0	1.5	1.4	2.3	2.3	13.4	12.7
TOTAL ASIA	30.3	28.3	3.6	3.3	5.5	5.4	39.4	37.0
Australia and New Zealand	8.9	8.3	0.3	0.3	0.5	0.5	9.7	9.1
All Other Countries	1.9	1.8	0.2	0.2	0.4	0.2	2.5	2.2
TOTAL	598.0	559.5	74.7	68.5	48.1	47.3	720.8	675.3

* Provisional.

** The Total does not include "Other Visitors" Category.

NUMBER OF DAYS STAYED* BY PURPOSE OF VISIT. 1987 - 1991

Table 13.4 '000

Purpose	1987	1988	1989	1990	1991**
Holiday	9,364.3	9,747.4	8,255.7	9,276.8	8,366.2
Business	822.0	855.6	647.7	770.3	700.7
Transit	218.5	227.5	177.9	179.6	198.0
TOTAL	10,404.8	10,830.5	9,081.3	10,226.7	9,264.9
Average length of stay in days	16.0	16.0	13.6	14.4	13.7

* Excludes days stayed by "Other Visitors" Category.

** Provisional.

was caused mainly by visitors from Germany and the United Kingdom which recorded increases of 9.0 per cent and 44.1, per cent respectively. Overall, Europe recorded an increase of 14.8 per cent in bed-nights. After showing a steady increase since 1987, bed-night occupancy by visitors from America dropped by 40.4 per cent from 525 thousand in 1990 to 312 thousand in 1991. The decreases

were contributed by the United States of America, the major source of tourists from America. Asia also recorded a decrease in the number of bed-nights, although Japan and India recorded marginal increases of 5.7 per cent and 7.0 per cent, respectively. Bed- nights by permanent occupants dropped from 168 thousand to 159 thousand but occupancy by Kenya residents increased from 876 thousand to 938 thousand. This growth compared with that of 5.6 per cent registered in 1990 indicates positive development in domestic tourism.

HOTEL BED-NIGHTS OCCUPIED BY COUNTRY. OF RESIDENCE, 1987 - 1991

Table 13.5 '000

	1987	1988	1989	1990	1991*
Permanent Occupants**	191.4	191.0	191.1	168.0	158.7
West Germany	1,215.9	1,274.2	1,370.2	1,610.7	1,755.4
Switzerland	467.8	475.3	474.6	494.9	502.3
United Kingdom	513.0	547.6	628.4	847.8	1,222.0
Italy	298.7	299.7	252.8	275.1	273.8
France	205.5	223.2	238.0	298.9	359.4
Scandinavia	87.2	82.5	90.5	122.7	114.8
Other Europe	223.3	222.9	244.0	346.2	359.3
EUROPE	3,011.4	3,125.4	3,298.5	3,996.3	4,587.0
Kenya Residents	847.5	853.9	829.4	875.5	938.0
Uganda	55.7	55.1	51.2	44.6	37.1
Tanzania	41.9	42.8	43.3	42.6	49.5
East and Central Africa	88.2	41.4	51.9	48.5	63.4
West Africa	30.9	12.7	14.0	16.0	40.9
North Africa	18.9	7.9	10.9	14.0	14.4
Other Africa	18.1	82.1	81.4	84.4	106.9
AFRICA	1,101.2	1,095.9	1,082.1	1,125.6	1,250.2
U.S.A	449.2	443.1	456.0	442.6	248.9
Canada	46 1	49.3	47.3	53.6	47.6
Other America	18.8	21.5	22.2	28.5	16.4
AMERICA	514.1	513.9	525.5	524.7	312.9
Japan	27.3	25.8	29.2	33.5	35.4
India	16.5	17.4	22.1	28.6	30.6
Middle East	20.2	22.9	24.4	26.9	27.8
Other Asia	55.5	52.2	47.6	45.8	28.9
ASIA	119.5	118.3	123.3	134.8	122.7
Australia and New Zealand	16.0	21.4	30.2	39.3	31.2
All Other Countries	77.7	68.6	65.8	57.2	55.8
TOTAL- OCCUPIED	5,031.3	5,134.5	5,316.5	6,045.9	6,518.5
TOTAL -AVAILABLE	9,479.2	9,704.3	9,630.8	10,494.7	11,036.7
Occupancy rate %	53.1	52.9	55.2	57.6	59.1

* Provisional.

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

13.8. The modest increase of 7.9 per cent in hotel bed-night occupancy in 1991 was less than the increase of 13.6 per cent in 1990. This decrease in growth rate may be attributed to negative publicity directed to Kenya by foreign media in America and Europe dealing with insecurity in Kenya in general and Masai Mara in particular. As a result of this, many tourists may have cancelled their visits to Kenya.

13.9. In Table 13.6 bed-nights are analysed by zone. Coastal beach hotels registered an increase of 681 thousand bed-nights while coastal hinterland recorded an increase of 10 thousand bed-nights. The rest of the zones showed decreases, except for Western and Northern zones which showed increases, which may be attributable to improved coverage rather than increases in tourism.

HOTEL BED-NIGHTS OCCUPIED BY ZONE. 1987 - 1991

Table 13.6 '000

Zone	1987	1988	1989	1990	1991*
Coastal-Beach	2,316.5	2,404.2	2,521.3	3,200.3	3,881.7
- Other	314.0	308.3	298.4	304.3	269.7
Coast Hinterland	141.5	142.4	158.6	175.2	184.9
Nairobi-High Class	564.8	577.5	605.1	649.9	544.0
-Other	864.9	843.3	831.8	780.2	733.1
Central	376.0	391.4	430.2	423.5	407.7
Masailand	259.8	268.2	270.6	291.4	273.2
Nyanza Basin	108.1	111.5	112.0	123.1	100.7
Western	77.0	78.9	79.6	81.3	85.3
Northern	8.7	8.8	8.9	10.0	38.3
TOTAL-OCCUPIED	5,031.3	5,134.5	5,316.5	6,039.2	6,518.5
TOTAL-AVAILABLE	9,479.2	9,704.3	9,630.8	10,494.7	11,036.7

* Provisional.

13.10. Bed-night occupancy by country of residence and locality of the hotels is shown in Table 13.7. From the table, it can be seen that most of the hotels with permanent occupants are in Nairobi. The table also shows that most tourists from Europe prefer Coast hotels rather than Nairobi hotels or game lodges. On the other hand visitors from the U.S.A prefer Nairobi, Coast and Game Lodges.

13.11. Occupancy by foreign residents in Game Reserves and national parks decreased by 20.9 per cent from 671 thousand in 1990 to 531 thousand in 1991. Both full catering and self service recorded decreases but full catering remained the most popular choice. Details of occupancy at game lodges and national parks are shown in Table 13.8.

Other Tourist Attractions

13.12. ***National Parks*** - Table 13.9 shows the number of visitors to National Parks and game reserves. There was a slight decrease in the number of visitors from 1.53 million in 1990 to 1.52 million in 1991. The areas affected most were Masai Mara and Amboseli game reserves which recorded decreases of 20.6 per cent and

HOTEL BED-NIGHTS OCCUPIED BY COUNTRY OF RESIDENCE. 1991*

Table 13.7 '000

Country of Residence	Nairobi	Coast	Lodges	Others	Total
Permanent Occupants**	115.1	29.7	4.6	9.3	158.7
West Germany	106.5	1,465.0	126.5	57.5	1,755.4
Switzerland	31.6	416.7	38.5	15.6	502.3
United Kingdom	157.4	885.5	117.8	61.2	1,222.0
Italy	36.7	195.9	25.7	15.7	273.8
France	52.6	220.3	61.1	25.4	359.4
Scandinavia	29.7	62.1	13.2	9.8	114.8
Other Europe	64.8	222.3	48.2	24.0	359.3
Kenya	279.3	376.2	87.1	195.4	938.0
Uganda	20.8	11.1	1.9	3.3	37.1
Tanzania	25.9	20.2	1.3	2.0	49.5
Other East and Central Africa	41.4	18.4	1.4	2.1	63.4
West Africa	13.6	25.7	0.7	0.9	40.9
North Africa	10.8	2.0	0.6	0.9	14.4
Other Africa	61.0	36.8	4.1	4.9	106.9
U.S.A.	112.3	52.1	51.8	32.7	248.9
Canada	21.2	14.1	7.7	4.7	47.6
Other America	7.6	4.2	3.0	1.6	16.4
Japan	17.0	8.6	6.7	3.0	35.4
India	19.8	4.9	2.6	3.3	30.6
Middle East	15.8	6.1	2.9	3.1	27.9
Other Asia	15.2	6.1	3.3	4.3	28.9
Australia and New Zealand	13.7	8.4	5.4	3.7	31.2
All Other Countries	7.1	40.3	4.7	3.7	55.8
* Provisional	1,276.9	4,132.7	620.8	488.1	6,518.6

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

GAME LODGES** OCCUPANCY, 1989 - 1991

Table 13.8 '000

Lodge locality/Type	BED-NIGHTS OCCUPIED					
	Foreign Residents			E.A. Residents		
	1989	1990	1991*	1989	1990	1991*
Game Reserves	266.6	323.7	331.4	13.9	23.4	63.8
National Parks	315.5	346.9	199.2	30.0	24.5	26.4
TOTAL	582.1	670.6	530.6	43.9	47.9	90.2
Of which full catering	534.4	625.4	488.6	37.1	39.0	73.7
Self Service	47.7	45.2	42.0	6.8	8.9	16.6

* Provisional.

