

REPUBLIC OF KENYA

ECONOMIC SURVEY 1980

Central Bureau of Statistics
Ministry of Economic Planning and Development

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ECONOMIC SURVEY
1980

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CHAPTER 0—CURRENT APPRAISAL AND OUTLOOK

Kenya had a poor year in 1979. Its economic performance was adversely influenced by continuing relatively low prices for coffee and tea on world markets; by drought conditions in the later months of the year; by substantially increased crude petroleum prices; and by the impact of the credit restrictions on imports. The growth rate of GDP at constant prices fell to only 3.1 per cent which is among the lowest growth rates recorded during the 1970's and well below the 8.8 per cent growth achieved in 1977. The restrictions imposed on imports through the import deposit scheme were very effective in 1979 and, because exports also managed to show some expansion, the trade deficit was reduced from K£265 million to K£207 million. There was also substantial international borrowing during the year and as a result the country's net foreign assets rose by K£73 million. However, the terms of trade moved against Kenya once again with a fall of 7.6 per cent so that these trade terms were 6 per cent lower than they had been in 1976; that is before the coffee boom. As a result of the Presidential Directive and despite the generally unsatisfactory economic conditions, wage employment in the formal sector rose by 6.7 per cent in 1979. The total number of persons working in modern establishments both employed and self-employed and in informal establishments in the urban areas rose to 1,156,900, which is about one-quarter of the labour force of the country. This does mean, however, that the overwhelming majority of the labour force is still engaged in rural sector activities mainly as small farmers.

0.2. The year 1979 was from the beginning characterized by a renewed energy crisis. During the year the world price of oil doubled with average OPEC oil prices at year-end standing at around US$27 a barrel compared with US$13.5 a year earlier. The increase of US$13.5 per barrel was much higher than the rise of US$8 in 1973/1974 which generated the 1975 recession. Growth in output in the OECD group of industrialised market economies fell from 3.8 per cent in 1978 to 3.3 per cent in 1979 and the overall level of inflation increased from 8 to 10 per cent while unemployment Was virtually unchanged at just over 5 per cent. World trade increased 'in volume by 6 per cent but much of the rise was due to increased trade between the industrialized countries themselves. Economic conditions experienced in selected groups of countries in the developing world varied widely. The oil producers with their large rise in incomes due to crude petroleum price rises recorded large increases in GDP growth rates. Also those non-oil producers which have advanced furthest on the road to industrialization appear to have done as well as in 1978. However, for many of the non oil producing countries which are basically producers of primary agricultural commodities, and these constitute the majority in the developing world, growth rates in 1979 were at relatively low levels. Attempts were made to sustain growth in many developing countries by increased recourse to foreign

borrowing. Without such borrowing it would have been impossible to pay for the basic imports required especially as the rise in the cost of crude petroleum imports had more than offset any increase in the value of exports. The attempts by the industrialized countries to counter increased inflationary pressures by the control of the money supply and very high interest rates is resulting in higher unemployment in these countries and in 1980 being a year of only slow economic growth. Reduction in demand for non-oil primary commodities has already resulted in the prices of these commodities in May 1980 being no higher than in May 1979. This means that most developing countries will be affected by stagnant prices for their exports in 1980 while imports will rise both because of much higher crude petroleum prices and also because of inflation which will continue to raise the cost of other imports from the industrialized world. Additionally it will probably be more difficult for most developing countries to borrow externally in 1980.

0.3. The domestic economy experienced a building boom in 1979 which appears to have been generated by the spending of sums saved during the 1977/78 coffee boom. Building plans approved rose to very high levels in the first half of the year but in the second half there appears to have been an abrupt change of sentiment with large falls being recorded in the value of building plans approved in the last two quarters of the year. Alongside the building boom the distribution sector ran down the stocks accumulated in the previous two years. This run down in stocks was induced by the operation of the import deposit scheme which was introduced late in 1978 and relaxed to some extent in the latter part of 1979 although too late to have much impact on 1979 itself.

0.4. The rise in export earnings in 1979 was due to the price rises for petroleum products manufactured at the Mombasa Refinery; to higher exports of maize and improved earnings from pyrethrum extract, soda ash and hides and skins. The value of exports rose from K£396 million in 1978 to K£413 million in 1979, a rise of K£17 million. Increased earnings from petroleum products accounted for K£8 million of this increase. Coffee earned K£14 million less in 1979 but still remained by far the country's most important export. The fall in imports of K£41 million occurred mainly in imports of transport equipment and consumer goods. The import deposit scheme had a particular impact on imports of passenger motor vehicles and durable and semi-durable consumer goods. The improvement in the overall merchandise trade account as a result of a decline in the overall deficit was accompanied by greatly increased borrowing from abroad. As a result the overall balance of payments which had been heavily in deficit in 1978 recorded a substantial surplus in 1979 with the foreign reserves rising by K£73 million.

0.5. With such a substantial rise in net foreign assets, domestic credit was subject to more control in 1979. The total credit rose by K£79 million or 12.9 per cent, a much lower rate of increase than that of 35 per cent recorded

in 1978. However, money supply including quasi-money rose by 16.1 per cent between December 1978 and December 1979; compared to an increase of 13.7 per cent in 1978. This means that inflationary pressure from the rise in money supply was higher in 1979 than in 1978 and with lagged impact it will lead to a higher rate of inflation in 1980. In fact while the average rate of increase in consumer prices was 8.4 per cent in 1979, between April 1979 and April 1980 prices had recorded a rise of 13.5 per cent. The liquidity ratio of the commercial banks was 23 per cent at December 1979 or the same as at the end of 1978 while the advances/deposits ratio rose slightly from 76.5 to 77.6 per cent. These comparatively high figures reflect the effect of the stringent credit policies and generally flat overall demand.

0.6. Provisional estimates of the outturn for 1979/80 of the Central Government accounts show a current surplus of K£68.8 million which is a very substantial improvement over the surplus of K£23.3 million recorded in 1978/79. Current expenditure in 1979/80 rose by a lower percentage than in the previous year and at the same time revenue increased much more rapidly. In 1979/80 current revenue should be K£590.8 million and current expenditure K£522 million. The present indications are that total development expenditure in 1979/80 will be below the sum projected and because the actual figure should be no higher than in 1978/79, this with the larger current budget surplus means that the financing which is required to balance the budget is substantially reduced. While external loans increased in 1979/80 to K£83.25 million from K£81.85 million in 1978/79, domestic long-term loans have fallen to K£45 million in 1979/80 compared to K£88.57 million in 1978/79.

0.7. The year 1979 was a poor one for agriculture; the long rains were not as heavy as in 1978 and the short rains were so poor as to result in drought conditions towards the end of the year. Output of coffee was reduced once again and while tea production increased prices were substantially lower so that these two major commodities together earned farmers K£173 million in 1979 compared to K£197 million in 1978 and the record K£286 million in 1977. Receipts from other crops with the exception of maize were generally higher than in 1978 but there was a substantial fall in livestock production. Sugar-cane and wheat did particularly well in 1979. Output of sugar-cane increased by 43 per cent in 1979 while that of wheat rose by 21 per cent. After allowing for own consumption of produce in rural areas and making estimates for sales outside official marketing channels it seems likely that total overall output at current prices rose by 2 per cent in 1979 being valued at K£748 million. At constant prices there was a fall of 1.2 per cent. As a result the contribution of the sector to GDP rose by 2.7 per cent at current prices but fell by 0.8 per cent at constant prices.

0.8. The manufacturing sector recorded only a moderate growth in 1979 after two years of high growth in 1977 and 1978. The volume of output rose by 7.1 per cent compared to 12.6 per cent in 1978 and 15.9 per cent in

1977. Employment in this sector rose by 6 per cent in 1979 following rises of 11 per cent in 1978 and 8 per cent in 1977. The more moderate increases in output and employment in 1979 were below the 9 per cent annual target for the current plan period and can be attributed to the more difficult economic conditions experienced in 1979 and which have continued into 1980. The exports of manufactured products to both Uganda and Tanzania are still subject to the difficult political situation in the first country and the border closure by the second. Poor world commodity prices have also caused a stagnation of domestic demand. These problems coupled with the after effects of drought which extended into the first four months of 1980 and resulted in the shortage of such essential commodities as dairy products, wheat and maize flour and electricity rationing will have an adverse influence on the level of performance of the manufacturing sector in 1980.

0.9. As indicated earlier there was a building boom in 1979 although activity in other construction was little changed compared with 1978. Employment in building and construction sector rose by 10.8 per cent and cement consumption by more than 10 per cent. Overall it is estimated that value added in the sector rose by 10.1 per cent at constant prices and by 20.9 per cent at current prices. Since 1977, annual output of residential dwellings has more than doubled when measured at current prices and this serves to underline the effort being made to provide more housing. Never-the-less it is estimated that as many as 250,000 persons were still living in shanty-type accommodation in peri-urban areas in 1979. Figures of building plans approved in the urban areas in the second half of 1979 show that the building boom was beginning to come to an end and activity seems likely to begin to wane in 1980.

0.10. Imports fell substantially in volume in 1979 and total domestic production from agriculture and manufacturing rose by less than one per cent at constant prices. This means that the wholesale and retail trade had a year of stagnation or falling real output. Also while the number of visitor-days increased, earnings from foreign tourists rose by only K£2 million at current prices; equal to a fall in real terms. So despite higher receipts from tourism, the sector wholesale and retail trade, hotels and restaurants registered a small fall in its contribution to GDP at constant prices in 1979.

0.11. In contrast activity in transport and communications sector led to higher surpluses being earned by the major corporations. Employment in the sector too went up. As a result its contribution to GDP rose by 13.7 per cent at current prices and 7.2 per cent at constant prices in 1979. The substantial investments made in this sector since 1977 have begun to show results leading to some restoration of the sector's relative position in the economy. However, the sums invested in new rolling stock for the railways in particular will not begin to earn real profits until the situation in Uganda has been restored to near-normality.

0.12. The small overall increase in consumption of energy measured in terms of intakes of oil and hydro-electricity of only 2 per cent in 1979 is an indicator of the slowdown in overall economic activity. This increase in 1979 can be compared with the increase of 7 per cent in 1978. Consumption of petroleum products has risen much less than hydro-electricity since 1976 and given the continued propensity for sharp rises in crude petroleum prices it seems that this trend will continue. The effort being made to harness the country's hydro and geothermal energy sources will also assist this trend. The total bill for imported petroleum was K£145.7 million in 1979. Of this K£76.9 million was recouped from export sales. In 1980 the price of crude petroleum seems likely to rise further by 50 per cent so that the bill for the same quantity of imports will rise to about K£220 million. While half of this sum might be earned from exports, the net cost to the country at K£110 million will take all the earnings from coffee, the major export.

0.13. The population census undertaken in August 1979 counted 15,322,000 persons, a total 40 per cent greater than that counted in August 1969. This population has been growing rapidly and as a result about half the total population is under 15 years of age. As noted above 1,156,900 persons have been reported as being employed or self-employed in modern establishments or working in informal establishments in the urban areas. While wage employment has been growing by 4.7 per cent a year since 1970 this form of activity still accounts for only a minority share of the gainfully occupied population. Continuing high population growth rates make it difficult to move a greater proportion of the population into wage employment and also imposes substantial burdens on the Government to provide the relevant social services, education, health and housing for the poor.

Outlook for 1980

0.14. The balance of payments has continued to be the major problem area in 1980. The import prepayment scheme was relaxed substantially late in 1979 and this factor could lead to a higher volume of imports in 1980. The cost of such imports will in any event rise substantially because of the oil price rises already announced and because of inflation in the countries supplying Kenya's imports. The continuing closure of its border by Tanzania and the uneasy political situation in Uganda seem likely to prevent any major increase in exports to African countries. However, export earnings will rise because of an anticipated increase in exports of coffee and because the price rises for the petroleum imported into Kenya to be processed for export must be passed on to the consuming countries. Some benefit should also accrue from the high sugar prices on world markets at a time when Kenya may be producing more sugar than is required for domestic consumption. All the same it will not be possible to balance external payments unless accumulated reserves are drawn down and Kenya borrows externally.

0.15. Sessional Paper No. 4 of 1980 on Economic Prospects and Policies provides information on the disappointing performance of the economy and the difficult fiscal and balance of payments positions faced by the country since the start of the 1979/83 Development Plan. As a result of continuing difficulties which have been accentuated by the escalating crude petroleum prices, the average growth rate of the economy expected for the five years of the plan has now been reduced from 6.3 to 5.4 per cent a year. Employment goals are also being reduced although here there will be an emphasis on labour-intensive, job-creating productive activities. The lowering of the average economic growth rate means that government revenues will be lower than had previously been forecast and this has implications for both current and development expenditure. In fact for the four year period ending in June 1983 the forecast of current revenue has been reduced from K£2,754 million to K£2,393 million and current expenditure including debt interest from K£2,181 million to K£2,076 million. The current surplus thus falls from K£574 million to K£317 million and the total development expenditure has had to be scaled down from K£1,202 million to K£991 million. As a result the build-up of the economic base for further expansion will take place at a somewhat slower rate.

0.16. Although these reduced levels of economic growth and forecast Government expenditure will help the balance of payments, it is already obvious that the current account deficit after the revisions will be twice as high as had been forecast at the time the 1979/83 plan was prepared. The current deficit for the period 1979 to 1983 is now forecast at K£l,026 million. At present funds are only in sight to cover K£823 million of this deficit.

0.17. The first four months of 1980 were difficult for the agriculture sector and drought conditions leading to electricity rationing in March and April had an adverse impact on the manufacturing sector and tourist industry. The manufacturing sector now seems to have restored its output momentum and at the time this report was prepared, the main rains had been good and widespread for six weeks; a continuation of these more normal climatic conditions will lead to a good harvest being reaped. The construction industry seems likely to maintain the impetus generated in 1979 in the first half of 1980 but may begin to decline thereafter. The other sectors of the economy will tend to move in line with these important productive sectors. The implications of the changes in emphasis in policies introduced in Sessional Paper No. 4 will begin to be felt in 1980 and any attempt to scale down growth targets will naturally lead to lower overall growth. While the key to the overall growth rate to be achieved will be the outturn from the agriculture sector, it would seem to appear that the country with luck may just manage to achieve a growth rate of 2.5 to 4 per cent in 1980.

CHAPTER 1—INTERNATIONAL SCENE

The year 1979 was from the beginning characterized by the renewed energy crisis. During the year the world price of oil doubled, with average OPEC oil prices at the year-end standing at around US$27 a barrel compared to US$13.5 a year earlier. The increase of US$13.5 per barrel was much higher than the rise of US$8 in 1973/1974 which generated the 1975 recession. Initially there were supply constraints caused by the upheavals in Iran and then price increases that followed in April and again in October. Against this background, the problems of inflation and unemployment have intensified and to date efforts by governments to solve them have not proved as effective as might have been hoped. The oil price increases have therefore renewed the upward pressure on prices and unemployment and because of restrictive credit policies and high interest rates the world is once again moving into recession.

1.2. Output in OECD countries grew by 3.3 per cent in 1979 with consumer expenditure rising by a similar percentage, while the overall rate of unemployment appears to have been unchanged at just over 5 per cent. There were, however, divergencies in the unemployment rates of the individual countries—being virtually unchanged in the cases of the U.S.A. and Japan while in West Germany the rate fell as it did in Canada and the U.K. In 1980 unemployment is likely to increase, especially in the U.S.A. and the U.K.

1.3. All countries in the OECD suffered acceleration in inflation during 1979, with the U.K. and the U.S.A. registering the fastest increases; and West Germany and Japan the lowest. The U.S.A., Italy and the U.K. together were mainly responsible for the overall increase in consumer prices in the OECD from 8 per cent in 1978 to 10 per cent in 1979. In 1980 the overall rate of inflation in OECD countries is expected to be in the region of 12 per cent—although country disparities may range from around 5 per cent in West Germany to 18 to 20 per cent for the U.K. and Italy.

1.4. The UNCTAD index of prices of developing countries' export commodities other than oil increased by 16 per cent in 1979, as detailed in Table 1.1. Several factors contributed to the rise. In addition to the inflation and supply demand situation these include the adverse weather conditions, notably in Brazil and the U.S.S.R., and recurring uncertainties in world commodity and financial markets. The unsettled conditions in world financial markets raised the prices of some metals to unprecedented heights, and speculation spilled over into the market for soft commodities.

1.5. Coffee prices rose by some 50 per cent from the early months of 1979 to their peak in September in response to limited frost damage in Brazil. In the meantime the "Bogota" group of Latin American producers seems to have been fairly successful in preventing a major downturn of prices by adjusting exports to the market position. However, in 1980 price reductions

PRICES OF DEVELOPING COUNTRIES' COMMODITY EXPORTS*

Table 1.1 1972 = 100

	Food	Agricultural Industrial Materials	Metals and Minerals	All Commodities
Weights	55.9	20.8	23.3	100
1978 1st Quarter	246	217	177	224
2nd Quarter	240	221	178	222
3rd Quarter	228	237	189	221
4th Quarter	244	253	204	237
1979 1st Quarter	237	263	222	239
2nd Quarter	253	285	236	255
3rd Quarter	275	298	241	272
4th Quarter	287	296	251	280
1980 January	293	318	276	294
Perventage Rise				
1978	-16	10	6	-7
1979	9	23	27	16

* Measured in US Dollars.

may occur. Much depends on the July frost season in Brazil. Tea prices fluctuated within a relatively narrow range during the year 1979, tending to rise latterly. During 1980, tea prices are expected to remain at or below the 1979 levels.

1.6. The volume of world trade was sustained in 1979 despite the slower growth of world output. The overall volume of trade rose by 6 per cent. The increase in world trade was, however, largely confined to trade between industrial countries as imports by developing countries rose much more slowly than in 1978. The trading position of developing countries was further weakened by non-tariff protection measures instituted by the industrial countries led by France, the U.K. and the U.S.A. especially on steel and textiles. Restrictions on imports of textiles from developing countries have increased significantly in number and coverage during 1979. Nonetheless developing countries should stand to gain benefits from the reduction in tariffs to which developed countries have agreed in the "Tokyo Round" of GATT negotiations. A series of agreements regulating intervention in different types of trade was a further result of these negotiations.

1.7. Major changes in the external payments position resulted in deficits being recorded by Japan, West Germany and the U.K., from positions of surplus in 1978. For non-oil developing countries, the year 1979 was characterized by a resurgence of current deficits—at a time when they were unable to achieve buoyant growth. This group of countries seems likely to experience little or no growth in 1980 due to difficulties over financing imports of goods required to sustain viable growth.

1.8. During most of 1978 poor management of their domestic economies by industrial countries continued to generate imbalances in the world trade and payments relationships. Actions taken by several western countries, especially the U.S.A., in November 1978, were initially successful in arresting seesaw movements of exchange rates and of private capital in late 1978. However, the restored more orderly conditions in early 1979 were overtaken by a return of many of the unsettling movements of short-term capital. The situation was further compounded by the oil price rises which occurred against a background of increasing demand which pushed up spot prices in early 1979. The large and persistent fall in the Japanese Yen and the rise in the Pound Sterling were the most significant changes to have occurred in effective exchange rates in 1979. In the first half of 1979 the oil supply situation helped strengthen further the currencies of major oil producers. It was indeed the rise in oil prices which later in the year 1979 resulted in the strengthening of the Pound Sterling and weakening the Yen referred to above.

1.9. Interest rates in the U.S.A. after the rise in late 1978, remained unchanged until they rose again in October 1979, as a result of government intervention. The package of monetary measures announced by the U.S. Federal Reserve on 6th October, 1979, had profound effects on the exchange markets and the U.S. Dollar. In addition to an increase in the discount rate and the imposition of marginal reserve requirements on managed liabilities, the measures were aimed at moderating the growth of money and credit in the U.S. economy. Prior to 6th October the U.S. Dollar had come under heavy selling pressure as market psychology became increasingly bearish. The upsurge in oil prices in 1979 was adding massively to the oil import bill of the U.S.A. slowing its trade and retarding improvement in its balance of payments and fuelling domestic inflation. With many prices advancing, speculative buying pressures had erupted in many commodity markets. The growth of money aggregates remained too high and markets were doubting the major countries' ability to restrain money and fight inflation. Market concerns about the outlook for international monetary stability were reflected in the rise, in late 1979 and early 1980, of prices in precious metals. The price of gold in London rose during 1979 from US$225 an ounce to US$650 in January 1980, after reaching US$835 at one time.

1.10. The year 1980 will be one of slow growth, rapid inflation and massive balance of payments deficits for non-oil producing countries. Consumer prices in the OECD countries are expected to increase above 12 per cent accompanied by nearly zero growth in GDP. The prime interest rates have risen dramatically in early 1980, reaching 20 per cent in April 1980, in the U.S.A., reflecting tight money market conditions and an expectation of high inflation. However, such rates do not seem sustainable unless money growth accelerates far beyond acceptable bounds especially as tight budget policies are being followed. The decline in interest rates is expected to occur perhaps after the middle of 1980. However, the immediate effect of the tight credit

conditions is the expected recession in the U.S.A. economy and due to the interdependence of other economies with the large U.S.A. economy it is anticipated that the rest of the world will follow the U.S.A. into the recession. One of the effects of these high interest rates on developing countries is to reduce their incursions into the Euro-dollar market for commercial borrowing. Therefore non-oil developing countries will have to make do with lower imports as they will find it more difficult to supplement the aid inflow with commercial borrowing. At the same time the prospects for their mainly primary exports are probably worse than in any year since the world recession of 1975.

CHAPTER 2—THE DOMESTIC ECONOMY

In 1979 the GDP at constant prices rose by only 3.1 per cent, half the growth rate achieved in 1978 and only two-fifths of that of 1977. The reasons for this poor performance have already been noted in the summary in Chapter 0. At current prices GDP rose by 10.4 per cent following the rise of 10.5 per cent in 1978 but an average of 24.6 per cent in 1976 and 1977. At current prices GDP per head rose by 6.5 per cent but at constant prices there was a small reduction. The foreign trade terms of trade moved against Kenya once again in 1979 so that the real GDP per head was reduced probably by about 3 per cent.

2.2. Sectors of the economy which grew faster than the average in 1979 included manufacturing, construction, electricity and water, and transport and communications. Government services also expanded at a faster rate than the percentage rise in GDP and the same was true of services provided by the private sector. However, there were falls in the contribution of agriculture and trade, restaurants and hotels sectors to the GDP when measured at constant prices in 1979 and the importance of these sectors led to the low overall GDP growth rate achieved.

2.3. The expenditure on gross fixed capital formation was maintained at a relatively high level during the year and measured at current prices there was a rise of 3.2 per cent compared to 1978. The share of capital formation and stock changes in GDP at market prices was 22.4 per cent and would have been higher but for a fall in stocks. This means that the base for future growth in the economy has been expanded at a satisfactory rate.

2.4. The total expenditure on investment of K506.4 million in 1979 was financed by domestic savings of K£306.7 million and foreign borrowing and grants of K£199.7 million. The net inflow of foreign resources which was used mainly for capital formation helped raise the total resources available by 7 per cent over those provided from domestic sources.

2.5. Sectoral breakdown of GDP in absolute figures is set out in Table 2.1, while growth rates are detailed in Table 2.2. Agriculture was affected in 1979 by the very limited and patchy rainfall during the short rains season and also by some reduction in rainfall during the long rains period. The total volume of output appears to have been reduced and while GDP from agriculture rose by 2.7 per cent at current prices, at constant prices its contribution fell by 0.8 per cent. It is shown in Chapter 8 that the terms of trade of the agricultural producer deteriorated in 1979 basically because the prices obtained for his produce rose less than the prices of the consumer items that he purchased. In 1979 these terms of trade were 4.9 per cent less than in 1976 and 6 per cent lower than in 1978.

2.6. Manufacturing sector recorded only moderate growth in 1979 with volume of production rising by 7.1 per cent or the same as the rise in value added to GDP at constant prices. At current prices the increase was 13.9 per

Table 2.1 GROSS DOMESTIC PRODUCT, 1976-1979 *K£million*

	CURRENT PRICES				CONSTANT (1976) PRICES			
	1976	1977	1978	1979*	1976	1977	1978	1979*
A. TRADITIONAL ECONOMY								
Forestry	9.40	10.77	13.30	15.21	9.40	9.88	10.04	10.32
Fishing	0.29	0.29	0.43	0.47	0.29	0.30	0.34	0.36
Building and Construction	21.86	25.99	31.01	36.70	21.86	22.71	23.32	24.00
Water Collection	8.90	11.11	12.66	14.35	8.90	9.41	9.56	9.84
Ownership of Dwellings	29.36	35.68	43.15	52.06	29.36	30.59	31.86	33.17
TOTAL TRADITIONAL ECONOMY	69.81	83.84	100.55	118.79	69.81	72.89	75.12	77.69
B. MONETARY ECONOMY								
1. Enterprises and Non-Profit Institutions								
Agriculture	466.15	668.01	631.73	648.78	466.15	513.60	533.31	529.05
Forestry	6.24	6.89	8.25	10.70	6.24	6.72	6.94	7.17
Fishing	2.36	2.33	3.52	3.87	2.36	2.36	2.75	3.00
Mining and Quarrying	3.41	4.17	4.41	5.04	3.41	4.05	4.14	4.52
Manufacturing..	144.18	179.94	219.32	249.84	144.18	167.10	188.16	201.56
Building and Construction	45.22	53.94	66.88	80.83	45.22	49.34	55.26	60.29
Electricity and Water	14.20	19.96	23.05	27.96	14.20	16.42	17.82	19.57
Trade, Restaurants and Hotels	132.54	164.63	189.34	209.22	132.54	143.59	155.92	154.36
Transport, Storage and Communications	69.15	78.62	100.84	114.65	69.15	73.74	81.40	87.26
Finance, Insurance, Real Estate and Business Services	68.03	82.98	96.22	108.73	68.03	71.98	77.59	81.31
Ownership of Dwellings	58.06	67.50	78.43	84.89	58.06	60.48	62.49	64.85
Other Services	27.00	30.80	35.46	43.01	27.00	28.69	30.46	32.67
Less: Imputed Bank Service Charges	-23.88	-31.80	137.31	-42.16	-23.88	-26.79	-28.76	-30.64
TOTAL	1,012.66	1,327.97	1,420.14	1,545.36	1,012.66	1,111.28	1,187.48	1,214.97
2. PRIVATE HOUSEHOLDS (DOMESTIC SERVICES)	10.93	13.44	17.06	20. 56	10.93	12.04	13.91	15.51
3. PRODUCERS OF GOVERNMENT SERVICES								
Public Administration	43.08	48.52	56.91	..	43.08	44.08	47.47	
Defence	9.63	11.73	13.49	..	9.63	10.63	11.37	
Education	82.75	94.43	107.51	..	82.75	83.99	89.20	
Health	17.43	21.90	27.40	..	17.43	19.43	20.63	
Agricultural Services	11.36	13.78	16.51		11.36	13.52	13.68	
Other Services	20.46	25.04	28.84	..	20.46	22.40	24.08	
TOTAL	184.70	215.40	250.66	290.26	184.71	194.05	206.43	221.09
TOTAL MONETARY ECONOMY	1,208.29	1,556.81	1,687.86	1,856.18	1,208.29	1,317.37	1,407.82	1,451.57
TOTAL TRADITIONAL AND MONETARY ECONOMY	1,278.10	1,640.65	1,788.41	1,974.97	1,278.10	1,390.26	1,482.94	1,529.26
GROSS DOMESTIC PRODUCT PER CAPITA	92.30	114.43	120.38	128.16	92.80	96.97	98.82	99.24

*provisional

Table 2.2 GROSS DOMESTIC PRODUCT; PERCENTAGE RATES OF GROWTH, 1976-1979 *Percentage*

	CURRENT PRICES				CONSTANT (1976) PRICES			
	1976-1977	1977-1978	1978-1979*	1976-1979* Cumulative	1976-1977	1977-197 8	1978-1979*	1976-1979 Cumulative
A. TRADITIONAL ECONOMY								
Forestry	14.6	23.5	14.4	17.4	5.1	1.6	2.8	3.1
Fishing	—	48.3	9.3	17.4	3.4	13.3	5.9	7.4
Building and Construction	18.9	19.3	18.3	18.9	3.9	2.7	2.9	3.2
Water Collection	24.8	14.0	13.3	17.2	5.7	1.6	2.9	3.1
Ownership of Dwellings	21.5	20.9	20.6	21.0	4.2	4.2	4.1	4.1
TOTAL TRADITIONAL ECONOMY	20.1	19.9	18.1	19.4	4.4	3.1	3.4	3.6
B. MONETARY ECONOMY								
1. Enterprises and Non-Profit Institutions								
Agriculture	43.3	-5.4	2.7	11.6	10.2	3.8	-0.8	4.3
Forestry	10.4	19.7	29.7	19.6	7.7	3.3	3.4	4.7
Fishing	-1.3	51.1	9.9	17.9	—	16.5	9.1	8.3
Mining and Quarrying	22.3	5.8	14.3	14.0	18.8	2.2	9.2	9.8
Manufacturing	24.8	21.9	13.9	20.1	15.6	12.6	7.1	11.7
Building and Construction	19.3	24.0	20.9	21.4	9.1	12.0	9.1	10.1
Electricity and Water	40.6	15.5	21.3	25.2	15.7	8.5	9.8	11.3
Trade, Restaurants and Hotels	24.2	15.0	10.5	16.5	8.3	8.6	-1.0	5.2
Transport, Storage and Communications	13.7	28.3	13.7	18.4	6.7	10.4	7.2	8.0
Finance, Insurance, Real Estate and Business Services	22.0	16.0	13.0	17.0	5.8	7.8	4.8	6.1
Ownership of Dwellings	16.3	16.2	8.2	13.4	4.2	3.3	3.8	3.8
Other Services	14.1	15.1	21.3	16.7	6.3	6.2	7.3	6.6
TOTAL (Excluding Imputed bank service Charges)	31.1	6.9	8.8	15.2	9.7	6.9	2.3	6.3
2. Private Households (Domestic Services)	23.0	26.9	20.6	23.4	10.2	15.5	11.5	12.4
3. Producers of Government Services								
Public Administration	12.6	17.3	..	..	2.3	7.7	..	..
Defence	21.8	15.0	..	..	10.4	7.0	..	..
Education	14.1	13.9	..	..	1.5	6.2	..	..
Health	25.6	25.1			11.5	6.2		
Agricultural Services	21.3	19.8	..	..	19.0	1.2	..	..
Other Services	22.4	15.2	..	..	9.5	7.6	..	..
TOTAL	16.6	16.4	15.8	16.2	5.1	6.4	7.1	6.2
TOTAL MONETARY ECONOMY	28.8	8.4	10.0	15.4	9.0	6.9	3.1	6.3
TOTAL TRADITIONAL AND MONETARY ECONOMY	28.4	10.5	10.4	15.6	8.8	6.6	3.1	6.2
GROSS DOMESTIC PRODUCT PER CAPITA	24.0	5.2	6.5	11.6	5.1	2.9	-0.6	2.4

*Provisional.

cent so that the deflator between current and constant prices for this sector was reduced to 6.3 per cent. As shown in Chapter 11 there were some relatively successful sub-sectors of manufacturing industry but overall demand was not particularly buoyant in 1979 and this had a dampening impact on the sector as a whole.

2.7. The construction industry has been enjoying boom conditions now for two years and the increase in GDP at constant prices of 9.1 per cent in 1979 followed on increases of 9.1 per cent in 1977 and 12 per cent in 1978. In 1979 itself there was more emphasis on building rather than construction but all sub-sectors were working at a high level of activity. It is perhaps unfortunate that the construction sector is too small to have as much of an impact on the general level of activity in the economy as a whole as do the agriculture and manufacturing sectors.

2.8. The import restrictions operating in 1979 and the fall in output from agriculture had their own impact on the wholesale and retail trade. As foreign earnings from tourism did not rise very much in current terms the sector trade, restaurants and hotels is thought to have suffered a small decline in its contribution to GDP at constant prices in 1979. This reduction came after two good years in 1977 and 1978 when GDP rose by 8.5 per cent a year on average at constant prices and by nearly 20 per cent at current prices.

2.9. The GDP contributed by producers of government services since 1972 has expanded on average at a slightly higher rate than the planned increase in total GDP. However, the actual rise in GDP in the last seven years has not managed to achieve the forecast average so that government services have grown more rapidly than total GDP. From 1972 to 1979 the average rise in total GDP was 4.4 per cent a year while government services increased annually by 6.5 per cent. In 1979 the growth in the contribution of producers of government services was 7.1 per cent at constant prices or more than double the total rise in GDP.

2.10. Private sector services are made up of finance, insurance, real estate and business services, ownership of dwellings and other services. The rates of increase in GDP at constant prices in 1979 were 4.8, 3.8 and 7.3 per cent respectively, figures which may be compared with growth rates of 7.8, 3.3 and 6.2 per cent in 1978.

2.11. The transport and communications sector has been growing at a faster rate than total GDP since 1975. In these four years the average increase in value added to GDP at constant prices has been 8.7 per cent a year while total GDP has risen by 5.2 per cent a year. In 1979 this sector recorded rises of 7.2 per cent at constant prices and 13.7 per cent at current prices. Although the volume of output in this sector has not grown as rapidly as the increase in its capacity over the last few years, higher charges and increased employment have led to the value added for GDP showing these satisfactory rates of increase.

Table 2.3 PRODUCTION ACCOUNTS, 1978 and 1979 *K£million*

	1978					1979*				
	Gross Output at approx. Basic Price+	Inter-mediate Consump-tion	Gross Domestic Product at Factor Cost			Gross Output at approx. Basic Prices+	Inter-mediate Consump-tion	Gross Domestic Product at Factor Cost		
			Total	Labour Costs	Operating Surplus**			Total	Labour Costs	Operating Surplus**
A. TRADITIONAL ECONOMY	129.51	28.60	100.55	1.47	99.08	153.02	34.23	118.79	1.70	117.09
B. MONETARY ECONOMY										
1. Enterprises and Non-Profit Institutions										
Agriculture	732.93	101.21	631.73	61.32	570.41	747.58	98.80	648.78	67.59	581.19
Forestry	9.75	1.50	8.25	7.55	0.70	12.38	1.68	10.70	9.26	1.44
Fishing	3.91	0.39	3.52	0.88	2.64	4.24	0.37	3.87	0.97	2.90
Mining and Quarrying	15.52	11.11	4.41	2.40	2.01	17.73	12.70	5.04	2.74	2.29
Manufacturing	1,011.40	792.08	219.32	91.94	127.38	1,177.08	927.23	249.84	103.54	146.30
Building and Construction	230.59	163.71	66.87	52.48	14.39	260.73	179.90	80.83	63.43	17.40
Electricity and Water	50.31	27.26	23.05	6.67	16.38	56.28	28.32	27.96	7.20	20.76
Trade, Restuarants and Hotels	333.26	143.93	189.34	81.80	107.53	364.96	155.74	209.22	92.52	116.70
Transport, Storage and Communications	272.45	171.61	100.84	56.49	44.35	300.62	185.97	114.65	65.52	49.13
Finance, Insurance, Real Estate and Business Services	129.23	33.01	96.22	42.23	54.00	146.03	37.30	108.73	47.71	61.02
Ownership of Dwellings	86.38	7.95	78.43		78.43	93.49	8.60	84.89		84.89
Other Services	105.17	69.71	35.46	25.11	10.35	120.55	77.54	43.01	31.68	11.33
Less: Imputed Bank Service Charges		37.31	-37.31		-37.31		42.16	-42.16		-42.16
TOTAL	2,980.90	1,560.78	1,420.13	428.87	991.26	3,301.67	1,756.31	1,545.36	492.16	1,053.19
2. Private Households (Domestic Services)	17.06	—	17.06	17.06	—	20.56	—	20.56	20.56	—
3. Producers of Government Services	419.62	168.96	250.66	245.43	5.22	477.09	186.83	290.26	284.70	5.56
TOTAL MONETARY ECONOMY	3,417.58	1,729.74	1,687.85	691.36	996.48	3,799.32	1,943.14	1,856.18	797.42	1,058.75
TOTAL MONETARY AND TRADITIONAL ECONOMY	3,546.73	1,758.34	1,788.41	692.83	1,095.56	3,952.34	1,977.37	1,974.97	799.12	1,175.84

*Provisional.