** Lodges in National Parks and Game Reserves only.

20.2 per cent, respectively. Tsavo West National Park recorded a substantial increase from 78.6 thousand visitors in 1990 to 119.3 thousand visitors in 1991.

13.13. ***Museums and sites*** - Details of visits to museums and sites are shown in Table 13.10. Unlike 1990 which recorded an increase of visitors to museums and sites, 1991 recorded a big drop from 906.9 thousand visitors in 1990 to 789.7

NUMBER OF VISITORS TO NATIONAL PARKS AND GAME RESERVES. 1987 - 1991

Table 13.9 000

	1987	1988	1989	1990	1991*
Nairobi	99.8	125.5	155.2	152.8	168.8
Animal Orphanage	82.1	84.8	43.3	213.8	217.6
Amboseli	148.5	137.7	140.4	237.2	189.2
Tsavo (West)	80.6	85.4	96.8	78.6	119.3
Tsavo (East)	89.6	87.3	101.1	127.7	135.9
Aberdare	54.0	59.9	57.5	66.6	56.3
Buffalo Springs	43.4	64.0	70.4		
Lake Nakuru	127.9	138.6	167.4	174.2	174.4
Masai Mara	95.9	118.8	196.2	180.5	143.3
Malindi Marine	38.6	39.2	40.7	35.6	33.0
Lake Bogoria	31.2	32.8	46.2	53.8	53.0
Meru	26.8	23.7	17.4	11.1	9.1
Shimba Hills	13.4	16.7	21.5		38.2
Mount Kenya	19.2	18.0	13.3	18.7	14.6
Samburu	4.3	3.6	4.0		
Kisite/Mpunguti	11.0	17.9	18.2	27.1	33.1
Mombasa Marine			16.5	29.1	54.6
Watamu Marine		16.9	17.3	20.5	22.0
Hell's Gatet	16.9	14.5	18.2	31.1	41.3
Other**	12.8	10.5	13.4	13.8	14.8
TOTAL	996.0	1,095.8	1,255.0	1,472.2	1,518.5

* Provisional.

** Other includes Mount Elgon, Ol-Donyo Sabuk, Marsabit, Saiwa Swamp, Sibiloi. Ruma National Park, Mwea National Reserve, Central Island National Park and Nasolot National Reserve.

thousand visitors in 1991, a drop of 13.0 per cent. National museum (Main Gate and Snake Park) and Fort Jesus remained the main attractions although all of them showed substantial decreases. The three attractions accounted for 73.1 per cent of the total.

Conference Tourism

13.14. Data on Table 13.11 show that the number of conferences held at the Kenyatta International Conference Centre (KICC) decreased drastically from 36 to 14 conferences in 1990 and 1991, respectively. On the other hand the number of conference days increased from 128 days in 1990 to 149 days in 1991 and delegates from 6,160 in 1990 to 9,750 in 1991, a 58.3 per cent increase. Percentage of occupancy increased slightly to 40.8 per cent. Since hotel conferences were also held, coverage of KICC, therefore, under-reports the volume of conference tourism. Arrangements are being made to include hotel conferences in conference tourism.

Tourism Promotion

13.15. Various institutions continued to support promotion of both international and domestic tourism. During 1991, the Department of Tourism in the Ministry of

VISITORS TO MUSEUMS. SNAKE PARK AND SITES, 1987 - 1991

Table 13.10 '000

	1987	1988	1989	1990	1991*
National Museum: (Main Gate)	185.7	217.2	224.3	234.5	213.9
National Museum: (Snake Park)	163.6	167.0	210.1	220.6	176.3
Fort Jesus	187.6	189.6	206.1	226.6	187.0
Kisumu Museum	69.5	38.1	38.8	28.6	35.1
Kitale Museum	34.7	35.1	15.9	21.9	30.2
Gedi	46.5	47.0	35.6	71.1	41.5
Meru Museum	25.2	25.5	12.4	28.4	29.5
Lamu	18.1	13.3	13.0	11.4	13.3
Jumba la Mtwala	14.6	14.8	14.2	9.4	14.0
Olorgessaile	2.5	2.5	3.4		
Kariandusi	2.8	4.3	5.8		3.1
Hyrax Hills	4.3	2.7	2.8		
Karen Blixen		51.0	48.6	53.3	45.8
Kilifi Mwarani				1.1	
TOTAL	755.1	808.1	831.0	906.9	789.7

* Provisional.

CONFERENCES HELD AT KENYATTA INTERNATIONAL CONFERENCE CENTRE, 1987 - 1991**

Table 13.11

	1987	1988	1989	1990	1991*
Number of conferences	58	19	32	36	14
Number of conferences days	176	180	111	128	149
Attendance (Number of Delegates)	7,411	3,915	5,510	6,160	9,750
Percentage of	48	49	30	35	41

* Provisional

** International conferences/delegates only.

Tourism and Wildlife participated in six overseas trade fairs and exhibitions at a cost of K£ 236 thousand compared with K£ 206 thousand in 1990. The fairs and exhibitions were International Tourism Borse in Germany, Borse Internationale Tourismo in Italy, World Travel Market in Britain, Brussels Travel Fair in Belgium, American Society of Travel Agents and Sion-Expo in Switzerland. Locally, the department participated in National Tourism Exhibition as well as local Agricultural Society of Kenya Shows at a cost of K£ 33 thousand.

Development of Tourism

13.16. In addition to active promotion of tourism by the department of tourism, the department maintains tourist offices in major markets abroad as well as locally in such areas as Malindi and Mombasa, to market Kenya as a destination for prospective tourists.

13.17. Kenya Utalii College, the main institution which trains management and auxiliary staff for different sub-sectors of the tourism industry had 743 trainees in

1991 compared with 700 trainees in 1990, an increase of 6.1 per cent. In addition, the institution hosted refresher courses and seminars which were attended by 870 participants in 1991 compared with 656 participants in 1990.

13.18. The Kenya Tourism Development Corporation (KTDC) complements private sector's efforts to develop the industry. It assists the private sector by either giving loans or through equity participation. In 1990/91 K£ 304 thousand was disbursed compared to K£ 279 thousand in 1989/90.

CHAPTER 14 - TRANSPORT, STORAGE AND COMMUNICATIONS

Overview

World recession and sharp rise in fuel prices had significant adverse effects on the transport, storage and communications sector in 1991. In the year, depressed activity was registered in both passenger and freight transportation. Real growths were only observed in postal activities and in quantities of bulk liquids handled at the port of Mombasa. The value of output of most subsectors increased marginally.

14.2. The effects of the gulf conflict, which were attributable to the initial sharp increase in oil prices before OPEC members lowered it to US$ 25 per barrel, were mainly felt in the first half of the year. Transport firms responded to the sharp price increases by revising tariff upwards. Although there were marginal increases in the value of output of most of the subsectors,there was depressed demand for both passenger and freight transport services and a drop in pipeline throughput of white petroleum products. The depreciation of the Kenya Shilling against major world currencies, lack of foreign exchange and the introduction of Value Added Tax (V.A.T) resulted in higher domestic prices for new radios, television sets and motor vehicles, leading to reduced local demand for these items.

14.3. The value of output of the sector is provided in Table 14.1. The gross output at current prices increased by 12.1 per cent from K£ 1,366.5 million in 1990 to K£ 1,531.5 million in 1991. This growth was much lower than the 23.1 per cent recorded in 1990. Road transport contributed 33.4 per cent of the total output of the sector, which was slightly lower than the 34.9 per cent in 1990. Increases were observed in the value of output from road transport, railway transport, water and air transport and communications, while output generated by services incidental to transport and that from pipeline transport was slightly lower than that recorded in 1990.

TRANSPORT AND COMMUNICATIONS - VALUE OF OUTPUT, 1987 - 1991

Table 14.1 K£million

	1987	1988	1989	1990	1991*
Road Transport	311.7	355.2	420.1	476.9	510.9
Railway Transport	60.7	67.9	80.0	94.5	112.6
Water Transport	75.5	79.0	109.9	134.2	148.7
Air Transport	131.3	155.0	192.6	268.2	316.2
Services Incidental to Transport	45.6	52.2	61.2	72.7	67.1
TOTAL	624.8	709.3	863.8	1,046.5	1,155.5
Pipeline	26.8	27.7	29.2	31.1	30.3
Communications**	145.8	194.0	217.1	288.9	345.7
TOTAL	797.4	931.0	1,110.1	1,366.5	1,531.5

*Provisional.

** Includes Kenya Broadcasting Corporation and Kenya Television Network from 1990

14.4. Table 14.2 provides details of earnings from road and rail traffic between 1987 and 1991. Earnings from road traffic increased marginally by 7.1 per cent from K£ 476.9 million in 1990 to K£ 510.9 million in 1991, while those from rail increased by 19.1 per cent. Rail freight transportation generated 89.1 per cent of the earnings in 1991 while about 61.5 per cent of the earnings from road was generated from passenger traffic.

EARNINGS FROM ROAD AND RAIL TRAFFIC*, 1987 - 1991

Table 14.2 K£million

	1987	1988	1989	1990**	1991**
Passenger Traffic:					
Road	200.7	212.4	243.5	285.9	314.4
Rail	6.3	7.0	8.1	10.1	12.3
Total	207.0	219.4	251.6	296.0	326.7
Freight Traffic:					
Road	111.0	142.8	176.6	191.0	196.5
Rail***	54.4	60.9	71.9	84.4	100.3
Total	165.4	203.7	248.5	275.4	296.8
Total Road Traffic	311.7	355.2	420.1	476.9	510.9
Total Rail Traffic	60.7	67.9	80.0	94.5	112.6
Total	372.4	423.1	500.1	571.4	623.5

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

** Provisional

*** Includes other Revenue.

Road Transport

14.5. The Nyayo Bus Corporation continued to expand its operations in providing commuter services to complement public transport in inter-urban and intra-urban routes. Its fleet has increased from 6 buses in 1986 to 235 buses in 1991. In addition, the corporation increased its labour force to 772 in 1991 compared with 449 employees in 1990. Revenue realised from passengers was K£ 6.0 million in 1991 compared with K£ 4.8 million recorded in 1990.