**Including consumption of fixed capital.

+After deduction of indirect taxes less subsidies from the total of output.

2.12. The production accounts for the various sectors of the economy are presented in Table 2.3. The table shows that the proportions of value added by the agriculture and manufacturing sectors related to total output are very different. In agriculture the GDP related to gross output is 87 per cent whereas in manufacturing it is only 21 per cent. This implies that the investment of similar sums in agriculture and manufacturing sector would in general yield much greater rewards to the economy as a whole from agriculture. However, this is only a very broad generalization; it means for example, that mere assembly type operations using foreign components have only limited economic value; but on the other hand an integrated complex such as a sugar scheme needs the manufacturing capacity created by a sugar-mill for the sugar-cane produced by the growers to be processed.

2.13. In other economic sectors the ratio of value added to total output, also varies widely. In 1979 the ratio for building and construction sector was 31 per cent; for transport and communications sector 38 per cent; for dis-

GROSS DOMESTIC PRODUCT
SECTOR SHARES,AT CONSTANT (1976) PRICES, 1976-1979

Table 2.4 *Percentage*

	1976	1977	1978	1979*
A. TRADITIONAL ECONOMY				
Forestry	0.7	0.7	0.7	0.7
Fishing				
Building and Construction	1.7	1.6	1.6	1.6
Water Collection	0.7	0.7	0.6	0.6
Ownership of Dwellings	2.3	2.2	2.1	2.2
TOTAL TRADITIONAL ECONOMY	5.5	5.2	5.1	5.1
B. MONETARY ECONOMY				
1. Enterprises and Non-Profit Instutitions				
Agriculture	36.5	36.9	36.0	34.6
Forestry	0.5	0.5	0.5	0.5
Fishing	0.2	0.2	0.2	0.2
Mining and Quarrying	0.3	0.3	0.3	0.3
Manufacturing	11.3	12.0	12.7	13.2
Electricity and Water	1.1	1.2	1.2	1.3
Building and Construction	3.5	3.5	3.7	3.9
Trade, Restaurants and Hotels	10.4	10.3	10.5	10.1
Transport, Storage and Communications	5.4	5.3	5.5	5.7
Finance, Insurance, RealEstate and Business Services	5.3	5.2	5.2	5.3
Ownership of Dwellings	4.5	4.4	4.2	4.2
Other Services	2.1	2.1	2.1	2.1
Less: Imputed Bank Services Charges	-1.9	-1.9	-1.9	-2.0
TOTAL	79.2	79.9	80.1	79.4
2, Private Households (Domestic Services)	0.9	0.9	0.9	1.0
3. Producers of Government Services				
Public Administration	3.4	3.2	3.2	
Defence	0.8	0.8	0.8	
Education	6.5	6.0	6.0	
Health	1.4	1.4	1.4	
Agricultural Services	0.9	1.0	0.9	
Other Services	1.6	1.6	1.6	
TOTAL	14.5	14.0	13.9	14.5
TOTAL MONETARY ECONOMY	94.5	94.8	94.9	94.9
TOTAL MONETARY AND TRADITIONAL ECONOMY	100.0	100.0	100.0	100.0

*Provisional

tribution, restaurants and hotels sector 57 per cent; and for finance, insurance real estate and business services sector 74 per cent. For the economy as a whole the proportion was 50 per cent in 1979 compared with 50.4 per cent in 1978 and 1977. In 1974 this proportion had been 52.6 per cent.

2.14. Table 2.4 gives the percentage shares of the economic sectors in total GDP for the last four years. The traditional economy produced only 5.1 per cent of GDP in 1979 when measured at constant prices. This proportion is similar to those of 1977 and 1978. In the monetary economy the most important sector is agriculture which contributed 34.6 per cent of GDP at constant prices in 1979. This sector is also the most important productive sector. Manufacturing sector accounted for 13.2 per cent of the total GDP in 1979, while government services contributed 14.5 per cent of the total. Distribution, restaurants and hotels and other private services including ownership of dwellings contributed 10.1 per cent and 11.6 per cent of GDP respectively in 1979.

Resource Allocation

2.15. The build-up of the GDP from a factor cost basis to market prices together with estimates of the inflow of resources to Kenya to assist its development are given in Table 2.5. The increase in receipts for indirect taxes

TOTAL USE OF RESOURCES, AT CURRENT PRICES, 1976—1979

Table 2.5 *K£million*

	1976	1977	1978	1979*
G.D.P. at Factor Cost	1,278.10	1,640.65	1,788.41	1,974.97
Of which—				
Traditional	69.81	83.84	100.55	118.79
Monetary	1,208.29	1,556.81	1,687.86	1,856.18
+ Indirect Taxes	176.27	219.78	270.25	284.00
—Subsidies	0.77	0.55	0.47	0.60
=G.D.P. at Market Prices	1,453.60	1,859.88	2,058.19	2,258.37
+ Imports of goods and services	461.60	587.60	787.40	736.50
—Export of goods and services	471.70	650.20	566.80	580.40
=import Surplus	-10.10	-62.60	220.60	156.10
Total Resources available for Domestic Investment and Consumption	1,443.50	1,797.28	2,278.79	2,414.47
Gross Fixed Capital Formation	290.43	390.01	514.01	530.64
Change in Stocks	3.84	51.22	96.62	-24.20
Gross Investment	294.27	441.23	610.63	506.44
Public Consumption	253.79	322.05	398.60	450.00
Private Consumption	895.44	1,034.00	1,269.56	1,458.03
TOTAL CONSUMPTION	1,149.23	1,356.05	1,668.16	1,908.03

*Provisional.

was slower in 1979 than in each of the two previous years. This was mainly the result of substantially reduced imports and slow economic growth and despite the rise in the sales tax in the budget of June 1979. In any event this increase had a much smaller impact in 1979 itself than it would have had in a full financial year. The GDP at current factor cost amounted to K£l,975 million in 1979; adding on net indirect taxes raises this total to K£2,258.4 million. Additionally K£156.1 million of resources were provided from abroad through the import surplus so that the overall resources available for investment and consumption reached K£2,414.5 million or only 6 per cent more than in 1978. This rate of increase compares with increases of 27.3 per cent in 1978 and 24.5 per cent in 1977. Hence the total level of resources available measured in real terms was stagnant or reduced in 1979 compared to 1977 and 1978, in which years the supply of these resources rose substantially.

2.16. Despite this only moderate rise in total resources available in 1979 gross fixed capital formation increased from K£514 million to K£530.6 million and the major impact of the small increase in total resources was

GROSS NATIONAL PRODUCTION AT CURRENT PRICES, 1976-1979

Table 2.6 *K£million*

	1976	1977	1978	1979*
FACTOR INCOMES—				
A. Traditional Economy	69.81	83.84	100.55	118.79
B. Monetary Economy—				
1. Remuneration of Employees:				
Enterprises	314.45	367.79	428.87	492.16
Private Households	10.93	13.44	17.06	20.56
Producers of Government Services	182.79	211.83	245.43	284.70
	508.17	593.06	691.36	797.42
2. Rental Surplus (including depreciation)	58.06	67.50	78.43	84.89
3. Other Operating Surplus (including depreciation)	642.06	896.25	918.05	973.86
TOTAL MONETARY ECONOMY	1,208.29	1,556.81	1,687.86	1,856.18
TOTAL FACTOR INCOMES=GROSS DOMESTIC PRODUCT	1,278.10	1,640.65	1,788.41	1,974.97
Add: Indirect Taxes	176.27	219.78	270.25	284.00
Deduct: Subsidies	0.77	0.55	0.47	0.60
GROSS DOMESTIC PRODUCT AT MARKET PRICES	1,453.60	1,859.88	2,058.19	2,258.37
Add: FACTOR INCOMES RECEIVED FROM ABROAD	14.30	20.00	22.10	24.30
Deduct: FACTOR INCOMES PAID ABROAD	82.40	98.70	93.80	88.30
GROSS NATIONAL PRODUCT	1,385.50	1,781.18	1,986.49	2,194.37

*Provisional.

felt in a fall in stocks by K£24.2 million whereas such stocks had risen by K£51.2 million in 1977 and K£96.6 million in 1978. Public consumption increased by 12.9 per cent in 1979 and private consumption by 14.8 per cent. Both rates are substantially less than the increase of 23.8 per cent and 22.8 per cent respectively, in 1978.

2.17. An attempted break-down of GDP between earnings of employees and between rental surpluses and other operating surpluses is set out in Table 2.6. Since 1976 the total remuneration of employees has risen from K£508.2 million to K£797.4 million, an increase of 57 per cent. Rental surpluses over this period have risen from K£58.1 million in 1976 by 46 per cent to K£84.9 million in 1979 while operating surpluses which contributed the largest share of GDP have risen by 51.7 per cent from K£642.1 million in 1976 to K£973.9 million in 1979. In 1979, 40.4 per cent of the total GDP was accounted for by wages and salaries, 4.3 per cent by rental surpluses, 49.3 per cent by other operating surpluses and 6 per cent was the imputed value of the traditional economy.

2.18. Reference has already been made to the financing of capital formation. The details for 1978 and 1979 are provided in Table 2.7. Comparison with earlier years as is attempted later in Chapter 3, shows that borrowing from the rest of the world as a source of capital financing has been very much greater in these last two years than in the earlier years of this decade. In 1978 and 1979 total external loans which were used to finance 41 per cent of total capital formation amounted to K£455.2 million compared with less than K£350 million for the eight years 1970 to 1977.

FINANCING OF CAPITAL FORMATION, 1978-1979

Table 2.7 *K£million*

Gross Capital Formation		Financing of Gross Capital Formation	
1978			
Gross Fixed Capital Formation	514.01	Net Borrowing from Rest of the World	266.20
Change in Stocks	96.62	Grants from Rest of the World	13.70
		Domestic Savings (including consumption of fixed capital)	330.73
TOTAL	610.63	TOTAL	610.63
1979*			
Gross Fixed Capital Formation	530.64	Net Borrowing from Rest of the World	189.00
Change in Stock	-24.20	Grants from Rest of the World	10.70
		Domestic Savings (including consumption of fixed capital)	306.74
TOTAL	506.44	TOTAL	506.44

*Provisional.

GROSS FIXED CAPITAL FORMATION BY TYPE OF ASSET, 1976-1979

Table 2.8

K£million

	CURRENT PRICES				CONSTANT (1976) Prices			
	1976	1977	1978	1979	1976	1977	1978	1979
DWELLINGS—								
PRIVATE:								
Traditional	73.01	27.51	33.17	39.73	23.01	24.74	27.24	28.75
Modern	9.45	12.20	26.71	35.43	9.45	10.97	21.93	25.64
TOTAL	32.46	39.71	59.88	75.16	32.46	35.71	49.17	54.39
PUBLIC	6.75	9.70	10.48	13.17	6.75	8.72	8.60	9.53
TOTAL	39.21	49.41	70.36	88.33	39.21	44.43	57.77	63.92
NON RESIDENTIAL BUILDINGS—								
PRIVATE	17.41	17.01	16.58	18.82	17.41	16.41	14.30	14.32
PUBLIC	19.34	24.42	29.17	37.46	19.34	23.09	25.17	28.51
TOTAL	36.75	41.43	45.75	56.28	36.75	39.16	39.47	42.83
OTHER CONSTRUCTION WORKS—								
PRIVATE	3.32	5.93	7.45	5.39	3.32	5.56	6.32	4.03
PUBLIC	62.44	70.74	78.66	84.71	62.44	66.23	66.72	63.41
TOTAL	65.76	76.67	86.11	90.10	65.76	71.79	73.04	67.44
LAND IMPROVEMENT AND PLANTATION DEVELOPMENT								
PRIVATE	5.71	6.34	6.87	7.78	5.71	6.55	6.27	5.98
PUBLIC	0.10	0.97	1.01	1.80	0.10	1.03	0.90	1.45
	5.81	7.37	7.87	9.58	5.81	7.58	7.17	7.43
TOTAL	33.45	43.78	64.04	52.64	33.45	38.92	49.26	35.09
TRANSPORT EQUIPMENT—								
PRIVATE	6.86	24.93	37.27	63.29	6.86	22.16	28.67	42.19
PUBLIC	40.31	68.71	101.31	115.93	40.31	61.08	77.93	77.29
TOTAL	75.66	112.72	165.84	134.60	75.66	98.44	127.57	94.79
MACHINERY AND OTHER EQUIPMENT—								
PRIVATE	27.01	34.23	37.10	34.37	27.01	29.90	28.54	24.20
PUBLIC	102.67	146.95	202.94	168.98	102.67	128.34	156.11	119.00
TOTAL								

GROSS FIXED CAPITAL FORMATION BY TYPE OF ASSET, 1976-1979

Table 2.8

K£million

	CURRENT PRICES				CONSTANT (1976) PRICES			
	1976	1977	1978	1979	1976	1977	1978	1979
BREEDING STOCK AND DAIRY CATTLE - PRIVATE	-0.08	-0.47	-0.33	+ 1.44	-0.08	-0.42	-0.30	1.16
TOTAL PRIVATE—								
Traditional Dwellings	23.01	27.51	33.17	39.73	23.01	24.74	27.24	28.75
Other	144.91	197.51	287.16	256.10	144.91	176.09	225.36	181.02
TOTAL PRIVATE	167.93	225.02	320.33	295.83	167.93	200.83	252.60	209.77
TOTAL PUBLIC	122.50	164.99	193.68	734.80	122.50	151.13	158.59	169.29
TOTAL PRIVATE AND PUBLIC	290.43	390.01	514.01	530.64	290.43	351.96	411.19	379.06

*Provisional.

GROSS FIXED CAPITAL FORMATION BY INDUSTRY, 1976-1979

Table 2.9

K£million

	CURRENT PRICES				CONSTANT(1976) PRICES			
	1976	1977	1978	1979	1976	1977	1978	1979
A. TRADITIONAL ECONOMY								
Traditional Dwellings	23.01	27.51	33.17	39.73	23.01	24.74	27.24	28.75
B. MONETARY ECONOMY								
Enterprises and Non-Profit Institutions;								
Agriculture	24.94	42.93	51.13	40.55	24.94	39.13	41.05	29.56
Forestry	0.34	0.68	0.73	0.83	0.34	0.62	0.59	0.58
Mining and Quarrying	1.62	1.94	4.95	4.76	1.62	1.70	3.81	3.30
Mamnacturiiit	45.96	63.27	83.71	70.30	45.96	55.82	64.87	49.41
Electricity and Water	33.15	33.72	40.20	41.29	33.15	31.46	33.72	30.67
Building and Construction	9.72	15.50	32.25	25.66	9.72	13.71	24.99	18.06
Trade, Restaurants and Hotels	20.61	21.42	20.24	24.88	20.61	19.05	15.80	17.56
Transport, Storage and Communications	50.41	79.41	110.50	107.76	50.41	71.08	86.38	73.51
Finance, Insurance Real Estate and Business Services	3.46	4.42	7.67	7.04	3.46	3.98	6.20	5.15
Ownership of Dwellings	17.12	23.12	38.66	50.28	17.12	20.76	31.66	36.35
Other Services	11.63	17.25	20.33	26.47	11.63	15.67	16.48	19.13
TOTAL	218.96	303.66	410.27	399.74	218.96	272.98	325.56	283.30
Producers of Government Services;								
Public Administration	4.00	7.95	14.66	16.84	4.00	7.26	11.85	12.21
Defence	—	—	—	—	—	—		
Education	5.10	7.23	8.87	12.19	5.10	6.62	7.32	8.99
Health	7.01	8.19	8.33	10.56	7.01	7.63	6.99	7.86
Agricultural Services	8.66	9.00	8.64	14.08	8.66	8.23	6.91	9.97
Other Services	23.69	26.46	30.07	37.51	23.69	24.50	25.32	27.97
TOTAL	48.46	58.84	70.56	91.17	48.46	54.24	58.39	67.01
TRADITIONAL ECONOMY	23.01	27.51	33.17	39.73	23.01	24.74	27.24	28.75
MONETARY ECONOMY	267.42	362.50	480.83	490.91	267.42	327.22	383.95	350.31
TOTAL	290.43	390.01	514.01	530.64	290.43	351.96	411.19	379.06
C. PERCENTAGE RATES OF GROWTH—								
Traditional Economy	14.4	19.6	20.6	19.8	-2.0	7.5	10.1	5.5
Monetary Economy	20.6	35.6	32.6	2.1	-0.9	22.4	17.3	-8.8
TOTAL	20.1	34.3	31.8	3.2	-1.0	21.2	16.1	-7.8

*Provisional.

2.19. Details on gross fixed capital formation by type of asset and industry are given in Tables 2.8 and 2.9 for the years 1976 to 1979. Measured at current prices the private sector was the major source of capital formation in all the four years, and in 1979 this sector accounted for 55.7 per cent of the total. Its largest investments were undertaken in purchase of machinery and other equipment, which accounted for 45.6 per cent of the the capital formation by the private sector in 1979. In the public sector there was particular emphasis on investment in non-residential buildings and "other" construction such as roads, bridges, water supply schemes and the like. Both sectors spent heavily on transport equipment. In terms of industrial distribution, transport and communications sector accounted for 20 per cent of the total capital formation. The share of manufacturing sector was 13 per cent and the balance was spread widely over the other sectors. After the very large rises in gross fixed capital formation in 1977 and 1978 growth in the total spent at current prices in 1979 was 3.2 per cent; and at constant prices there was fall of 7.8 per cent.

CHAPTER 3—TRENDS IN THE ECONOMY IN THE 1970'S AND SOME POLICY IMPLICATIONS FOR THE 1980'S

The inflationary trends in the developed world in 1973 were significantly accelerated by the action of the OPEC states in multiplying drastically the price of crude petroleum. These factors led on to the world recession in 1975. Recovery from this recession began in 1976 and continued in 1977 and 1978 but in 1979 further larger rises in oil prices, and measures taken by some of the major developed economies to curb inflationary pressures have caused a slowdown in the growth of the world economy. The present forecasts are for a further substantial decline in the growth rate in 1980 and indeed for actual falls in the GDP at constant prices in the USA and the UK.

3.2. The growth of the Kenya economy moved in line with this general world trend but in 1977 because of the coffee boom the increase in GDP was a high 8.8 per cent. Some comparative data on the GDP and prices are given in Table 3.1. From 1970 to 1979 GDP at current prices rose by an average of 15.2 per cent a year and at constant prices the increase was 5.1 per cent giving a GDP deflator of 9.6 per cent a year which compares well with the average rise in consumer prices of 9.8 per cent a year. The increase in GDP per head over this period is estimated at 2 per cent a year at constant prices.

GROWTH OF GDP AND RATE OF INFLATION IN KENYA, 1970 to 1979

Table 3.1

Year	GDP Growth Rate		Rate of Inflation	
	Current Prices	Constant (1976) Prices	Consumer Prices	GDP Deflator
	Percentages			
1970	9.7	6.8*	2.0	2.7
1971	12.2	7.0*	3.7	4.9
1972	13.8	6.8*	5.4	6.6
1973	14.6	4.3	11.1	9.9
1974	18.9	1.1	15.8	17.6
1975	12.6	4.1	17.8	8.2
1976	20.8	2.4	9.9	18.0
1977	28.4	8.8	11.7	18.0
1978	10.5	6.6	12.3	3.7
1979	10.4	3.3	8.4	6.9
Average 1970-1979	15.2	5 1	9.8	9.6

*At 1972 prices.

3.3. The increase in GDP at constant prices provides the basis for the rise in per capita GDP in real terms. However, this increase in GDP per head affects different groups in different ways; to some extent it is reflected in increases in the numbers in wage employment and changes in their real earnings but there are also changes in numbers and real incomes of persons working on own account. The largest group of persons working on own account are those farming small-holdings in the rural areas.

3.4. Table 3.2 compares the years 1970 and 1979 showing numbers in formal sector employment, their real wages and also the operating surpluses of small farmers. This comparison indicates that the estimated average operating surplus of small farmers rose in real terms by about 20 per cent between 1970 and 1979 while real wages of workers in the formal sector fell by about 10.5 per cent. There was an increase of 51 per cent in the numbers in wage employment in the formal sector, a growth equal to an average of 4.7 per cent a year, while the number of small farmers probably increased from 1.35 to 1.68 million, an increase of 24.4 per cent at a rate of 2.5 per cent a year. There are of course far more dependants in each rural household than there are per wage earner in the formal sector of the economy.

EMPLOYMENT AND EARNINGS OF WAGE-EARNERS IN FORMAL SECTOR AND OPERATING SURPLUSES OF SMALL FARMERS, 1970 AND 1979

Table 3.2

	1970	1979	1970-1979 Growth per annum
			Percentage
Numbers in wage employment in formal sector '000's	644.5	972.3	4.7
Total wages K£million	168.5	563.5	14.8
Nominal wages per employee K£	261.4	579.5	9.3
Real wages per employee 1970 = 100	100.0	89.5	-1.2
Number of small farmers, 000's	1,350*	1,680*	2.5
Operating surpluses K£million	129.0	450.0	14.9
Real incomes** per farmer 1970 = 100	100.0	119.5	2.0

*Estimates based on 1974/75 Integrated Rural Survey results.

**Operating surpluses per farmer including produce consumed on farm divided by increase in consumer prices.

3.5. Also while the evidence suggests that the real incomes of small-scale farmers increased between 1970 and 1979 and real wages in the formal sector have fallen, it must not be overlooked that the average farm operating surplus from, say, the 1.48 million agricultural holdings in 1974/75 was only K£104. Other income raised the total to K£183 per household but these totals are well below the average wages of employees in the formal sector of K£274 in 1974 and K£312 in 1975.

3.6. Estimates of the division of incomes in the GDP are provided in Table 3.3 for 1970 and 1979. Over this period there has been a significant

DISTRIBUTION OF GDP, 1970 and 1979

Table 3.3

	1970	1979	1970	1979
	K£ m.		*Percentage*	
Remuneration of employees	223.1	797.4	42.7	40.4
Rental surplus	17.1	84.9	3.3	4.3
Other Operating Surpluses*	281.6	1,092.7	54.0	55.3
Total GDP at factor cost	521.9	1,975.0	100.0	100.0
Net Incomes paid abroad	-11.5	-64.0		
GNP at factor cost	510.4	1,9 11.0		

*Including non-monetary economy.

move away from purely subsistence activities in the rural areas. However, despite this fall in the proportion of GDP from non-monetary activities, the share going on wages has fallen from 42.7 per cent in 1970 to 40.4 per cent in 1979. The estimated total remuneration of employees including both urban and rural informal sectors was K£223.1 million in 1970 and K£797.4 million in 1979. The rise of 257 per cent is equal to an average increase of 15.2 per cent a year which is below the cumulative GDP growth rate. The faster growth in surpluses earned by companies and by self-employed persons together with the increased monetisation of the economy has led to the proportion of GDP accounted for by operating surpluses rising from 57.3 per cent in 1970 to 59.6 per cent in 1979.

3.7. As shown in Table 3.4 the numbers in wage employment in agriculture and forestry in the private sector was more or less unchanged between 1971 and 1979 but their average wages increased by 10.4 per cent a year; in the private sector as a whole average wages increased on average by 10.2 per cent a year and in the public sector by 9.1. per cent a year.

3.8. Employment in the public sector as detailed in Table 3.5 includes the Central Government, local authorities, parastatal bodies and companies in which the Government is the majoriy share-holder. In 1971 there were 267.500 employees in the public sector of whom 128,800 worked for the Central Government and in the general fund services of the East African Community. A further 23 900 were employed by local authorities and 62,400 in the parastatal bodies, 54.900 in East African Community corporations and 6,600 in companies in which the government had majority share-holding. The total in 1971 accounted for 38.7 per cent of the numbers employed in the whole of the formal sector. Since 1971 there has been a much faster growth of 5.9 per cent a year in employment in the public sector as compared

EMPLOYMENT IN PUBLIC AND PRIVATE SECTORS, 1971 AND 1979

Table 3.4

	1971	1979	1971-1979 Growth Rate per annum
Numbers Working—			
Public Sector	267,500	424,700	5.9
Private Sector	423,700	547,500	3.3
of which:			
Agriculture and Forestry	189,600	193,800	0.3
Average Wages K£—			
Public Sector	339.0	681.0	9.1
Private Sector	230.1	500.8	10.2
of which:			
Agriculture and Forestry	79.6	175.3	10. 4
Rest of Private Sector	352.0	679.4	8.6

EMPLOYMENT IN THE PUBLIC SECTOR, 1974 TO 1979

Table 3.5 '000

	1974	1975	1976	1977	1978	1979
Central Government	143.7	146.1	157.5	157.2	168.9	197.3
Parastatal Bodies	146.1	154.8	161.6	170.0	168.0	170.1
Majority Control by the Public Sector	12.6	15.3	11.8	17.0	20.2	23.4
Local Government	27.8	26.2	22.5	32.1	32.5	33.8
Others	—	—	—	0.1	—	0.1
TOTAL	330.1	342.4	356.4	376.4	390.0	424.7
Proportion of Employment in Formal Sector %	39.9	41 .8	41.6	41.7	42.9	43.7

to the 3.3 per cent yearly growth in the numbers employed in the private formal sector raising the proportion of public sector employees in the total to 43.7 per cent in 1979.

Real Average Wages

3.9. Analysis of real wages from employment can only be attempted for employees working in the formal sector of the economy. It is known that there are also substantial numbers working in the informal sector both in the urban and the rural areas but data on numbers and wages are not available to the required level of accuracy to be able to make a comprehensive analysis of changes in wages of all workers between 1970 and 1979. Thus based on data available for formal sector employees and as a result of policies adopted to restrain the inflationary impact of wage awards on the economy, it is

clear that real average wages have fallen by 10.5 per cent since 1970. As indicated in Table 3.6 the only years in the 1970's which real average wages increased were 1971, 1972, 1976 and 1979. In all other years real earnings

CHANGES IN WAGE EMPLOYMENT IN THE FORMAL SECTOR. AVERAGE WAGES AND CONSUMER PRICES, 1971 AND 1979

Table 3.6 *Percentages*

	Wage Employment	Current Price Average Wages	Consumer Prices	Real Average Wages
1971	7.2	4.1	3.7	0.4
1972	4.1	5.6	5.4	0.1
1973	5.8	5.7	11.1	-4.9
1974	8.5	9.3	15.8	-5.6
1975	-0.9	14.8	17.8	-2.5
1976	4.7	16.1	9.9	5.6
1977	5.3	7.9	11.7	3.4
1978	1.0	10.9	12.3	-1.2
1979	6.7	9.4	8.4	0.9
Total Change 1970 to 1979	+ 50.8	+ 121.8	+ 147.5	-10.5

were reduced. The years of significant declines were 1973 to 1975, in which the oil price increases and world recession had a major impact on the economy. The fall in real average wages between 1970 and 1979 was more in the public sector than the private sector.

Structure of the Economy

3.10. Comparison of 1979 with 1970 as per figures noted in Table 3.7 indicates that the proportions of GDP contributed by agriculture and manufacturing industry have both risen while the shares of transport and communications sector, and of other services have all fallen. In 1979 approximately 34.4 per cent of GDP was accounted for by agriculture, forestry and fishing sectors; 12.6 per cent by manufacturing industry; 5.9 per cent by construction; 10.6 per cent by wholesale and retail trade, hotels and restaurants; and 14.7 per cent and 13.5 per cent, respectively, by government services and other services. The agriculture sector, the manufacturing sector and the construction sector registered above average rates of growth between 1970 and 1979 and increased their shares of GDP in this period. These proportions indicate the continuing preponderence of agriculture as the major productive sector of the economy, and this despite the effort that has been made to develop manufacturing industry at a rapid rate. The share of directly productive sectors in GDP was 55.4 per cent in 1975 as against 52.9 per cent in 1970. This comparison reflects the fall in the service sectors of the economy due mainly to a reduction in the share of GDP generated in transport and communications.

GDP BY SOURCE, AT CURRENT PRICES, 1970 AND 1979

Table 3.7

	1970	1979	1970	1979	1970-1979 1979 Average Growth rate
	K£'000		*Percentages*		
Agriculture, Forestry and Fishing	173.0	679.0	33.1	34.4	16.4
Mining and Quarrying	2.4	5.0	0.5	0.3	8.5
Manufacturing	62.2	249.8	11.9	12.6	16.7
Electricity and Water	12.0	42.3	2.3	2.2	14.0
Construction	62.4	117.5	5.1	5.9	18.0
Wholesale and Retail Trade, Hotels and Restaurants	55.8	209.2	10.7	10.6	15.8
Transport and Communications	40.8	114.7	7.8	5.8	12.2
Government Services	76.5	290.3	14.7	14.7	16.0
Other Services	72.8	267.2	13.9	13.5	15.6
Total GDP factor cost	521.9	1,975.0	100.0	100.0	15.9*

*Differs from the average shown in Table 3.1 because the average in this table is the compound rate of growth, while the other is the average of individual years' growth rates.

3.11. ***Agriculture***.— In agriculture the increase in value added to GDP at current prices of 16.4 per cent a year has been largely due to prices for the major products but there has also been important development of output of sugar-cane and substantially increased production of coffee and tea in particular. As shown in Table 3.8 the average annual increases in the volume of output of tea, coffee and sugar-cane were 9.5 per cent, 2.8 per cent and 10.3 per cent, respectively, between 1970 and 1979.

3.12 The position of other crops was generally less satisfactory. There were falls in output of wheat, sisal and other non-cereal crops and also of livestock products other than dairy products, while the increases in recorded marketed production of maize, cattle for slaughter and dairy products were all well below the rate of population increase. This relatively poor performance in the output of food products means that effectively food output for sale has risen at a rate much below the rate of increase in the population which relies on food purchases.

3.13. ***Manufacturing***.— Based on the indices of industrial production, output in the manufacturing sector rose by 133 per cent between 1970 and 1979 equal to an annual average increase of 9.9 per cent per annum. This volume increase may be compared with a rise in the value added for GDP of 166.7 per cent a year indicating that price rises for the products of Kenya's industries have also been substantial in this period.

RECORDED MARKETED PRODUCTION OF AGRICULTURE SECTOR BY COMMODITY, 1970 AND 1979

Table 3.8

	1970	1979	Average Annual Increases In Value	Average Annual Increases In Volume*
	K£'000		*Percentage*	
CROPS:				
Wheat	4,994	14,886	12.9	negative
Maize	2,828	9,363	14.3	2.1
Other cereals	1,178	9,230	25.7	positive
Pyrethrum	1,477	5,156	14.9	2.0
Sugar-cane	3,509	23,302	23.4	9.5
Coffee	21,814	106,426	19.2	2.8
Sisal	1,715	6,578	16.1	negative
Tea	13,838	67,343	19.2	10.3
Others	7,145	11,126	5.0	negative
LIVESTOCK:				
Cattle for slaughter	13,324	29,535	9.2	negative
Dairy products	6,806	17,465	11.0	0.3
Other	3,173	7,730	10.4	negative
UNRECORDED ITEMS	3,595	7,160	9.0	negative
TOTAL	85,396	320,240	15.8	3.3

*Based on average producer price related to value of output.

3.14. *Tourism.*—Data for the tourist industry indicate an increase in contribution of hotels and restaurants to GDP. A total of 1,903,000 bed-nights were spent in hotels in 1970 including 755,000 bed-nights by East African residents. In 1979 the comparable figures were 4.338,000 bed-nights of which 1,283,000 were accounted for by East African residents. The totals for foreign residents thus increased from 1,148,000 in 1970 to 3,055,000 in 1979. These figures speak for themselves and show the relative success of tourism although it must be pointed out that the really substantial increases took place in the years to 1976. In 1978 and 1979 the growth rates for foreign residents were 3.2 and 8.0 per cent respectively. Earnings from tourism have also been rising at a fast rate the total for 1979 estimated at K£62 million or about three times the level of 1979.

3.15. Thus agriculture, manufacturing and tourism can be considered as sectors which have been reasonably successful, while the transport and communications sector has shown a decline in its contribution to GDP from 7.8 to 5.8 per cent between 1970 and 1979. Some part of this decline is due to the difficulties experienced in major sub-sectors including railways and air transport because of the break-up of the corporations which previously served Kenya, Tanzania and Uganda.

3.16. Other sectors to record relative declines include mining and quarry* ing, electricity and water and the service sectors exluding government services. In mining the average growth rate in value added at current prices was only 8.5 per cent a year compared with 15.9 per cent for total GDP. For electricity and water, value added rose by 15.0 per cent a year, for government services by 16.0 per cent a year and for other services by 15.6 per cent. The construction sector showed a rate of increase in its contribution to GDP of 18 per cent a year which was in excess of the average for the GDP as a whole.

3.17. It is perhaps only in mining and in transport and communications that it is possible to talk of relative failures; in the case of mining, production in Kenya is heavily dependent on demand in world markets, while for transport the reasons for the decline have already been mentioned.

Capital Formation and Savings

3.18. Kenya has managed to achieve a relatively high rate of capital formation since independence and in the 1970's despite the minor setback in the years 1975 and 1976 the proportion of GDP being invested averaged 24.1 per cent a year between 1970 and 1979, Table 3.9 refers. The rise in GDP at

EXPENDITURE ON INVESTMENT AND INCREASE IN GDP, 1970 TO 1979

Table 3.9 *Per cent*

	Proportion of GDP on Investment	Increase in GDP at Constant Prices	Ratio
1969	19.7	..	
1970	21.9	6.8	
1971	25.2	7.0	3.24
1972	22.7	6.8	
1973	28.8	4.3	
1974	28.4	1.1	8.41
1975	18.2	4.1	
1976	20.2	2.4	
1977	23.7	8.8	
1978	29.7	6.6	4.35
1979	22.4	3.3	
Average 1970-1979	24.1	5.1	4.7

constant prices in these years averaged 5.1 per cent a year. If it is assumed that investment expenditure starts to have an impact in the following year in terms of increasing the value added to GDP, it can be shown that investment expenditure in the years 1969 to 1978 which averaged 24.31 per cent of GDP resulted in GDP increasing in the years 1970 to 1979 at an average rate of 5.12 per cent. Thus the capital to output ratio was 4.75. However, this average was pushed up during the difficult years of very low growth in

1974 and 1975. In the three years 1970 to 1972 the capital to output ratio had averaged 3.24 but in 1975 to 1979 the average had risen to 4.35 per cent. Mounting evidence suggests that the inflation in countries supplying capital equipment to the developing world has been such as to increase the relative cost of capital projects so that more capital is now required to produce a required increase in GDP. Now that it takes K£4.35 to produce an increase in output of K£1 whereas the ratio in the early years of the last decade had been K£3.24 to K£1, Kenya has had to raise the proportion of its GDP going on investment in order to continue to achieve an acceptable level of growth.

3.19. The investment in Kenya has been largely financed from domestic savings and for the ten years 1970 to 1979 the proportion financed domestically was 74.5 per cent while 25.5 per cent was covered by external loans and grants. As shown in Table 3.10 there was one exceptional year in 1977 when because of the coffee boom incomes rose so rapidly that it was not possible for the recipients to spend the normal proportions on consumption and in this year savings were sufficient to cover the country's total investment expenditure, and the funds accumulated in 1977 by individuals were spent in 1978. All the same, in 1978 the level of residual requirement of foreign resources to meet a much higher total investment expenditure rose to 45.8 per cent. It is also shown in Table 3.10 that domestic savings were equal to 18.3

DOMESTIC SAVINGS AND INVESTMENT, 1970 TO 1979

Table 3.10

	Domestic Savings	External Loans and Grants	Total Investment	Proportion of Domestic Savings	
				To GNP	To Investment
		K£m.		*Percentage*	
1970	116.1	10.0	126.1		
1971	120.4	41.8	162.2	20.6	84.7
1972	143.5	16.1	159.6		
1973	179.2	47.5	226.7		
1974	157.1	116.1	273.1	16.3	65.9
1975	136.5	80.6	217.1		
1976	252.3	42.0	294.4		
1977	441.2	nil	441.2	18.1	71.8
1978	330.7	279.9	610.6		
1979	306.7	199.7	506.4		
Averages 1970-1979	218.4	83.3	300.7	18.3	72.6

per cent of GNP in the years 1970 to 1979 but the ratio fell to 16.3 per cent in the difficult years 1973 to 1975. In 1978 and 1979 the ratios declined further to 15.5 per cent and 14.0 per cent having been as high as 24.2 per cent in 1977.

3.20. Data on sources of domestic savings are available only for 1976. In this year domestic savings amounted to K£252.3 million and a rough breakdown of this total by source of origin is as follows: —

	K£ Million	*Per cent*
Household savings	79.0	31.3
Enterprises	108.3	42.9
Government	65.0	25.8
Total	252.3	100.0

Thus business enterprises were the major source of savings in 1976 and this is general as they need to make allowances for replacement of capital equipment as well as setting aside sums for expansion. The government total includes surpluses originating in the Central Government current budget operations and from local government authorities.

3.21. If it is possible to make any "guess" on the distribution of household savings, probably one third of these household savings in 1976 originated in households on small farms, one-third in households with persons working in wage employment in the formal sector of the economy and one third in households on the larger farms or in households engaged in non-agricultural activities. As far as the households on small farms were concerned it was not until the income of the said households exceeded K£250 a year that savings rose to a significant level. Indeed for households on small farms at the lower income levels, and particularly for those below K£150 a year, expenditure exceeded income.

Growth of External Debt

3.22. Although the proportion of investment financed domestically has been high and domestic savings have averaged 18.3 per cent of GNP from 1970 to 1979, the net inflow of loans and grants has in aggregate been substantial totalling K£930.9 million in the ten year period under reference. The balance of payments figures for 1979 also show that net outflow of payments of international investment income i.e. payments made abroad for interest and dividends amounted to K£49.2 million in that year equal to 2.5 per cent of GDP at factor cost and 8.1 per cent of earnings from exports of goods and services.

3.23. External debt creates fewer problems for a country if its expenditure is related to helping increase earnings from exports. However, the turbulant nature of Kenya's export earnings over the last few years with a high dependence on coffee and tea which fluctuate markedly in price from year to year has made it difficult to plan ahead or even to expect forecasts of earnings to be met. The policy of trying to develop production of items currently imported or which have export potential has only been moderately successful and exports of manufactured products in particular have been hit in recent years by the closure of the border by Tanzania and the events in Uganda.

External Trade

3.24. The pattern of the development of external trade is presented in Table 3.11. Imports have risen at a faster rate than exports between 1970 and 1979 and this trend has resulted in widening trade deficit. In fact in 1979 itself earnings from exports covered only 67 per cent of the cost of imports and the trade deficit was at the high level of K£206.9 million. While exports other than those to Uganda and Tanzania have risen in the period 1970 to 1979

Table 3.11 GROWTH OF EXTERNAL TRADE, 1970 AND 1975 TO 1979

	1970	1975	1976	1977	1978	1979	Growth Rates 1970-1979
			K£m				*%P.A.*
EXPORTS:							
To Uganda and Tanzania	31.4	61.5	66.6	61.9	41.2	41.8	3.2
Other markets	71.6	169.0	268.8	428.9	336.7	351.9	19.4
Re-exports	5.8	7.5	9.7	11.0	17.8	19.1	13.1
TOTAL	108.8	238.0	345.1	501.8	395.7	412.8	15.9
IMPORTS:							
From Uganda and Tanzania	16.0	10.4	13.1	2.2	2.3	0.9	negative
Other areas	142.0	352.2	393.8	529.2	658.9	618.8	17.8
TOTAL	158.0	362.6	406.9	531.4	661.2	619.7	16.4
Trade balance	-49.2	-124.6	-61.8	-29.6	-265.5	-206.9	17.3

at the annual rate of 19.4 per cent or somewhat more than the rise in imports, exports of Uganda and Tanzania only increased at an average rate of 3.2 per cent a year. This indicates that when allowance is made for inflation, there has been a large fall in the volume of exports to Uganda and Tanzania when comparing 1979 with 1970.

3.25. The deficit on external trade has been covered partly by earnings from tourism and to an increasing extent in recent years by net transfer of receipts to the government. These transfers can be described as grants-in-aid from other countries. However, the inflow of capital both to the private sector and the Government and its corporations has been the major source of funds to cover the deficit on trade account.

3.26. The country's exports are still heavily dependent on the two primary commodities, coffee and tea, and on the sale of petroleum products from the Mombasa Refinery to Uganda and other land-locked countries and to

ships and aircraft. There has been growth of exports of other manufactured products since 1970 but not as much as in the case of the three products mentioned and the closure of the Tanzania border has had a significant impact in this respect from 1977 onwards. The average annual increase in the value of exports of these other manufactured products was 11.5 per cent which is significantly below the growth rate of all exports. As a result of the substantial price rises for coffee, tea and petroleum product exports but lesser increases in exports of other manufactured goods, the proportion of other manufactures in total exports fell from 35.9 per cent in 1970 to 25.1 per cent in 1979.

EXPORTS OF MAJOR PRODUCTS, 1970, 1977 AND 1979

Table 3.12

	1970		1977		1979	
	Value	Proportion	Value	Proportion	Value	Proportion
	K£m.	%	*K£m.*	%	*K£m.*	%
Coffee, unroasted	22.3	21.6	204.4	41.6	110.6	28.1
Tea	12.7	12.3	71.8	14.6	62.8	15.9
Petroleum Products	12.3	11.9	72.4	14.7	68.0	17.3
Other Manufactures	37.0	35.9	79.9	16.3	98.8	25.1
SUB TOTAL	84.3	81.7	428.5	87.3	340.2	86.4
TOTAL EXPORTS	103.1	100.0	490.8	100.0	393.7	100.0

3.27. As shown in Table 3.13 high proportions of imports consist of fuel and lubricants, supplies for industry, machinery and other capital equipment and transport equipment. In 1970 residual imports of consumer goods excluding private cars made up 20.2 per cent of imports and by 1979 this proportion

IMPORTS OF MAJOR PRODUCTS, 1970 AND 1979

Table 3.13

	1970		1979	
	Value	Proportion	Value	Proportion
	K£Mn.	%	*K£Mn.*	%
Fuels and lubricants	14.8	9.4	146.8	23.7
Supplies for industry	61.8	39.0	197.2	31.8
Machinery and other capital equipment	23.2	14.7	125.0	20.2
Transport equipment	26.4	16.7	95.7	15.4
SUB-TOTAL	126.2	79.8	564.7	91.1
TOTAL IMPORTS	158.1	100.0	619.7	100.0

had fallen to only 8.9 per cent. This high current concentration of imports on the more essential categories, make it difficult to find means of making savings when as in 1978 export earnings were reduced. However, there is evidence that in 1978 imports had been higher than really required in order to build-up stocks. The drop in imports in 1979 from the peak level of 1978 was due to the fairly strict controls in force.

The Central Government Budget

3.28. It is at this stage pertinent to appraise the performance of the Central Government in context of an appraisal of its budget and manpower deployment. The figures given in Table 3.14 are averages for the three years centered on the year shown in the table; this technique has been used in order to average out the fluctuations which occurred especially in the years 1974/75 and 1977/78. There has been continuous growth in recurrent revenue at a high rate averaging 19.9 per cent a year since 1970/71, compared to a slightly lower rate of increase in recurrent expenditure. This has resulted in a rise in the level of current budget surplus.

OUTTURN OF REVENUE AND EXPENDITURE, 1970/71 TO 1977/78

Table 3.14

	1970/71*	1974/75*	1977/78*	1970/71 to 1977/78 Growth Rate per annum
	K£.			%
Recurrent Revenue	121.2	228.9	431.7	19.9
Recurrent Expenditure	110.4	205.6	383.0	19.4
Recurrent Surplus	10.8	23.3	48.7	24.0
Capital Expenditure	43.2	96.0	177.0	22.8
TOTAL DEFICIT	31.4	72.7	128.3	22.3
FINANCED by:				
External Grants	1.3	6.1	15.1	42.0
External Loans	11.1	26.1	43.7	21.7
Long-term Domestic Borrowing	12.4	29.1	45.0	20.0
Short-term Domestic Borrowing**	6.6	11.4	24.5	20.6

*Three year average centered on year shown.

**Balancing item.

3.29. Capital expenditure has, however, risen at even a faster rate than recurrent expenditure. Thus despite the increase in the recurrent budget

surplus and a fast rise in external grants since 1970/71 it has been necessary to finance a growing part of this higher level of capital spending from both external and domestic loans. In the three years centered on 1977/78 the average annual deficit of K£128.3 million was financed by K£15.1 million from external grants; K£43.7 million from external loans; and K£54.0 million from long-term domestic loans. The residual requirement for short-term financing has been increasing rapidly and in the three years centered on 1977/78 this form of finance averaged K£24.5 million—the total being gross of the run down of cash balances.

3.30. In the seven years to 1977/78 recurrent revenue rose more rapidly than GDP at current prices, which indicates that the taxable capacity of the nation is now being tapped to a greater extent than in earlier years. On the other hand the rise in the overall budget deficit financed by external and domestic loans is having the effect of increasing the cost of servicing public debt and thus reducing the funds available for other uses. Total public debt amounted to K£170.1 million at June 1971 and had risen to K£526.2 million at June 1978. Net debt servicing charges including repayments and contributions to sinking funds had increased to K£56.01 million in 1977/78 from K£9.72 million in 1970/71. In addition in recent years considerably larger sums have been spent on defence. The total recurrent and development expenditure on defence rose from K£6.47 million in 1970/71 to K£79.4 million in 1977/78 and K£108.8 million in 1978/79. There has also been the move towards universal primary education which has also an impact on the proportion of funds devoted to education. Education cost the Central Government K£27.58 million in 1970/71, K£94.5 million in 1977/78 and K£108.18 million in 1978/79.

3.31. The details on breakdown of personnel in Central Government and Teachers Service Commission and their emoluments are set out in Tables 3.15 and 3.16—excluding the information on the numbers engaged for defence and on those employed as casuals. Education and health services are the main growth areas in the deployment of personnel and in expenditure in the Central Government. The share of these two services has risen from 49 per cent of personnel and 50 per cent of emoluments in 1971/72 to 56.7 per cent and 54.7 per cent respectively in 1979/80. This increased emphasis on the basic social services to meet the desires of the people has been further accompanied by increased expenditure by the Central Government on personnel and emoluments for developing water supplies. Outside these three social services, the growth of personnel and emoluments on general administration, in ministries with activities in mining, manufacturing and construction and in a residual group of activities which includes operations on transport and power has been higher than average. In contrast the growth in numbers of personnel in provincial administration, and of those dealing with law and order and in agriculture, forestry and fishing has been well below the average.

PERSONNEL AND EMOLUMENTS: CENTRAL GOVERNMENT, 1971/72, 1975/76 AND 1979/80

Table 3.15

Function or Economic Sector	Number of Personnel			Emoluments K£'000		
	1971/72	1975/76	1979/80	1971/72	1975/76	1979/80
General Administration	6,264	9,106	14,359	3,809	7,177	12,504
Provincial Administration	7,973	8,637	8,509	2,436	3,295	5,173
Law and Order	29,403	32,049	37,196	8,893	13,245	19,681
Agriculture, Forestry, Fishing	17,084	18,753	22,571	6,015	9,478	17,378
Education and Training	56,753	102,150	115,883	21,673	48,835	76,395
Health	11,183	19,851	30,391	4,455	9,747	14,789
Industry	3,673	4,424	7,845	1,955	3,156	5,938
Water Supplies	**	1,718	4,209	**	1,062	2,167
Other	6,355	8,188	17,395	3,021	5,076	12,768
TOTAL	138,688	204,876	258,358	52,257	101,071	166,793

*Mining, manufacturing, construction.

**Included in agriculture vote.

CHANGES IN DISTRIBUTION AND GROWTH RATES OF PERSONNEL AND EMOLUMENTS: CENTRAL GOVERNMENT, 1971/72 TO 1979/80

Table 3.16

Function or Economic Sector	Percentage Distribution				Growth Rates—Percentage per annum 1971/72—1979/80	
	Personnel		Emoluments			
	1971/72	1979/80	1971/72	1979/80	Personnel	Emoluments
General Administration	4.5	5.6	7.3	7.5	10.9	16.0
Provincial Administration	5.8	3.3	4.7	3.1	0.8	9.9
Law and Order	21.2	14.4	17.0	11.8	3.0	10.4
Agriculture, Forestry, Fishing	12.3	8.7	11.5	10.4	3.5	14.2
Education and Training	40.9	44.9	41.5	45.8	9.3	17.1
Health	8.1	11.8	8.5	8.9	13.3	16.2
Industry*	2.6	3.0	3.7	3.6	9.9	14.9
Water Supplies		1.6		1.3	12.9	15.2
Other	4.6	6.7	5.8	7.6	13.4	19.7
TOTAL	100.0	100.0	100.0	100.0	8.1	14.8

*Mining, manufacturing, construction.

Some Implications of the Changes since 1970

3.32. Between 1970 and 1979 the periods of greatest strain as noted above were in the years of high oil price rises and their impact on world economic conditions. The frosts in the coffee growing areas in Brazil in 1977 resulted in an exceptional situation in 1977—but the ensuing coffee boom came to an end in 1978 and in the years 1979 and 1980 Kenya faced further difficulties due to the high OPEC inspired oil price rises.

3.33. It would seem to appear that in the 1980's Kenya will probably not be able to obtain all its essential supplies of non-oil imports except with increased recourse to foreign borrowing; and a continuing tight foreign exchange situation will mean that non-essential imports must continue to be curtailed and essential imports allowed in to meet only the immediate demands avoiding unnecessary accumulation of stocks.

3.34. It has also been shown that a higher capital to output ratio in investment entails that an increase in GDP of K£1 at constant prices now requires an investment of at least K£4.3. At the beginning of the 1970's this ratio was K£3.2 to K£l. Thus to secure a growth rate 6 per cent a year in GDP at least 26 per cent of GDP must now be invested while in the earlier period 19 per cent of GDP investment would have yielded the same GDP growth rate. The implications of this on domestic savings need no emphasis—these must be increased.

3.35. While this is so the high population growth rate in Kenya by itself requires an average growth of probably 3.9 per cent in GDP just to maintain per capita real income. To secure a reasonable but not excessive increase in GDP per head would require a GDP growth rate of about 6 per cent a year. Domestic savings in the years 1976 to 1979 would have financed investments leading to a growth of 4.2 per cent a year in GDP. In 1979 itself domestic savings were equal to 14.0 per cent of GDP and this savings rate would have financed investments sufficient only to generate an increase of 3.3 per cent a year in GDP which does not equal the population growth rate.

3.36. Information on domestic savings by source i.e. by enterprises, by government and by households for 1976 has been given earlier. As the capital stock in industry has increased rapidly in the recent past and as the prices of capital equipment have been high so sums set aside for depreciation have also risen farly rapidly; this would have led to increased savings by enterprises to be able to replace capital equipment when required. In the case of the Central Government, dat:i for the 1970's suggest that the level of the Central Government current budget surplus, i.e. its level of savings was rising up to 1977/78 but has fallen since then. It was noted earlier that in 1976 household savings accounted for about 36 per cent of domestic savings and one-third of these or about 12 per cent probably originated in households with members working in wage employment in the formal sector.

Thus out of wage earnings estimated at K£380 million in 1976, K£36 million or 9.5 per cent would have been saved. In 1979 out of wage earnings of K£564 million but after a period of falling real incomes, the savings rate was probably lower.

3.37. Wage increases which restore real incomes to previous levels could be expected to lead to higher savings in this group of households. Similarly producer prices for farmers which have the result of encouraging greater production and raising small farmer incomes appreciably would normally result in greater savings from this group in the economy. In 1974/75 even out of small farmer average household incomes of only K£183, K£10 per year or 5.5 per cent was saved. At income levels above K£250 a year for this group savings increased very rapidly indeed. But as a corollary those households with lower than average incomes spent much more than their income indicating that they were receiving support from other households or family members in the urban areas. Low incomes do not allow for savings and it is here that the implications of the current high population growth rate can be serious. There are also the implications of the need for Government to spend more on education and health services to cater for the continuing increase in the children eligible for schooling and for more health care for the increasing population in both urban and rural areas. Higher current expenditure without increases in revenue would lead to a much lower Central Government current budget surplus meaning that essential capital expenditure would be more difficult to finance.

3.38. Thus economic growth must continue at a comparatively fast rate to generate both the higher wage employment required and to help raise income levels in the rural areas. It has been shown that while GDP grew by an average 5.1 per cent a year from 1970 to 1979, wage employment increased by 4.7 per cent a year and the number of small farmers probably increased by 2.5 per cent a year. The indications of a higher population growth rate mean that the rise in GDP in the 1980's must be higher than the average of 5.1 per cent a year achieved from 1970 to 1979 to create the extra work required in the economy. It needs to be in the region of per cent a year, as per the revised plan target and to achieve the growth rate will require at least 23 per cent or more of GDP to be spent on investment. Domestic savings in 1979 were, however, equal to only 14 per cent of GDP and if this rate continues an inflow of foreign resources equal to 9 per cent of GDP is called for as an alternative to an increase in savings noted in para 3.33 above. While part of this resource inflow can be expected to be in grant form, the larger share will probably have to be as loans, both private and public. At the same time to ensure that no basic problems arise over future debt servicing, the investment effort must help increase export earnings and save on imports, while food production must also be stimulated. These are the imperatives for the economy. Thus it seems essential to continue to develop both agriculture and manufacturing industry at comparatively fast

rates while the transport sector which was lagging behind the rest of the economy up to 1976 must continue to be restored to its former relative position in the economy while the provision of essential services such as electricity and water must keep pace with the requirements of industry, agriculture and the population. In agriculture there is now more need than ever to raise food production; the high current poulation growth rate and a generally poor performance in food output in the 1970's mean that the right incentives must be given to ensure that the basic staples are produced in substantially greater quantities.

CHAPTER 4—MONEY, BANKING AND BALANCE OF PAYMENTS

As indicated in Chapter 1 the year 1979 was marked by continued instability in foreign exchange markets, further substantial oil price increases and high inflation in many countries. These disturbing features of the world economy which continued into the first part of 1980 have precipitated hardships for most of the non-oil developing countries. External debt held by these countries has increased sharply and a number of them have reached the stage where lenders are looking very carefully at requests for further loans.

4.2. Nevertheless, despite these adverse conditions, the balance of payments position improved in Kenya in 1979 mainly as a result of the advance deposit scheme and other measures which were initiated in December 1978, to conserve foreign exchange. The reduction in imports together with a greater capital inflow led to the country's foreign reserves increasing quite markedly and it was possible to relax in November 1979, some of the restrictions on imports. About K£15 million of K£30 million held at the Central Bank of Kenya under the advance deposit scheme has been returned to importers.

4.3. The main monetary indicators from 1977 to 1979 for Kenya are detailed here below: —

DOMESTIC CREDIT

Date	Net Foreign Assets K£m.	Private * K£m.	Govern-ment K£m.	Money** Supply K£m.	Liquidity Ratio per cent	Advances/ Deposits Ratio per cent
1977 December	181	373	81	621	28 0	68.8
1978 December	106	468	145	706	23.0	76.5
1979 March	113	473	162	701	26.0	77.1
1979 June	143	487	135	724	24.0	76.9
1979 September	174	500	136	748	22.0	78.9
1979 December	179	536	156	820	23.0	77.6

*Include parastatal bodies.

**See Table 4.4 for coverage.

4.4. The advance deposit scheme had a considerable favourable impact on Kenya's net foreign assets, which had been depleted at an alarming rate in 1978. They recovered strongly and increased by 69 per cent between December 1978 and December 1979. As a result liquid assets of commercial banks increased by 24 per cent over the same period, while tight monetary and stringent credit policies ensured that inflation was somewhat less than in 1978. Credit to private sector and parastatals which had been expected to increase by up to 18 per cent increased by only 14.5 per cent in 1979; and credit to the Government which had risen very rapidly in 1978 increased by only 7.3 per cent in 1979. The advances/deposits ratio averaged 77.6 per

cent based on the quarterly figures in 1979 and this relatively high figure does reflect the effects of the stringent credit policies, the generally flat consumer demand and lower imports.

Foreign Exchange Rates

4.5. The value of the Kenya Shilling in foreign exchange markets was 1.7 per cent higher in December 1979, than in December 1978, showing some small recovery from the fall of 7.1 per cent recorded between the end of 1977 and 1978. In December 1979, the U.S. Dollar was worth slightly less in Kenya Shillings than a year earlier but the largest fall occurred in the value of the Japanese Yen which was worth only 80 per cent of its value at December 1978. The Pound Sterling, the Deutsche Mark and the French Franc were among the currencies which appreciated in value against the Kenya Shilling in 1979. The weighted index of the Kenya Shilling against twenty currencies was 76.748 per cent in December 1979, with the Kenya Shilling showing a small improvement on the 75.437 per cent recorded in December 1978. However, when compared to December 1973, the Kenya Shilling has suffered a depreciation of 23.25 per cent. Table 4.1 provides data on the exchange rates of various currencies against the Kenya Shilling since 1975.

FOREIGN EXCHANGE RATES OF KENYA SHILLING FOR SELECTED CURRENCIES, 1976-1979

Table 4.1

Currency	MEAN RATES IN KENYA SHILLINGS			
	31st Dec. 1976	31st Dec. 1977	31st Dec. 1978	31st Dec. 1979
1 U.S. Dollar	8.310	7.947	7.404	7.328
1 Pound Sterling	14.150	15.207	15.059	16.355
1 Deutsche Mark	3.530	3.785	4.060	4.249
1 French Franc	1.680	1.697	1.771	1.823
1 Swiss Franc	3.400	3.967	4.565	4.600
100 Italian Lira	0.951	0.912	0.890	0.911
100 Japanese Yen	2.849	3.310	3.825	3.046
1 Indian Rupee	0.931	0.966	0.913	0.919
1 Zambian Kwacha	10.480	10.479	9.431	9.431
Overall Weighted Index*—31st Dec. 1973 = 100	86.298	81.194	75.437	76.748

* Against twenty currencies.

Interest Rates

4.6. With exception of Central Bank discount rate, interest rates charged for loans and paid for deposits were unchanged in 1979. The discount rate for treasury bills which had stood at 6.80 per cent in December 1978, was lowered to 4.60 per cent in December 1979. The rates charged or paid are shown in Table 4.2.

PRINCIPAL INTEREST RATES, 1977-1979

Table 4.2 *Per cent*

	31st DECEMBER		
	1977	1978	1979
CENTRAL BANK OF KENYA			
Discount Rate for Treasury Bills	1.52	6.80	4.60
Advances against Treasury Bills	6.50	7.50	7.50
Bills and Notes under Crop Finance Scheme :—			
Discounts	6.00	7.00	7.00
Advances	6.00	6.00	6.00
Other Bills and Notes:—			
Other Bills and Notes:—			
Discounts	6.50	7.50	7.50
Advances	6.50	7.50	7.50
KENYA COMMERCIAL BANKS			
Time Deposits:—			
Minimum 30 days (7 days notice)	5.125	5.125	5.125
12 months (K.Sh. 100,000-250,000)	5.875	5.875	5.875
Savings Deposits	5.00	5.00	5.00
Loans and Advances (Maximum)*	10.00	10.00	10.00
OTHER FINANCIAL INSTITUTIONS			
Kenya Post Office Savings Bank deposits	5.00	5.00	5.00
Agricultural Finance Corporation, Loans	9.00	9.00	9.00
Hire-Purchase Companies and Merchant Banks:—			
Deposits (time)	5.00-8.00	5.00-8 00	5.00-8.00
Loans	10.00-12.00	10.00-12.00	10.00-12.00
Building Societies:—			
Deposits	6.00-8.50	6.00-8.50	6.00-8.50
Loans	8.00-12.00	8.00-12.00	8.00-12.00

*Loans and Advances for less than 3 years.

Foreign Exchange Reserves

4.7. Table 4.3 sets out details on the foreign exchange reserves of the Central Monetary Authorities. Net foreign reserves of these authorities increased by K£101.2 million or 75.9 per cent from December 1978 to December 1979, compared to a fall of K£75.3 million or 36.1 per cent during the period December 1977 to December 1978. The increase in foreign assets is essentially accounted for by the tighter exchange controls in operation for most of 1979 and by the increased level of external borrowing.

4.8. The Central Bank's holdings of Special Drawing Rights increased following the receipt in July 1979 of an equivalent of K£33.3 million that is 100 per cent of Kenya's quota with the IMF under its Compensatory Financing Facility arrangements. As a result the IMF's holdings of local currency increased to K£85.6 million by the end of December 1979. This is 2.6 times the Kenya quota. Other foreign exchange assets held by the Central Bank increased by K£64.1 million or by 64.8 per cent over the year.

CENTRAL MONETARY AUTHORITIES: FOREIGN EXCHANGE RESERVES 1975—1980

Table 4.3 K£'000

As at end of		CENTRAL BANK OF KENYA			Total Net Foreign Reserves of Central Government	Total Foreign Reserve of Central Monetary Authorities	GENERAL ACCOUNT WITH I.M.F.			Counter-part Liability+ S.D.R. Account
	S.D.R'S	Foreign Reserves	Foreign Liabilities (other than to I.M.F.)	Total Net Foreign Reserves of Central Bank**			Subscrip-tion	I.M.F. holding of Kenya Currency	Net use of Fund Credit*	
1975	1,818	69,129	860	70,141	414	70,555	23,184	56,293	-33,109	6,721
1976	1,388	112,944	1,134	113,198	799	113,997	23,184	64,254	-41,070	6,721
1977	5,988	204,408	3,019	207,377	1,214	208,591	23,184	46,199	-23,015	6,721
1978	5,293	129,909	3,294	131,908	1420	133,328	33,327	58,583	-25,256	6,721
1979:—										
January	8,738	131,758	3,345	137,151	2,310	139,461	33,327	66,165	-32,838	10,181
February	8,303	132,651	3,610	137,344	2,064	139,408	33,327	66,165	-32,838	10,181
March	8,303	134,232	3,189	139,346	1,473	140,819	33,327	66,165	-32,888	10,181
April	8,303	146,604	3,421	151,486	1,737	153,223	33,327	65,415	-32,088	10,181
May	7,729	160,429	4,678	163,480	1,421	164,901	33,327	65,415	-32,088	10,181
June	7,729	169,082	4,812	171,999	1,341	173,340	33,327	65,415	-32,088	10,181
July	7,729	161,234	5,040	163,923	1,655	165,578	33,327	53,074	-19,747	10,181
August	40,319	200,049	4,720	235,648	1,572	237,220	33,327	86,307	-52,980	10,181
September	40,288	189,308	5,521	224,075	1,494	225,569	33,327	86,307	-52,980	10,181
October	40,289	193,946	5,735	228,500	1,457	229,957	33,327	85,556	-52,229	10,181
November	39,821	200,654	4,620	235,855	1,905	237,760	33,327	85,462	-52,135	10,181
December	39,821	197,768	4,877	232,712	1,828	234,540	33,327	85,636	-52,309	10,181
1980:—										
January	..	..	..	..	1,597	..	33,327	84,886	-51,559	..

*Figures in minus indicate use of Fund Credit.

**Excludes subscription to I.M.F.

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

Source: Central Bank of Kenya.

4.9. Following the substantial build-up in foreign reserves, the Government has to some extent relaxed the import restriction requirements. The requirement of 90 to 180 days overseas credit on imports and the deposit requirement for crude petroleum and petroleum products, hitherto applicable at 10 per cent of their value were abolished in December 1979, while the 25 per cent deposit requirement on imports of completely knocked down motor vehicle kits was reduced to 10 per cent. Also with the exception of motor vehicles and textiles, all other imports are now currently subject to 50 per cent deposit instead of the former 100 per cent. An improvement in the supply of imported materials needed by manufacturing industry and other sectors can therefore be anticipated leading hopefully to increased production from these sectors of the economy.

Money Supply

4.10. Data on supply of money and quasi-money are set out in Table 4.4. Supply of money rose by 14.4 per cent between December 1978 and December 1979 and that of quasi-money by 19.6 per cent; in the previous year the increases had amounted to 10.4 per cent and 20.8 per cent respectively.

MONEY AND QUASI MONEY SUPPLY, 1975-1979

Table 4.4 K£'000

As at end of	Money*	Quasi-Money**	Total
1975	226,996	113,711	340,707
1976	283,715	139,018	422,733
1977	421,368	199,287	620,655
1978	465,057	240,833	705,890
1979—			
January	431,863	241,632	673,495
February	436,414	243,898	680,312
March	452,813	248,509	701,322
April	442,371	252,966	695,337
May	449,879	260,953	710,832
June	457,549	266,725	724,274
July	460,559	259,781	720,380
August	462,392	277,966	740,358
September	465,738	282,577	748,315
October	493,809	280,489	774,298
November	512,615	283,246	795,861
December	531,847	287,964	819,811

*Currency in circulation 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.

4.11. This substantial increase in total money supply was mainly due to the 68.6 per cent rise in net foreign assets which increased from K£106.4 million to K£179.4 million. Table 4.5 refers. Domestic credit to the private sector over this period rose by only 9.8 per cent and net credit to the Central Government rose modestly by 7.3 per cent; while for other public bodies the

CONSOLIDATED ACCOUNT BANKING SYSTEM, 1975—1979

Table 4.5 K£'000

	As at the end of							
	1975	1976	1977	1978	1979			
					1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
LIABILITIES—								
1. Money:								
1.1 Demand Deposits	142,569	176,239	254,753	272,230	268,534	278,981	267,704	316,363
Other	19,896	27,888	54,727	71,089	69,834	58,874	40,972	50,134
1.2 Currency in Circulation :—								
Notes	67,194	87,885	117,169	127,978	118,793	118,934	127,245	147,398
Coins	3,229	3,613	4,004	4,163	4,048	4,170	4,304	4,779
SUB-TOTAL	232,888	295,625	430,653	475,460	461,209	460,959	440,225	518,674
2. Quasi-Money:								
2.1 Savings Deposits	63,885	75,687	104,157	119,065	119,415	121,845	121,224	132,461
2.2 Time Deposits	49,825	6,333	95,131	121,834	129,095	144,881	161,353	155,503
3. Other Items (Net)	-5,356	62,470	5,217	3,687	37,562	37,252	86,677	64,531
SUB-TOTAL	108,354	144,490	204,505	244,586	286,072	303,978	369,254	352,495
TOTAL	341,242	440,115	635,158	720,046	747,281	764,937	809,479	871,169
ASSETS—								
4. Net Foreign Assets	33,118	72,457	181,230	106,435	112,511	143,417	174,128	179,395
5. Domestic Credit:								
5.1 Central Government (Net)	72,050	88,042	80,833	145,459	161,963	134,958	135,671	156,133
5.2 Private Sector	207,424	244,598	325,644	445,037	449,464	465,381	466,637	488,718
5.3 Other Public Bodies	28,650	35,018	47,451	23,115	23,343	21,181	33,043	46,923
	341,242	440,115	635,158	720,046	747,281	764,937	809,479	871,169

rise was more than 100 per cent to K£46.9 million. The quarterly trends for 1979 show that net foreign assets rose particularly sharply in the second quarter and third quarter while net domestic credit to the Central Government fell in the second quarter after a substantial rise in the first quarter of 1979. As far as the private sector is concerned, domestic credit rose most rapidly in last quarter of the year.

Liquidity Ratio

4.12. The rise in net foreign assets is also reflected in increases of liquid assets of commercial banks. Liquid assets of commercial banks increased by 16.8 per cent from K£ 125.8 million to K£ 146.9 million between December 1978 and December 1979, while their deposit liabilities increased by 13.3 per cent from K£553.3 million to K£627.1 million over the same period. Effective from July 1979, the statutory minimum liquidity ratio previously set at 18 per cent was lowered to 16 per cent, to induce the commercial banks to reduce the high level of liquidity. However, as Table 4.6 shows, the liquidity ratio fluctuated between 21 and 26 per cent in 1979, consistently above the minimum statutory requirement and ended the year at 23 per cent or about the same level as at the end of 1978.

COMMERCIAL BANKS—LIQUID ASSETS, 1976—1980

Table 4.6

	Deposit Liabilities*	Liquid Assets+	Current Liquidity Ratio**
	K£m.	*K£m.*	*Per cent*
1976 December	346.0	83.1	24.0
1977 December	510.0	144.7	28.0
1978 December	553.3	125.8	23.0
1979—			
January	537.9	110.7	21.0
February	554.4	129.9	23.0
March	555.8	141.7	26.0
April	538.5	111.9	21.0
May	558.3	122.3	22.0
June	573.1	137.0	24.0
July	576.5	147.4	26.0
August	580.6	137.0	24.0
September	570.7	125.8	22.0
October	582.2	128.8	22.0
November	606.8	141.8	23.0
December	627.1	146.9	23.0
1980—			
January	620.4	137.3	22.0

*Includes Notes and Coins, balances at Central Bank, net inter-bank balances in Kenya and overseas (included only if positive) and Treasury bills.