14.6. Details of new registrations of road vehicles between 1987 and 1991 are

NEW REGISTRATION OF ROAD VEHICLES, 1987 - 1991

Type of Vehicle	1987	1988	1989	1990	1991*
Saloon Cars	4,914	5,561	5,007	4,703	4,671
Station Wagons	3,008	2,795	2,898	2,452	2,712
Panel Vans, Pick-ups, etc	4,720	4,783	4,899	4,996	4,189
Lorries/Trucks	1,759	1,790	1,477	1,611	1,387
Buses and Coaches	761	1,075	785	914	856
Mini Buses	569	509	465	525	439
Special Purposes Vehicles	46	32	29	35	37
Trailers	619	643	618	419	447
Rollers, Graders, Cranes	54	26	13	42	54
Wheeled Tractors	1,124	1,172	1,111	1,127	813
Crawler Tractors	3	4	8	10	4
Motor and Auto Cycles	1,146	1,131	1,095	1,188	1,359
Three Wheelers	4	3	0	1	0
All Vehicles	18,727	19,524	18,405	18,023	16,968

* Provisional.

presented in Table 14.3. New vehicles registrations dropped by 5.9 per cent to 16,968 vehicles in 1991. This drop is attributable to the depreciation of the Kenya Shilling against major international currencies thus making vehicles more costly. Saloon cars continued to lead in new registrations followed by panel vans and pick-ups.

14.7. The number of licences issued for freight and passenger vehicles on hire is shown in Table 14.4. Total licences issued increased by 6.7 per cent from 10,485 in 1990 to 11,183 in 1991. This increase was a result of 16.7 per cent increase in the number of licences issued for passenger service vehicles and 2.9 per cent increase in the number of licences issued for Freight Transport Vehicles. The increase in the number of licences issued for Passenger Service Vehicles (PSV) reverses the declining trend observed in 1987 through 1991.

LICENCES ISSUED FOR VEHICLES ON HIRE, 1987 - 1991

Table 14.4 Number

	1987	1988	1989	1990	1991*
Passenger Service Vehicles	4,652	3,850	3,343	2,881	3,362
Freight Transport Vehicles	6,050	7,200	7,752	7,604	7,821
Total	10,702	11,050	11,095	10,485	11,183

* Provisional.

14.8. "Matatus" play an important role in the transport sector. However in 1991, it is estimated that the number of matatus operating in the country dropped by 4 per cent from 14,137 in 1990 to 13,572. The sub-sector employed about 27,000 people and earned an estimated K£ 176 million slightly lower than the K£ 184 million earned in 1990.

14.9. In 1991, a total of 33,173 drivers' licences were issued. Most of the licenses were issued in Nairobi with 18,888 licences, followed by Rift Valley and Coast provinces which issued 4,580 and 3,735 licences, respectively. New PSV drivers' and conductors' licences were 8,525 and 5,795, respectively for the same period.

Railway transport

14.10. The performance of the Kenya Railways Corporation in transporting both passengers and freight is given in Table 14.5. The tonnage of freight handled in

RAILWAY TRAFFIC, 1987- 1991

Table 14.5

	Unit	1987	1988	1989	1990	1991*
Freight:						
Tonnes	'000	3,002	3,255	3,317	3,581	3,309
Tonne-km	million	1,702	1,755	1,910	1,808	1,865
Revenue**	K£million	51.97	55.69	66.94	81.78	91.40
Revenue per tonne-Km	cts	61	63	70	90	98
Passenger:						
Journeys	000	3,757	4,037	3,347	3,109	2,616
Passenger-Km	million	752	828	732	699	606
Revenue	K£million	6.31	6.99	8.09	10.30	12.15
Revenue per passenger-Km	cts	17	17	22	29	40

* Provisional.

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

1991 was 7.6 per cent lower than that handled in 1990 partly attributable to the decline in coffee exports. However, freight tonne-kilometres increased by 3.2 percent while freight revenue increased by 11.8 per cent from K£ 81.8 million in 1990 to K£ 91.4 in 1991. This increase in revenue resulted from an upward revision of tariffs.

14.11. Due to increased competition from road vehicles, the number of passengers handled by the railways corporation has since 1988 continued to decline. The number of passengers transported dropped by 15.9 per cent from 3.1 million in 1990 to 2.6 million in 1991. Passenger-kilometres dropped from 699 million in 1990 to 606 million in 1991. However, as a result of increased tariffs, revenue earned from passengers increased from K£ 10.3 million in 1990 to K£ 12.2 million in 1991, an increase of about 18 per cent.

Harbours and Shipping

14.12. Table 14.6 provides the performance of the Kenya Ports Authority for the last five years. Freight handled by the port in 1991 was 5.2 per cent lower than that recorded in 1990. The volume of exports handled dropped by 21.9 per cent. This was mainly the result of quantum decreases in exports of cement, coffee, maize and bulk liquids. The tonnage of imports handled in 1991 was 2.3 per cent higher than that recorded in 1990. This was occasioned by increased importation of bulk liquids which increased by 229 thousand tonnes.

FREIGHT HANDLED AT MOMBASA HARBOUR, 1987 - 1991

Table 14.6 '000 Tonnes

	1987	1988	1989	1990	1991*
Loaded:					
Dry Cargo	1,656	1,486	1,466	1,907	1,483
Bulk Liquids	354	297	529	390	310
Total	2,010	1,783	1,995	2,297	1,793
Landed:					
Dry Cargo	2,134	1,980	2,096	2,193	2,081
Bulk Liquids	2,747	2,887	3,104	2,999	3,228
Total	4,881	4,867	5,200	5,192	5,309
Total Freight Handled	6,891	6,650	7,195	7,489	7,102

Provisional.

Pipeline Throughput

14.13. The volume of white petroleum products delivered by the Kenya Pipeline Company from 1987 to 1991 is given in Table 14.7. Total pipeline throughput dropped by 7.3 per cent from 1,983.4 thousand cubic metres in 1990 to 1,838.8 thousand cubic metres in 1991. There was a drop in throughput of all the products particularly jet fuel, which dropped by 17.0 per cent from 372.2 thousand cubic metres in 1990 to 308.9 thousand cubic metres in 1991. The drop in throughput of white petroleum products delivered is attributed to depressed domestic demand due to the sharp fuel price increases.

PIPELINE THROUGHPUT OF WHITE PETROLEUM PRODUCTS, 1987 - 1991

'000 Cubic Metres

Year	Motor Spirit Premium	Motor Spirit Regular	Kerosene Illumin-ating Oil	Light Diesel Oil	Jet Fuel*	Aviation Turbo	Total
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
1991**	328.5	256.3	218.3	661.8	308.9	57.3	1,838.8

* Includes Jet fuel in Mombasa from 1988

** Provisional

Air Transport

14.14. Table 14.8 provides details of commercial traffic handled at both Jomo Kenyatta International Airport (JKIA) and Moi International Airport (MIA). Passengers handled by both airports in 1991 was 3.0 per cent lower than that recorded in 1990. Also freight handled decreased marginally by 3.4 per cent.

COMMERCIAL TRAFFIC AT JOMO KENYATTA AND MOI INTERNATIONAL AIRPORTS, 1987 - 1991

Table 14.8

	1987	1988	1989	1990	1991*
Passengers-000's:					
Landed	916.0	992.7	1,061.6	1,122.9	1,102.0
Embarked	921.7	987.1	1,055.6	1,056.4	1,123.9
In Transit	559.0	542.1	531.7	474.2	346.8
Total	2,396.7	2,521.9	2,648.9	2,653.5	2,572.7
Freight - 000 tonnes:					
Cargo: Landed	16.9	18.2	22.3	13.9	13.8
Loaded	40.1	39.7	39.2	42.0	40.0
Mail: Landed	2.0	2.5	3.1	1.3	1.1
Loaded	1.1	1.6	1.8	0.9	1.2
Total	60.1	62.0	66.4	58.1	56.1

* Provisional

14.15. Major developments were undertaken at both JKIA and MIA in order to facilitate the traffic flow. Developments at JKIA were the modernisation of power distribution and passenger terminal facilities, the supply of fire fighting equipment, and pavement rehabilitation works on the runway, taxiway and apron.

Postal Services and Communications

14.16. Details of various postal and telecommunications services and facilities are provided in Tables 14.9 and 14.10. There has been a substantial growth in postal and telecommunications facilities in the recent past. The number of full fledged post offices has continued to grow since 1987 and increased by 4.1 per cent and 2.0 per cent in 1990 and 1991, respectively. The number of private letter boxes also increased by 3.7 per cent in 1991 compared with a growth of 5.2 per cent recorded in 1990.