**On 1st July 1978 the prescribed minimum was fixed at 18%.

+Deposits and Liquid Assets are calculated as an average of three days balances.

Table 4.7

CENTRAL BANK OP KENYA—ASSETS AND LIABILITIES, 1975-1979

K£'000

	As at the end of							
	1975	1976	1977	1978	1979			
					1st Qr.	2nd Qr.	3rd Qr.	4th Qr.
ASSETS								
1. Foreign Exchange—								
1.1 Balances with External Banks	39,672	78,727	175,095	99,095	91,485	105,930	149,360	163,294
1.2 Treasury Bills	3,756	6,658			11,980	27,247	501	2,330
1.3 Other Investments	25,701	27,559	29,313	30,814	30,767	35,905	39,447	32,142
1.4 Special Drawing Rights	1,818	1,388	5,988	5,293	8,303	7,729	40,288	39,821
TOTAL	70,947	114,332	210,396	135,202	142,535	176,811	229,596	237,587
2. Securities Guaranteed by Kenya Government								
Advances and Discounts	9,221	25,271	37,223	50,317	44,474	4,385	43,844	43,847
3. Advances to Kenya Government	27,157	10,000	10,000	23,326	11,808	10,000	10,000	15,908
4. Other Assets including Kenya Treasury Bills	16,562	6,302	10,397	11,012	38,848	74,471	18,869	23,226
TOTAL ASSETS	123,887	155,905	268,016	219,857	237,664	305,133	302,309	320,568
Liabilities								
1. Capital and General Resource Fund	2,600	2,600	2,600	2,600	2,600	4,600	4,600	4,600
2. Currency in Circulation—								
2.1 Notes	67,194	87,885	117,169	127,978	118,793	118,934	127,245	147,398
	3,229	3,613	4,004	4,163	4,048	4,170	4,304	4,779
Total	70,423	91,498	121,173	132,141	122,841	123,104	131,549	152,177
3. Deposits—								
3.1 Kenya Government		2,758	62,646			47,080	6,208	
3.2 Kenya Banks	6,563	6,659	36,497	26,721	46,764	35,256	26,895	40,575
3.3 External Bank	34,159	42,308	26,112	28,672	36,155	37,439	59,321	57,997
3.4 Other	3,676	1,895	3,995	14,450	12,463	34,694	48,078	46,357
Total	44,398	53,620	129,250	69,843	95,382	154,469	140,502	144,929
4. Revaluation Account	2,004	2,088	379	4,113	4,113	9,174	9,326	9,326
5. Other Liabilities	4,462	6,099	14,614	11,160	12,728	13,786	16,332	9,536
TOTAL LIABILITIES	123,887	155,905	268,016	219,857	237,664	305,133	302,309	320,58*.

Central Bank Assets and Liabilities

4.13. The build-up of foreign assets in 1979 is shown in the balance sheet of the Central Bank of Kenya presented in Table 4.7. The recovery of these assets in 1979 after the sharp decline in 1978 more than re-established the foreign exchange reserves to the position of December 1977. However, if Special Drawing Rights are excluded the total of foreign exchange reserves at December 1979, drops to K£197.7 million compared with K£130 million at the end of 1978 and K£204.4 million the end of December 1977. Deposits of foreign banks had risen to K£58 million at the end of 1979, more than double the level of K£28.7 million as at the end of December 1978, while the total deposits with the Central Bank reached K£144.9 milion in December 1979, again more than double the K£69.8 million recorded for December 1978. Notes in circulation continued to rise in 1979 and at K£ 147.4 million the total was 15.2 per cent higher than at December 1978 and more than twice as high as in 1975.

Commercial Banks, Bills, Loans and Advances

4.14. Table 4.8 sets out details of bills, loans and advances of the commercial banks. A lower level of economic activity and the effects of the credit squeeze had their adverse impact on the total increase in credit advanced by the commercial banks. In 1979 credit to the public sector rose by 29.6 per cent compared to an increase of 13.1 per cent in credit to private sector. The overall increase of 15.8 per cent compares with 22.4 per cent increase in 1978 and 35.8 per cent increase in 1977. Credit in the form of treasury bills rose from K£62.6 million in 1978 to K£82.3 million by December 1979—an increase of 31.5 per cent, while in 1978 a decrease of 8.7 per cent had been recorded. Agriculture, manufacturing and construction sectors continued to be prominent recipients of credit. These three productive sectors received more than half the increase in total credit of K£83 million in 1979. In total they accounted for 53 per cent of overall credit increase while the Government took 24 per cent. Credit for domestic and external trade rose by only K£2.6 million but for financial institutions the increase was K£18.2 million or 22 per cent of the new credit during the year. In contrast credit to private households fell by K£17.6 million from K£47 million to K£29.4 million.

Balance of Payments

4.15. As shown in Table 4.9 Kenya enjoyed an overall balance of payments surplus of K£72.6 million in 1979, compared to a deficit of K£81.5 million in 1978. This turn round in the balance of payments position as noted earlier was the result of the advance import deposit scheme coupled with other measures which limited remittances of dividends and profits from the country. As a result, Kenya's import bill was curtailed fairly drastically reducing its external payments on merchandise trade from K£723.3 million in 1978 to

COMMERCIAL BANKS—BILLS, LOANS AND ADVANCES, 1976—1979

Table 4.8 K£'000

	1976 Dec.	1977 Dec.	1978 Dec.	1979 Dec.
PUBLIC SECTOR—				
Central Government	870	114	44	131
Local Government	871	843	745	917
E.A. Community	2,705	4,311		
Enterprises, Parastatal bodies and other Public entities	6,818	7,421	9,088	10,348
Treasury	50,792	68,546	62,594	82,524
TOTAL PUBLIC SECTOR	62,056	81,235	72,471	93,920
PRIVATE ENTERPRISES—				
Agriculture*	40,658	54,395	72,517	89,999
Mining and Quarrying	6,754	7,087	7,726	8,694
Manufacturing	46,200	61,294	92,381	106,245
Building and Construction	14,832	17,086	23,474	36,013
Transport, Storage and Communication	8,933	13,466	19,450	23,698
Trade:				
Exports	15,725	17,446	18,392	24,455
Imports	14,480	16,900	30,272	23,334
Domestic	26,547	41,945	49,472	52,952
Financial Institutions	10,031	20,934	16,800	34,971
Other Businesses	42,428	61,397	76,326	85,634
TOTAL PRIVATE ENTERPRISES	226,588	311,950	406,810	485,995
PRIVATE HOUSEHOLDS— (including non profit making institutions)	27,868	36,622	47,002	29,394
TOTAL BILLS, LOANS AND ADVANCES	316,512	429,807	526,283	609,309

*Including Forestry, Fishing and Wildlife.

K£665.0 million in 1979. Exports rose slightly from K£366.5 million in 1978 to K£380.3 million in 1979 so that the deficit on the merchandise account fell by 20.2 per cent from K£356.8 million in 1978 to K£284.7 million. The net deficit for 1979 while an improvement on 1978 must, however, still be considered as unacceptably large.

4.16. The performance of invisible transactions was generally satisfactory. Current transactions on invisibles left Kenya with an overall net surplus of K£ 106.4 million in 1979 compared to a surplus of K£104.3 million in 1978, and K£72.7 million in 1977. In the more difficult conditions prevailing in 1979 did well to record increases in earnings from freight and insurance and from foreign travel while there was a fall in earnings from other transportation from K£78.8 to K£76.5 million. A fall in net payments abroad international investment income improved the overall balance on invisible account. The restrictions placed on the remittance abroad of dividends and Profits not only caused some of the fall in net payments abroad of

KENYA BALANCE OF PAYMENTS, 1977—1979

Table 4.9 *K£million*

	1977++			1978			1979*		
	Debits/ Assets	Credits/ Liabilities	Net Credits	Debits/ Assets	Credits/ Liabilities	Net Credits	Debits/ Assets	Credits/ Liabilities	Net Credits
A. CURRENT ACCOUNT									
1. Merchandise transactions: Imports (c.i.f.): Exports (f.o.b.)	529.3	468.0	Dr. 61.3	723.3	366.5	Dr. 356.8	665.0	380.3	Dr. 284.7
2. Freight and Insurance	0.9	27.9	27.0	2.2	28.8	26.6	2.7	30.5	27.8
3. Other Transportation	24.6	73.9	49.3	21.7	78.8	57.1	24.2	76.5	52.3
4. Foreign Travel	10.3	53.5	43.2	15.0	63.5	48.5	15.5	66.1	50.6
5. International Investment Income	82.4	16.9	Dr. 65.5	74.3	19.3	Dr. 55.0	70.0	20.8	Dr. 49.2
6. Government Transactions n.e.s.	17.4	8.2	Dr. 9.2	20.1	12.5	Dr. 7.6	20.4	12.7	Dr. 7.7
7. Other Services	21.4	21.8	0.4	24.6	19.5	Dr. 5.1	27.0	22.2	Dr. 4.8
8. Private Transfers	11.6	13.0	1.4	11.5	19.0	7.5	10.4	19.5	9.1
9. Government Transfers+	1.9	28.0	26.1	1.5	33.8	32.3	2.3	30.6	28.3
TOTAL CURRENT ACCOUNT	699.8	711.2	11.4	894.2	641.7	Dr.252.5	837.5	654.8	Dr. 178.3
of which; Visible Balance	529.3	468.0	Dr. 61.3	723.3	366.5	Dr. 356.8	665.0	380.3	Dr.284.7
Invisible Balance	170.5	243.2	72.7	170.9	275.2	104.3	172.5	278.9	106.4
B. CAPITAL MOVEMENTS									
10. Private Long-term	5.2	53.2	48.0	Cr. 1.5	74.9	76.4	Cr. 1.0	79.7	80.7
11. Government Long-term	0.7	37.1	36.4	Cr. 14.8	69.2	84.0	Cr. 10.0	93.8	103.8
12. Government Corporations* *		Dr. 0.5	Dr. 0.5	0.5	Dr. 2.5	Dr. 3.0	0.5	Dr. 3.0	Dr. 3.5
13. Short-term	Cr. 2.1	16.4	18.5	5.2	18.8	13.6	8.0	77.9	69.9
TOTAL	3.8	106.2	102.4	Cr. 10.6	160.4	171.0	Cr. 2.5	248.4	250.9
C. MONETARY MOVEMENTS									
14. Transactions with IMF	4.6	Dr. 18.1	Dr. 22.7	9.4	12.4	3.0	34.5	30.6	Dr. 3.9
15. Other Changes in Assets and Liabilities	91.9	1.9	Dr. 90.0	Cr. 74.3	0.3	74.6	68.3	1.6	Dr. 66.7
TOTAL	96.5	Dr. 16.2	Dr. 112.7	Cr. 64.9	12.7	77.6	102.8	32.2	Dr. 70.6
D. Errors and Omissions			Dr. 1.1			3.9			Dr. 2.0

*Provisional.
**Former E.A. Community Corporations only,
+Includes capital grants,
++ Revised.

international investment income but also ensured that the residual unremitted profits and dividends were ploughed back into the economy. The decline in Government transfer receipts essentially of aid grants from K£32.3 million in 1978 to K£28.3 million in 1979 was partly compensated for by a rise in net receipt of private transfers from K£7.5 million in 1978 to K£9.1 million in 1979.

4.17. The net capital inflow increased by K£79.9 million or 46.7 per cent from K£171.0 million in 1978 to K£250.9 million, more than covering the current deficit. The capital inflow on Government account increased from K£84.0 million in 1978 to K£103.8 in 1979. This increase was helped by the Euro-dollar balance of payments support loan of K£37.2 million. Receipts of private long-term capital amounted to K£80.7 million in 1979 compared with K£76.4 million in 1978 and the short-term capital movements resulted in a net inflow of K£69.9 million in 1979—while in 1978 these had amounted to only K£13.6 million.

Future Prospects

4.18. The outlook for Kenya's balance of payments in 1980 appears to be uncertain. The prices for coffee and tea exports in 1980 may at best be similar to 1979, while at worst some decline is in prospect. The volume of exports of these commodities may rise and attempts are being made to increase exports of other commodities. The further substantial rise in prices of crude petroleum coupled with the tendency towards an increase in domestic consumption of petroleum products means that the net cost of petroleum will again rise markedly. Also the Government has had to accelerate imports of grain in order to ensure adequate availability of food products in the country. All these developments will have a bearing on the balance of payments and it seems likely that in order to ensure essential imports are not restricted, recourse to more foreign borrowing, though perhaps not on the scale of 1979, will be necessary.

CHAPTER 5—EMPLOYMENT, EARNINGS AND CONSUMER PRICES

The 1979-1983 Development Plan, as has been the case in previous plans, makes the expansion of employment opportunities one of its major targets. It is expected that a further 50,000 persons will be employed in the modern sector every year during the plan period. This objective is to be attained by promoting more intensive and extensive use of land; by rural development in general; and by continuous growth in the modern sector of the economy. In 1979 in a speech given on the 15th anniversary of Kenya's independence, His Excellency the President announced that wage employment in the modern sector was to be increased by 10 per cent during the year. As a result the increase of wage employment in 1979 was more than the target figure of 50,000 and this helped partially compensate for a generally unsatisfactory result in 1978. The total number working in modern establishments both employed and self-employed and in informal establishments in the urban areas was 1,156,900 in 1979 compared with 1,085,100 in 1978.

Employment

5.2. During 1979 wage employment in the modern sector went up by 6.7 per cent compared with the increase of only 1 per cent in 1978. In absolute terms the number of those in wage employment rose from 911,600 in 1978 to 972,300 in 1979, a rise of 60,700, as shown in Table 5.1. However, 260,100 people had also registered as seeking new employment in 1979. While some of these may have done so to change their present employment, the total is never-the-less high and reflects the underlying and increasing unemployment level in the country. Elsewhere in the modern sector the number of self-employed and unpaid family workers rose by 5.7 per cent and employment in the informal sector in urban areas increased by 6.8 per cent.

PERSONS ENGAGED: RECORDED TOTALS, JUNE, 1976-1979

Table 5.1 '000'S

	1976	1977	1978	1979*
Modern Establishments—Urban and Rural Areas—				
Wage Employees	857.5	902.9	911.6	972.3
Self-employed and unpaid family workers	57.5	57.0	59.6	63.0
Informal Establishments—Urban Areas	94.9	103.9	113.9	121.6
TOTAL	1,009.9	1,063.8	1,085.1	1,156.9

*Provisional.

5.3. Changes in wage employment as shown in Table 5.2 reflect the success of the Presidential Decree in 1979 in increasing employment in the modern sector. Employment in the private sector increased by 25,900 or 5 per cent, whereas employment in the public sector went up by 34,700 or 8.9 per cent.

The increase of 6.7 per cent in total employment in 1979 has ensured a good start to the 1979-1983 Development Plan as regards meeting its target for employment.

WAGE EMPLOYMENT BY MAJOR SECTOR, 1976-1979

Table 5.2 '000's

	1976	1977	1978	1979	Annual Percentage Change 1977-78	1978-79*
PRIVATE SECTOR—						
Agriculture and Forestry	197.7	206.4	189.0	193.8	—8.4	2.5
Rest of Private Sector	303.4	320.1	332.6	353.7	3.9	6.3
Total Private Sector	401.1	526.5	521.6	547.5	—0.9	5.0
PUBLIC SECTOR	356.4	376.4	390.0	424.7	3.6	8.9
TOTAL	857.5	902.9	911.6	972.3	1.0	6.7

*Provisional.

5.4. Table 5.3 indicates that despite an overall rise of 5 per cent in employment in the private sector the increase in employment in the formal component of the agriculture sector, which is by far the most significant component of private sector was only 2.5 per cent. The small increase is the result of decline in employment on coffee plantations and in mixed farming by 2.9 per cent and 2.2 per cent, respectively. These declines ha.

e partially offset the increases that have occurred in employment on sugar-cane, and tea estates.

WAGE EMPLOYMENT IN THE PRIVATE SECTOR BY INDUSTRY, 1976-1979

Table 5.3 '000's

	1976	1977	1978	1979	Percentage change 1978-79*
Agriculture and Forestry	197.7	206.4	189.0	193.8	2.5
Mining and Quarrying	3.1	2.4	1.9	2.0	5.3
Manufacturing	88.1	94.7	105.3	112.0	6.4
Construction	30.1	29.6	28.6	32.5	13.6
Trade, Restaurants and Hotels	57.9	60.3	59.6	64.4	8.1
transport and Communications	18.0	19.6	20.6	23.3	13.1
Finance, Insurance, Real Estate and Business Services	20.9	24.2	25.9	28.1	8.5
community. Social and Personal Services	85.4	89.3	90.6	91.3	0.8
TOTAL	501.1	526.5	521.6	547.5	5.0

*Provisional.

5.5. Employment in the mining and quarrying sector was only 1,980 in 1979 compared to 1,927 in 1978. This shows that employment in this sector is still relatively insignificant compared to other sectors. The total of 1,980 in 1979 compares with employment of 193,800 in agriculture and forestry sector.

5.6. Wage employment in the private manufacturing sector rose by 6.4 per cent in 1979 whereas the increase in 1978 had been 11.2 per cent. There were decreases in employment in establishments engaged in processing grain mill products; cordage and rope industries; manufacturing furniture and paper; and the manufacture of soap and cleaning preparations. Other subsectors of manufacturing industry recorded increases in employment with larger than average rises being registered in establishments engaged in canning fruit and vegetables; in extraction of oils and fats; in spinning and weaving of textiles; in manufacture of plastic products; and in motor vehicle assembly.

5.7. In 1978 wage employment in the private construction sector had not increased. Building plans approved in 1978 but not started were carried over into 1979. As a result wage employment in private construction rose by 13.6 per cent in 1979. There was a particularly large rise in employment for the construction of buildings in the private sector. In the public sector, employment on civil construction projects went up by 7.9 per cent. Other significant increases in employment in the private sector occurred in establishments engaged in wholesale and retail trade, and transport and finance. Details are given in Table 5.3. As shown employment in transport and communications sector rose from 20,600 to 23,300; from 25,900 to 28,100 in establishments engaged in finance and business services; and from 59,600 to 64,400 in establishments engaged in trade and catering.

5.8. As stated earlier wage employment in the public sector went up by 8.9 per cent in 1979 compared to an increase of 3.6 per cent in 1978. This particularly large rise resulted from the Presidential Directive and some details of the changes are given in Table 5.4. The Central Government increased its employment by 28,400 or 16.8 per cent. However, some part of this big increase is a result of moving Government casual employees into permanent posts. Parastatal bodies increased their employment by 2,100 or 1.3 per cent, and in organizations where the public sector has a majority control employment rose by 15.8 per cent. Employment in local government authorities went up by only 2.7 per cent probably reflecting the tight financial situation which is effecting the operations of the local authorities.

5.9. Table 5.5 details breakdown of wage employment by province from 1976 to 1979. Nairobi, the most significant centre of employment, accounted for 27 per cent of the total in 1979. The increase in employment in Nairobi in 1979 was 16,400 and according to the Ministry of Labour's report on Unemployment Relief in 1979, 10,814 of these 16,400 found work in the

WAGE EMPLOYMENT IN THE PUBLIC SECTOR, 1976-1979

Table 5.4 '000's

	1976	1977	1978	1979*
Central Government	157.5	157.2	168.9	197.3
Parastatal Bodies**	161.6	170.0	168.0	170.1
Majority Control by the Public Sector	11.8	17.0	20.2	23.4
Local Government	25.5	32.1	32.9	33.8
Others+	–	0.1	–	0.1
TOTAL	356.4	376.4	390.0	424.7

*Provisional.

**Includes Teachers Service Commission, Kenya Railways Corporation, Kenya Ports Authority, Kenya Posts and Telecommunication, Kenya Airways Limited, etc.

+E.A. Development Bank and E.A. Examinations Council.

private sector. Second in importance in wage employment is the Rift Valley Province which had 24 per cent of the total in wage employment in 1979. Here the increase in employment in 1979 was 13,300. The next two provinces in order of total employment in 1979 were the Central and Coast provinces where the increases in employment were 8,200 and 9,300 respectively. The growth rates in wage employment in all provinces in 1979 ranged from 6.0 per cent to 8.2 per cent.

WAGE EMPLOYMENT BY PROVINCE, 1976-1979

Table 5.5 '000's

Province	1976	1977	1978	1979*	Percentage Change 1978/79*
Nairob	230.3	235.5	244.4	260.8	6.7
Central	133.6	143.7	137.6	145.8	6.0
Nyanza	63. 4	64.8	67.3	72.0	7.0
Western	36.2	44.5	42.5	46.0	8.2
Coast	105.9	113.8	122.7	132.0	7.6
Rift Valley	216.9	225.8	221.1	234.4	6.0
Eastern	66.5	70.1	71. 0	76.0	7.0
North Eastern	4.8	4.7	4.9	5.3	8.2
TOTAL	857.5	902.9	911.5	972.3	6.7

*Provisional.

5.10. Details of the growth of wage employment in selected sectors by major towns are set out in Table 5.6. These major towns accounted for 47.7 per cent of total employment in 1979. Between 1974 and 1979 employment in these towns has gone up by 29.7 per cent while over the same reference period, employment in Nairobi has risen by 15.8 per cent. Thus wage employment in towns other than Nairobi has risen at a particularly

WAGE EMPLOYMENT BY MAJOR TOWNS AND SELECTED INDUSTRIES, 1974 AND 1979

Table 5.6 '000's

	Manufacturing		Construction		Trade, Restaurants and Hotels		Transport and Commut-ations		Finance, Insurances, Real Estate and Business Services		Community Social and Personal Services	
	1974	1979*	1974	1979*	1974	1979*	1974	1979*	1974	1979*	1974	1979*
Nairobi	44.6	51.8	24.9	35.3	27.6	32.6	18 6	20.6	15.4	25.3	85.3	85.0
Mombasa	14.8	19.0	4.7	5.1	8.6	10.7	18.9	23.6	2.3	4.9	16.7	26.6
Kisumu	2.3	3.5	0.5	1.1	1.7	1.7	2.7	2.3	0.7	0. 9	3.6	6.7
Nakuru	3.7	5.7	2.3	1.6	2.2	2.5	0.8	1.0	0.4	0.8	4.0	5.7
Thika	6.1	10.2	0.5	0.2	0.5	0.5	0.1	0.1	0.5	0.4	1.6	1.6
Eldoret	2.5	5.1	0.1	0.9	0.9	1.2	1.0	0.7	0.3	0.3	2.3	3.1
Other Towns	4.2	10.6	2.0	4.7	6.8	9.1	3.4	5.0	1.1	2.3	16.3	34.1
TOTAL	78.3	105.9	35.0	48.9	48.3	58.3	45.5	53.3	20.7	34.9	129.8	162.8

*Provisional.

fast rate with a greater than average increase being recorded in employment in community, social and personal services. Indeed employment in Nairobi in 1979 in this subsector was about the same as in 1974 whereas in all other towns taken together employment in these services increased from 44,500

WAGE EMPLOYMENT BY CITIZENSHIP AND INDUSTRY, 1978 AND 1979

Table 5.7 '000'S

	CITIZENS		NON-CITIZENS		TOTAL	
	1978	1979*	1978	1979*	1978	1979*
Agriculture and Forestry	242.0	253.4	1.0	1 1	243.0	254.5
Mining and Quarrying	2.4	2.6	0.1	**	2.5	2.6
Manufacturing	127.5	136.2	2.6	2.2	130.1	138.4
Electricity and Water	8.9	9.2	0.4	0.7	9.3	9.9
Construction	54.1	60.3	1.2	1.0	55.3	61.3
Trade, Resturant and Hotels	60.9	67.2	1.6	1.5	62.5	68.7
Transport and Communications	50.0	54.1	0.9	0.7	50.9	54.8
Finance, Insurance, Real Estate and Business Services	30.4	34.3	1.6	1.4	32.0	35.7
Community, Social and Personal Services—						
Public Administration	91.5	101.0	0.2	0.2	91.7	101.2
Education Services	117.8	125.4	2.3	2.7	120.1	128.1
Domestic Services	55.7	53.7	0.8	1.4	56.5	55.1
Other Services	55.9	60.4	1.7	1.6	57.6	62.0
TOTAL	897.1	957.8	14.4	14.5	911.6	972.3
Of which: Males	744.0	792.0	12.0	12.1	756.0	804.1
Females	153.1	165.8	2.4	2.4	155.5	168.2

*Provisional.

**Less than 50.

to 77,800; a rise of 75 per cent. The rise in employment outside Nairobi in the other economic sectors shown in Table 5.6 was less marked but there has none-the-less been a general spread in employment opportunities to the benefit of these towns outside the capital city. This development is in line with the policy aim of the Government. The creation of the development authorities for the Lake Basin and the Kerio Valley should help provide a further stimulus to greater increases in employment in Kisumu and Eldoret in the future.

5.11. Details on wage employment by industry, citizenship and sex are set out in Table 5.7. There was virtually no increase in the employment of non-citizens in 1979 and the total at 14,500 was only 1.5 per cent of the overall number in wage employment. The number of non-citizens in manufacturing sector fell from 2,600 in 1978 to 2,200 in 1979; from 1,200 to 1,000 in the construction sector; and from 900 to 700 in transport and communications sector. These falls were offset by increases from 2,300 to 2,700 and

from 400 to 700 in the number of non-citizens respectively employed in education services and in electricity and water services. Employment of females accounted for 17.3 per cent of the total in 1979; this share was sightly higher than the 17.1 per cent for 1978.

Earnings

5.12. There was a particularly large increase of 16.7 per cent in total earnings from wage employment from K£483.0 million in 1978 to K£563.5 million in 1979 as shown in Table 5.8. This increase compares with an increase of 12 per cent in 1978 and 13.6 per cent in 1977. The increases of 17.4 per cent and 15.9 per cent in private sector and public sector earnings in 1979 were both substantially in advance of the increases recorded in the two preceeding years. These are accounted for by the wage awards and the grant of annual increments which accompanied the rise in the total numbers in employment in 1979.

EARNINGS BY MAJOR SECTOR, 1976-1979

Table 5.8 *K£million*

	1976	1977	1978	1979*
PRIVATE SECTOR—				
Agriculture and Forestry	26.8	27.8	30.2	34.0
Mining and Quarrying	1.3	0.8	0.6	0.7
Manufacturing	46.5	56.5	65.2	72.1
Construction	13.6	14.5	16.1	18.7
Trade, Restaurants and Hotels	35.0	39.8	44.3	53.9
Transport and Communications	11.5	13.9	16.5	20.9
Finance, Insurance, Real Estate and Business Services	22.0	27.5	29.4	36.9
Community, Social and Personal Services	26.7	29.3	31.2	37.1
TOTAL PRIVATE SECTOR	183.4	210.0	233.5	274.3
Public Sector—				
Central Government	86.0	99.6	112.9	137.1
Parastatal Bodies**	90.1	96.2	105.7	116.1
Majority Control by the Public Sector	8.1	10.0	13.5	16.8
Local Government	12.1	15.6	17.4	19.1
Others+	—	0.1	—	0.1
TOTAL PRIVATE SECTOR	196.3	221.4	249.5	289.2
TOTAL	379.6	431.4	483.0	563.5

*Provisional.

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

+E.A. Development Bank and E.A. Examinations Council.

5.13. Average earnings from employment in the economy as a whole went up by 9.4 per cent in 1979 and the details are shown in Tables 5.9 and 5.10. In the private sector, average earnings rose by 11.9 per cent while average earnings in the public sector increased by 6.4 per cent. Employment in community, social and personal services in the private sector had the highest percentage increase of average earnings, of 18.0 per cent, followed by an increase of 15.5 per cent for the employees in finance, insurance, real estate and business services. However, in absolute terms while the average earnings of employees in finance, insurance, real estate and business services increased from K£1,135 to K£1,312 per annum, in the private sector as a whole average earnings rose from K£448 to K£501. In the public sector as a whole average earnings went up from K£640 to K£681 per annum. Average earnings of employees in the Central Government rose from K£668 to K£695 and those in local government authorities from K£529 to K£566. These are equal to a percentage increase of 4 per cent for employees in Central Government and 7 per cent for employees in local government authorities compared to an

AVERAGE WAGE EARNINGS PER EMPLOYEE, 1976-1979

Table 5.9 *K£million*

	1976	1977	1978	1979*
PRIVATE SECTOR—				
Agriculture and Forestry	135.6	134.7	159.8	175.3
Mining and Quarrying	419.4	333.3	315.8	330.1
Manufacturing	527.8	596.6	619.1	654.3
Construction	451.8	490.0	562.9	575.7
Trade, Restaurants and Hotels	604.5	660.0	743.3	836.4
Transport and Communications	638.9	709.2	801.0	897.4
Finance, Insurance, Real Estate and Business Services	1,052.6	1,136.4	1,135.1	1,311.6
Community, Social and Personal Services	312.6	328.1	344.4	406.3
TOTAL PRIVATE SECTOR	366.0	398.9	447.7	500.8
PUBLIC SECTOR—				
Central Government	546.0	633.6	668.4	695.1
Parastatal Bodies**	557.5	565.9	629.2	682.5
Majority Control by the Public Sector	686.4	588.2	668.3	721.8
Local Government	474.5	486.0	528.9	565.9
Others+		1,000.0		1,397.0
TOTAL PUBLIC SECTOR	550.7	588.3	639.7	681.0
TOTAL	442.7	477.8	529.8	579.5

*Provisional.

**Includes Teachers Service Commission, Kenya Railways Corporation, Kenya Ports Authority, Kenys Posts and Telecommunications Corporation, Kenya Airways Limited, etc.

+E.A. Development Bank and E.A. Examinations Council.

increase of 8.5 per cent for employees in parastatal bodies. The rise in average earnings of workers in agriculture and forestry was 9.7 per cent, or somewhat less than the 11.9 per cent recorded for the private sector as a whole. Furthermore these workers' average earnings amounted to only K£175.3 per annum in 1979 compared with average earnings of K£579.5 for all employees in the economy as a whole.

CHANGES IN WAGE EMPLOYMENT AND AVERAGE EARNINGS, 1979-1979

Table 5.10 *Percent*

	EMPLOYMENT		AVERAGE EARNINGS	
	1976-19*	1978-79*	1976-79*	1978-79*
PRIVATE SECTOR—				
Agriculture and Forestry	—0.5	2.5	9.2	9.7
Mining and Quarrying	—12.7	5.3	—7.1	4.5
Manufacturing	8.4	6.4	7.5	5.7
Construction	2.8	13.6	8.6	2.3
Trade, Restaurants and Hotels	3.7	8.1	11.4	12.5
Transport and Communications	9.0	13.1	12.0	12.0
Finance, Insurance, Real Estate and Business Services	10.4	8.5	7.8	15.5
Community, Social and Personal Services	2.3	0.8	9.3	18.0
TOTAL PRIVATE SECTOR	3.1	5.0	11.0	11.9
PUBLIC SECTOR—				
Central Government	8.0	16.8	8.5	4.0
Parastatal Bodies**	1.8	1.3	7.1	8.5
Majority Control by the Public Sector	26.2	15.8	2.4	8.0
Local Government	10.4	2.7	6.1	7.0
TOTAL PUBLIC SECTOR	6.0	8.9	7.3	6.5
TOTAL	4.3	6.7	9.1	9.4

*Provisional.

**Includes Teachers Service Commission, Kenya Railways Corporation, Kenya Ports Authority, Kenys Posts and Telecommunications Corporation. Kenya Airways Limited, etc.

5.14. The increase of 9.4 per cent in average nominal earnings noted above when compared to an average of 8.4 per cent in consumer prices yielded as shown in Table 5.11 a rise of 0.9 per cent in real average wage in 1979. This small overall rise in real earnings in 1979 helped compensate partially for the overall fall of 1.2 per cent in 1978 but not for the overall reduction of 3.4 per cent in 1977. The overall averages, however, do not reflect the diverse trends in changes in real average earnings in the private and public sectors, respectively.

CHANGES IN WAGE EMPLOYMENT, AVERAGE WAGES AND COSUMER PRICES, 1976-1979

Table 5.11 *Percentage*

	1976	1977	1978	1979*
Wage employment	4.7	5.3	1.0	6.7
Current prices average wages	16.1	7.9	10.9	9.4
Consumer prices**	9.9	11.7	12.3	8.4
Real average wages	5.6	—3.4	—1.2	0.9

*Provisional.

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

5.15. As shown in Table 5.12 while real average earnings in the private sector went up by 3.2 per cent in 1979, there was a decline in real earnings of 1.8 per cent in the public sector. Central Government employees were most affected with the decline of 4 per cent in their real earnings which

ESTIMATED REAL AVERAGE WAGE EARNINGS** PER EMPLOYEE, 1976-1979

Table 5.12 *K£*

	1976	1977	1978	1979*
PRIVATE SECTOR—				
Agriculture and Forestry	119.1	106.0	111.9	113.3
Mining and Quarrying	368.2	262.2	221.3	213.4
Manulacturing	463.4	469.4	433.8	422.9
Construction	396.7	385.5	394.5	372.1
Trade, Restaurants and Hotels	530.6	519.3	520.9	540.7
Transport and Communications	560.9	558.0	561.3	580.1
Finance, Insurance, Real Estate and Business Services	924.1	894.1	795.4	847.8
Community, Social and Personal Services	274.5	258.1	241.3	262.6
TOTAL	321.3	313.8	313.7	323.7
PUBLIC SECTOR—				
Central Government	479.4	498.5	468.4	449.5
Parastatal Bodies+	489.5	445.2	440.9	441.2
Majority Control by the Public Sector	602.6	462.8	468.3	466.6
Local Government	416.6	382.4	370.6	365.8
Others	—	—	—	903.0
TOTAL PUBLIC SECTOR	483.5	462.9	448.3	440.2
TOTAL	388.7	375.9	371.3	374.6

*Provisional

**Average current earnings adjusted for the rise in consumer prices. Real earnings and the consumer price indices are based on January—June, 1975.

+Includes Teachers Service Commission, Kenya Railways Corporation, Kenya Ports Authority, Kenya Posts and Telecommunications Corporation, Kenya Airways Limited, etc.

came on top of the fall of 5.7 per cent in 1978. Also while in 1979 the real average earnings in the private sector were 0.7 per cent above the level of 1976, real average earnings had fallen by 9 per cent between 1976 and 1979 for the public sector.

Wages Awards

5.16. In May 1980, minimum wages were increased from K.Sh. 175 to K.Sh. 215 per month for agricultural workers and from K.Sh. 350 to K.Sh. 456 for unskilled workers in Nairobi. Wage increases by the private sector registered with the Ministry of Labour indicate that wages for lower and middle income groups went up by 6.9 and 9.5 per cent respectively during 1979. Most of the agreements concerned enterprises in the manufacturing sector and here the average wage for the employees in both lower and middle income groups rose by 11.8 per cent compared to increases of between 8 and 9 per cent for employees in establishments in the wholesale and retail trade sectors.

Unemployment

5.17. A total of 260,100 job-seekers had registered themselves as unemployed with the Ministry of Labour in 1979. Of this total 102,694 were registered in Nairobi, followed by 61,292 in Nyanza/Western provinces; 35,059 in Central/Eastern provinces; 33,343 in Rift Valley Province; and 27,701 in Coast Province. This when compared with 27,889 vacancies declared by the private sector, and 59,928 vacancies declared in public confirms that there was thus a large pool of disappointed job-seekers at the year end. Vacancies declared in the private sector were mostly for general labourers while in the public sector the vacancies included a significant number for professionals and technicians. The total of 260,100 job-seekers in 1979 represents about 5 per cent of the total labour force but 22.6 per cent of the numbers working in the formal sector and the informal sector in urban areas.

Consumer Prices

5.18. During 1979 consumer prices went up by 8.0, 7.2 and 10.1 per cent in Nairobi for the lower, middle and upper income groups, respectively as shown in Table 5.13. These average increases show fairly moderate rises for the lower and middle income groups but a larger rise for the upper income earners. In 1978 the average increases were 17.0, 10.3 and 9.6 per cent respectively. Food prices and rents rose less steeply in 1979 than in 1978. The food index rose by an average of 5.4 per cent in 1979 while rents increased by 8.3 per cent, compared with the rises of 11.8 and 16.2 per cent, respectively, for 1978. On the other hand prices rose relatively steeply for fuel, light and transport services in 1979 as compared to 1978. The fuel, light and water index increased by an average of 17.1 per cent in 1979 while

prices for transport and communication rose by 12.8 per cent; the rises in 1978 having been 2.3 and 5.1 per cent respectively. However, for the period March 1979 to March 1980, consumer prices have risen by an average of

PERCENTAGE CHANGES IN NAIROBI CONSUMER PRICES, 1975—MARCH, 1980

Table 5.13

	1975/76	1976/77	1977/78	1978/79	March, 1979 to March, 1980
Nairobi Lower Income Index	11.4	14.8	17.0	8.0	15.1
Nairobi Middle Income Index	8.3	11.5	10.3	7.2	12.6
Nairobi Upper Income Index	10.0	8.7	9.6	10.1	14.2

14.0 per cent, indicating that inflationary pressures have again become serious after the relative success in reducing the level of price rises in 1979. Comparing March 1980, with March 1979, there were increases of 10 per cent or more in virtually all groups of commodities or services, although the major increases occurred in prices of fuel and light, transportation and clothing and footwear for the lower income group. The impact of rises in prices of crude oil on the cost of fuel and light and transportation needs no emphasis and in this context the continuing high level of increases in prices by OPEC in the recent period is still working its way through to the prices paid by Kenya's consumers.

NAIROBI CONSUMER PRICES INDICES, 1976-1979

Table 5.14

January-June 1975 = 100

	Food	Rent	Others	All Groups
LOWER INCOME—				
December—1976	111.5	124.3	117.5	118.0
December—1977	130.7	164.0	142.9	142.8
December—1978	147.8	187.7	162.0	162.3
December—1979	159.5	205.1	179.2	177.1
March—1980	167.4	216.8	190 9	187.1
MIDDLE INCOME—				
December—1976	110.8	120.5	116.1	114.9
December—1977	127.1	146.3	127.7	130.4
December—1978	141.1	158.7	135.1	141.0
December—1979	154.8	175.3	150.0	155.7
March—1980	160.9	180.3	152.9	160.1
UPPER INCOME—				
December—1976	119.2	115.6	118.2	117.7
December—1977	139.8	135.7	131.9	134.8
December—1978	149.9	145.7	142.2	145.1
December—1979	162.0	164.1	164.3	163.7
March—1980	167.2	171.0	171.4	170.2

5.19. Consumer prices in Mombasa, Kisumu and Nakuru went up by 19.3, 7.6 and 16.1 per cent respectively during 1979. In Mombasa, prices of fuel and light went up by 32.9 per cent; health and personal care by 19.9 per cent; clothing and footwear by 18.5 per cent; and food by 15.0 per cent. In Nakuru prices of food, clothing and footwear, fuel and light went up by 17.2, 21.5 and 31.0 per cent respectively while in Kisumu although food prices rose by only 3.8 per cent prices of fuel and light even here went up by 25.6 per cent.

5.20. Prices in the rural areas rose by an average of 11.3 per cent during 1979. Methods of price collection in the rural areas have been strengthened and prices are collected monthly from the rural markets. The overall level of price rises in rural areas in 1979 was higher than in Nairobi but lower than in certain urban areas. This may reflect a somewhat less efficient trading system then that which operates in the capital city.

CHAPTER 6—PUBLIC FINANCE

In May 1980 the Government published Sessional Paper No. 4 of 1980 on Economic Prospects and Policies. This document as already noted in Chapter 0 calls for a reduction in the projected growth rate during the 1979/83 plan period. Reductions are also forecast in Central Government recurrent and development expenditure. These expenditure revisions will begin to have most effect in the 1980/81 financial year. The possible expenditure and revenue out-turns for 1979/80 are given in Table 6.1. The recurrent and development forward budgets were originally planned and have subsequently been revised as follows:—

*K£million***

	RECURRENT*		DEVELOPMENT	
	Planned	Revised	Planned	Revised
1979/80	430	416	291	243
1980/81	461	431	295	245
1981/82	493	443	296	245
1982/83	530	469	320	258
TOTAL	1,914	1,758	1,202	991

*Excludes debt interest which rises from K£267 million to K£318 million.
**At 1979/80 Prices.

6.2. The estimates have had to be scaled down because of lower than expected growth in revenue since the GDP growth rates now seem no longer able to reach their targets. Overall the plan had forecast a GDP growth at constant prices averaging 6.3 per cent a year; this average has now been reduced to 5.4 per cent a year. Various policy objectives have been laid down within the revised expenditure targets. For example, education expenditure is now to be kept at no more than 27 per cent of total recurrent expenditure; previously the maximum proportion had been 30 per cent. In general the average annual growth of recurrent expenditures by ministries at constant Prices has been reduced to 4.1 per cent from 7.2 per cent though the reductions will vary for individual ministries.

6.3. The greater proportionate reduction in projected development expenditure than for recurrent expenditure means that capital formation through Central Government budget will be reduced. The projected development expenditure has been reduced by 17.6 per cent while recurrent expenditure including debt interest will decline by 4.8 per cent. The greater relative fall in development expenditure has been made necessary by the need to reduce foreign commercial borrowing which has become much more expensive than originally anticipated. The prevailing rates of interest on such borrowing

would place too onerous a debt burden on the economy. The borrowing requirements of the Government are instead to be met by raising the level of domestic borrowing especially from the commercial banks and non-bank lenders.

6.4. In 1978/79 the current account surplus fell to K£23.3 million from K£72.1 million in 1977/78. At the same time capital expenditure on development and investment rose from K£190.3 million to K£220.3 million so that the deficit to be financed increased from K£118.2 million to K£197 million. Although there was an increase in external grants from K£9 million to K£13.3 million, domestic and external borrowing were the major sources of finance to cover the deficit. In 1978/79 K£81.8 million was borrowed abroad and K£88.6 million was raised on the domestic market. There was also a very large rise in the issues of treasury bills of K£66.3 million while the IMF counterpart facility rose by K£12.1 million. All this borrowing was not however, required in 1978/79 itself so that cash balances rose by K£55.3 million while K£10.7 million was repaid to the Cereals and Sugar Finance Corporation.

6.5. Current revenue is estimated to have risen by K£100.2 million in 1979/80 to K£590.8 million while current expenditure went up by K£54.7 million to K£522 million. The current budget surplus based on these figures has as a result, increased to K£68.8 million. This has helped finance total development and investment expenditure of K£211.8 million, some K£8 million less than in 1978/79. The development and investment expenditure in 1979/80 had originally been budgeted to amount to K£252.8 million but actual expenditure it appears will be K£41 million less. Thus the financing requirement to cover the actual deficit of K£143 million is substantially below the K£197.7 million required in 1978/79. Foreign grants in 1979/80 totalled K£18.1 million, foreign loans K£83.3 million and long-term domestic loans K£45 million. These three sources yielded more than adequate finance to cover the deficit.

6.6 Current expenditure increased by 11.7 per cent in 1979/80; this is a comparatively low increase against the rise of 16.8 per cent in 1978/79 and the very high increase of 40.4 per cent of 1977/78. Development expenditure had been budgeted to increase by 27.3 per cent in 1979/80 but the actual increase was probably negligible. However, even at around K£142 million the average expenditure on development in the two years to 1979/80 is very much greater than the average of K£92 million for the three years 1975/76 to 1977/78. Investment expenditure in 1979/80 had been budgeted at K£71.2 million, a fall of K£6.4 million from the level of 1978/79.

6.7. As shown in Chapter 5 on Employment, Earnings and Prices, the number employed in the Central Government rose by 28,400 or 16.8 per cent in 1979. This very large increase resulted from the Presidential Directive together with the movement of some casual employees into permanent

employment. Wages and salaries paid to these employees increased by 21.4 per cent to K£137.1 million, a figure equal to 24.3 per cent of the total wages paid to all employees in the public and private sectors in the formal sector of the economy. Despite the small rise in average earnings at current prices, real wages per employee in Central Government service fell by about 4 per cent between 1978 and 1979.

Summary of Government Revenue and Expenditure

6.8. As per the revenue figures given in Table 6.1 there has been a strong upward movement in current revenue since 1975/76. Recurrent revenues have increased from K£269.2 million in 1975/76 to K£590.8 million in 1979/80, a rise of 119.5 per cent, at an average rate of 21.7 per cent a year. Monetary GDP in this period on the other hand rose by 86 per cent or 16.8 per cent a year. Hence over this four year period the Government has been able to increase the proportion of total GDP taken in taxes.

6.9. Table 6.1 shows that current expenditure rose from K£246.7 million in 1975/76 to K£522 million in 1979/80, a rise of 111.6 per cent at an average rate of 20.6 per cent a year. The growth in current expenditure has thus been below the rate of growth in current revenue, and the current surplus in 1979/80 as a consequence increased to K£68.8 million. This is more than three times as great as the surplus of K£22.4 million which was recorded in 1975/76.

6.10. Development expenditure as mentioned above amounted to a possible actual level of around K£142 million in 1979/80 while investment expenditure reached a level of K£71.2 million. These figures may be compared with development and investment expenditures of K£74.3 million and K£52.1 million in 1975/76. These increases of 91 per cent in development expenditure and 37 per cent in investment expenditure add up to an overall increase of 69 per cent in total development and investment expenditure between 1975/76 and 1979/80 at an average rate of 14 per cent per year. Given that construction costs went up by 11.1 per cent a year and prices of imported machinery and transport equipment rose by 16.6 per cent a year between 1975 and 1979, this comparison implies that the capital expenditure in real terms by the Central Government was little changed over this period.

6.11. The overall deficit shown in Table 6.1 which represents the sum to be financed after accounting for external grants amounted to K£96.9 million in 1975/76, a very high K£183.7 million in 1978/79 and is given as K£165.9 million in 1979/80 though the actual out-turn may be reduced to K£125 million. Whatever the actual out-turn in 1979/80, the size of the deficit has certainly been rising.

6.12. The financing of the overall deficit creates particular problems because too high a dependence on external loans could result in future difficulties for the balance of payments, whereas domestic sources may only be able to provide a part of the funds required unless a deliberate policy of excessive

CENTRAL GOVERNMENT

OUT-TURN* OF REVENUE AND EXPENDITURE, 1975/76—1979/80

Table 6.1 K£'000

	1975/76	1976/77	1977/78	1978/79**	1979/80**
Current Revenue	269,171	320,556	472,164	490,560	590,813
Current Expenditure	246,770	285,079	400,111	467,292	521,973
Current Surplus	22,401	35,477	72,053	23,268	68,840
Development Expenditure	74,254	86,034	115,142	142,642	181,639+
External Grants	7,008	10,519	9,049	13,296	18,080
DEFICIT	-44,845	-40,038	-34,040	-106,078	-94,719+
INVESTMENT EXPENDITURE—					
PURCHASE OF EQUITY ETC.					
Financial Enterprises	1,245	949	1,490	2,890	9,686
Non-Financial Enterprises	5,148	10,699	16,547	9,148	
LOANS TO;					
Financial Enterprises	14,121	3,871	19,204	15,423	
Non-Financial Enterprises	8,041	13,147	31,906	41,578	61,510
General Government	21,696	8,038	3,782	6,117	
Other	1,834	1,947	2,208	2,467	
Increase in Investment Claims	52,085	38,651	75,137	77,618	71,196+
TOTAL DEFICIT	-96,930	-78,689	-109,177	-183,696	-165,915+
FINANCING OF THE DEFICIT—					
External Loans	43,673	29,773	43,231	81,848	83,250
Long-Term Domestic Borrowing	52,782	25,600	66,942	88,569	45,000
SHORT-TERM BORROWING—					
Cereals and Sugar Finance Corporation	8,390	6,152	-4,248	-10,655	4,820
Tax Reserve Certificates	82	2,601	-1,047	834	
Treasury Bills	24,000	25,000	-24,050	66,250	
IMF Counterpart Facilties..				12,110	5,750
Advance from Central Bank		-4,400			
NET SHORT-TERM BORROWING	32,472	29,713	-29,345	68,539	
CHANGES IN CASH BALANCES; INCREASE = +	+ 31,997	+ 5,797	-28,349	55,260	
MEMORADUM ITEMS—					
(i) Loans to University Students on Recurrent Account included with other loans	1,823	1,935	2,198	2,415	2,720
(ii) Development Project Earnings on Development Account included with Current Revenue		6,433	766	505	300

*This table details Kenya Government's deficit and its financing. The details on this table are set out in such a way as to isolate destortions caused by items of "Investment" expenditure. These items consist of expenditure on purchase of equity in enterprises and loans and advances to various sectors of the economy. Similarly current revenue, as shown in this table, excludes long-term and short-term financing. Basic aggregates in this table can be reconciled as follows:—

1. Current revenue as shown in this table plus short-term borrowing, minus memorandum item (ii) equals revenue on the Recurrent Account as shown in Table 6.2.
2. Current expenditure plus development expenditure and investment expenditure as shown in this table equal total expenditure shown in Table 6.6.

**Provisional.

+*See* the Chapter text. It is suggested that total spending may be K£41 million less than these estimates.

domestic deficit financing is followed at the risk of aggravating the ensuing inflationary pressures. This latter option also creates indirectly problems for the balance of payments as the inflationary demand creates a greater demand for imports. As per the figures in Table 6.1 external loans covered 47.5 per cent and long-term domestic loans 47 per cent of the total deficit between 1975/76 and 1979/80 while the balance of the deficit was accounted for by short-term domestic borrowing.

Recurrent Revenue

6.13. The continued emphasis on increasing the receipts from indirect, taxation at a faster rate than direct taxes was again reflected in the budget introduced in June 1979. Sales taxes were raised by 50 per cent. As a result as shown in Table 6.2 sales tax receipts accounted for 24.7 per cent of the gross receipts in 1979/80 compared to a proportion of 21.1 per cent in 1976/77. The share of import and excise duties has also risen from 26.1 per cent in 1976/77 to 28.1 per cent in 1979/80. Between them these two major sources of indirect taxation contributed 52.8 per cent of total receipts in 1979/80 compared to 47.2 per cent in 1976/77. The share of receipts from income tax on the other hand has declined from 34.6 per cent in 1976/77 to 28.2 per cent in 1979/80.

CENTRAL GOVERNMENT

GROSS RECEIPTS ON RECURRENT ACCOUNT**, 1976/77—1979/80

Table 6.2 *K£million*

	1976/77	1977/78	1978/79*	1979/80*
DIRECT TAXATION—				
Income Tax	107.47	142.34	151.07	165.00
Other	0.56	0.68	0.66	0.50
TOTAL	108.03	143.01	151.73	165.50
INDIRECT TAXATION—				
Sales Tax	65.42	92.76	99.77	145.00
Import Duties	52.86	104.20	101.37	165.10
Excise Duties	28.22	38.47	49.02	
Export Duties		8.27	2.80	5.00
Licences and Fees Under Traffic Act	3.32	3.64	3.80	6.16
Other	8.04	9.42	11.31	9.41
TOTAL	157.87	256.76	267.97	330.67
Compulsory Fees, Fines and Penalties	5.20	4.77	7.05	7.38
Income From Property	15.28	26.25	30.36	35.48
Current Transfers	1.78	0.55	1.16	1.32
Charges for Goods and Services	19.39	23.57	39.89	44.56
Internal Borrowing	29.73	-29.34	56.43	8.82
Loan Repayments	3.49	2.95	4.66	3.38
Other	2.09	13.52	7.21	2.22
GRAND TOTAL	343.80	442.05	566.48	599.33

*Provisional.

**This is the name of the account used to cover current receipts but includes internal borrowing and loan repayment receipts.

6.14. Budget changes for 1979/80 apart from raising the level of the sales tax also increased rates of duty on drinks and cigarettes and also raised the fees charged for all motor vehicle licences. The latter change was designed to discourage future purchases of larger vehicles to economise on the consumption of petroleum products.

6.15. Import duty collections as shown in Table 6.3 were lower in 1979 than in 1978. This is the direct consequence of a decline in total imports as a result of the introduction of the import deposit scheme late in 1978. Falls are recorded in duty collections on imports of metals, transport equipment, machinery, fuels, food, drink and tobacco, basic materials and textiles. Only in the case of chemicals have import duty collections been higher in 1979 than in 1978. Details on excise revenue collection are shown in Table 6.4. Duty collected from sugar and cigarettes rose significantly but there was a a small fall in the receipts from duty on beer and spirits.

CENTRAL GOVERNMENT

IMPORT DUTY COLLECTIONS, 1975-1979

Table 6.3 K£'000

END USE CATEGORY	1975	1976	1977	1978	1979*
Food, drink and tobacco	3,588	3,938	6,256	6,378	5,735
Basic materials ..	1,706	2,371	2,459	2,868	2,595
Fuels	13,170	19,160	16,768	22,850	18,212
Chemicals	1,764	3,722	5,575	6,620	8,770
Textiles	5,015	4,726	4,972	6,518	5,616
Semi-manufactures ..	2,307	2,814	3,866	5,960	4,851
Metals	2,514	6,432	8,248	10,324	8,704
Transport Equipment	8,411	9,512	13,302	16,878	13,683
Machinery	4,286	7,149	12,325	18,402	17,078
Miscellaneous commodities	4,606	6,648	8,067	9,622	4,986
TOTAL	47,368	66,472	81,838	108,420	90,230

*Provisional.

CENTRAL GOVERNMENT

EXCISE REVENUE BY COMMODITIES, 1975-1979

Table 6.4 K£'000

	1975	1976	1977	1978	1979*
Beer and spirits	10,890	12,541	14,319	16,122	15,884
Sugar	3,636	5,668	9,091	11,420	14,371
Cigarettes	7,788	8,580	12,553	17,175	23,327
Other commodities**	2,580	1,861	1,860	24	32
TOTAL	24,894	28,623	37,803	44,741	53,614

*Provisional.

**Includes transfer adjustments not allocated by commodity.

6.16. A summary of the expenditure and financing of the development and investment account since 1976/77 is given in Table 6.5. As shown total development and investment expenditure has risen rapidly between 1976/77 and 1978/79 but the actual expenditure may in 1979/80 be lower than in 1978/79. The size of the current surplus has varied widely from year to year so that the residual financing requirement has also varied.

CENTRAL GOVERNMENT

FINANCING OF DEVELOPMENT AND INVESTMENT ACCOUNT, 1976/77—1979/80

Table 6.5 *K£million*

	1976/77	1977/78	1978/79*	1979/80*
EXPENDITURE				
Development Expenditure	86.0	115.2	142.6	181.6
Investment Expenditure	38.7	75.1	77.6	71.2
TOTAL	124.7	190.3	220.2	252.8+
FinANCING				
Surplus on Current Account	35.5	72.1	23.3	68.8
External Loans	29.8	43.2	81.8	83.2
External Grants	10.5	9.0	13.3	18.1
Long Term Domestic Borrowing	25. 0	66.9	88.6	45.0
Treasury Bills	25.0	-24.0	66.3	..
Other Short Term Borrowing	4.7	-5.3	2.3	10.6
From Cash Balances**	-3.8	28.3	-55.4	..
TOTAL	124.7	190.3	220.2	..

*Provisional.

**Including development project earnings.

+Actual expenditure is unlikely to exceed K£211.8 million.

Functional and Economic Classification of Expenditure

6.17. A breakdown of expenditure on main services is given in Table 6.6. The total expenditure in 1979/80 is shown as K£774.8 million which is nearly twice as high as the total in 1976/77. The actual increase in 1979/80 may, however, be lower as development expenditure was K£41 million less than expected. The major heads of recurrent expenditure in descending order of importance in 1979/80 were education accounting for K£123 million or 23.4 Per cent of the total; general administration including external affairs and public order K£96.2 million or 18.3 per cent; and defence K£90.9 million or 17.3 per cent. "Other" services including public debt accounted for K£83.1 million equal to 15.8 per cent of expenditure. Public debt interest is the major item under this heading. In 1976/77 these four heads had taken 26.6 Per cent, 16.4 per cent, 14.3 per cent and 16 per cent of the total expenditure

CENTRAL GOVERNMENT
EXPENDITURE ON MAIN SERVICES, 1976/77-1979/80

Table 6.6 *K£million*

	1976/77			1977/78			978/79*			1979/80*		
	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	22.39	13.85	36.24	31.80	21.41	53.21	43.65	16.63	60.28	52.52	27.74	80.26
External Affairs	2.62	0.34	2.97	4.04	0.69	4.73	5.94	0.62	6.56	7.35	0.86	8.21
Public Order and Safety	22.19	1.49	23.68	3.26	3.00	34.26	32.88	2.57	35.46	36.34	4.24	40.59
TOTAL	47.20	15.69	62.89	67.10	25.10	92.20	82.47	19.82	102.29	96.22	32.84	129.06
DEFENCE.	41.12	1.79	42.91	73.74	5.66	79.40	96.88	8.85	105.74	90.92	6.12	97.05
EDUCATION	76.25	4.57	80.82	89.11	5.39	94.50	101.50	7.42	108.93	122.96	16.20	139.16
HEALTH	21.26	8.30	29.56	29.20	7.69	36.90	34.15	7.77	41.93	34.97	11.27	46.25
HOUSING AND COMMUNITY WELFARE	1.18	4.24	5.42	1.74	8.74	10.47	1.73	6.62	8.35	2.03	9.49	11.52
SOCIAL WELFARE	6.42	2.40	8.82	7.38	3.14	10.52	9.46	4.07	13.53	40.66	9.94	20.62
ECONOMIC SERVICES												
General Administration	3.19	5.97	9.16	5.20	7.19	12.38	6.08	8.82	14.90	8.28	11.15	19.43
Agriculture, Forestry and Fishing	19.08	23.98	43.06	22.26	32.66	54.91	20.84	37.31	58.16	22.75	47.16	69.91
Mining, Manufacturing and Construction	5.58	1.71	7.29	8.14	5.46	13.60	10.18	4.94	15.13	11.56	4.45	16.01
Electricity, Gas, Steam and Water	4.62	11.21	15.83	5.47	30.21	35.68	7.14	3057	37.71	6.83	29.01	35.85
Roads	8.80	20.55	29.34	9.68	24.32	34.00	10.98	32.37	43.35	12.26	37.62	49.89
Transport and Communications	1.92	16.20	18.12	5.01	26.50	31.1	51.6	36.60	41.76	5.91	14.55	20.45
Other Economic Services	4.61	2.16	6.77	6.68	2.24	8.92	10.23	4.21	14.44	10.82	2.87	13.69
TOTAL ECONOMIC SERVICES	47.80	81.78	129.57	62.43	128.57	191.00	70.62	154.83	255.45	78.41	146.82	225.23
OTHER SERVICES; INCLUDING PUBLIC DEBT	45.80	3.99	49.79	71.60	3.78	75.39	68.41	6.12	74.53	83.09	11.12	94.31
TOTAL	287.01	122.75	409.76	402.31	188.08	590.39	469.71	217.84	687.55	524.69	250.11	774.81

*Provisional.

respectively. An increase in spending on defence and reduction in the relative share of expenditure on education are the major features of the shift in emphasis of expenditure between 1976/77 and 1979/80.

6.18. Over the last three years there has been some concentration of development expenditure on agriculture, forestry and fishing, electricity and water, roads and transport and communications. These four expenditure categories accounted for 51.3 per cent of the total in 1979/80, 62.8 per cent in 1978/79 and 60.4 per cent in 1977/78.

CENTRAL GOVERNMENT

ECONOMIC ANALYSIS OF EXPENDITURE, 1976/77—1979/80

Table 6.7 *K£million*

	1976/77	1977/78	1978/79*	1979/80**
CURRENT EXPENDITURE				
CONSUMPTION EXPENDITURE ON GOODS AND SERVICES				
Labour Costs	84.49	111.90	125.82	. .
Other Goods and Services	96.90	150.53	198.05	. .
TOTAL	181.40	262.43	323.87	. .
SUBSIDIES	0.74	0.37	0.60	. .
INTEREST	23.95	32.80	41.40	. .
TRANSFERS TO:				
Households and Un-incorporated Enterprises Including Private Non-profit Institutions	9.50	8.41	14.87	. .
Financial and Non-Financial Enterprises	0.17	3.64	1.62	. .
General Government	67.45	81.14	91.36	. .
Rest of the World	1.26	1.52	3.50	. .
Funds	0.36	1.76	0.21	. .
TOTAL TRANSFERS	78.75	96.48	111.56	. .
OTHERS	0.12	0.07	0.76	. .
TOTAL CURRENT EXPENDITURE	284.96	392.16	478.19	. .
CAPITAL EXPENDITURE				
Gross Fixed Capital Formation	71.35	90.69	106.63	. .
Purchase of Equity in Enterprises	11.65	18.04	12.04	. .
Loans	27.00	57.10	65.58	. .
Transfers	2.45	4.52	6.61	. .
Loan Repayments	12.34	27.82	17.95	. .
Transfer of Funds	0.01	0.06	0.55	. .
TOTAL CAPITAL EXPENDITURE	124.81	198.23	209.36	. .
TOTAL EXPENDITURE	409.76	590.39	687.55	774.81

*Provisional.

**No breakdown available at the time of going to press.

6.19. As noted in Table 6.7 the data for economic analysis of expenditure were not available for 1979/80 as this survey was prepared. The last year covered is 1978/79 and in this year labour costs represented 18.3 per cent of total expenditure, other consumer goods and services 29 per cent, gross fixed capital formation 15.5 per cent and transfers to general government 13.3 per cent. Loans and loan repayments made up 12.2 per cent of total expenditure. Comparing 1978/79 with 1976/77, expenditure on other goods and services has risen in importance while disbursements of loans and loan repayments reflect a lower share of total expenditure.

Public Debt

6.20. The total funded and unfunded public debt excluding short-term borrowing increased by an average of 16.8 per cent a year between June 1974 and June 1979. As shown in Table 6.8 the total debt at June 1979 was K£577.9 million and this total is 9.8 per cent more than the level of at June

CENTRAL GOVERNMENT
PUBLIC DEBT, 1974—1979

Table 6.8 *K£'000*

As at 30th June	PUBLIC DEBT*								
	FUNDED			UNFUNDED			TOTAL		
	External	Internal	Total	External	Internal	Total	External	Internal	Total
1974	21.21	118.52	139.73	115.13	10.61	125.74	136. 34	129. 13	265.46
1975	21.21	133.60	154.81	146.30	10.50	156.80	167. 51	144.10	311.61
1976	21.21	108.44	201.64	188.66	10.43	199.09	209.87	190.87	400.73
1977	19.64	203.29	222.93	209.30	10.17	219.47	228.94	213.46	442.40
1978	3.08	273.46	276.54	239.54	10.11	249.86	242. 62	283.57	526.20
1979	3.08	308.86	311.94	255.88	10.08	265.96	258. 96	318.94	577.90

*Excluding Short-Term Borrowings.

1978. The rise of some K£51.7 million in 1978/79 was, however, lower than the average increase in absolute terms since 1974 of K£62.7 million a year. Of the total debt at June 1979, K£311.9 million or 54 per cent was funded and K£266 million or 46 per cent was unfunded; similarly K£259 million, an equivalent of 44.8 per cent was external debt and K£318.9 million or 55.2 per cent was internal. Most funded debt is internal and bulk of the unfunded debt is external. The sources of unfunded and funded debt are respectively given in Tables 6.9 and 6.10. There are a large number of donor countries assisting Kenya. At June 1979 the main countries to which Kenya owed debt included West Germany, USA and Japan. The United Kingdom had abolished debts owing by Kenya and now provided aid on a grant basis only. Among the international organizations most debt was owed to the World Bank and its subsidiary the International Development Agency. The EEC and IMF are fast increasing their loans allocated to Kenya. For internal debt,

CENTRAL GOVERNMENT
SOURCES OF UNFUNDED DEBT, 1974-1979

Table 6.9 K£'000

Outstanding as at June, 30th	1974	1975	1976	1977	1978	1979
EXTERNAL DEBT						
Lending Countries						
United Kingdom	47,098	43,825	40,786	37,164	36,997	
U.S.A.	13,476	15,902	18,380	19,868	14,618	16,371
West Germany	6,319	14,223	16,122	20,530	29,660	32,745
Japan	1,058	2,738	6,710	11,384	14,274	13,747
Sweden	6,678	10,004	11,981	12,245		
Netherlands	1,674	5,157	4,491	6,134	9,320	6,521
Denmark	798	2,035	2,788	3,948	7,210	6,766
Finland				6,766	1,061	1,470
Other	3,999	5,124	7,006	3,722	20,910	34,640
TOTAL	81,100	99,009	108,264	121,761	134,060	112,263
International Organizations—						
I.B.R.D	11,143	16,296	39,101	42,423	45,819	55,219
I.D.A	21,371	27,739	37,531	40,946	46,825	55,875
African Development Bank	1,508	1,970	2,243	2,672	3,211	2,502
O.P.E. C					1,952	1,992
E.E.C					2,443	14,109
I.M.F					3,837	12,479
Area League		1,286	1,517	1,494	1,405	1,435
TOTAL	34,022	47,291	80,392	87,535	105,491	143,612
TOTAL EXTERNAL ..	115,123	146,300	188,656	209,296	239,541	255,873
INTERNAL DEBT						
Central Bank of Kenya	10,000	10,000	10,000	10,000	10,000	10,000
Other	614	497	434	174	115	81
TOTAL INTERNAL	10,614	10,497	10,434	10,174	10,115	10,081
TOTAL UNFUNDED DEBT	125,737	156,796	199,091	219,470	249,655	265,956

CENTRAL GOVERNMENT

ANALYSIS OF PUBLIC FUNDED DEBT AT VALUE BY HOLDERS ON LOCAL REGISTER, AS AT 30th JUNE 1974-1979

Table 6.10 K£'000

	1974	1975	1976	1977	1978	1979
INTERNAL-						
PUBLIC BODIES:—						
National Social Security Fund	48,181	62,185	76,220	100,478	130,294	150,268
Central Government	19,448	20,581	23,921	16,812	22,740	27,671
Local Government	780	721	838	734	675	709
Kenya Post Office Savings Bank	4,851	6,186	7,320	7,832	13,718	15,719
East African Community lnsti-tutions**	5,191	6,562	6,388	8,152	6,346	13,523
Central Bank	8,311	7,156	36,349	37,730	44,297	44,881
Other Public Sector	1,437	382	564	1,375	1,409	1,399
OTHER INTERNAL:—						
Commercial Banks	10,184	9,732	8,888	8,697	30,988	30,452
insurance Companies	6,357	5,964	7,082	9,718	11,925	12,774
Other Companies	12,236	13,192	11,943	11,263	10,584	11,053
Private Indiiduals	450	282	270	296	382	317
EXTERNA..	1,090	661	654	203	101	101
TOTAL	118,516	133,604	180,438	203,290	273,457	308, 864

*Provisional

**And their successors.

the National Social Security Fund is by far the largest single source of funded debt. It accounted for just under half such debt outstanding at June 1979. The Central Bank and Commercial Banks were other important holders of Kenya's internal debt.

6.21. In general debt servicing charges are rising in line with the total debt. However, in the year ended June 1979 net servicing charges totalled K£44.48 million or K£11.53 million below the figure for 1977/78. The high figure in 1977/78 had been due to lower receipts of interest and loan repayments as shown in Table 6.11. The interest on debt for the four year period 1979/80 to 1982/83 according to the Sessional Paper No. 4 of 1980 is expected to reach K£318 million at an average of K£79.5 million a year.

CENTRAL GOVERNMENT
DEBT SERVICING CHARGES, 1974-1979

Table 6.11 K£milllon

Year ending 30th June	ANNUAL DEBT SERVICING CHARGES			INTEREST AND LOAN REPAYMENT RECEIPTS			NET SERVICING CHARGES			Sinking Funds at Market Value
	External	Internal	Total*	External	Internal	Total	External	Internal	Total	
1974	8.61	9.40	18.04	0.01	4.96	4.97	8.63	4.44	13.07	16.37
1975	10.11	13.55	23.66		5.61	5.61	10.11	7.94	18.05	18.36
1976	11.96	19.09	31.05		5.80	5.80	11.96	13.29	25.25	20.92
1977	14.77	21.52	36.29		9.72	9.72	14.77	11.80	26.57	23.50
1978	31.17	29.45	60.62		4.61	4.61	31.17	24.84	56.01	
1979	25.53	32.82	59.35	—	14.87	14.87	25.53	1895	44.48	

*Includes interest payments of K£milllon:—
1974-11.98: 1975-14.53: 1976—19.54: 1977—23.95: 1978—32.80: 1979—41.40.

CENTRAL GOVERNMENT

DEBT SERVICE CHARGES ON EXTERNAL DEBT RELATED TO EXPORT OF GOODS AND SERVICES
1973-1979

Table 6.12

	Debt Service Charges on External Debt*	Exports of Goods and Services	External Debt Service Charges as a Percentage of Exports of Goods and Services
	K£million	*K£million*	
1973	8.9	253.6	3.5
1974	8.6	357.2	2.4
1975	10.1	356 9	2.8
1976	12.0	471.7	2.5
1977	14.8	650.2	2.3
1978	31.2	566.8	5.5
1979	25.5	580.4	4.4

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

6.22. The debt service charges are detailed in Tables 6.11 and 6.12. There was a decline in the debt service charges on external debt in the year 1979 because of the abolition by the United Kingdom of debt outstanding from Kenya. As a result the debt service ratio as a proportion of earnings from exports of goods and services fell from a high of 5.5 per cent in 1978 to 4.4 per cent in 1979. However, unless there are other offers to abolish outstanding debt it seems most unlikely that this ratio will fall in future years.