Table 8.11

	Unit	1987	1988	1989	1990	1991*
Post Offices	No	929	972	1,013	1,055	1,076
Private Letter Boxes	'000	207	216	231	243	252
Registered and Insured Items Posted	million	3.3	3.7	3.7	3.7	3.3
Total correspondence handled	million	258	259	287	318	297
Parcels handled	'000	347	406	422	378	409
Telephone Exchange connections	'000	145	157	169	183	200
Public Call boxes	No	3,571	3,723	3,981	5,135	5,525
Manual Telephone Calls made	million	15.0	12.5	11.9	10.9	9.2
Subscriber Dialed Units	million	1,075	1,294	1.746	1,805	2,416
Telex Subscribers	'000	2.4	2.4	2.3	2.2	2.0
Telegrams Handled	'000	1,189	1,189	1,748	1,772	1,672
Money Orders	No.(million)	1.8	2.0	1.9	2.1	1.7
Postal Orders	No. ('000)	124	105	92	73	73

* Provisional.

EXTERNAL TELECOMMUNICATIONS TRAFFIC, 1987 - 1991

Table 14.10

	1987	1988	1989	1990	1991*
Telephone service-million paid minutes-					
Outgoing	10.7	11.6	18.4	21.4	22.5
Incoming	16.7	12.9	13.9	26.6	30.6
Telex service-million paid minutes-					
Outgoing	3.9	3.3	3.0	2.7	2.2
Incoming	4.0	3.0	2.2	1.5	1.6
Telegraph service-million paid words-					
Outgoing	1.6	1.3	1.2	1.2	0.9
Incoming	2.0	1.6	0.6	1.2	0.7

* Provisional.

14.17. Demand for domestic telephone services continued to increase with the number of telephone lines connected increasing by 8.3 per cent and 9.3 per cent in 1990 and 1991, respectively. The number of public call boxes recorded a slower growth rate of 7.6 per cent in 1991 compared with 29.0 per cent between 1989 and 1990. Subscriber dialled units increased by 33.9 per cent. However, the number of telegrams handled dropped by 100 thousand.

14.18. On external telecommunications, a substantial increase was recorded for both outgoing and incoming telephone calls, with corresponding increases of 5.1 per cent and 15.0 per cent over the 1990 level. These are modest growths when compared with corresponding increases of 16.3 and 91.4 per cent recorded in 1990. Paid minutes for outgoing telex services and paid words for both outgoing and incoming telegraph services continued the downward trend observed in the recent past. This decline is attributable to the rapid expansion of superior substitute services such as facsimile.

Radio, Television and Newspapers

14.19. Details of new radios and television sets sold and licensed from 1987 to 1991 are presented in Table 14.11. The number of new radios sold and licensed dropped by 11.2 per cent in 1991 compared with 18.4 per cent increase in 1990. New television sets sold and licensed in 1991 also dropped by 3.2 per cent compared with a 67.3 per cent increase recorded between 1989 and 1990. The decline in the sale and licensing of both new radios and television sets is mainly attributable to the higher prices after the introduction of Value Added Tax (V.A.T) and the depreciation of the Kenya Shilling against major trading currencies.

NEW RADIOS AND T.V. SETS SOLD AND LICENSED, 1987-1991

Table 14.11 Number

	1987	1988	1989	1990	1991*
Radios - '000	208.4	217.8	224.5	265.7	235.9
Television Sets - '000	18.7	22.8	20.5	34.3	33.2

* Provisional.

14.20. Table 14.12 provides details of readership of weekly and daily English and Kiswahili newspapers. Weekly newspapers continued to enjoy more readership than their daily counterparts. However, there was a decline in the numbers of both weekly and daily newspapers due to the sharp price increases for both issues of the papers.

DAILY/WEEKLY AVERAGE LOCAL NEWSPAPER CIRCULATION, 1987 - 1991

Table 14.12 '000 Copies

	1987	1988	1989	1990	1991*
Morning Newspapers-					
English	243.3	256.4	287.7	318.6	304.4
Swahili	56.9	52.2	79.5	81.9	77.7
Other Newspapers-					
English Weeklies	254.9	280.4	331.7	356.7	341.0
Swahili	78.5	50.4	87.6	90.5	75.5

* Provisional.

CHAPTER 15 - SOCIAL SCENE

Total Government expenditure on social services between 1988/89 and 1991/92 fiscal years is set out in Table 15.1. Expenditure increased by 9.2 per cent from K£ 813.45 million in 1990/91 fiscal year to K£ 887.94 million in 1991/92 fiscal year. Estimated recurrent expenditure of K£ 722.71 million accounted for 81.4 per cent of the total expenditure during the period under review. Education continued to take the largest share of expenditure on social services, accounting for 77.6 per cent and 54.4 per cent of recurrent and development expenditure, respectively.

CENTRAL GOVERNMENT EXPENDITURE ON SOCIAL SERVICES. 1988/89 - 1991/92

Table 15.1 K£million

	1988/89	1989/90	1990/91*	1991/92**
RECURRENT EXPENDITURE-				
Ministry of Education	436.60	479.09	566.18	561.00
Ministry of Health	113.69	115.03	128.81	140.09
Ministry of Labour	2.88	3.09	2.95	3.42
Ministry of Culture and Social Services	13.08	14.72	15.18	18.20
DEVELOPMENT EXPENDITURE-				
Ministry of Education	51.30	36.36	60.13	89.87
Ministry of Health	20.90	24.24	37.62	69.07
Ministry of Labour	0.02	0.21	0.13	0.13
Ministry of Culture and Social Services	3.30	3.37	245	6.16
TOTAL EXPENDITURE	641.77	676.11	813.45	887.94

* Provisional.

** Estimates excluding supplementaries.

15.2. Details of Local Authorities expenditure on social services for the fiscal years 1987/88 to 1991/92 are shown in Table 15.2. During 1991/92 Local Authorities are expected to incur an expenditure of K£ 35.96 million, an increase of 29.0 per cent over 1990/91 fiscal year. As has been observed in the previous years, health services continue to absorb the highest share, which for the current year constitutes 59.4 per cent of the total expenditure.

LOCAL GOVERNMENT EXPENDITURE ON SOCIAL SERVICES, 1987/88 -1991/92

Table 15.2 K£million

	1987/88	1988/89	1989/90	1990/91*	1991/92**
Education	7.87	9.90	11.13	11.88	13.41
Health	9.00	12.49	17.40	14.71	21.36
Other Social Services	1.49	0.61	1.47	1.29	1.19
TOTAL EXPENDITURE	18.36	23.00	30.00	27.88	35.96

* Provisional.

** Estimates.

Education

15.3 Table 15.3 gives details of the expenditure of the Ministry ofEducationand the Ministry of Technical Training and Applied Technology in respect to technical

and polytechnic education. Estimated recurrent expenditure on education (excluding technical and polytechnic education) decreased by 1.3 per cent from K£ 569.98 million during 1990/91 to K£ 562.54 million in 1991/92 fiscal year. During the same period, estimated development expenditure rose from K£ 60.27 million to K£ 90.17 million, an increase of 49.6 per cent. A significant increase in development expenditure is noticeable with regard to teacher training and higher education due to the construction and equipping of the new teachers' training colleges, and expansion of facilities in the public universities.

EXPENDITURE OF THE MINISTRY OF EDUCATION. 1988/89 - 1991/92

Table 15.3 K£million

	1988/89	1989/90	1990/91*	1991/92**
RECURRENT EXPENDITURE-				
General Administration and Planning	36.32	46.79	44.07	52.30
Pre-Primary Education	0.49	0.60	0.68	0.64
Primary Education	237.94	246.97	292.52	285.52
Secondary Education	69.57	78.60	87.80	84.56
Technical Education*	4.88	3.54	3.70	4.27
Teacher Training	15.39	17.45	14.97	10.60
Special Schools	3.16	3.82	3.84	4.20
Polytechnic Education+	3.06	3.65	3.62	4.77
Higher Education** *	73.25	86.54	123.93	123.38
Miscellaneous	1.68	1.78	2.17	1.34
TOTAL	445.74	489.74	577.30	571.58
DEVELOPMENT EXPENDITURE-				
General Administration and Planning	2.12	0.90	4.18	6.42
Pre-Primary Education	-	-	-	-
Primary Education	0.58	1.02	0.69	3.60
Secondary Education	1.84	1.99	5.28	2.38
Technical Education*	0.05	0.23	0.23	1.30
Teacher Training	7.76	8.84	9.55	20.50
Special Schools	0.33	0.37	0.69	1.10
Polytechnic Education+	0.95	0.02	0.02	4.32
Higher Education** *	38.30	23.14	39.80	56.00
Miscellaneous	0.36	0.17	0.08	0.17
TOTAL	52.29	36.68	60.52	95.79

* 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. The number of educational institutions by category from 1987 to 1991 are shown in Table 15.4. The total number of institutions rose by 303 from 17,566 in 1990 to 17,869 in 1991. The number of primary schools increased by 2.2 per cent from 14,864 in 1990 to 15,196 in 1991. The number of secondary schools fell by 1.2 per cent from 2,678 schools in 1990 to 2,647 schools in 1991. During the year, new primary teachers training colleges were opened in Muranga, Baringo, Narok, Tambach and Bondo while Moi, Siriba and Laikipia secondary teachers training colleges were converted into constituent colleges of the public universities.