Local Authorities

6.23. There has been a fairly substantial growth in the level of expenditure incurred by local authorities since 1975. Their total expenditure has risen from K£29.73 million in 1975 to K£55.67 million in 1979. The overall increase of 87 per cent is somewhat less than the rise in Central Government expenditure but it is in line with the increase in total GDP. Nairobi City Council accounted for more than half the expenditure incurred by local authorities in 1979 but the growth in its expenditure since 1975 of 82.6 per cent is lower than the growth in expenditure incurred by town and county councils whose spending rose by 128 per cent. Table 6.13 refers.

EXPENDITURE OF LOCAL AUTHORITIES, 1975-1979

Table 6.13 *K£million*

	MUNICIPALITIES			Town and County Councils	Total
	Nairobi City Council	Other Municipal Councils	Total		
1975	16.13	8.50	24.63	5.10	9.73
1976	18.74	9.71	28.34	5.58	34.03
1977	21.56	11.05	32.61	7.32	39.93
1978*	22.56	12.96	35.52	10.13	46.65
1979*	29.46	14.57	44.03	11.64	55.67

*Provisional.

6.24. The breakdown of recurrent and capital expenditure of municipal councils by main services is given in Table 6.14. Major categories of expenditure in 1979 were—education K£7.4 million; water supplies—K£6.6 million; sanitary services—K£5.9 million; housing estates—K£5.9 million; and health K£5 million. An economic analysis of expenditure incurred by municipal councils is set out in Table 6.15. It reflects the importance of labour costs and gross fixed capital formation in municipal expenditures. These two headings accounted respectively for 40.3 and 24.3 per cent of the total expenditure in 1979. Expenditure on gross fixed capital formation has risen more rapidly than on any other category since 1975.

MUNICIPAL COUNCILS: RECURRENT AND CAPITAL EXPENDITURE ON MAIN SERVICES, 1975-1979

Table 6.14 K£'000

	1975	1976	1977	1978*	1979*
Administration	3,085	3,352	3,556	4,185	4,951
COMMUNITY SERVICES:					
Roads	1,365	1,706	1,938	2,223	2,402
Sanitary Services	2,684	3,338	5,029	5,124	5,946
Other	1,049	1,019	1,118	1,248	1,725
TOTAL	5,098	6,063	8,086	8,595	10,073
SOCIAL SERVICES:					
Health	2,846	3,168	3,323	4,156	5,005
Education	4,539	4,925	5,320	5,750	7,411
Other	296	301	392	464	507
TOTAL	7,681	8,394	9,035	10,370	12,923
ECONOMIC SERVICES:					
General Administration	898	1,057	1,056	1,237	1,413
Water Undertakings	2,470	3,653	4,182	4,250	6,640
Housing Estates (including Staff Housing)	4,362	4,833	5,529	5,458	5,873
Other	1,033	1,094	1,167	1,429	2,159
TOTAL	8,763	10,637	11,934	12,374	16,085
TOTAL EXPENDITURE	24,627	28,446	32,611	35,524	44,032

*Provisional.

MUNICIPAL COUNCILS: ECONOMIC ANALYSIS OF EXPENDITURE, 1975-1979

Table 6.15

	1975	1976	1977	1978	1979*
CURRENT EXPENDITURE—					
Labour Costs	10,918	11,973	12,659	14,857	17,742
Other Goods and Services	5,367	5,728	6,658	6,946	8,541
Transfer to Households and Enterprises	450	690	423	422	491
Transfer to Funds (current)	194	294	310	211	739
Interest					
TOTAL CURRENT	16,929	18,685	20,050	22,436	27,513
CAPITAL EXPENDITURE—					
Gross Fixed Capital Formation	4,146	5,569	7,814	8,146	10,697
Loan Repayment**	3,428	3,918	4,498	4,644	5,474
Transfer to Funds (capital)	124	274	249	298	347
TOTAL CAPITAL	7,698	9,761	12,561	13,088	16,519
TOTAL EXPENDITURE	24,627	28,446	32,611	35,524	44,032

*Provisional. **Includes Interest.

6.25. Analysis of revenue of municipal councils set out in Table 6.16 shows that municipal councils rely mainly on rates, receipts from sales of goods and services and transfers from the Central Government for their current revenue, while loans meet much of the costs of gross fixed capital formation. Current transfers and loans have increased much more rapidly

MUNICIPAL COUNCILS: ECONOMIC ANALYSIS OF REVENUE, 1975-1979

Table 6.16 K£'000

	1975	1976	1977	1978*	1979*
CURRENT REVENUE—					
Direct Taxes (Rates**)	5,665	6,628	7,137	6,956	7,580
Indirect Taxes (Licences and cesses)	210	449	452	484	596
Income from Property	577	694	832	745	610
Current Transfers	5,395	5,654	5,326	5,497	10,196
Sales of Goods and Services	9,520	11,765	13,118	14,621	16,246
TOTAL CURRENT	21,367	25,190	26,865	28,303	35,228
CAPITAL REVENUE—					
Loans Raised	3,016	5,657	5,698	7,215	8,623
Grants					
Loan Repayments		37	36	40	36
TOTAL CAPITAL	3,016	5,694	5,734	7,255	8,659
TOTAL REVENUE	24,383	30,884	32,599	35,558	43,887

*Provisional

**Paid by households and enterprises.

between 1975 and 1979 than the receipts from rates and the sale of goods and services. A continuation of relatively slow growth in receipts from these sources of revenue will create future problems for the municipalities especially over the repayment and interest charges on loans. In 1979 current transfers and loans, respectively, accounted for K£10.2 million and K£8.6 million of the total receipts of K£43.9 million. The comparative figures in 1978 were K£5.5 million and K£7.2 million respectively out of total revenue receipts K£35.6 million.

6.26. Table 6.17 gives expenditure and revenue data for town and county councils. For this group of local authorities, licence fees and cesses and the sale of goods and services are the major sources of revenue while labour costs, other goods and services and gross fixed capital formation are the main categories of expenditure. After a fast growth in revenue in both 1976 and 1977, the increases in the latest two years have been much smaller. However, expenditure rose most rapidly in 1977 and 1978 so that there was a small overall deficit by 1979.

TOWN AND COUNTY COUNCILS: ECONOMIC ANALYSIS OF EXPENDITURE AND REVENUE, 1975-1979

Table 6.17 K£'000

	1975	1976	1977	1978*	1979*
CURRENT EXPENDITURE					
Labour Costs	2,364	2,946	3,495	4,858	5,666
Other Goods and Services	974	1,277	1,834	2,070	2,179
Transiers to Households and Enterprises	447	182	360	493	562
Transfer to Funds (current)	40	56	56	105	145
Interest					
TOTAL CURRENT	3,825	4,461	5,745	7,526	8,552
CAPITAL EXPENDITURE—					
Gross Fixed Capital Formation	954	766	1,230	2,033	2,467
Loan Repayments **	274	322	307	538	614
Transfer to Funds (capital)	43	31	34	32	7
TOTAL CAPITAL	1,271	1,119	1,571	2,603	3,088
TOTAL EXPENDITURE	5,096	5,580	7,316	10,129	11,640
CURRENT REVENUE—					
Direct Taxes (Rates+)	567	462	982	904	995
Indirect Taxes (Licences and cesses)	1,729	3,219	5,431	4,831	4,677
Income from Property	634	716	831	902	965
Current Transfers	72	185	262	285	298
Sale of Goods and Services	1,622	2,022	2,227	3,155	3,403
TOTAL CURRENT	4,624	6,704	9,733	10,077	10,338
CAPITAL REVENUE—					
Loans Raised	385	345	309	668	870
Grants					
Loans Repayments	15	19	20	24	26
TOTAL CAPITAL	400	364	329	692	896
TOTAL REVENUE	5,024	7,068	10,062	10,769	11,234

*Provisional.

**Includes Interest.

+Paid by households and enterprises.

CHAPTER 7—EXTERNAL TRADE

Kenya's external trade improved moderately during 1979. The value of imports declined by 6.3 per cent whereas that of exports increased by 4.3 per cent. The level of value of imports fell from K£661.1 million in 1978 to K£619.7 million in 1979, while the value of exports rose from K£395.7 million to K£412.8 million over the same period. Import restriction measures instituted in late 1978 helped reduce the level of imports although imports were rising again during the last quarter of 1979 following relaxation of the restrictions later in that year. Exports of the main crops of coffee and tea declined during the year, and the rise in the value of exports was occasioned by an increase in the value of exports of maize, petroleum products, hides and skins and some chemicals. Earnings from exports could only finance 67 per cent of the import bill compared with 60 per cent in 1978.

7.2. Table 7.1 shows a reduction in the trade deficit with countries outside East Africa; this fell from K£304.3 million in 1978 to K£247.8 million in 1979. Simultaneously an increase occurred in the surplus on East African trade despite the continued closure of the border by Tanzania; the surplus on East African trade rose from K£38.9 million in 1978 to K£40.9 million or by 5.1 per cent in 1979. The overall deficit as a result declined from K£265.4 million in 1978 to K£206.9 million in 1979.

BALANCE OF TRADE, 1975-1979

Table 7.1 — *K£million*

	1975	1976	1977	1978	1979
IMPORTS—					
From outside East Africa	352·1	393·8	529·2	658·8	618·8
Commercial	319·5	364·1	493·3	628·8	573·6
Government	32·6	29·7	35·9	30·0	45·2
From Uganda and Tanzania	10·4	13·1	2·2	2·3	0·9
TOTAL	362·6	407·0	531·4	661·1	619·7
EXPORTS—					
To Markets outside E. Africa	169·0	268·8	428·9	336·6	351·9
Re-exports	7·5	9·7	11·0	17·9	19·1
To Uganda and Tanzania	61·5	66·6	61·9	41·2	41·8
TOTAL	238·0	345·1	501·8	395·7	412·8
BALANCE OF TRADE—					
With Markets outside E. Africa	−175·7	−115·3	−89·3	−304·3	−247·8
With Uganda and Tanzania	+51·1	+53·5	+59·7	+38·9	+40·9
TOTAL	−124·6	−61·8	−29·6	−265·4	−206·9

7.3. During the period 1975 to 1979 Kenya's import bill has been rising steadily, due mainly to increases in the prices of petroleum fuels and imported machinery and other manufactured goods. At the same time the erratic nature of the factors governing the prices of Kenya's primary exports on the world market has made Kenya's export receipts fairly unpredictable. The external trade has therefore been rather unstable during these years.

Price Changes

7.4. Details on price indices are given in Table 7.2. The average price of imports increased by 15.8 per cent during 1979 having risen by 5.6 per cent in 1978. The highest rise of 31.7 per cent took place in the prices of imported chemicals since most chemicals are derivates from petroleum products while the prices of imported petroleum fuels increased by 22.6 per cent; machinery and capital equipment by 10.8 per cent and other non-oil items by an average of 10.9 per cent.

PRICE INDICES, 1975-1979

Table **7.2**

1976 = 100

Imports	1975	1976	1977	1978	1979
Food and live animals	100	100	87	86	76
Beverages and Tobacco	88	100	115	130	125
Crude materials, inedible	77	100	99	123	120
Mineral fuels	85	100	108	106	130
Animal and vegetable oils and fats	107	100	136	131	140
Chemicals	81	100	100	101	133
Manufactured goods	94	100	109	118	126
Machinery and transport equipment	78	100	114	130	144
Miscellaneous manufactured articles	97	100	110	122	123
All Imports	86	100	108	114	132
Non-oil Imports	86	100	109	119	132
EXPORTS					
Food and live animals	61	100	167	123	117
Beverages and tobacco	80	100	96	114	108
Crude materials, inedible	89	100	112	122	127
Mineral fuels	83	100	112	113	145
Animal and vegetable oils and fats	87	100	104	127	135
Chemicals	80	100	105	96	134
Manufactured goods	84	100	128	140	149
Machinery and transport equipment	79	100	120	127	144
Miscellaneous manufactured articles	71	100	124	125	130
All Exports	74	100	142	120	128
Non-oil Exports	70	100	150	123	124

7.5. The prices of Kenya's primary exports, i.e. agricultural products, on the other hand, fell during 1979 by 4.9 per cent. This was mainly due to the decline in the coffee and tea prices. The prices of petroleum products, however, increased by 28.3 per cent, tending to partly offset the increase in price of crude petroleum which has been a prominent factor in the worsening of Kenya's balance of payments. The average price of chemical exports increased by 39.6 per cent while the increases in the prices of other manufactured items were moderate. On the whole, the overall price of non-oil items did not change appreciably though for all exports taken together the average increase in price amounted to 6.7 per cent.

Volume Changes

7.6. Quantum indices for the years 1975 to 1979 are shown in Table 7.3. Overall, the volume of imports fell by 18.3 per cent compared to an increase of 16.4 per cent in 1978. The volume of imports of non-oil products declined by 21.9 per cent whereas non-machinery items taken together registered a

QUANTUM INDICES, 1975-1979

Table 7.3 1976=100

Imports	1975	1976	1977	1978	1979
Food and live animals	95	100	103	172	139
Beverages and tobacco	68	100	58	99	107
Crude materials, inedible	95	100	150	103	94
Mineral fuels	109	100	104	107	108
Animal and vegetable oils and fats	66	100	90	110	101
Chemicals	115	100	145	155	121
Manufactured goods	88	100	115	128	110
Machinery and transport equipment	120	100	136	176	126
Miscellaneous manufactured articles	88	100	107	112	111
All Imports	104	100	122	142	116
Non-oil Imports	103	100	126	151	118
EXPORTS					
Food and live animals	86	100	116	112	115
Beverages and tobacco	94	100	155	120	129
Crude materials, inedible	98	100	85	81	93
Mineral fuels	102	100	107	89	80
Animals and vegetable oils and fats	69	100	25	13	18
Chemicals	105	100	85	89	75
Manufactured goods	101	100	74	68	66
Machinery and transport equipment	97	100	53	46	41
Miscellaneous manufactured articles	130	100	78	77	81
All Export	94	100	104	96	94
Non-oil Exports	93	100	102	96	97

fall of 10.4 per cent. There was indeed a heavy decline in the volume of imported machinery, capital goods and transport motor-vehicles of 28.4 per cent. Volume of imports of chemicals too declined by 21.9 per cent while that of foodstuffs fell by 19.2 per cent.

7.7. The decline in the overall volume of exports was 2.1 per cent arising mainly from a drop of 10.1 per cent in the quantity of exported petroleum fuels and moderate increases in export volumes of some other sectors. In total the volume of non-oil items exported was virtually unchanged but excluding oil, coffee, and tea, the quantum index for exports increased by 12.5 per cent.

Terms of Trade

7.8. The terms of trade for the years 1975 to 1979 are shown in Table 7.4. The trend in the decline in the terms of trade since 1977 continued into 1979. There was an overall drop of 7.6 per cent in Kenya's terms of trade in 1979 compared to one of 19.8 per cent in 1978. For non-oil trade, the decline was 8.7 per cent compared to a decline of 25.4 per cent in the previous year.

TERMS OF TRADE, 1975-1979

Table 7.4 1976=100

	1975	1976	1977	1978	1979
All Items	86	100	131	105	97
Non-oil Items	81	100	138	103	94

Analysis by Broad Economic Categories

7.9. *Imports.*—Table 7.5 shows values of imports by broad economic categories while the values of imports of some selected items are detailed in Table 7.6. Whereas in general the relative shares of the various categories remained unchanged in 1979, there was a notable increase in the share of the value of fuels and lubricants and non-food industrial supplies while the shares of the values of certain other categories declined.

7.10. The value of imported industrial inputs declined from K£204.0 million in 1978 to K£197.2 million in 1979, a decline of 3.4 per cent against an increase of 14.4 per cent in 1978, while the value of consumer goods, excluding fuels declined by 22 per cent from K£69.6 million in 1978 to K£54.3 million in 1979.

7.11. The largest increase in value terms occurred in the imports of fuels and lubricants, from K£117.8 million in 1978 to K£146.8 million in 1979, an increase of 24.6 per cent. Imports of primary fuels, which had declined by 7.1 per cent in 1978, increased by 28.8 per cent, from K£93.9 million in 1978 to K£120.9 million in 1979. Though the increases were high, they were mainly due to increases in price rather than increased consumption.

TOTAL IMPORTS, 1975–1979

Table 7.5 By Broad Economic Category *K£'000*

	1975	1976	1977	1978	1979
1. Food and Beverages	21,393	26,310	27,459	38,503	32,900
Primary	6,609	2,786	4,977	11,729	9,868
For Industry	4,712	393	2,894	7,245	3,138
For Household Consumption	1,879	2,393	2,083	4,484	6,730
Processed	14,784	23,534	22,482	26,774	23,031
For Industry	8,925	11,379	14,575	16,937	14,262
For Household Consumption	5,859	12,145	7,907	9,837	8,769
2. Industrial Supplies (Non-Food)	105,007	124,011	160,780	179,812	179,849
Primary	7,734	11,488	13,147	13,350	7,731
Processed	97,273	112,523	147,633	166,462	172,118
3. Fuels and Lubricants	95,805	103,884	117,147	117,778	146,798
Primary	87,242	94,159	101,007	93,861	120,934
Processed	8,563	9,725	16,140	23,917	25,864
Motor Spirit	1,006	796	2,652	5,000	5,538
Other	7,557	8,929	13,488	18,917	20,326
4. Machinery and other Capital Equipment	61,660	75,521	103,006	141,074	125,036
Machinery and other Capital Equipment	56,307	63,259	91,439	126,052	94,151
Parts and Accessories	5,353	8,262	11,567	15,022	30,885
5. Transport Equipment	46,789	44,116	76,054	126,652	95,688
Passenger Motor Vehicles	6,230	8,410	12,412	20,182	11,173
Other	19,072	16,955	38,502	63,706	58,666
Industrial	18,836	16,618	38,059	62,735	57,574
Non-Industrial	236	337	443	971	1,092
Parts and Accessories	21,487	18,751	25,140	42,764	25,850
6. Consumer Goods not elsewhere specified	31,273	35,219	46,355	55,299	38,786
Durable	5,277	7,009	9,034	12,365	8,313
Semi-Durable	12,989	16,578	21,431	21,202	11,956
Non-Durable	13,007	11,632	15,890	21,732	18,517
7. Goods not elsewhere specified	659	936	644	2,007	647
TOTAL	362,586	406,997	531,446	661,125	619,704

PERCENTAGE SHARES

1. Food and Beverages	5·9	6·5	5·2	5·8	5·3
2. Industrial Supplies (Non-Food)	29·0	30·5	30·3	27·2	29·0
3. Fuels and Lubricants	26·4	25·5	22·0	17·8	23·7
4. Machinery and other Capital Equipment	17·0	17·8	19·4	21·3	20·2
5. Transport Equipment	12·9	10·8	14·3	19·2	15·4
6. Consumer Goods not elsewhere specified	8·6	8·7	8·7	8·4	6·3
7. Goods not elsewhere specified	0·2	0·2	0·1	0·3	0·1
TOTAL	100·0	100·0	100·0	100·0	100·0

7.12. Imports of non-food industrial supplies remained almost unchanged 1979 though there was more emphasis on imports of processed supplies rather than on primary goods. Imports of primary industrial supplies fell from K£13.3 million in 1978 to K£7.7 million in 1979 while imports of Processed supplies rose from K£166.5 million to K£172.1 million.

7.13. There was a heavy decline in the value of imported transport equipment, from K£126.6 million in 1978 to K£95.7 million in 1979, a fall of 24.4 per cent. The value of imported passenger vehicles was almost halved while that of imports of industrial transport equipment fell from K£62.7

Table 7.6 — *K£million*

	1975	1976	1977	1978	1979
Crude Petroleum	86·82	93·47	100·60	92·34	120·09
Motor Vehicles and Chassis	22·96	23·63	40·80	68·80	45·12
Agricultural Machinery and Tractors	6·56	7·06	16·60	18·58	7·57
Industrial Machinery (including Electrical)	61·13	69·89	92·13	130·18	112·87
Iron and Steel	15·56	28·17	32·64	41·82	37·63
Cotton Fabrics	1·38	0·97	0·44	0·44	0·41
Synthetic Fabrics	5·98	3·30	3·20	2·38	1·88
Paper and Paper Products	11·13	7·60	9·03	10·26	12·56
Pharmaceuticals	7·60	6·74	10·18	13·19	11·23
Fertilizers	11·23	5·22	9·47	10·01	5·60

million to K£57.6 million, a decline of 8.1 per cent. Similarly the value of imports of machinery and other capital equipment fell from K£141.1 million in 1978 to K£125.0 million in 1979, a decline of 11.4 per cent though imports of their parts and accessories almost doubled. That was obviously due to the high imports of machinery in earlier years.

7.14. Imports of non-food consumer goods also fell sharply from K£55.3 million in 1978 to K£38.8 million, or by 29.9 per cent. Imports of the durable and semi-durable consumer goods fell much more substantially than those of non-durables and there was a decline of 14.6 per cent in the value of imports of food and beverages, from K£38.5 million in 1978 to K£32.9 million in 1979. The decrease of K£5.6 million was almost equally distributed within both the primary and processed categories.

7.15. *Exports.*—Table 7.7 contains information on Kenya's exports by broad economic categories for the period 1975 to 1979. The further relative decline in shares of foods and beverages in total exports was matched by an increase in value of exports of non-food industrial supplies and petroleum fuels. The share of exports of foods and beverages fell from 65.6 per cent of the total in 1977 to 58.8 per cent in 1978 and further to 56.2 per cent in 1979. Petroleum fuels, on the other hand, increased their share from 17.3 per cent in 1977 to 20.0 per cent in 1979.

7.16. Details on quantities and prices of a selected number of export commodities are set out in Tables 7.8 and 7.9 while Table 7.10 details changes in value, quantity and prices of exports in the period 1978-1979. Export prices of most of the commodities increased while the volumes exported declined. Except for falls in prices of coffee, tea, pyrethrum extract and cotton, most of the other commodities increased in price. The volume of exports of pyrethrum extract, hides and skins and soda ash rose by 49.6, 20.1 and 34.4 per cent, respectively during 1979.

TOTAL EXPORTS', 1975-1979)

By Broad Economic Category

Table 7.7

K£'000

	1975	1976	1977	1978	1979
1. Food and Beverages	82,417	159,586	315,102	217,688	216,643
Primary	67,676	135,873	289,158	198,338	186,248
For Industry	36,278	95,926	206,258	126,025	116,555
For Household Consumption	31,398	39,947	82,901	72,313	69,693
Processed	14,741	23,713	25,943	19,350	30,394
For Industry	2,395	2,805	2,117	711	8,673
For Household Consumption	12,346	20,908	23,826	18,639	21,721
2. Industrial Supplies (Non-Food)	65,196	78,480	64,790	65,973	73,793
Primary	30,617	34,836	27,911	30,182	31,278
Processed	34,579	43,644	36,879	35,792	42,515
3. Fuel and Lubricants	58,957	69,730	83,198	68,985	77,172
Primary	268	323	220	215	14
Processed	58,689	69,407	82,978	68,771	77,158
Motor Spirit	8,246	8,966	13,578	10,390	23,994
Other	50,443	60,441	69,400	58,381	53,164
4. Machinery and other Capital equipment	5,303	6,589	1,228	1,489	1,509
Machinery and Other Capital Equipment	4,398	5,319	1,162	1,450	1,286
Parts and Accessories	905	1,270	66	39	223
5. Transport Equipment	4,190	4,005	999	965	1,079
Passenger Motor Vehicles	460	484	—	—	—
Other	1,570	1,283	492	448	631
Industrial	1,467	1,269	488	443	604
Non-Industrial	103	14	4	5	27
Parts and Accessories	2,160	2,238	507	518	449
6. Consumer Goods not elsewhere specified	14,092	16,712	14,627	14,615	15,060
Durable	528	762	346	510	601
Semi-Durable	3,279	3,925	4,113	5,414	4,151
Non-Durable	10,285	12,025	10,168	8,691	10,308
7. Goods not elsewhere specified	200	293	314	250	272
TOTAL	230,356	335,395	480,259	369,965	385,528

	PERCENTAGE SHARES				
1. Food and Bevcraj.es	35·8	47·6	65·6	58·8	56·2
2. Industrial Supplies (Non-Food)	28·3	23·4	13·5	17·8	19·1
3. Fuel and Lubricants	25·6	20·8	17·3	18·6	20·0
4. Machinery and other Capital Equipment	2·3	2·0	0·3	0·4	0·4
Transport Equipment	1·8	1·1	0·2	0·3	0·3
6. Consumer **Goods not elsewhere specified**	6·1	5·0	3·0	4·0	3·9
7. Goods not elsewhere speeded	0·1	0·1	0·1	0·1	0·1
TOTAL	100·0	100·0	100·0	100·0	100·0

***Excluding Re-exports.**

Exports of Manufactured Products

7.17. As shown in Table 7.7, there was an increase in the value of Processed exports. Processed exports including fuels, machinery, transport equipment and residual consumer goods fetched K£167.8 million in 1979 compared to K£141.1 million in 1978. When petroleum fuels are excluded, these exports amounted to K£90.6 million in 1979 compared to K£72.4 million in 1978. Details on individual processed commodities which feature Prominently in exports are shown in Tables 7.8 to 7.10. Appreciable increases

Table 7.8

	Unit	1975	1976	1977	1978	1979
Coffee	Tonnes	67,728	77,586	94,344	85,434	78,759
Tea	,,	52,450	59,285	70,220	84,968	94,025
Petroleum Products	Million Litres	1,528	1,564	1,634	1,399	1,174
Pyrethrum products	Tonnes	4,907	4,170	3,694	1,656	955
Meat Products	,,	8,167	9,768	9,344	3,033	2,644
Sisal	,,	43,986	29,368	24,925	26,870	25,959
Hides and skins	,,	11,940	14,158	11,389	10,893	13,081
Soda ash	,,	81,009	101,131	101,787	160,526	215,669
Fluorspar	,,	49,684	91,371	100,208	102,900	59,352
Cement	,,	549,130	628,436	662,132	610,100	510,206
Maize (raw)	,,	120,812	113,231	8,136	23,432	120,475
Canned pineaples	,,	20,399	29,905	45,329	42,082	41,048
Butter and ghee	,,	1,105	1,182	1,063	1,581	1,206
Beans and peas	,,	19,050	11,470	22,000	14,777	9,735
Cotton (raw)	,,	3,005	2,073	763	2,110	1,886
Wool	,,	1,223	1,288	1,360	1,165	1,080
Animal feeds	,,	16,046	27,223	17,730	22,626	21,530
Cashew nuts	,,	14,327	11,543	1,100	—	73

* adjusted for Annual 1979

EXPORT PRICES, 1975–1979

Table 7.9 *K.Sh./Unit*

	Unit of Quantity	1975	1976	1977	1978	1979
Coffee unroasted	Kg.	10·40	24·06	43·33	29·20	28·63
Tea	Kg.	8·74	10·72	20·44	14·87	13·37
Petroleum products	1,000 Lt.	636·84	736·62	866·22	860·86	1,159·51
Maize	100 Kg.	79·50	99·70	162·11	60·91	88·40
Meat and products	Kg.	12·57	17·17	16·26	17·95	20·34
Pyrethrum extract	Kg.	223·33	225·91	238·17	312·73	281·84
Sisal	100 Kg.	333·69	285·45	315·65	303·33	372·87
Hides and skins, undressed	Kg.	9·07	12·09	14·09	18·04	21·05
Wattle extract	Kg.	2·46	2·78	3·13	3·16	3·50
Soda ash	100 Kg.	60·13	59·98	52·80	45·90	51·53
Fluorspar	100 Kg.	40·25	48·92	49·69	49·89	66·85
Cement	100 Kg.	21·87	25·68	25·88	29·53	32·72
Beans, peas, etc.	Kg.	2·42	2·89	2·49	2·90	3·06
Cashew nuts, raw	Kg.	1·59	1·73	2·29	—	15·54
Wool	Kg.	6·97	8·18	11·46	11·98	12·92
Animal feed	100 Kg.	79·58	99·97	134·55	89·94	93·31
Cotton, raw	Kg.	8·53	11·02	11·39	13·16	9·81
Pineaples, canned	Kg.	3·54	4·67	4·64	4·55	4·54
Butter and ghee	Kg.	9·68	9·69	12·25	12·03	14·04
Wattle bark	100 Kg.	79·61	100·52	108·74	105·16	—

EXPORT CHANGE IN VALUE,QUANTITY AND PRICE , 1978—1979

Table 7.10

	VALUE K£'000			PERCENTAGE CHANGE IN		
	1978	1979	Change	Value	Quantity	Price
Coffee, unroasted	124,669.3	110,573.2	-14,096.1	-11.3	-9.6	-2.0
Tea	63,187.1	62,845.0	-342.1	-0.5	10.7	—10.1
Petroleum products	60,316.2	68,044.8	7,828.6	13.0	-16.0	34.7
Meat and products	2,721.3	2,689.4	-31.9	-1.2	-12.8	13.3
Pyrethrum extract	4,082.7	5,502.7	1,420.0	34.8	49.6	-9.9
Sisal	4,075.3	4,839.7	764.4	18.8	-3.4	22.9
Hides and skins, undressed	9,825.0	13,770.4	3,945.5	40.2	20.1	16.7
Wattle extract	1,486.7	1,965.6	478.9	32.2	19.2	10.8
Soda ash	3,684.3	5.556.5	1,872.2	50.8	34.4	12.3
Flourspar	2,566.8	1,983.8	-583.0	-22.7	-42.3	34.0
Cement	9,008.2	8,346.7	-661.5	-7.3	-16.4	10.8
Beans, peas etc.	2,141.6	1,491.7	-649.9	-30.3	34.1	5.5
Cashew nuts, raw	—	56.6	56.6	—	—	—
Wool	698.0	697.3	-0.7	-0.1	-7.3	7.8
Animal feed	1,017.5	1,004.5	-13.0	-1.3	-4.8	3.7
Cotton, raw	1,389.0	924.7	-464.3	-33.4	-10.6	-25.5
Pineables, canned	9,583.1	9,316.0	-267.1	-2.8	-2.5	-0.2
Butter and ghee	950.7	846.6	-104.1	-10.9	-23.7	16.7
Wood carvings	638.7	689.8	51.1	8.0	-2.8	11.1
Metal scrap	274.1	495.2	221.1	80.7	109.3	-13.6
Wattle bark	17.3	—	-17.3	—	—	—
All other items	67,731.6	83,888.0	16,156.4	23.9	—	—
TOTAL	369,964.5	385,528.2	15,563.7	4.2		

*Excluding Re-Exports.

were recorded in the value of exports of soda ash, pyrethrum extract and wattle extract. Exports of pyrethrum extract rose from K£4.1 million to K£5.5 million, wattle extract from K£1.5 to K£2.0 million and soda ash from K£3.6 to K£5.6 million. There was also a substantial increase in the value of exports of other items shown as a residual in Table 7.10 from K£67.7 million in 1978 to K£83.9 milion in 1979. These latter increases do reflect higher earnings from a number of processed products. Exports of molasses rose from K£0.4 million to K£1.5 million. There were also increases in exports of maize flour and other processed foodstuffs used in food industries outside Kenya.

Direction of Trade

7.18. Table 7.11 shows imports by areas and principal countries of origin. The overall pattern of Kenya's suppliers did not change in 1979. Imports from the EEC countries amounted to K£284.3 million, accounting for 54.9 Per cent of the total and of this one half originated from the UK. Next in importance were the imports from the Middle East, mostly of petroleum andpetroleum products which amounted to K£135.7 million in 1979 or 21.9 Per cent of the total. The Far East and Australia provided 15.9 per cent of total imports of which one half came from Japan. Lastly imports from the A accounted for 5.6 per cent of the total.

ORIGIN OF TOTAL IMPORTS, 1975-1979

Table 7.11

K£'000

	1975	1976	1977	1978	1979
E.E.C.—					
United Kingdom	75,707	77,043	95,218	145,933	141,349
West Germany	29,186	40,974	57,852	87,755	68,810
Italy	13,284	12,914	22,006	33,490	23,747
France	9,968	10,820	26,316	30,831	17,663
Netherlands	7,429	9,601	10,901	15,096	14,112
Other	9,441	11,645	16,859	24,578	18,668
TOTAL	145,015	162,997	229,152	337,683	284,349
Other Western Europe Total	17,978	19,621	27,969	29,553	35,378
Eastern Europe Total	3,496	3,742	4,246	5,340	4,737
U.S.A.	25,556	23,672	30,482	41,096	34,927
CANADA	5,799	6,270	5,276	3,877	5,589
AFRICA—					
Tanzania	9,166	12,406	1,622	353	102
Uganda	1,486	818	581	1,977	804
Zambia	549	824	1,030	1,575	1,243
Other	1,461	2,546	4,923	5,270	9,817
TOTAL	12,662	16,594	8,156	9,175	11,966
MIDDLE EAST—					
Iran	51,355	68,381	45,506	44,816	25,799
Other	32,261	28,997	44,860	28,844	109,933
TOTAL	83,616	97,378	90,366	73,660	135,732
FAR EAST AND AUSTRALIA—					
Australia	5,666	2,211	5,291	10,291	8,078
Japan	31,384	45,034	65,603	67,912	49,975
India	6,379	7,922	11,720	15,818	10,155
China (Mainland)	1,471	3,055	5,814	5,103	4,804
Other	11,906	17,492	25,552	23,832	25,583
TOTAL	56,806	75,714	113,980	122,956	98,595
All other countries	11,435	353	21,260	37,234	8,434
Parcel Post and Special Transactions	223	656	559	551	—
TOTAL	362,586	406,997	531,446	661,125	619,707

7.19. The pattern of Kenya's export markets is displayed in Table 7.12. The EEC and Africa continued to be the main markets of Kenya's produce. The EEC received 43 per cent of Kenya's total exports; and of this West Germany accounted for one third or 14.7 per cent of total exports while the United Kingdom accounted for 14.2 per cent. Exports to Africa amounted to K£99.0 million in 1979, which was 5.3 per cent higher than 1978 accounting for 24 per cent of the total exports. There was a marked increase in exports to the Far East and Australia, from the almost stagnant level of K£26 million to K£27 million during 1976 and 1978 to K£31.5 million in 1979.

7.20. Details on trade with individual African countries are set out in Table 7.13. Exports to African countries increased by 5.3 per cent from K£94.0 million in 1978 to K£99.0 million in 1979. While exports to Uganda,

DESTINATION OF TOTAL EXPORTS*, 1975-1979

Table 7.12

K£'000

	1975	1976	1977	1978	1979
E.E.C.—					
United Kingdom	22,691	36,072	63,594	57,197	58,792
West Germany	19,189	42,123	85,951	56,813	60,836
Italy	5,771	13,874	13,442	18,891	23,804
France	1,459	3,415	6,074	5,685	5,119
Netherlands	7,477	17,052	51,345	24,351	17,702
Other	4,407	6,349	11,761	9,248	11,311
TOTAL	60,994	118,885	232,167	172,185	177,564
Other Western Europe Total	11,287	21,012	26,273	21,585	21,657
Eastern Europe Total ..	2,301	3,301	14,891	6,930	4,801
U.S.A.	8,409	18,378	27,592	18,519	16,737
CANADA	5,039	6,096	8,458	5,336	5,715
AFRICA—					
Tanzania	28,540	33,442	9,822	2,756	4,075
Uganda	32,910	33,162	51,992	38,443	37,747
Zambia	8,218	9,018	6,897	5,702	5,847
Other ..	25,360	32,227	41,550	47,083	51,284
TOTAL	95,028	107,849	110,261	93,984	98,953
MIDDLE EAST—					
Iran	964	955	2,065	1,769	—
Other	4,619	5,040	10,561	8,885	14,847
TOTAL	5,583	5,995	12,626	10,654	14,847
FAR EAST AND AUSTRALIA—					
Australia	1,740	1,393	1,848	1,450	1,238
Japan	6,333	4,551	5,233	3,807	5,100
India	2,862	2,545	1,623	1,559	2,197
China (Mainland) ..	1,402	413	1,463	2,702	1,959
Other	7,503	17,295	16,612	16,949	21,044
TOTAL	19,840	26,197	26,779	26,467	31,538
ALL OTHER COUNTRIES ..	10,884	13,653	11,833	10,851	8,451
AIRCRAFT AND SHIPS STORES	18,617	23,696	30,939	29,201	32,518
ALL EXPORTS ..	237,982	345,062	501,819	395,712	412,781

*Excluding gold and currency but including Re-Exports.

The main consumer, fell by 1.8 per cent, exports to Tanzania—though small compared to the level of exports prior to the closure of the border, increased From K£2.8 million in 1978 to K£4.1 million in 1979. Rwanda, Zambia, Egypt and Sudan continued to be the other important markets of Kenya's Produce. Imports from African countries too increased by 30.4 per cent From K£9.2 milion in 1978 to K£12.0 million in 1979. Rwanda, Burundi and Ethiopia were the only countries which registered an increase in their to Kenya while imports from most other countries continued to fall, The level of total imports, though rising is nowhere near the level achieved in 1976 when Tanzania was Kenya's main source of imports in Africa.

Table 7.13

K£'000

	Exports*					Imports					
	1975	1976	1977	1978	1979	1975	1976	1977	1978	1979	Jan/Dec 1980
Mainland—											66373
Uganda ..	32,910	33,163	51,992	38,443	37,747	1,486	818	581	1,977	804	5232
Tanzania ..	28,540	33,442	9,822	2,756	4,075	9,166	12,406	1,622	353	102	4949
Zambia ..	8,219	9,018	6,897	5,702	5,847	549	824	1,030	1,575	1,243	2,365
Ethiopia ..	1,189	1,701	1,923	2,705	2,346	104	56	245	616	2,241	7.335
Burundi ..	809	1,306	1,855	3,412	4,552	32	5	—	—	1,158	3986
Somalia ..	3,061	2,373	2,397	3,574	2,678	126	103	105	20	71	9946
Sudan ..	1,818	4,165	5,035	7,027	7,663		136	1,161	23	210	12,660
Rwanda ..	4,922	6,269	6,241	7,999	8,549	8551	765	1,259	2,333	3,295	3966
Zaire	1,920	2,184	3,445	2,535	3,142	462	410	606	467	540	285
Malawi ..	310	415	376	407	348	15	8	104	228	211	570
Mozambique	366	243	577	493	443	81	11	484	1,016	527	3074
Egypt ..	2,631	2,669	7,309	5,141	6,061	59	21	58	73	39	2588
Algeria and Libya	533	124	51	2,887	331	—	—	—	—	6	1713
Ghana and Nigeria	1,022	655	884	1,352	675	10	30	20	20	12	9411
Other ..	1,733	2,935	4,819	2,470	5,299	544	977	865	329	1,486	134,453
Total	89,983	100,661	103,623	86,903	89,756	12,634	16,570	8,140	9,030	11,945	
Indian Ocean Island—											3605
Mauritius ..	1,463	2,474	3,286	3,067	4,832	21	8	10	135	9	1090
Reunion ..	984	1,524	772	717	1,377	—	—	—	—	—	4178
Other** ..	2,597	3,190	2,580	3,297	2,988	7	16	6	10	12	140,326
Total	95,028	107,849	110,261	93,984	98,953	12,662	16,594	8,156	9,175	11,966	
Percentage of all Exports/ Imports ..	39·9	31·2	22·0	23·8	24·0	3·5	4·1	1·5	1·4	1·9	27.3

*Including Re-exports.
**Madagascar and Seychelles.

Kenya External Trade Authority

7.21. During 1979, the Kenya External Trade Authority launched a number of ventures aimed at establishing markets for Kenya's produce and enabling Kenyan businessmen to participate in trade fairs and exhibitions abroad. The Authority also continued to provide consultancy and advisory services and management techniques to Kenyan manufacturers; and in particular to the handicraft industry, where attention was given to the development of new and improved export items.

Outlook for 1980

7.22. As pointed out earlier, the reduction on Kenya's import bill in 1979 originated from the import and credit control restrictions which were imposed in 1978. These controls have since been partially relaxed. It is therefore anticipated that the value of imports will rise in 1980 due to increases in the prices of petroleum fuels and imports of increased volume of manufactured goods. As far as exports are concerned, with some increase in coffee production, exports and earnings therefrom are expected to rise moderately in 1980; production of tea is estimated to drop while earnings from petroleum exports should further rise in 1980 because of price rises and hopefully with an increase in volume. There should also be some further benefits from the intense efforts being made to tap all export outlets. All told overall export receipts will rise but probably by less than the increase in imports. Under the circumstances it would appear that without the reimposition of stricter controls, the trade deficit in 1980 is likely to be higher than in 1979.

CHAPTER 8—AGRICULTURE

The long rains in 1979 were not as heavy as in 1978 and this had some impact on production. Output of coffee was reduced once again and an 11 per cent fall in deliveries led to a reduction of K£12.4 million in receipts from this crop, while for tea, despite an increase in output but because of lower prices the returns to farmers fell by K£6.3 million. Receipts from other crops with the exception of maize .were generally higher than in 1978 but there was a substantial fall in livestock production. After allowing for own consumption of produce in rural areas and making estimates for sales outside the official marketing channels, it seems likely that total output at current prices rose by 2 per cent and was valued at K£748 million in 1979. At constant prices, there was a fall of 1.2 per cent. As a result the contribution of the sector to GDP rose by 2.7 per cent at current prices but fell by 0.8 per cent at constant prices.

8.2. There was a small increase in the average price realized for coffee from K£1,409 per tonne in 1978 to K£1,417 per tonne in 1979. However, deliveries fell from 84,328 tonnes to 75,082 tonnes over the same period. As a result the value of marketed coffee fell from K£118.8 million to K£106.4 million. In 1977 it had been as high as K£192.9 million. Deliveries of tea, the second major crop rose from 93,373 tonnes in 1978 to 99,275 tonnes in 1979 but as the average price fell from K.Sh. 15.8 to K.Sh. 13.6 per kilogram, the value of the crop was reduced from K£73.9 to K£67.3 million. There were substantial increases in output of both wheat and sugar-cane of 21 per cent and 43 per cent respectively and as wheat prices were increased the total realization from this crop rose by 27.5 per cent. Details of output, value added and quantum and price index numbers are given in Table 8.1.

AGRICULTURAL OUTPUT LESS RECORDED INPUT

Table 8.1 *K£million*

	1975	1976	1977	1978	1979*
AT CURRENT PRICES—					
Total Output	405.44	532.85	755.32	732.93	747.58
Less Inputs	59.14	66.70	87.31	101.21	98.80
Value Added	346.30	466.15	668.01	631.73	648.78
AT CONSTANT (1976) PRICES—					
Total Output	519.65	532.85	591.68	614.99	607.55
Less Inputs	61.27	66.70	78.09	81.68	78.50
Value Added	458.39	466.15	513.60	533.31	529.05
Quantum Indices (1976=100)					
Output	97.52	100.00	111.04	115.42	114.02
Input	91.86	100.00	117.08	122.46	117.69
Price Indices (1976=100)					
Output	78.02	100.00	127.66	119.18	123.05
Input	96.52	100.00	111.81	123.91	125.86

*Provisional.

Marketed Production

8.3. The marketed agricultural output handled by marketing boards fell in 1979 both in volume and value. The fall in volume was 1.8 per cent and in value 3.9 per cent. Reductions in deliveries of coffee were compensated for by increases in deliveries of wheat, sugar-cane, tea, rice paddy and sisal while for maize, pyrethrum and cotton the position was virtually unchanged. However, sales of bovine livestock and products weie substantially reduced.

8.4. The improvement in cereal and sugar-cane sales ensured that the fall in the value of marketed production in 1979 due to lower realizations from coffee and tea was not as marked as in 1978. The reduction in 1979 at 3.9 per cent can be compared with the fall of 19.6 per cent recorded in 1978 when the coffee boom came to an end. The shares of coffee and tea in total recorded marketed agricultural output were 33.2 per cent and 21 per cent, respectively in 1979 compared with 35.6 per cent and 22.2 per cent in 1978, while the proportions of marketed production of sugar-cane and wheat rose from 5.2 to 7.3 per cent and from 3.2 to 4.6 per cent, respectively. Details of recorded marketed production are given in Tables 8.2 and 8.3.

AGRICULTURAL MARKETED PRODUCTION INDICES**, 1977-1979

Table 8.2

1976 = 100

	1977	1978	1979*
QUANTUM INDICES—			
Cereals	80.93	61.64	68.82
Temporary Industrial Crops	105.97	125.71	153.37
Permanent Crops	123.46	114.61	109.18
TOTAL	111.77	103.51	103.54
Livestock and Products	115.29	132.25	119.71
TOTAL GROSS MARKETED PRODUCTION	111.58	107.68	105.77
PRICE INDICES—			
Cereals	111.61	113.33	112.65
Temporary Industrial Crops	122.00	134.76	139.68
Permanent Crops	167.96	123.45	118.76
TOTAL CROPS	154.86	123.20	120.65
Livestock and Products	114.78	139.80	123.18
TOTAL GROSS MARKETED PRODUCTION	148.60	126.06	121.09

*Provisional.

**Based on sale to Marketing Boards only.

RECORDED MARKETED PRODUCTION AT CURRENT PRICES, 1975-1979

Table 8.3 . K£'000

	1975	1976	1977	1978	1979*
CEREALS					
Wheat	8,275	12,047	11,877	11,675	14,886
Maize	17,022	21,628	18,843	10,501	9,363
Others	3,626	5,658	4,807	5,301	6,230
TOTAL	28,923	39,333	35,527	27,477	30,479
TEMPORARY INDUSTRIAL CROPS					
Pyrethrum	4,551	4,089	3,662	4,106	5,156
Sugar Cane	8,230	9,618	13,364	17,392	23,302
Others	3,041	3,670	5,440	7,941	8,769
TOTAL	15,822	17,377	22,466	29,439	37,227
OTHER TEMPORARY CROPS	7,123	8,626	6,604	6,640	7,196
PERMANENT CROPS—					
Coffee	35,345	101,333	192,919	118,822	106,426
Sisal	7,038	3,920	4,800	4,278	6,578
Tea	22,914	32,757	92,729	73,914	67,343
Others	3,274	3,477	2,945	3,185	3,111
TOTAL	68,571	141,487	293,393	200,199	183,458
TOTAL CROPS	120,439	206,823	357,991	263,755	258,360
LIVESTOCK AND PRODUCTS					
Cattle and Calves	19,827	19,056	23,437	34,941	29,525
Dairy Products	10,781	12,050	18,836	19,587	17,465
Others	5,515	6,003	6,831	7,574	7,730
TOTAL	36,123	37,109	49,104	62,102	54,720
UNRECORDED** MARKETED PRODUCTION	5,404	6,115	7,489	7,532	7,160
TOTAL	161,966	250,047	414,584	333,389	320,240

* Provisional.

***This is only a very partial coverage.

8.5. The average prices for individual products are shown in Table 8.4 for the years 1975 to 1979. The market price available for coffee rose slightly in 1979 but was well below the record level established in 1977, while there was a further fall in the average realized price of tea so that the 1979 price was 63 per cent of the price recorded in 1977. However, the average prices for the other commodities shown in the table were higher in 1979 than in 1978 for sisal, pyrethrum, seed cotton, rice paddy, wheat, beef, and pigs, unchanged for sugar-cane and milk but lower for maize. The average price for maize fell from K.Sh. 89 to K.Sh. 77 per 100 kg. between 1978 and 1979.

AVERAGE GROSS COMMODITY PRICES TO FARMERS 1975-1979*

Table 8.4 *KSh. per stated Unit*

	Unit	1975	1976	1977	1978	1979
Coffee	100 kg.	1,069	2,524	3,975	2,818	2,835
Tea	"	808	1,057	2,149	1,583	1,357
Sisal	"	323	234	298	272	361
Pyrethrum (extract equivalent)	kg	447	492	559	720	907
Seed Cotton .	100 kg.	192	209	288	315	328
Maize	"	70	77	89	89	77
Sugar Cane	tonne	89	105	127	133	133
Rice Paddy	100 kg.	104	137	136	145	151
Wheat	"	105	120	133	133	144
Beef (third grade)	"	474	479	519	676	689
Bacon Pigs	"	636	655	684	764	778
Milk	100 Litres	85	105	132	132	132

*These Prices arc for calender year delivered and reflect actual payouts, although average prices for two seasons overlap during a calender year might have differed.

8.6. The general trend of an increase in the share of marketed output from small farms since 1976, was reversed in 1979 by a slight fall in the proportion of sales at small farms effected through official marketing channels. The proportion of such sales from small farms declined from 55.8 per cent in 1978 to 55.3 per cent in 1979. In 1976 the share was 51.2 per cent. As shown in Table 8.5 out of total marketed production of K£320.2 million in 1979, K£177 million originated in small farms.

GROSS MARKETED PRODUCTION** FROM LARGE AND SMALL FARMS, 1975-1979

Table 8.5

	LARGE FARMS		SMALL FARMS		TOTAL		PERCENTAGE SHARE OF SMALL FARMS
	KÃmillion	Annual Per cent change	*KÃmillion*	Annual Per cent change	*KÃmillion*	Annual Per cent change	Per cent
1975	71.8	-2.2	90.1	20.1	162.0	9.2	55.6
1976	122.1	70.1	128.0	42.1	250.0	54.3	51.2
1977	206.0	68.7	208.5	62.9	414.6	65.8	50.3
1978	147.2	-28.5	186.2	—10.7	333.4	—19.6	55.8
1979*	143.3	-2.6	177.0	—4.9	320.2	-4.0	55.3

*Provisional.

**Shares of sales through official marketing channels only.

8.7. Indices on prices and volume of agricultural inputs, are given in Table 8.6. Unit prices of such inputs continued to rise in 1979 with the index based on 1976 rising to 124.2 compared to 119.1 in 1978, an increase of 4.3 per cent. However, there was a fall of 5.6 per cent in the quantities purchased in 1979 so that as shown in Table 8.7 the total value of purchased input fell from K£70.6 million in 1978 to K£69.4 million in 1979.

AGRICULTURAL INPUT INDICES, 1977-1979

Table 8.6 1976=100

	1977	1978	1979*
QUANTUM INDICES—			
Fertilizers	143.6	155.6	136.1
Fuel and Power	129.2	126.8	131.0
Bags	101.5	105.8	103.1
Manufactured Feeds	121.3	142.1	129.5
Purchased Seeds	135.9	94.9	92.5
Other Material Inputs	123.7	153.5	140.5
TOTAL MATERIAL INPUT	128.5	139.5	127.5
Service Inputs	99.8	106.7	104.0
TOTAL INPUTS	124.9	135.4	127.8
PRICE INDICES—			
Fertilizers	99.2	98.3	102.6
Fuel and Power	105.9	120.2	138.6
Bags	111.1	116.4	118.3
Manufactured Feeds	117.3	132.5	138.3
Purchased Seeds	123.0	182.2	154.4
Manufactured Feeds	117.3	118.1	123.0
TOTAL MATERIAL INPUT	110.1	118.2	126.1
Service Inputs	116.4	127.4	137.4
TOTAL INPUTS	110.7	119.1	124.2

*Provisional.

8.8. Very tentative terms of trade for the agriculture industry are given in Table 8.8. Prices paid by farmers in 1979 rose more rapidly than prices they received for their produce so that the terms of trade fell once again this time by an estimated 6 per cent. Overall prices received rose by only 3.7 per cent compared to an increase of 10.2 per cent in prices paid. The most important component in the latter category are the prices for consumer goods purchased by rural households. Amongst other inputs, prices of fertilizers, animal feeds, seed and fuel all had an impact on raising overall costs to farmers. The terms of trade in 1979 were also less favourable than in 1976 with the index registering a fall of 4.9 per cent in this period.

PURCHASED AGRICULTURAL INPUTS**, 1975-1979

Table 8.7 K£'000

	1975	1976	1977	1978	1979*
MATERIAL INPUTS—					
Fertilizers	9,974	9,664	13,765	14,781	13,500
Other Agricultural Chemicals	3,719	4,277	7,197	10,626	9,563
Livestock Drugs and Medicines	2,321	2,848	3,261	3,306	3,360
Fuel and Power	6,754	7,063	9,668	10,762	12,827
Bags	2,858	2,952	3,331	3,636	3,450
Manufactured Feeds	4,417	6,456	9,193	12,154	11,563
Purchased Seeds	2,407	2,615	4,370	4,522	3,734
Other Material Inputs	1,904	2,460	3,429	3,446	3,643
TOTAL	34,354	38,335	54,214	63,233	61,640
SERVICE INPUTS TOTAL	4,871	5,455	6,338	7,416	7,794
TOTAL INPUTS	39,225	43,790	60,552	70,649	69,434

*Provisional.

**Except Labour.

PROVISIONAL TERMS OF TRADE INDICES FOR AGRICULTURE, 1978-1979

Table 8.8 1976=100

	1978	1979
PRICES RECEIVED		
Total Crops	114.4	119.1
Domestic	109.9	115.2
Export	118.4	122.3
Livestock and Products	130.0	131.6
INDEX OF PRICES RECEIVED	116.7	121.0
PRICES PAID		
Purchased Inputs	110.9	118.6
Index of Purchased Consumer Goods—		
Rural Areas	117.0	130.1
INDEX OF PRICES PAID	115.5	127.3
Agriculture Sector Terms of Trade	101.1	95.1

Agricultural Credit

8.9. As shown in Table 8.9 new credit to the agricultural sector by major lending institutions excluding the commercial banks declined by 31 per cent from K£27.47 million in 1977/78 to K£18.93 million in 1978/79. The withdrawal in 1979 of the Guaranteed Minimum Return (GMR) credit facilities accounts for most of the fall. Large scale farmers who received 24 per cent

of the total credit released in 1978/79 were worst hit by the withdrawal of GMR. As a result credit extended to them fell by 67 per cent in 1978/79 as compared to 1977/78. The fall in receipts by small-scale farmers of 14 per cent was less pronounced, while co-operative societies—the largest recipients of such credit, maintained their position almost at the previous year's level, and "Other" farmers, i.e. those engaged in poultry keeping, pig rearing and the like increased their credit receipts from K£75,000 to K£1.08 million. Except for the large-scale farmers whose credit receipts were mainly long-term, short-term loans accounted for 89 per cent of new credit to small farmers and 65 per cent to co-operative societies in 1978/79.

NEW AGRICULTURAL CREDIT ISSUED BY TYPE OF FARMER, 1975/76—1978/79

Table 8.9 K£'000

	1975/76	1976/77	1977/78	1978/79*
SMALL SCALE FARMERS—				
Short term loans	2,137	1,817	1,013	2,389
Medium term loans	599	595	1,905	188
Long term loans	50	29	135	64
Other loans	26	21	66	34
TOTAL	2,812	2,462	3,119	2,675
LARGE SCALE FARMERS—				
Short term loans	846	93	7,117	13
Medium term loans	30	–	–	–
Long term loans	2,321	2,294	5,683	3,020
Other loans		348	890	1,534
TOTAL	3,197	2,735	13,690	4,567
CO-OPERATIVE SOCIETIES—				
Short term loans	10,926	7,963	7,552	6,926
Medium term loans	4,281	1,883	3,019	3,676
Long term loans	21		12	
Other loans	–	–	–	–
TOTAL	15,228	9,846	10,583	10,602
OTHER FARMERS—				
Short term loans	3,421	5,576	–	817
Medium term loans	376		75	
Long term loans	–	338	–	267
TOTAL	3,797	5,914	75	1,084
ALL RECEIPTS—				
Short term loans	17,330	15,451	15,682	10,144
Medium term loans	5,287	2,477	4,999	3,864
Long term loans	2,392	2,661	5,830	3,351
Other loans	26	370	956	1,569
TOTAL	25,034	20,957	27,467	18,928

*Revised Scries.

8.10. The "New Seasonal Credit Scheme" already launched in 1980 is designed to fill the gap created by the withdrawal of the GMR programme. The scheme aims to promote expansion of maize and wheat production. It is a nationwide programme and caters for farmers with at least 4 hectares of arable land. Some K£30 million borrowed from the Cereals and Sugar Finance Corporation has been made available for lending during 1980. The Agricultural Finance Corporation has already received K£10 million to administer while the Co-operative Bank of Kenya is to handle K£5 million. The new scheme is to be run on a more commercial basis than its predecessor. Farmers are to be allowed credit up to nearly K.Sh. 1,900 per hectare but are to provide security for it. The measure is expected to reduce the default rate which plagued the GMR programme. The credit will mostly be made available in the form of inputs to prevent possible diversion of funds to other uses. There will also be strict monitoring of the crop at harvest time to ensure that it is marketed through the National Cereals and Produce Board. Close Liaison is to be maintained between the Kenya Farmers Association, the National Cereals and Produce Board and the lending institutions in implementing this new scheme.

8.11. Commercial banks continued to extend credit to the agricultural sector although the level of new lending was reduced by 4 per cent from K£18.12 million in 1977/78 to K£17.48 million in 1978/79. This amount raised the total credit by commercial banks to agricultural sector to nearly K£90 million as at the end of December, 1979. The amount is, however, still short of the Government target for agriculture of 17 per cent of total deposit liabilities of commercial banks.

Crop Production

8.12. *Maize.*—Total estimated maize production in 1979 of 16.5 million bags was the lowest since 1975. Three major factors namely marketing problems in the previous buying season, the withdrawal of the GMR scheme and lowering of the producer price largely accounted for less effective cultivation of maize in 1979. There was a further drop of 16 per cent in hybrid seed purchases below the 1978 level and fertilizer too was not as widely used due to lack of credit facilities. As a result there was a drop in per hectare yield of 8 per cent in 1979 as compared to 1978.

8.13. Despite the overall drop in estimated maize production in 1979, Purchases by the National Cereals and Produce Board increased by 5,455 tonnes to 241,717 tonnes—a rise of 2 per cent above the low level of Purchases in 1978. The improvement was partly due to the re-imposition of maize marketing restrictions. These had been relaxed earlier because of inability by the former Maize and Produce Board in 1978 to accept deliveries due to a shortage of funds and inadequate storage facilities.

8.14. Local sales of maize in 1979 were reported at 409,320 tonnes—nearly twice the quantity sold in 1978. This increase resulted from the re-imposition of restrictions on marketing of maize; the previous withdrawal of restrictions had enabled some millers to secure their grain directly from producers and not from the Board. During the year, more than 120,000 tonnes of maize were exported—the highest level of maize exports since 1973. The substantial increases in both local and export sales combined with low crop resulted in a substantial rundown of maize stocks held by the Board. Intake of maize from the 1979 short rains was well below average and there were no signs that maize stocks would improve. This necessitated maize imports in the early part of 1980. In fact, the shortage of locally grown maize is not expected to end until the 1980 long rains crop is harvested. As a long term objective and as a remedy to future shortages of maize, the Government through the Ministry of Agriculture has already embarked on a programme expected to result in 600,000 hectares of land being planted to maize.

8.15. Wheat.—As can be seen from Table 8.10, wheat deliveries from farmers during 1979 reached a new record of 200,968 tonnes, 21.6 per cent above the level of deliveries in 1978. This increase is accounted for by two

MARKETED* PRODUCTION OF SOME MAJOR CROPS, 1975-1979

Table 8.10 Tonnes

Crop \ Year	1975	1976	1977	1978	1979
Wheat	145,459	186,774	169,880	165,941	200,968
Maize	487,826	564,748	423,964	236,268	241,717
Rice Paddy	32,113	39,299	41,415	35,816	37,466
Pyrethrum (Extract Equivalent)	203.9	166.1	131.1	114.0	113.7
Sugar-Cane	1,654,583	1,652,597	1,888,140	2,349,206	3,147,580
Cotton	16,121	15,803	16,257	27,190	27,597
Coffee	66,152	80,303	97,066	84,328	75,082
Sisal	43,639	33,555	33,196	31,456	36,457
Tea	56,730	61,984	86,291	93,373	99,275

*Sales to Marketing Boards.

factors. Firstly, the wet weather in 1978 resulted in late ripening of the 1978 planted crop. Consequently, 76,694 tonnes of the year's wheat were delivered during the first six months of 1979. Secondly, the 1979 crop also benefited from the dry weather which was ideal for early ripening and harvest with the result that 124,274 tonnes of the crop were delivered by December.

WHEAT FLOUR CONSUMPTION

Year	*Tonnes*
1975	112,057
1976	136,488
1977	158,400
1978	184,733
1979	158,387

8.16. Domestic consumption of wheat flour as shown above declined by 14 per cent in 1979 but was nearly the same as inl977. During the early part of 1979, the country's demand for wheat was greater than the existing supplies. This led to rationing of wheat to millers and resulted in shortages of wheat flour. The fall in wheat flour consumption is therefore not the result of a fall in demand for the commodity but inadequate supply. Indeed, due to the fluctuation in the grain supply, Kenya had to import some 21,154 tonnes of wheat in 1979, at a cost of K£2.44 million, to bridge the gap between consumption and production.

8.17. The price of wheat was increased by K.Sh. 15 from K.Sh. 120 to K.Sh. 135 per 90 kg. bag in June, 1979. This incentive together with the credit facility of the National Cereals and Produce Board and timely availability of fertilizers are expected to stimulate production further in 1980.

8.18. *Coffee.*—The decline in coffee production which followed the 1977 boom continued into 1979. Total deliveries at 75,082 tonnes were 9,246 tonnes or 11 per cent below the level of deliveries in 1978; 23 per cent below the record 1977 level of deliveries and the lowest since 1975. The drop was mainly due to untimely and poorly distributed rainfall which influenced more leaf growth than crop setting. In addition, supplies of fertilizers and spray chemicals were reportedly inadequate. Co-operatives which accounted for nearly 75 per cent of the total planted crop area of 119,160 hectares delivered 62 per cent of the 1979 total crop harvest.

8.19. The year 1979, however, recorded further improvement in both grades and quality of delivered coffee over the previous two years. Overall there was a 12 per cent improvement in deliveries of coffee in class one to three as against a drop of nearly 10 per cent in deliveries of coffee in classes four to six. Thus there was a major shift towards delivery of better grades of coffee which in itself is an indication of the commendable efforts being made by farmers especially those falling under co-operatives.

8.20. World coffee prices have fallen significantly since the 1977 boom which resulted from the very heavy frosts in Brazil, the major world producer. Although the average price for Kenya coffee was slightly higher in 1979 than in 1978 there were serious price fluctuations during the year. While there has been relative stability at a generally satisfactory price to growers since the latter part of 1979 it is by no means certain that this stability will continue or that the average price can be expected to increase in line with world inflation.

8.21. The smallholder coffee improvement programme which was conceived two years ago became a reality during the 1978/79 coffee season when plans were drawn up and agreement reached between Kenya Government and the World Bank to fund it. The five-year programme which will cost K£10 million was initiated in July 1979, and entails among other things, factory construction, and provision of farm input loans, labour training facilities for both staff and growers and support services including research. Work schedules to guide implementation have been drawn up betwen the Coffee Research Foundation, Ministry of Agriculture, the Ministry of Co-operative Development and the Co-operative Bank of Kenya. It is expected that this programme will considerably enhance smallholder coffee production.

8.22. *Tea.*—A further increase in output of tea was registered during 1979. Total deliveries of manufactured tea increased to 99,275 tonnes a rise of 6.3 per cent over 1978. Kenya exported 94,025 tonnes of made tea in 1979, an increase of 10.7 per cent over the 1978 level of exports of 84,967 tonnes. The proportion of exports to total production thus rose from 91 per cent in 1978 to 94.7 per cent in 1979.

8.23. The tea industry was, however, faced with declining world prices. The average prices at tea auctions both in Mombasa and London in 1979 were the lowest since 1976 and this resulted in low export earnings of K£62.85 million despite the increase in the quantity exported in the year. The average producer prices fell to K.Sh. 13.57 per kilogram compared to K.Sh. 15.83 in 1978 and K.Sh. 21.49 in 1977.

8.24. As shown in Table 8.11 there was marked progress in expansion of tea production by smallholders in 1978/79 resulting in a further 2,093 hectares being planted with tea and output rising by 4,329 tonnes. The total smallholder tea area rose to 48,954 hectares and is expected to expand further to 54,689 hectares by mid-1982. In 1979 an additional 3,821 smallholders were growing tea and the total number stood at 126,169. Total production of made tea from this sector rose by 13.6 per cent to reach 36,196 tonnes in 1979. Smallholders thus accounted for 36.5 per cent of total tea production. The Kenya Tea Development Authority is committed to expanding small-

THE DEVELOPMENT OF SMALL-HOLDER TEA—TO 1978/79

Table 8.11

	Total Hectares at end of year	Number of growers at end of year	Average size of holding per grower in Hectares	Production of ready-made tea *tonnes*
1974/75	37,205	97,337	0.38	16,118
1975/76	39,740	105,949	0.38	19,442
1976/77	43,636	115,648	0.38	27,720
1977/78	46,861	122,348	0.38	31,867
1978/79	48,954	126,169	0.39	36,196

holder tea production and its present plans expect to achieve higher yields from existing bushes, minimization of leaf loss, construction of new factories and expansion of old ones and improvement of roads to facilitate green leaf collection.

8.25. *Cotton.*—The high level of cotton production achieved in 1978 was maintained in 1979. The production of 27,597 tonnes of seed cotton was 2 per cent higher than in 1978. Increases were registered in Eastern, Western and Nyanza provinces—all the main traditional cotton growing regions. The targeted crop area in 1979 was 89,950 hectares which was slightly below the estimated area planted with cotton in 1978. It would appear therefore that higher yields were obtained from the 1979 crop possibly as a result of improved husbandry, better pest control and good weather during the year. A total of 56,660 bales of lint were produced by the local ginneries.

8.26. The world market was reported to be dull resulting in a slight drop in prices. Consequently, Kenya's export of raw cotton fell to 1,886 tonnes in 1979 from the 1978 export level of 2,108 tonnes, and yielded K£0.92 million as compared to K£1.39 million in 1978. The balance of output of lint and seed was consumed locally.

8.27. Incentives to boost cotton production have been available for two years. These include provision of seed, insecticides and spray pumps to farmers. The recently announced producer price increase of K.Sh. 13 per 100 kg. above the 1978 price of K.Sh. 315 per 100 kg. should further boost cotton production.

8.28. *Sugar-cane.*—The sugar industry in Kenya has been growing steadily since 1976 and output has reached the point of self-sufficiency. Total deliveries of cane to the factories attained a new high level of deliveries in 1978. Given this rate of expansion the target of crushing 4.5 million tonnes of cane by the end of current five-year development plan seems certain to be achieved.

8.29. As shown in Table 8.12 smallholders continued to be the major producers of cane followed by factory estates. These two sources of supply accounted for 39 and 29 per cent respectively of total cane deliveries in

SUGAR CANE PRODUCTION BY TYPE OF GROWERS, 1976-1979

Table 8.12 *Tonnes*

	1976	1977	1978	1979
Factory Estates	487,328	584,248	626,467	920,595
Large Farms	138,353	239,649	282,260	379,618
Small-Holders	500,479	630,374	846,854	1,228,876
Co-operative Societies	332,603	278,345	351,079	231,680
settlement Schemes	193,834	155,524	242,548	386,811
TOTAL	1,652,597	1,888,140	2,349,206	3,147,580

1979. Settlement schemes maintained their high growth rate of 1978 and increased their cane output by nearly 60 per cent over 1978. They overtook large farms to become the third major source of cane supply. There was however a decline of 34 per cent in deliveries of cane by co-operative societies.

8.30. Production of mill-white sugar rose to 295,823 tonnes in 1979, a 24.2 per cent increase over 1978. Sugar consumption also increased to 253,413 tonnes in 1979, including 26,536 tonnes for industrial use. Total sugar consumption was therefore lower than its production and as a result Kenya attained its long-desired goal of self-sufficiency in 1979. A surplus of 42,410 tonnes of sugar was realized, 15,239 tonnes of which were exported. The sugar industry is expected to maintain its growth rate. The setting-up of factories at Kisumu and Muhoroni for the processing of mollases and production of alcohol for industrial use should further enhance yield potential of this crop. However, problems of transport to take cane to the various factories from outgrowers and of available processing capacity are currently resulting in some cane being wasted.

8.31. *Pyrethrum.*—There was little change in total output of pyrethrum in 1979 despite the measures taken by the Pyrethrum Marketing Board to enhance production which included the incentive of an increase in producer price. Total deliveries of dried flowers infact declined by 519 tonnes from 8,435 tonnes in 1978 to 7,916 tonnes in 1979. However, considering the heavy annual decreases of between 13 and 21 per cent since the production decline set in 1976, the 1979 performance indicates a relative stabilization and hopes for improvement are high taking into account the upward trend in dried flower deliveries reported during the second half of 1979.

8.32. The average price paid to the farmer increased by 26 per cent in 1979 over the 1978 level, to reach K.Sh. 9.07 per kilogram of dried flowers. The guaranteed minimum price of dried flower ranged between K.Sh. 7 and K.Sh. 7.50 per kilogram for most of the year but this was increased to K.Sh. 10 late in the year. Kenya earned K£5.5 million from 390 tonnes of pyrethrum extract exported in 1979 as compared to K£4.1 million earned from exports of 261 tonnes of extract in the preceeding year.

8.33. *Sisal.*—The sisal industry in Kenya registered a modest and satisfactory recovery in 1979 mainly as a result of increased supply and improved world market prices. At 36,457 tonnes the 1979 deliveries were 16 per cent above the 1978 level and the highest since 1975. Further the tight global supply helped to raise the average price. The average world price for grade one sisal during the latter half of 1979 was US$853 per tonne—a 66 per cent rise over the average price of US$513 per tonne for the same period in 1978. As a result of the improved export prices in the world market, prices received by Kenyan growers rose by an average of 33 per cent from K.Sh. 272 per 100 kg. in 1978 to K.Sh. 361 per 100 kg. in 1979.