15.5. As shown in Table 15.5, primary school enrolment rose from 5.39 million in 1990 to 5.46 million in 1991. Girls constituted 48.7 per cent of the total enrolment,

NUMBER OF EDUCATIONAL INSTITUTIONS. 1987 - 1991

Table 15.4 Numbers

Category	1987	1988	1989	1990	1991*
Schools:					
Primary	13,849	14,288	14,691	14,864	15,196
Secondary	2,592	2,717	2,654	2,678	2,647
Training Colleges:					
Primary	16	16	17	17	22
Secondary	6	7	7	7	4
TOTAL	16,463	17,028	17,369	17,566	17,869

* Provisional.

a gender ratio that has remained constant since 1989. Standard 1 enrolment fell by 1.9 per cent from 941,800 in 1990 to 924,000 in 1991, which, however, had been erratic decreasing by 1.4 per cent in 1989 and then increasing by an insignificant 0.2 per cent in 1990. A transition rate of 61.9 per cent from the pupils in Standard 7 proceeding to Standard 8 in 1991 was observed giving a decline of 3.8 percentage points compared to the rate observed in 1990. A total of 366,281 candidates sat for the Kenya Certificate of Primary Education (KCPE) examination in 1991 of whom 179,158 or 48.9 per cent were expected to join Form I in 1992.

PRIMARY SCHOOL ENROLMENT BY STANDARD, 1988 - 1991

Table 15.5 '000

	1988		1989		1990		1991*	
Class	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Standard 1	491.6	461.2	482.2	457.3	484.6	457.2	476.2	447.8
Standard 2	402.9	382.6	424.1	397.3	411.4	389.4	409.3	384.9
Standard 3	358.4	337.4	385.3	363.5	382.6	364.2	390.9	369.3
Standard 4	331.3	319.3	351.3	334.0	358.4	344.1	360.9	353.6
Standard 5	294.5	290.5	312.9	305.5	313.5	305.1	322.5	317.8
Standard 6	273.8	269.3	290.6	285.8	292.1	286.5	302.6	302.2
Standard 7	279.4	263.0	295.5	289.4	313.3	305.4	327.4	309.7
Standard 8	206.6	161.8	224.1	190.5	210.4	174.1	207.3	173.7
TOTAL	2,638.5	2,485.1	2.766.0	2,623.3	2.766.3	2,626.0	2,797.1	2,659.0

* Provisional.

15.6. Table 15.6 provides details on enrolment in secondary schools by form and sex from 1987 to 1991. Enrolment in 1991 declined marginally by 0.7 per cent from 618,461 in 1990 to 614,161 in 1991. At the provincial level, major declines of 17 per cent, 8 per cent and 5 per cent were observed in Western, Nairobi and Coast provinces, respectively. While enrolment of boys decreased in all classes that of girls increased except in Form 4 leading to the proportion of girls enrolled in secondary schools during the year under review reaching an all time high of 43.7 per cent, nearly 1 percentage point higher than the previous year. Enrolment in Form 1 increased slightly from 171,071 students in 1990 to 171,637 students in 1991. A total of 136,755 candidates sat for the Kenya Certificate of Secondary Education (KCSE) examination in 1991, 2.6 percentage points higher than the previous year.

ENROLMENT IN SECONDARY SCHOOLS BY FORM AND SEX 1987 - 1991

Table 15.6 Numbers

	1987		1988		1989		1990		1991*	
FORM	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
FORM 1	95,528	69,719	99,822	73,783	97,725	69,023	96.079	74.992	95,511	76.126
FORM 2	93,340	66,825	92,166	67.245	93,866	65,109	91,482	69,615	89,181	70,651
FORM 3			91,491	63.533	85,471	58,955	83,334	60.172	82,749	64,139
FORM 4	88,961	61,963			84,655	54,346	82.800	59.987	78,14	57,457
FORM 5	13,799	7,882	17,705	9,305						
FORM 6	14,416	7,828	16,817	8,325	21,418	10,167				
TOTAL	306,044	214,217	318,001	222,191	383,135	257,600	353,695	264,766	845,788	268,373
TOTAL	522,261		540,192		640,735		618, 461		614 , 161	

* Provisional.

15.7. Details on the number of teachers in schools by qualification and school level from 1989 to 1991 are given in Table 15.7. The total teaching force in both primary and secondary schools rose by 2.3 per cent from 203,738 teachers in 1990 to 208,467 teachers in 1991, of whom 173,370 teachers or 83.2 per cent were primary school teachers. Female teachers constituted 37 per cent of the entire teaching force. There has been a marked drop in the proportion of untrained teachers (UTs) in both primary and secondary schools. In the primary education, UTs constituted 25.5 per cent in 1991 compared to 29.8 per cent in 1990, whereas the proportions were 30.3 per cent and 36.5 percent in secondary schools. The

NUMBER OF TEACHERS IN SCHOOLS BY QUALIFICATION AND SCHOOL LEVEL 1989-1991

Table 15.7 Numbers

	PRIMARY			SECONDARY		
	1989	1990	1991*	1989	1990	1991*
TRAINED-						
Graduate	34	13	25	7,315	7,812	9,694
Approved+	519	617	658	1.186	1,346	1,488
S1	4,275	4,919	5,495	8,050	1	12,244
Technical				369	4/4	519
P1	69,106	75,748	82,024	219	375	526
P2	28.309	28,670	29.579			
P3	11,790	11,454	11.393			
P4	54	40	55			
Others						
TOTAL	114,087	121,461	129,229	17,139	19,431	24,471
UNTRAINED-						
Graduate	-	-	-	938	989	1,410
Technical	-	-	-	182	263	374
K.A.C.E	4,391	4,170	4,281	9,199	9,515	8,458
K.C.E	36,890	39.088	33,650	71	46	114
K.J.S.E	6,543	7.001	5,028		-	
C.P.E	1,523	1.337	1,105		-	-
Other	175	60	77	527	377	270
TOTAL	49,522	51,656	44,141	10,917	11,190	10,626
GRAND TOTAL	163,609	173,117	173,370	28,056	30,621	35,097

* Provisional.

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

pupil-teacher ratios for both primary and secondary schools continued to improve. In primary schools the ratio remained at the same level of 31 pupils per teacher as observed in 1990 while in secondary schools the ratio improved from 20 in 1990 to 17 students per teacher in 1991, respectively.

15.8. At the Kenya Institute of Special Education (KISE), 79 diploma students who were enrolled for the 1989/91 period, graduated. A total of 84 diploma students comprising of 19 females and 65 males have been enrolled for the 1991/93 period. The institute also holds in-service courses for teachers. Two courses, lasting three months each, were held from May to August 1991 and from September to November 1991, in which a total of 85 teachers were up-graded. Three shorter courses, lasting between 2 to 3 weeks were also conducted during the year under review and were attended by a total of 135 participants.

15.9. As has been observed in Table 15.4, five new primary teachers training colleges became operational during the year bringing the total number of primary teachers training colleges to 22. Details of enrolment in all Government primary teachers training colleges are given in Table 15.8. Total student enrolment in all the colleges rose by 431 students from 17,073 in 1990 to 17,504 in 1991. Female trainees constituted 44 per cent of the total. The three diploma colleges (Kagumo, Kenya Science and Kisii) had a total enrolment of 1,657 students, of whom 32.2 per cent were female.

STUDENT ENROLMENT IN ALL GOVERNMENT PRIMARY TEACHERS TRAINING COLLEGES 1991/92*

Table 15.8 Numbers

	1ST YEAR		2ND YEAR		TOTAL	
CERTIFICATION	Male	Female	Male	Female	Male	Female
P1	4,736	3,562	4,541	3,643	9,277	7,205
P2	199	210	218	146	417	356
P3	67	74	47	61	114	135
TOTAL	5,002	3,846	4,806	3,850	9,808	7,696

* Provisional

15.10. The in-service teacher training programme for primary school teachers for the 1991/92 period is being conducted in 15 Government primary teachers' training colleges. The current enrolment consists of 5,426 students composed of 2,888, 2,355 and 183 P1s, P2s and P3s, respectively. Female students in this programme are 1,845 or 34.0 per cent of total enrolment.

15.11. Most technical training programmes are handled by the Ministry of Technical Training and Applied Technology. Among the institutions that offer these programmes are: 3 polytechnics (Kenya, Mombasa and Eldoret), 18 technical training institutes (TTIs) and 17 institutes of technology (previously referred to as Harambee Institutes of Science and Technology). A total of 21,705 students were enrolled for these technical programmes. In 1991 the three polytechnics enrolled a total of 8,843 students, 26.7 percentage points higher than the previous year. The institutes of technology enrolled 6,013 students in 1991 as compared to 5,469 students in 1990. Diploma courses have been established at the Western College

of Arts and Science (WECO), Murang'a, Rift Valley and Kiambu Institutes of Technology. A total of 6,849 students were registered in the technical training institutes (TTIs) in 1991 compared to 5,906 students enrolled in 1990, a significant 16 per cent increase.

15.12. Table 15.9 provides details of undergraduate enrolment in public universities. Total first year admissions at the public universities and their constituent colleges in 1991/92 are 9,463 students of whom 2,077 or 21.9 per cent were females. The overall student population in these institutions for the 1991/92 academic year rose by 4.9 per cent over the previous academic year to reach 41,674 students of whom 1,112 were pursuing diploma courses, 38,836 undergraduate courses and 1,726 postgraduate courses.

FIRST YEAR UNDERGRADUATE ENROLMENT IN PUBLIC UNIVERSITIES, 1990/91 - 1991/92

Table 15.9

COURSE	1990/91			1991/92*		
	Male	Female	Total	Male	Female	Total
Agriculture **	862	259	1,121	635	179	814
Horticulture	165	42	207	88	26	114
Fisheries	21	2	23	23	2	25
Forestry	58	8	66	28	6	34
Wildlife Management	46	8	54	23	1	24
Wood Science Technology	47	3	50	21	3	24
Production Technology	71	1	72	57	1	58
Architecture	75	8	83	60	6	66
Building Economics	42	7	49	28	3	31
Land Economics	41	22	63	23	3	26
Design	39	38	77	21	9	30
Arts	3,218	1,098	4,316	1,467	426	1,893
Anthropology	191	72	263	137	55	192
Fine Art	22	4	26	10	6	16
B. Ed. (Arts)	4,955	2,997	7,952	1,932	723	2,655
B. Ed. (Science)	753	248	1,001	430	84	514
B. Ed. (Technology)	101	127	228	3	106	109
B.Ed.(Home Economics)	5	127	132	3	106	109
B. Ed. (Technology)	101	7	108	37	3	40
B. Ed. (Home Science Technology)	34	15	49	6	28	34
Environmental Studies				56	4	60
Information Science	82	37	119	34	16	50
Tourism				20	4	24
Business Management	52	8	60	40	6	46
Law	279	98	377	113	45	158
Commerce	769	208	977	369	118	487
Science	1,813	260	2,073	1,064	117	1,181
Electrical & Communication Technology	67	1	68	30	1	31
Engineering***	780	57	837	390	22	412
Veterinary Medicine	157	83	240	70	28	98
Medicine	206	47	253	120	25	145
Dental Surgery	25	19	44	8	7	15
Pharmacy	55	22	77	25	2	27
B.Sc. Nursing				18	12	30
Total	15,031	5,806	20,837	7,386	2,077	9,463

* Provisional.

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

*** Includes civil, mechanical, electrical, agricultural and building construction.

15.13. The University of Nairobi enrolled a total of 14,834 students during the 1991/92 academic year, of whom 1,522 were pursuing postgraduate courses. A total of 3,161 first year students were admitted during current academic year. Female students constituted 22.7 per cent of the new admissions.

15.14. A total of 6,502 students are pursuing undergraduate and post-graduate studies at Moi University. A further 2,028 students are enrolled at Maseno University College, a constituent college of Moi University. In the current academic year the university admitted a total of 1,683 students of whom 394 were females.

15.15. There are 9,138 students enrolled at the Kenyatta University, excluding Jomo Kenyatta University College of Agriculture and Technology(JKUCAT). During the 1991/92 academic year, the undergraduate student population rose by 4.2 per cent over the 1990/91 enrolment. Of the 2,341 first year students, 631 or 27.0 per cent were females.

15.16. Egerton University enrolled 1.888 first year students during the 1991/92 academic year of whom 311 were females. The total student population rose by 670 students compared to the enrolment during 1990/91 academic year, to reach 7,389 students.

15.17. Jomo Kenyatta University College of Agriculture and Technology has a student population of 1,783 students during the 1991/92 academic year, of whom 610 are pursuing diploma courses and 1,173 undergraduate courses. In these courses females constituted 15.2 per cent and 8.0 per cent of the total, respectively.

Health

15.18. Table 15.1 underscores Government commitment to the provision of health services to the population. The proportion of expenditure on health in the total budgetary outlay on social services increased from 20.5 per cent in 1990/91 to 23.6 per cent in 1991/92. The development budget increased by 83.6 per cent in 1991/92 and more than tripled between 1988/89 and 1991/92.

15.19. The Government continued to strengthen the primary health care in the provision of health services to the population. Community participation in the control of diseases is a major focus. Campaigns to create public awareness of AIDS and other diseases have been strengthened through radio and television broadcasts, public barazas, and the use of posters and calendars. Routine lectures to patients attending health institutions are also used to educate the community. Other control measures include provision of impregnated mosquito nets to households at subsidized costs in the malaria areas. Infant immunization coverage increased from 51 per cent in 1987 to over 70 per cent by end of 1990.

15.20. ***Health institutions:*** Details of health institutions are shown in Table 15.10. A number of health centres including Saboti in Trans-Nzoia, Griftu in Wajir, Chepareria in West Pokot were completed during the period under review, while construction work on Phase 1 of Bondo Sub-district Hospital is in progress. Health

centres at Manywanda in Siaya, Nyahera in Kisumu, Oloishobor in Kajiado and Ekerenyo in Nyamira were expanded. The Government started a giant X-ray rehabilitation project to upgrade, and install X-ray machines in all Government hospitals. Yala health centre was equipped with theatre facilities to bring it to sub-district hospital status. Voluntary surgical contraceptive units were constructed in ten districts hospitals while another 16 are under construction.

HEALTH INSTITUTIONS AND HOSPITAL BEDS AND COTS BY PROVINCE. 1991

Table 15.10

Province	HEALTH INSTITUTIONS				HOSPITAL BEDS & COTS	
	Hospitals	Health Centres	Health sub-centres and Dispensaries	Total	No. of Beds and Cots	No. Per 100,000 Population
Nairobi	32	18	136	186	6,021	407
Coast	28	37	215	280	3,451	177
Eastern	42	43	303	388	4,769	120
North-Eastern	3	9	33	45	429	115
Central	44	46	228	318	5,170	157
Rift Valley	63	113	522	698	6,729	127
Nyanza	43	50	189	282	4,373	116
Western	22	41	86	149	2,944	109
TOTAL 1991	277	357	1,712	2,346	33,926	148
TOTAL 1990	268	299	1,564	2,131	33,086	136

15.21. ***Maternal Health***: Table 15.11 gives the number of health personnel trained in maternal health care during 1987-1991 period. A total of 1330 health workers were trained in maternal health care during 1990 and 1991 periods of whom 1116 were enrolled community nurses. The decline in the various categories during 1991 was due to lack of funds to hold more workshops.

STAFF TRAINED ON THE MATERNAL HEALTH CARE 1987 - 1991

Table 15.11 Number

Type of Personnel	1987	1988	1989	1990	1991
Enrolled Community Nurses	411	560	741	734	382
Kenya Registered Nurses/Midwife	88	96	94	88	66
Clinical Officers	21	39	43	29	31
Total	520	695	878	851	479

15.22. ***Medical Personnel***: The medical personnel shown in Table 15.12 covers registered personnel in both Government and Non-Governmental institutions. Figures for all categories except for the nurses should be interpreted with caution as they include registered personnel, some of whom may not be in active service. The table also excludes most of the paramedical personnel like medical laboratory technologists, physiotherapists, etc, but includes pharmaceutical technologists and public health technicians. The aggregate number of nurses reported by the census conducted by the Nursing Council in April, 1990 was 21,168. There was an

improvement in the doctor to population ratio, from 13.8 doctors per 100,000 people in 1990 to 15.1 in 1991. The increase is attributable to absolute increase in the number of doctors and the change in the population base. The August/September, 1989 Population Census reported a population of 21.5 million people compared to a projected population of 23.5 million.

REGISTERED MEDICAL PERSONNEL 1990 - 1991

Table 15.12 Number

Type of Personnel	1990		1991		IN TRAINING	
	Number	No. Per 100,000 Population	Number	No. Per 100,000 Population	1990-91 Number	1991-92 Number
Doctors	3,357	13.8	3,457	15.1	1,072	1,162
Dentists	596	2.4	631	2.8	150	150
Pharmacists	443	1.8	472	2.1	234	230
Pharmaceutical Technologists	604	2.5	644	2.8	145	145
Registered Nurses	5,441	22.4	5,664	24.8	1,069	1,074
Enrolled Nurses	17,734	72.4	18,674	81.7	3,463	3,587
Clinical Officers	2,630	10.8	2,665	11.7	530	565
Public Health Officers	585	2.4	620	2.7	105	140
Public Health Technicians	2,528	10.4	2,628	11.5	520	560

15.23. Table 15.13 shows that the National Hospital Insurance Fund Receipts and benefits which have increased tremendously from the previous years due to the change in the rate of contribution from a flat rate of Ksh.20 to a graduated scale based on 2 per cent of a member's gross income. The contribution net of benefits has also gone up from K£ 1.78 million in 1989/90 fiscal year to K£ 21.20 million in 1990/91.

NATIONAL HOSPITAL INSURANCE FUND, 1986/87 -1990/91

Table 15.13 K£million

YEAR	Receipts	Benefits	Contribution Net of Benefits
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
1990/91	36.80	15.60	21.20

15.24. ***Essential National Health Research:*** The overall goal of Essential Health Research, which is defined as that research that focuses on priority health problems, is to improve peoples' social and economic development through better health. A situation analysis was conducted in January, 1991, resulting in the formation of a broad-based national task force. A community survey was also conducted in Nairobi, Mombasa and rural Kwale, Kisumu and Baringo.

15.25. ***National Youth Sen/ice:*** Table 15.14 presents the National Youth Service recruitment between 1988 and 1991. The National Youth Service did not have Pre-university recruits for the years 1989 and 1990. The number of regular recruits declined from 3,330 in 1989 to 2,848 in 1990, a drop of 14.5 per cent. However, various development activities undertaken by the service continued to be a major source of income. The development activities undertaken by the service in the year included the construction of Kerio Valley Road Project and the ongoing construction of Masai Mara Olkurruk air strip. Nyayo Bus Service Corporation contributed a total revenue of K£ 6 million in the year 1991. Agriculture also continued to be an income generating activity for the National Youth Service.

NATIONAL YOUTH SERVICE RECRUITMENT 1988-1991

Table 15.14

Recruits (Numbers)

YEAR	Servicemen		Servicewomen		Total
	Regular	Pre-University	Regular	Pre-University	
1988	3,400	3,645	1,200	1,856	10,101
1989		4,878		2,878	7,756
1990	2,890		450		3,330
1991	2,418		430		2,848

15.26. ***National Social Security Fund:*** Table 15.15 shows that the total number of Employers and Employees registered with the fund increased only moderately by 0.8 per cent and 5.3 per cent, respectively. However, there has been a drop in the total contribution which fell by 6.9 per cent in 1991. Change in terms of service for most female civil servants may have contributed to this decline.

NATIONAL SOCIAL SECURITY FUND, 1987 - 1991

Table 15.15

	1987	1988	1989	1990	1991
Employers registered '000	38.1	39.0	39.0	39.9	40.2
Employees registered '000	1,606.1	1,679.9	1,795.1	1,887.7	1,987.1
Annual contribution K£mn	54.2	55.2	58.0	59.2	55.1
Annual benefits paid K£mn	6.4	8.1	10.6	11.2	12.9

ADULT EDUCATION ENROLMENT BY SEX 1987 - 1991

Table 15.16

Year	Male	Female	Total	% of Female enrolment
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
1991	34,709	104,867	139,576	75.1

15.27. ***Adult Education:*** The total number of persons enrolled in adult education as shown in Table 15.16 increased marginally from 138,154 recorded in 1990 to 139,576 in 1991, an increase of 1 per cent. However, there was a drop in female enrolment while male enrolment increased by 2,013 adult learners.

15.28. ***Women in Development:*** The Women's Bureau conducted a census of women groups in the country in 1991 with a view to developing a database on socio-economic characteristics of the groups. Preliminary results of the census shown in Table 15.17 indicate that there are 23,163 groups with a total membership of nearly 1 million members. However, the level of mobilization is apparently low compared to the number of women in the 20-59 age group. The census also found out that women groups engage in more than one activity at any given time. The largest proportion of women groups, about 63 per cent, have two to three activities undertaken concurrently. Multiple activities minimize the risks related to failure experienced by single activity group.

DISTRIBUTION OF WOMEN GROUPS BY PROVINCE - 1991

Table 15.17

Province	Number of Groups	Membership	
		Males	Females
Nairobi	568	1,694	28,099
Central	3,783	12,598	174,320
Eastern	5,105	15,421	212,945
Coast	1,357	1,594	40,500
North - Eastern	225	127	5.046
Rift Valley	4,249	6,677	166,229
Nyanza	4,960	33,252	166,334
	2,916	18,585	97,230
Total	23,163	89,948	890,703

CHAPTER 16 - RURAL CHILD NUTRITION SURVEY, 1987/88

Overview:

16.1. Anthropometric measurements, particularly weight and height of children aged 5 years and below, are an important proxy for measurement of living standards. The indicators from these measurements do measure nutrition related variables which respond to changes in water and sanitation, access to health care and food availability.

16.2. To monitor changes in the nutritional status of children, the Government has conducted four nutrition surveys, between 1977 and 1988 and within the National Sample Surveys Programme, using simple anthropometric methods. The first nutrition survey was conducted in February-March 1977, and covered a total of 1,400 children aged between 12 and 48 months. The second survey was carried out between December, 1978, and January, 1979, and included 3,525 children aged 6 to 60 months. Both the surveys disaggregated data to provincial level. The third Nutrition Survey conducted between July and September, 1982 covered about 5,400 children aged 3 months to 60 months. The fourth Nutrition Survey carried out between November, 1987, and January, 1988, whose findings are presented in this chapter, is a follow up of the previous three surveys, and is an update of the 1982 which dissagregated data to district level. Due to the changing nature of the target population, limited comparisons will be made with earlier surveys.

Sample and Methodology

16.3. Data on the fourth Rural Nutrition Survey was collected from households within the clusters of phase two of National Sample Survey and Evaluation Programme (NASSEP, 1980-84) master frame. The survey frame consisted of 29 districts, each comprising 24 clusters. Each cluster was defined to cover 100 to 150 households. A 10 per cent systematic random sample of household was sub-sampled for the survey. On average, the number of responding households varied between 10 and 15 per cluster. A total of about 8,000 households were covered in the 29 districts and about 6,900 children aged between 6 months and 60 months were captured in the survey.

16.4. Five questionnaires were administered during the survey. The questionnaires sought information on social and demographic characteristics, drinking water sources, housing, sanitary provisions, anthropometric data on weight and height and information on child health.

Nutritional Status Indicators

16.5. By using height, weight and age, and expressing them as a percentage of the World Health Organisation/National Centre for Health Statistics reference population, nutritional status of children were then assessed. According to these standards, a well nourished child of a given age is expected to be of a certain height and weight. The indices developed from the anthropometric measurements are Height-for-Age (H-A), weight-for-Height (W-H) and weight-for-Age (W-A).

- ***Height for Age*** assesses chronic malnutrition and is an indicator of cumulative deficit in growth. The growth deficit is associated with long term stresses in food intake, morbidity and feeding practices. Children falling below 90 per cent of the reference population are stunted.

- ***Weight for Height*** indicates acute malnutrition and shows marked seasonal patterns associated with food availability or morbidity. Weight for height below 80 per cent of the reference population measures nutritional wasting.

- ***Weight for Age*** on the other hand is a composite measure of stunting and wasting.

Highlights of the Fourth Rural Nutrition Survey 1987/88

16.6. The national mean per cent medium H-A lies at 95.6 and about 20 per cent of the sampled children fell below the 90 per cent H-A. Mean per cent median W-H was 101.0 and 2.5 per cent of the children were categorised as wasted. Only 0.7 per cent of the children were below the 60 per cent W-A. The data shows that mild and moderate forms of wasting and underweight are more prevalent. Of the surveyed children, 18 per cent had W-A indices below 80 per cent and about 16 per cent below 90 per cent W-H.

16.7. Table 16.1 presents nutritional status indicators at provincial level. Nyanza and Coast had high prevalence of nutritional stunting. In the Coast and Nyanza Provinces, 33.6 per cent and 28.8 per cent of the children, respectively, were categorised as stunted compared with 22.3 per cent in Eastern, 15.9 in Rift Valley, 12.8 per cent in Central and 10.4 per cent in Western. Nutritional wasting indicators show that Nyanza province had more children wasted, 3.7 per cent, compared with all other provinces; while Central Province had the lowest prevalence of wasting, with only 1.5 per cent of children reported with acute malnutrition.

Table 16.1 Nutritional Status Indicators by Province

	Percent of Children	
	H-A	W-H
Province	< 90%	< 80%
Coast	33.6	2.2
Eastern	22.3	2.7
Central	12.8	1.5
Rift Valley	15.9	2.7
Nyanza	28.8	3.7
Western	10.4	2.1
National	**19.6**	**2.5**

16.8. The differentials in nutritional status by districts are shown in Table 16.2. All the districts in Coast and Nyanza province had stunting rates higher than the national prevalence of 19.6 per cent. Kilifi and Kwale in Coast, South Nyanza, Kisii

and Siaya in Nyanza contribute to most of the national stunting. The districts in other provinces with stunting higher than the national rates were Machakos and Meru in Eastern; Nyandarua in Central and Narok, Kericho and Nakuru in Rift Valley.

Comparison of indicators of nutritional status by district

Table 16.2

Districts	Height fo Age				Weight for Height				
	Percent	Median	Z-scores		Percent	Median		Z-scores	
	Mean	<90%	Mean	-2SD	Mean	<80%	<90%	Mean	-2SD
National	95.6	19.6	-1.4	32.2	101.0	2.1	15.5	-0.04	4.5
Kilifi	92.3	39.3	-2.0	51.7	99.7	2.5	18.0	-0.21	4.5
Kwale	90.2	42.8	-2.5	56.1	105.9	1.7	16.5	0.11	6.7
Taita Taveta	93.0	24.3	-1.8	41.2	100.8	1.1	15.9	-0.09	4.6
Machakos	92.8	29.4	-1.8	45.9	101.7	3.1	12.8	0.09	2.1
Kitui	93.7	18.9	-1.6	37.8	100.0	3.9	18.9	-0.11	4.7
Meru	94.5	22.3	-1.4	38.0	99.6	3.9	16.9	-0.12	3.9
Embu	94.7	15.0	-1.4	30.1	98.6	3.6	15.3	-0.28	5.4
Nyeri	94.2	20.1	-1.5	32.6	101.7	1.3	10.1	0.08	2.7
Muranga	95.2	12.0	-1.2	24.9	96.8	4.2	19.1	-0.42	5.3
Kirinyaga	95.5	2.5	-1.2	15.3	98.1	1.4	14.9	-0.27	2.7
Kiambu	95.2	5.7	-1.2	17.9	99.9	0.7	6.2	-0.07	1.1
Nyandarua	93.9	23.8	-1.5	37.0	99.6	0.3	11.1	-0.11	1.1
Laikipia	95.5	12.9	-1.1	25.7	99.1	3.1	17.8	-0.18	8.2
Nakuru	92.9	24.2	-1.8	37.3	102.9	0.8	10.7	0.04	3.7
Nandi	95.2	12.5	-1.2	22.8	101.1	1.4	13.1	0.03	2.6
Narok*	89.4	51.8	-2.7	59.7	111.2	6.1	15.3	0.84	6.4
Kajiado	96.2	18.5	-1.0	24.7	97.0	6.6	25.7	-0.44	9.9
Kericho	92.9	30.7	-1.8	45.8	103.0	0.9	13.2	0.17	1.8
Uasin Gishu	96.8	2.4	-0.8	7.9	98.2	3.3	19.4	-0.26	5.8
Trans Nzoia	97.1	3.2	-0.7	11.5	98.3	2.5	18.7	-0.26	5.0
Baringo	95.9	12.6	-1.0	24.9	100.0	3.6	16.3	-0.09	5.9
E. Marakwet	95.7	1.2	-1.1	15.0	97.6	1.1	22.9	-0.32	2.9
South Nyanza	93.7	30.2	-1.6	44.8	102.6	5.4	21.2	0.60	7.8
Kisii	92.9	33.3	-1.8	44.4	108.6	1.9	6.1	0.59	3.4
Kisumu	95.2	21.8	-1.2	38.2	99.9	3.4	21.7	-0.18	6.3
Siaya	94.2	25.9	-1.5	33.7	101.4	6.1	24.8	-0.10	11.7
Kakamega	96.4	4.2	-0.9	18.4	101.7	1.8	10.3	0.10	2.8
Bungoma	95.0	9.2	-1.3	22.8	101.8	1.2	7.7	-0.10	1.7
Busia	96.0	18.5	-1.0	27.0	99.9	3.5	21.8	-0.13	6.4

* Provisional

16.9. Prevalence of wasting did not follow the trend as stunting amongst the districts. All the districts in Eastern Province i.e. Machakos, Kitui, Meru and Embu; Muranga in Central; Narok, Kajiado, Uasin Gishu, Laikipia and Baringo in Rift Valley; and South Nyanza, Kisumu and Siaya in Nyanza had wasting rates higher than the national average of 2.5 per cent. It would appear that wasting in children is associated with agricultural potential and seasonality of food availability in some of the districts. Districts falling in the arid and semi-arid zones in Eastern and Rift Valley contributed to most of the wasting in children.

16.10. A summary of nutritional status and selected indicators for the districts with prevalence of stunting higher than 20 per cent during the 1987/88 survey are presented in Table 16.3. In Kilifi, Kwale, Narok, Kericho, Siaya and South Nyanza,

there is a likelihood that water and sanitation, literacy rates and nutritional stunting are closely associated. Morbidity rates as detected by the 7-day recall period does not show any consistent association with nutritional status.

, however, which had the highest rate of stunting, had widespread malaria related fever. Incidences of diarrhoea were high in Taita Taveta, Machakos, Nyandarua, Kericho, Nakuru and Kisii. Housing, which probably reflects economic status, generally indicates that districts in Coast (except Taita Taveta) and Nyanza were least advanced in terms of housing.

16.11. The selected indicators for Taita Taveta, Meru, Nyandarua, Kisii and Nakuru do not correspond with some of the associations observed in the other districts. Nutritional problems in these districts therefore may be related to other factors that cannot be distinguished from the available survey data.

Trends in Child Nutritional Status 1977 to 1987/88

16.12. Changes in nutritional status at provincial level between 1977 and 1987/88 are presented in Table 16.4. Nutritional stunting, an indicator of chronic malnutrition has been used to compare changes over time since it is not influenced by seasonality. Over the ten year period, Coast and Nyanza showed higher prevalence of stunting compared with other provinces. Central, Rift Valley and Eastern improved considerably over time. It may be speculated that the observed improvement in Eastern Province could be as a result of improved agricultural activities.

16.13. Changes in nutritional status between 1982 and 1987/88 are presented in Table 16.5. Districts with more than 20 per cent of children stunted in the latter year are selected for comparison purposes. Although at national level there was improvement in nutritional status over the 5 year period, it can be seen that prevalence of stunting remained high in Kwale, South Nyanza and Kisii, the changes being 4.3, 4.9 and 2.2 percentage points respectively. The increase in prevalence of stunting was particularly notable in Nyandarua, Kericho and Meru districts, whereas decreases were observed in Nakuru, Siaya and to some extent in Kilifi.

Acute malnutrition was not a major nutritional problem nationally. Only Meru and South Nyanza showed some increase in the prevalence of wasting. It should be noted, though, that this indicator is affected by seasonality and may, therefore, not reflect long term changes.

16.14. Table 16.6 examines the districts contributing to most of the stunting in the provinces surveyed in 1982 and 1987/88. It is evident that in Coast Province, Kilifi and Kwale are the major contributors to chronic malnutrition in the province. An upsurge of chronic malnutrition was observed in Taita Taveta (increase of 9.6 percentage points). However, the stunting rates (24.3 per cent) was lower compared with 39.3 per cent and 42.8 per cent in Kilifi and Kwale respectively. In Eastern Province, a decrease in prevalence of stunting was noted in Kitui and Embu while an increase was observed in Meru, from 16.0 per cent in 1982 to 22.3 per cent in 1987. Over this period, however, Machakos still recorded higher prevalence of chronic malnutrition.

Nutritional Status and other Selected Indicators by Districts

Table 16.3

Indicators	Kilifi	Kwale	T/Taveta	Machakos	Meru	Nyandarua	Narok	Kericho	Nakuru	Siaya	S/Nyanza	Kisii	Kisumu	National
No. of Children	371	205	206	329	200	219	220	225	208	145	220	336	198	6947
% Stunted	39.3	428	24.3	29.3	22.3	23.8	51.8	30.7	24.2	25.9	30.2	24.2	21.8	19.6
% with Fever	75.1	90.4	61.8	58.6	70.7	71.9	71.7	55.4	46.8	68.6	68.7	61.8	82.6	71.9
% with Diarrhorea	17.7	6.2	26.5	34.5	20.0	28.1	21.2	38.9	32.6	21.1	21.0	26.0	17.4	21.1
No. of Households (weighted)	62184	53839	30267	226532	143879	48136	30803	133477	95657	148750	157826	162539	88560	2736530
% with no Toilets	44.7	62.8	15.3	22.0	10.7	0.3	59.2	33.1	4.7	21.4	61.8	9.1	9.5	20.8
% obtaining water from unprotected sources (wet Season)	13.4	50.1	47.3	62.6	40.7	38.1	55.5	61.7	42.4	59.9	63.0	11.4	39.7	45.9
% with improved housing	10.5	11.2	46.0	16.2	58.2	58.3	27.3	31.7	49.3	19.7	15.4	30.9	22.9	36.0
Literacy Rates *	33.9	34.8	59.3	58.5	56.0	70.3	39.4	48.5	55.7	47.6	43.6	55.9	54.6	54.3

Source: * CBS. Kenya Rural Literacy Survey 1988. Basic Report pp. 17.

Table 16.6 Nutritional Stunting in 1982 AND 1987/88 by Administrative Areas

PROVINCE	Districts with more than 20 per cent stunted children	
	1982	1987/88
COAST	* Kilifi/Tana River/Lamu	Kilifi
	Kwale	Kwale, Taita Taveta
EASTERN	Machakos	Machakos
	Kitui, Embu	Meru
CENTRAL	Muranga, Kirinyaga	Nyandarua
RIFT VALLEY	Nakuru	Narok, Kericho
		Nakuru
NYANZA	Siaya	Siaya
	South Nyanza	South Nyanza
	Kisii	Kisii, Kisumu
WESTERN	Bungoma	-
	Kakamega	-

* Sampled as a stratum in 1982 Nutrition Survey.

16.15. Central Province has over the years shown that the nutritional status of the under 5's has continued to improve. In 1987, only Nyandarua district recorded an increase in chronic malnutrition. Kericho and Narok in Rift Valley had an increase in chronic malnutrition whereas Nakuru, although falling in this group, registered considerable improvement in nutritional status. In Nyanza, there was marginal improvement in nutritional status of children under 5 years. Overall, all the districts in Nyanza had stunting rates higher than the national average.

Percentage Distribution of Mean Height for Age and Stunting in 1-4 year olds by Province, 1977-1987

Table 16.4

Province	Height for Age (< 90 per cent)				Means of Height for Age			Median
	1977	1978/79	1982	1987/88	1977	1978/79	1982	1987/88
Coast	14*	40	39	40	96.3	92.9	92.2	91.2
Eastern	34	24	27	23	92.8	946	93.3	93.6
Central	26	21	24	15	93.6	94 5	94.0	94.6
Rift Valley	25	24	22	17	94.0	94.2	949	95.2
Nyanza	21	34	33	32	94.7	93.6	93.4	93.4
Western	16	24	30	12	95.0	94.0	92.9	95.4
National	24	27	28	22	94.1	94.5	93.7	94.2

* Unreliable due to small sample size.

Changes in Nutritional Status 1982 to 1987 by District

Table 16.5

District	Percentage of children with HA <90%		Changes in	Percentage of children with W H <80%		Changes in
	1982	1987	H-A	1982	1987	W-H
Kilifi	42.1	39.3	-2.8	5.1	2.1	-3.0
Kwale	38.5	42.8	+ 4.3	4.9	2.5	-2.4
Taita Taveta	14.7	24.3	+ 9.6	4.7	1.7	-3.0
Machakos	23.1	29.3	+ 6.2	2.9	1.1	-1.8
Meru	16.1	22.3	+ 6.2	3.3	3.9	+0.6
Nyandarua	12.4	23.8	+ 11.4	2.0	0.3	-1.7
Kericho	18.1	30.7	+ 12.6	3.0	0.9	-2.1
Nakuru	34.5	24.2	-10.3	2.3	1.4	-0.9
Siaya	36.5	25.9	-10.6	6.3	6.1	-0.2
South Nyanza	25.3	30.2	+ 4.9	1.5	5.4	+ 3.9
Kisii	31.1	33.3	+ 2.2	5.0	1.9	-3.1
Kisumu	19.8	21.8	+ 2.0	3.4	3.4	0.0
National	24.0	19.6	-4.4	3.0	2.5	-0.5