8.34. While Brazil and Tanzania the two major sisal producers had reported lower output, Kenya's major problem was a shortage of labour for cutting the green sisal leaf. Western and Nyanza provinces are the traditional sources of this type of labour and the development of sugar industry in these areas has tended to reduce the available labour. This has forced the sisal estates to turn to other parts of the country for their labour requirements.

8.35. *Horticulture.*—The export of horticultural products has been constantly on the increase mainly as a result of sustained efforts by the Horticultural Crop Development Authority. As shown in Table 8.13, exports

EXPORT OF FRESH HORTICULTURAL PRODUCE, 1975-1979

Table 8.13

	Tonnes	K£
1975	13,115	4,163,700
1976	17,963	5,117,040
1977	18,844	6,435,815
1978	21,007	7,987,850
1979	21,377	9,736,855

of fresh produce increased by 2 per cent over 1978 to reach 21,377 tonnes in 1979. However, more significantly they earned K£9.74 million—K£1.75 million or 22 per cent more than the receipts in 1978. Considerable increases were reported in exports of flowers, avocado pears and some vegetables. There was however, a 33 per cent decrease in exports of fresh pineapples. The United Kingdom increased its share of the market for Kenyan horticultural produce to 47 per cent followed by West Germany which accounted for a further 22 per cent of these exports. Holland, Italy and Saudi Arabia are the other significant markets. Exports to Djibouti in 1979, however, fell by over half mainly as a result of resumed supplies from Ethiopia since the end of the Ogaden war.

8.36. Lack of cargo space continues to be the major constraint in increasing exports of fresh horticultural produce but with a more liberal policy by the aviation authority regarding North-bound charges, an improvement in capacity for horticultural produce is expected.

Livestock Production

8.37. Prolonged drought conditions in the second half of 1979 had an adverse effect on livestock production. Recorded milk sales fell to 240.56 million litres, 10.8 per cent below the 1978 production of 269.8 million litres. here was, however, a notable increase in output of processed wholemilk and cream which rose to 212.26 million litres, 14.4 per cent above the 1978

level of 185.56 million litres. The proportion of processed wholemilk to total milk production thus rose from 68.8 per cent in 1978 to 88.2 per cent in 1979. Increased demand for wholemilk arising mainly from the school milk scheme was the major cause of the rise in output of processed wholemilk and cream. There were, however, consequential decreases in the output of other dairy products—especially powdered wholemilk, evaporated milk and dried skim-milk powder. The first few months of 1980 started badly with continuing drought leading to very low milk deliveries.

DAIRY AND LIVESTOCK PRODUCTS, 1975—1979

Table 8.14

	Unit	1975	1976	1977	1978	1979
KENYA CO-OPERATIVE CREAMERIES						
Recorded Milk Production*	'000 litres	230,607	208,658	259,450	269,796	240,559
Milk Processed:						
Wholemilk and cream	'000 litres	157,956	150,422	157,880	185,557	212,255
Butter and ghee	Tonnes	4,191	3,067	4,342	3,871	3,134
Cheese	"	462	177	445	253	264
Evaporated milk	"	1,626	2,099	1,321	489	188
Dried Wholemilk powder	"	2,289	3,009	5,262	4,236	1,439
Dried skim-milk powder	"	2,772	1,489	3,440	2,956	1,218
Other Products	"	1	2	1	–	–
KENYA MEAT COMMISSION						
Intake of:						
Cattle and calves	'000 Head	134	228	158	68	68
Sheep	"	15	12	8	11	10
Lambs	"	11	1	3	—	—
Goats	"	7	5	6	10	2
TOTAL PRODUCTION OF CARCASS BEEF	Tonnes	16,600	26,865	20,637	8,890	7,634
UPLANDS BACON FACTORY						
Intake of pigs for:						
Bacon	'000 Head	33	34	36	34	29
Pork	"	2	2	3	4	5
Manufactures	"	2	2	2	2	2

*Including sales licensed by the Kenya Dairy Board.

8.38. The cattle intake by the Kenya Meat Commission remained at the same low level in 1979 as in 1978. About the same number of cattle, 68,000 head, were delivered while the intake of small stock went down by about 9,000 head. The Kenya Meat Commission plants have therefore been operating well below capacity. Farmers have been reluctant to sell animals to Kenya Meat Commission and private slaughterhouses have kept up their stiff competition. An *ad hoc* survey of large farmers has revealed that a large portion of animals they sold for slaughter went to buyers other than the Kenya Meat Commission, mostly private slaughterhouses and their agents. These offer better terms to farmers and can select the animals that they want. In the case of small stock, farmers have probably been holding animals for breeding purposes. There is also the possibility of animal sales across the border from major districts like Marsabit and Garissa.

8.39. Total intake of pigs by Uplands Bacon Factory went down by 4,000 animals to total only 36,000 head in 1979. The decrease was a result of a fall in supply of baconers by 5,000 head while the supply of porkers increased

by 1,000 head and of manufacturers remained the same as in 1978. The decline in supply of bacon pigs is reported to be the result of low producer prices in the face of rapidly rising feeding and veterinary costs. Nyeri District still remained the major source of supply for pigs. Kiambu, Kitale/Eldoret, Murang'a and Nairobi are the other sources of supply. New market outlets in Ethiopia, Somalia and Hong Kong were opened in 1979, although the value of sales involved was not significant, while the market in Djibouti has collapsed completely.

Agricultural Development Services

8.40.—Training.—Details on the various training courses in agriculture are set out in Table 8.15. Efforts to train Kenyans in agriculture continue to increase. In 1979, the University of Nairobi had enrolled 711 students in the Facultties of Agriculture and Veterinary Medicine. This was an increase of 41 students over the 1978 enrolment. A total of 183 students are expected to graduate from the two faculties during the current academic year. Among these, of the 101 graduates from the Faculty of Agriculture,

TOTAL ENROLMENTS AT AGRICULTURAL TRAINING INSTITUTIONS, 1975-1979

Table 8.15

	1975	1976	1977	1978	1979
Degree Level—					
University of Nairobi—Faculty of Agriculture	185	202	284	353	379
Faculty of Veterinary Medicine	312	313	329	317	332
Diploma Level—					
Egerton College	643	682	687	683	787
Certificate Level—					
Bukura Institute of Agriculture		187	176	142	175
Embu Institute of Agriculture	161	190	169	150	154
Animal Health and Industry Training Institute	215	215	285	310	272
Short-Term Vocational Courses—		..	..	..	..
Narosura Farm Mechanization Training Scheme	100*				
Naivasha Dairy Training School	454**	490	405	356	713**

*Includes short courses of 1—2 weeks.

**Includes short course seminars.

20 have been studying food science and technology and 11 taking courses jn agricultural engineering. These are two relatively new courses and were introduced in 1977. In addition, 54 students were taking postgraduate courses in veterinary medicine, and 72 postgraduate courses in agriculture. Enrolment of students at the other institutes of agriculture also continued to grow. The intake for diploma courses at Egerton College increased to 787 in 1979, a rise of 104 students over the 1978 intake. Bukura and Embu Institutes which offer training at certificate level also increased their intakes by 33 and 4 respectively. However, enrolment at the Animal Health and Industrial Training Institute fell by 12.3 per cent. Intake for short-term vocational courses at Naivasha Dairy Training School rose to a record level of 713.

8.41. *Irrigation.*—As shown in Table 8.16, the total area cropped in the six major irrigation schemes rose by 689 hectares from 8,607 hectares in 1978 to 9,296 hectares in 1979. The number of plot holders also rose to 5,283, but the average size of plot remained unchanged at 1.76 hectares. Gross value of output rose slightly by 4.5 per cent to K£2.78 million in 1979 as compared to K£2.66 million on 1978 mainly as a result of improved receipts from sales of paddy and cotton by the West Kano and Tana schemes.

PROGRESS AND PRODUCTION AT SIX IRRIGATION SCHEME AREAS, 1974/75—1978/79

Table 8.16

	1974/75	1975/76	1976/77	1977/78	1978/79
MWEA—					
Area Cropped—*Hectares*	5,379	5,609	5,616	5,648	5,767
Plot-holders—*Number*	2,917	2,972	2,973	3,003	3,149
Gross value of output—K£'000	1,349	1,851	2,088	2,054	1,926
Payments to plot-holders—K£'000	903	1,346	1,083	1,566	1,416
ALL (6) SCHEME AREAS—					
Area cropped—*Hectares*	8,471	8,283	8,728	8,607	9,296
Plot-holders—*Number*	4,405	4,554	4,744	4,904	5,283
Gross value of output—K£'000	1,874	2,450	2,880	2,659	2,779
Payments to plot-holders—K£'000	1,180	1,652	1,553	1,825	1,659
CROPS PRODUCED—*Tonnes*					
Mwea—Paddy	28,423	32,060	35,960	32,289	29,046
Ahero—Paddy	2,467	3,747	5,127	3,985	3,539
West Kano—Paddy	—	—	1,477	1,009	2,146
Bunyala—Paddy	674	1,189	1,074	756	681
Tana—Cotton	2,288	2,209	2,507	1,309	1,382
Perkerra—Onions	1,267	775	1,083	418	577
Chillies	188	178	172	132	165

8.42. There was a decline in output of rice paddy of 6.9 per cent. All the schemes, except West Kano produced less paddy than in 1978. However, increases were recorded in production of cotton, onions and chillies. Construction work is underway at the site of the Bura Irrigation Scheme. This scheme will be managed by the National Irrigation Board and is expected to cover some 900 hectares.

8.43. Development of small-scale irrigation schemes continued to gain momentum in the year. The Kibirigwi overhead irrigation scheme which initially was a pilot scheme is now successfully growing onions, tomatoes and potatoes. This scheme covers 100 hectares involving 265 plotholders. At the Ishiara scheme, construction of canals and drainage layout is nearing completion. Feasibility studies of Mitunguu and Muka Mukuu Irrigation schemes were also completed in 1979. Construction works are expected to start soon and will initially cover 220 and 500 hectares respectively. The Mitunguu scheme when fully established will spread over 500 hectares. The final design for the first two phases of Yala Swamp reclamation project expected to cover 10,000 hectares is to be completed in 1980.

8.44. New schemes which are at the planning stage include the Lower Tana Village Irrigation Programme and South Kano Rice Scheme. The Tana programme will consist of twenty small irrigation areas each belonging to a village. Some 1,000 hectares are to be irrigated involving 1,500 small holders. The South Kano Scheme, on the other hand, is to cover between 850 and 1,000 hectares and the construction work is to commence in July, 1980.

8.45. There are currently five major schemes which are operational in arid areas of Turkana, West Pokot and Isiolo districts. The two schemes in Turkana District at Turkwell and Katilu cover 245 hectares and involve some 240 families growing maize, greengram, cotton, cowpeas, citrus fruits and vegetables. The two schemes in Isiolo District at Malka Daka and Merti together cover 145 hectares involving 250 families growing maize, green-grams, citrus fruits and bananas.

Land Adjudication

8.46. The land adjudication programme made further progress in 1979. Some 297,500 hectares were registered during the year, raising the area of total land registered so far to 5.51 million hectares. However, this is still 2.90 million hectares below the 1983 target of 8.41 million hectares. Rift Valley Province continued to be the main centre of adjudication activities. There were 265,100 hectares of land registered in this province during 1979. Nyanza and Coast provinces followed with 13,900 hectares, and 7,400 hectares, respectively, of newly registered land. Adjudication work in Western Province did not proceed as planned and there are 8,657 hectares of land pending completion. Work in North-Eastern Province is expected to commence during the financial year 1980/81.

PROGRAMME OF LAND REGISTRATION AND ADJUDICATION BY PROVINCE AS AT 31ST DECEMBER, 1979

Table 8.17

	Registered Areas		Area Adjudicated but not Registered		Area in Progress	Total Land Registered, Adjudicated or under Adjudication	
	'000 Holdings	'000 Hectares	'000 Holdings	'000 Hectares	'ooo Hectares	'000 Hectares	% of Total Registrable Land
Western	256.0	597.5			8.7	606.2	94.6
Nyanza	306.2	619.6		29.2	378.0	1,026.8	91.5
Central	238.1	412.8				412.8	100.0
Rift Valley	105.7	3,123.2		26.0	1,475.3	4,624.5	72.0
Western	149.7	439.9	0.2	45.7	451.4	937.0	29.3
Coast	36.7	321.3	0.4	28.2	311.3	660.8	46.6
ALL Provinces—							
At 31-12-1979	1,092.4	5,514.3		129.1	2,624.7	8,268.1	62.6
At 31-12-1978	1,065.8	5,216.8	26.2	363.7	2,019.9	7,600.4	57.6
Difference	26.6	297.5			604.8	667.7	5.0

8.47. About one-third of the newly registered land—100,824 hectares, was located in Samburu District; 82,175 hectares were in Kajiado District; 56,321 hectares in Narok District; and 12,473 hectares in West Pokot District. Registration in South Nyanza and Kwale districts slackened substantially with 10,355 hectares and 2,621 hectares of land being registered respectively during the year.

CHAPTER 9—NATURAL RESOURCES

Data which have become available over the last year have provided information on and have shown some of the effects of uncontrolled developments on the country's natural resources. For example in Chapter 10 in this survey figures are presented on the estimated total use of fuelwood and charcoal for household consumption. These figures show that fuelwood is by far the most important current source of energy in the country and its importance calls for strict control of the forest areas estimated at 1.7 million hectares so that these areas are not devastated by uncontrolled and wasteful means of cutting and energy usage. Similarly in March 1980 an electricity crisis arose because the actual water level of the dams where hydro-power is generated was being reduced by drought and silting. This silting had arisen mainly through a lack of control of agricultural use in the river catchment area. This factor had led to the freeing and release of large quantities of soil which had escaped into the river and thereafter into the dams causing the build-up of silt at an alarming rate. The consequences of the electricity crisis on the economy have been very severe and it is even more essential that the forests be more effectively managed and the water resources more appropriately controlled to ensure their optimal utilization including the elimination of wasteful and harmful practices especially in the rural areas.

Water

9.2. Since the availability of water is a major determinant of national development and increased agricultural production, the water sector has been given high priority in the current 1979-1983 Development Plan. The Ministry of Water Development is expected to play a significant role by making piped water more readily available in the rural areas and in harnessing more of the country's water resources to increase supplies for agriculture. The Government over the current plan period has, allocated K£200.1 million for water development. Of the amount, K£44.7 million is earmarked for the Tana River Development Authority, whose functions now fall under the Office of the President. The Ministry of Water Development is to utilize the remaining K£155.4 million for rural and urban water supplies, Mombasa and coastal water supplies, sewerage, water conservation, water for livestock development and minor irrigation works.

9.3. Preparations for Phase I of the National Master Water Plan for Kenya were initiated a few years ago. The master plan in Phase I provides detailed information on the availability and reliability of the country's water resources as well as an assessment of their irrigation and hydro-power potential. The Plan has more recently been revised and the final document is expected to be ready by June 1980. Indeed a pre-investment study on the Athi Basin as a Part of Phase II of the plan has already been started by the Tana River Development Authority. Development plans are also being worked on for Ewaso Nyiro North and Kerio and Turkwel rivers.

9.4. Table 9.1 details total public expenditure on water development related services incurred by the Central Government and other public authorities during the period 1975/76 to 1979/80. Total expenditure increased by K£6.14 million or 18 per cent in 1979/80 as compared to the previous year.

DEVELOPMENT EXPENDITURES ON WATER SUPPLIES AND RELATED SERVICES, 1975/76—1979/80

Table 9.1 K£'000

	1975/76	1976/77	1977/78	1978/79	1979/80*
Ministry of Water Development—					
Urban water supplies	1,240	728	2,228	2,290	3,250
Rural water supplies	3,855	2,922	3,961	4,130	6,250
Sabaki River Project	785	3,186	73,225	7,715	6,500
Miscellaneous programmes	2,353	2,755	5,973	6,209	7,000
Mombasa Pipeline Board	547	399	650	385	125
Tana River Development Authority	417	732	10,983	8,034	11,115
Other Ministries	123	125	130	140	186
Local Authorities	2,188	2,418	3,754	4,598	5,215
TOTAL	11,508	13.265	39,904	33,501	39,641

*Provisional.

Expenditure on the rural water supply development programme which covers both the development of rural water supplies by the Government and by the people themselves through self-help efforts rose further by K£2.12 million in 1979/80 to K£6.25 million. It accounts for nearly 16 per cent of total expenditure on water development in 1979/80. Expenditure by the Tana River Development Authority which had declined in 1978/79 after the sharp rise in 1977/78 rose by K£3.08 million to reach K£11.12 million taking 28 per cent of the total development expenditure in 1979/80. Nearly K£4.20 million or 80 per cent of total expenditure by the local authorities was incurred by the Nairobi City Council. The Mombasa Pipeline Board whose expenditure has been reduced to nearly one quarter since five years ago is being dissolved and its functions taken over by the Ministry of Water Development.

9.5. Physical distribution of rural water projects already operational or expected to be operational by June 1980 is shown in Table 9.2. The capital expenditure so far committed for the development of rural water schemes is also indicated. As can be seen, 14 more schemes are expected to be operational by June 1980 as compared to the number which were operational at the same time last year. The total cost of 122 schemes by June 1980 will, it is estimated, be KX17.8 million. The Government intends to provide all the rural population with clean potable water by the year 2000. Increasing annual subventions have been earmarked for this purpose in the current plan.

RURAL WATER SUPPLY PROJECT SCHEMES OPERATIONAL OR EXPECTED TO BE OPERATIONAL AT JUNE, 1978, 1979 AND 1980

Table 9.2

Province	JUNE, 1978		JUNE, 1979		JUNE, 1980*	
	NO.	Cost K£'000	NO.	Cost K£'000	No.	Cost K£'000
Central	10	2,850	11	4,525	15	6,620
Coast	9	249	10	399	11	454
Eastern	18	1,980	19	2,180	23	3,400
North-Eastern	15	157	15	157	15	157
Nyanza	14	3,128	15	3,198	16	4,998
Rift Valley	30	622	32	917	35	1,117
Western	6	585	6	585	7	1,035
TOTAL	102	9,571	108	1 1,961	122	17,781

*Provisional.

9.6. A total of K£29 million has been spent on the Sabaki Water Project by the end of March 1980. The construction of reservoirs, the main pipelines and the installation of the bulk of the equipment arc in progress. Work is expected to finish before the end of 1980. This project with a capacity to supply 54 million litres of water per day on full completion, will considerably alleviate the recurrent water shortages in Mombasa and northern coastal region.

9.7. The Ministry of Water Development in collaboration with Mines and Geology Department of Ministry of Environment and Natural Resources undertakes exploration of ground water on a localized basic, with the object of drilling successful boreholes. During 1979, some 105 boreholes were drilled out of which only 13 were unsuccessful. Nearly 80 per cent of the boreholes were drilled by private contractors. Currently, efforts are being made to explore the ground water potential in dry regions of the Eastern and North-Eastern provinces.

9.8. During 1979/80 activities on water conservation were concentrated in the range districts of Wajir, Garissa and Isiolo as well as in the semi-arid areas of Kitui, Machakos, Samburu. Baringo and Taita-Taveta districts. Seven earth dams were constructed in the range districts with a total water storage capacity of 200,000 cubic metres. Two earth dams were constructed in Kitui District with a total storage capacity of 185,000 cubic metres. In Samburu District, rehabilitation of four dams was completed—their total storage capacity being 65,000 cubic metres. Four small dams were desilted in the southern division of Baringo District, while in Machakos District, two earth dams with total water storage capacty of 150,000 cubic metres together with twenty-eight subsurface dams and four intakes for rural water supplies were constructed under the Integrated Agriculture Development Programme.

9.9. Activities of the Ministry of Water Development on water pollution control were focussed on three sectors of industry namely coffee processing, tanning and sugar manufacture. As a result pollution control regulations have been imposed on the coffee industry and there are 1,000 existing coffee factories which need attention. A study on the Kenyan leather industry was also completed with financial assistance from SIDA. Negotiations are now currently underway to improve water treatment facilities at a number of existing factories.

9.10. The problem of silting of the country's rivers came into sharp focus in March 1980 with the electricity cuts arising from the high level of silt in the dams on Tana River.

9.11. The Water Development Training School which trains sub-professional level staff increased its intake by 70 to 185 trainees during 1979. Thus by April 1980 the cumulative number of students had risen to 900. Further funds have been made available for the construction of a new school with a capacity intake of 500 students per year. The World Health Organization has also helped in developing a plan for the establishment of a Water Engineering Institute in Nairobi. The institute will offer training facilities to students from other African countries,. Furthermore, steps have been taken to establish training facilities at the provincial level for lower cadres. These developments will help ensure an adequate supply of trained and specialized manpower for the Ministry of Water Development to help it develop, maintain and operate the proposed numerous water projects and the country's water resources.

9.12. Steps have also been taken by the Ministry of Water Development to initiate a water rehabilitation programme which involves redesign and restoration of water schemes that are no longer functioning at their designed capacity. The Goverenment has received financial aid for this programme from CIDA, DANIDA and SIDA. A total of K£7 million has been set aside for this purpose in the current plan.

9.13. The importance of the national water development programme does not only lie in utilization of the country's water resources for human and livestock consumption but much more to the extent to which water can be utilized for increased crop production and electricity generation in such a way as not to lead to soil erosion.

Forestry

9.14. An additional 4,105 hectares of both pulpwood and saw-wood were planted in 1979 thus raising the total area of planted forests to 163,000 hectares. However, the plantation area still accounts for only 9 per cent of the total gazetted forest land in Kenya. A total of 28,100 hectares have now

been planted with forests since 1974. The area added in 1979 was the lowest in the five-year period because of dry weather conditions during the year. Of the area planted in 1979, about 932 hectares are in Turbo and Eldoret forest reserves intended for the supply of pulpwood to the giant pulp and paper factory at Webuye while the balance is earmarked to be used mainly for production of sawn timber. Table 9.3 gives details of the forest plantation area since 1975.

FOREST PLANTATION AREA, 1975-1979

Table 9.3 '000*Hectares*

	1975	1976	1977	1978	1979*
Indigenous softwoods	4.7	3.7	3.7	3.7	4.7
Indgenous hardwoods	5.3	6.4	5.4	5.4	5.4
Exotic softwoods—					
Cypress	56.7	59 5	62.8	66.5	68.5
Pines	64.9	67.1	68.4	70.4	71.8
Exotic hardwoods—					
Timber	1.8	1.8	1.8	2.2	2.7
Fuel	9.1	9.3	9.5	9.7	9.9
TOTAL AREA	142.5	147.8	152.6	158.9	163.0

*Provisional.

9.15. The rural afforestation scheme which aims to promote resource conservation and development of arid and semi-arid lands progressed satisfactorily during 1979. The scheme now covers 38 administrative districts and each district has its main tree nursery and smaller nurseries established at divisional level. To-date, some 6.5 million seedlings have either been sold or issued free to the public and it is estimated that these have helped forest some 4,000 hectares. The rural afforestation programme is, to be supplemented with local afforestation intended to prevent soil erosion, protect water catchment areas and provide fuelwood and building poles for the rural population.

9.16. The effectiveness of control of forest fires continued to improve in 1979 with only 241 hectares of indigenous and 115 hectares of exotic plantations reported destroyed. The improvement in controlling fire losses is the result of precautionary measures instituted by the Forest Department.

9.17. Table 9.4 gives details on sales of forest product during the last five years. As can be seen, steady progress has been maintained in timber sales with a reported sale of 500,000 cubic metres of sawn timber in 1979, some 34,000 cubic metres or 7 per cent above the 1978 sales. The increase covered sales of softwood while hardwood sales remained at their previous level, sales of fuelwood have also continued to rise but it seems that charcoal burning has been reduced since 1974 at least as far as authorized burning is

concerned. Reference to Chapter 10 will show that these sales figures, however, are only a very small part of the total consumption of fuelwood and charcoal in the country.

RECORDED SALES OF FOREST PRODUCTS, 1975-1979

Table 9.4

	1975	1976	1977	1978	1979*
Timber '000 *true cu. metres*—					
Softwood	352	350	350	383	417
Hardwood	59	54	84	83	83
TOTAL	411	404	434	466	500
Fuel '000 *stacked cu. metres*—					
Fuelwood	84	64	90	104	121
Charcoal	121	115	58	38	12
Power and Telegraph Poles— *numbers*	15,352	15,221	6,193	8,684	8,893

*Provisional.

9.18. Forest-based industries performed fairly well in 1979. The pulp and paper mill at Webuye used 291,854 cubic metres of raw timber valued at K£2.3 million. During 1978 the mill had consumed 293,727 cubic metres of an equivalent value of K£1.8 million. The higher value per cubic metre in 1979 reflects a higher royalty paid to the Government. Production of plywood rose by 0.5 million metres above the 1978 output of 5.1 million metres, while production of fibreboard fell below the level recorded in 1978.

9.19. The Forest Research Services conduct research on forest silviculture, entomology, pathology and timber utilization. During 1979, the research was concentrated on forest plantation silviculture and on arid and semi-arid land forest potential where preliminary results have revealed that certain wood species can be planted. Consequently, arid and semi-arid land research sub-stations have been established at Ramogi, Kibwezi and Hola to promote the planting of trees. In addition 27 cases of diseases were referred to forest pathology research section for study, and wood from 30 different timber species was also subjected to study and research to establish behaviour patterns during sawmilling and air drying process. In addition, qualitative and quantitative investigations were made to determine retention and distribution of preservative salts in green eucalyptus poles treated by the sap-displacement method of wood preservation. It is hoped that this technique will improve durability of a number of plantation-grown species and hence increase their utilization in building and fencing, etc.

Fisheries

9.20. Total 1979 fish landings from both fresh waters and marine waters as shown in Table 9.5 rose to 50,344 tonnes in 1979 or 8.7 per cent more than the previous record catch of 46,322 tonnes in 1978. Fresh water landings rose by 4,520 tonnes and there was a particularly large rise in landings from Lake Victoria from 23,856 tonnes to some 30,000 tonnes which offset the falls elsewhere. Lake Victoria thus accounted for 60 per cent of fish landings from all sources in 1979. Landings from Lake Turkana which is another important source of fresh water fish, declined by 1,829 tonnes to 13,731 tonnes in 1979. The catch from this lake has thus declined by 19.4 per cent from the record level of 17,044 tonnes reached in 1976. There was an increase of 201 tonnes in the quantity of fish landed from other fresh water sources. Fresh water fishing still accounts for over 90 per cent of total fish landed, as the sea catch is small despite its potential. The total earnings from fish catches from all sources estimated at K£4,710,000 were 8.5 per cent more than the receipts in 1978 and more than double the level of 1975.

QUANTITY AND VALUE OF FISH LANDED, 1975-1979

Table 9.5

	1975	1976	1977	1978	1979
Quantities *Tonnes:*—					
Freshwater fish-					
Lake Victoria	16,581	18,680	19,332	23,856	30,000
Lake Turkana	4,236	17,044	15,473	15,560	13,731
Other areas	1,993	1,148	1,820	2,344	2,545
TOTAL	22,810	36,872	36,625	41,760	46,276
Marine fish	4,220	3,889	4,046	4,178	3,710
Crustaceans	124	159	208	365	331
Other marine products	187	101	82	19	27
GRAND TOTAL	27,341	41,021	40,961	46,322	50,344
Value K£'000:—					
Freshwater fish	1,348	2,200	2,020	3,282	3,702
Marine fish	538	541	679	796	742
Crustaceans	50	70	103	216	199
Other marine products	81	89	58	47	67
TOTAL	2,017	2,900	2,859	4,341	4,710

*Provisional.

9.21. The Fisheries Department of the Ministry of Environment and Natural Resources has conducted a feasibility study to determine the economic viability of deep sea fishing. The area now available to Kenya under its national control has been extended to 322 kilometres or 200 nautical miles into the Indian Ocean. As a result, the Ministry is in the process of drafting

appropriate legislation which would ensure proper management of the country's marine and aquatic resources. Kenya now has a total of 538,000 square kilometres of fishing area of which more than 10,000 square kilometres is covered by inland water surfaces with a potential of producing more than 150,000 tonnes of fish per year. Present production is only one-third of the inland fishing potential while marine fishing is capable of landing 50,000 tonnes a year—ten times greater than its present low level yield of 5.000 tonnes.

Mining

9.22. Mining activities in 1979 made a relatively modest but growing contribution to the economy in terms of export earnings and GDP. This is indicated by the value of production which rose by over K£2.5 million from K£8.6 million in 1978 to K£11.1 million in 1979, a growth of 29 per cent. Two factors, namely improved mineral output and increased export prices largely accounted for this growth. Export earnings from soda ash increased by nearly K£1.9 million or 51 per cent and accounted for 50 per cent of total mineral earnings in 1979. Earnings from fluorspar, however, continued the downward trend first observed in 1978, mainly as a result of the acute financial, technical and transportation problems that the mine has been experiencing. Indeed, the Government has had to step in to help inject more capital into this venture. Apart from the decline in fluorspar output, other minerals which made increased contributions to export earnings in 1979 included gypsum, diatomite, vermiculite and dolomite. Table 9.6 refers.

VALUE OF MINERAL PRODUCTION, 1977-1979

Table 9.6 K£'000

	1975	1976	1977	1978	1979*
Soda Ash	2,670	3,019	2,643	3,684**	5,557**
Fluorspar	1,569	1,788	2,832	2,567	1,984
Salt	170	669	719	450	698
Limestone Products	382	433	532	462	387
Other	762	1,807	2,088	1,483	2,500+
TOTAL	5,553	7,716	8,814	8,646	11,126

*Provisional. **Export value.

+Rough estimates only.

9.23. The value of gemstone production doubled from K£495,740 in 1978 to over K£1.0 million in 1979. Most of these gemstones were mined in the gemstone belt in the Taita-Taveta District. Gold production which had been declining also made a recovery, increasing its output from 6,361 grammes in 1978 to 14.813 grammes worth K£43,272 in 1979.

9.24. The export prices during the year as shown in Table 9.7 all showed increases. The average export price for soda ash increased by 8 per cent: that of fluorspar by 35 per cent and of corundum-ruby by 18 per cent above the 1978 prices.

AVERAGE EXPORT PRICES OF SELECTED MINERALS, 1977-1979

Table 9.7 *K£ per tonne*

	1977	1978	1979*
Fluorspar	24.8	24.9	33.4
Soda Ash	26.4	23.9	25.8
Corundum—Ruby	96.0	68.5	81.2

*Provisional.

9.25. Mineral exploration was intensified during the year with special emphasis on basic metals; exploration, evaluation and assessment of non-metalic industrial minerals; as well as exploration for petroleum which has now been taken over by the Ministry of Energy. The results of an airborne survey and subsequent publication of its results for review in an "Openfile" generated a great interest amongst foreign investors and the Government is hoping to grant exploration licences to interested companies.

CHAPTER 10—ENERGY

Total domestic consumption of fossilised fuels (oil, coal and coke) and hydro-electricity rose by about 2 per cent in 1979 compared with the increase of 7 per cent in 1978. This much more moderate increase can be attributed to the less buoyant economic conditions in 1979 and higher fuel prices. Consumption of petroleum products has risen much less than hydro-electricity since 1976 and in fact the figures given below suggest that consumption of petroleum products had been rising at only half the rate of total increase in consumption of fosilised fuels and hydro-electricity taken together.

1976 = 100

	Index of Monetary GDP at Constant Prices	Index of Consumption of Fossilised Fuels and Hydro-electricity	Index of Consumption of Petroleum Products
1973	93	88	87
1974	94	89	87
1975	98	91	89
1976	100	100	100
1977	109	104	103
1978	116	111	106
1979	120	113	107

10.2. These figures continue to show the close relationship between the increase in monetary GDP at constant prices and the consumption of fossilised fuels and hydro-electricity but it seems that in the more recent period the efforts being made to conserve energy are beginning to have some impact. While GDP at constant prices has risen by 20 per cent since 1976, consumption of these types of energy has risen by only 13 per cent so the relationship has changed from a ratio of 1:1 in the period before 1976 to a ratio 1:0.7, i.e. since 1976 for every one per cent increase in monetary GDP consumption of energy has risen by 0.7 per cent. For petroleum products the ratio since 1976 has been 1:0.4.

Oil

10.3. Kenya's energy needs in 1979 in the modern sector continued to be met largely by oil and electricity. Oil constituted 82 per cent of total consumption of primary energy while hydro-electricity and coal and coke accounted for 17 per cent and just 1 per cent respectively. Oil has continued to feature prominently in the energy supply of the modern sector despite the increasing effort being directed towards the development of electricity. The quantity of oil used in thermal generation of electricity in 1979 accounted for 5 per cent of the total oil used in the country. Although the significance of thermally generated electricity from oil, is expected to decline in importance as geothermal and low-head hydro power units are developed, oil, nevertheless

Table 10.1

QUANTITY AND VALUE OF IMPORTS AND EXPORTS *of* PETROLEUM PRODUCTS, 1975-1979

	1975		1976		1977		1978		1979	
	Quantity '000 tonnes	Value K£'000	Quantity '000 tonnes	Value K£'000	Quantity '000 tonnes	Value K£'000	Quantity '000 tonnes	Value K£'000	Quantity '000 tonnes	Value K£'000
IMPORTS—										
Crude Petroleum	2,824.9	86,822.4	2,496.7	93,469.5	20,551.5	100,158.4	2,369.2	92,337.6	2,471.5	102,085.3
Petroleum Fuels	16.7	1,249.1	47.7	3,345.7	104.7	8,269.9	258.3	16,899.4	288.3	20,480.8
Lubricating oils	77.6	6,158.1	53.0	5,678.9	73.9	6,927.7	65.4	6,636.1	47.9	5,100.0
Lubricating greases	8.3	73.7		41.5	0.2	65.1	0.2	75.2	0.1	47.5
TOTAL	2,919.5	94,303.3	2,597.5	102,535.6	2,730.3	115,421.1	2,693.1	115,948.3	2,807.8	145,713.6
EXPORTS—										
Petroleum Fuels	1,318.1	45,988.4	1,372.0	57,603.4	1,365.0	72,398.3	1,173.3	60,372.6	1,001.7	68,138.3
Lubricating oils	57.3	8,670.7	57.3	10,584.7	50.0	10,253.8	38.9	8,172.2	33.9	8,311.3
Lubricating greases	2.2	478.7	1.5	372.2	1.5	350.3	1.3	378.7	1.3	409.8
TOTAL	1,377.6	55,137.8	1,430.8	68,560.3	1,416.5	83,002.4	1,213.5	68,923.5	1,036.9	76,859.4

Fisheries

9.20. Total 1979 fish landings from both fresh waters and marine waters as shown in Table 9.5 rose to 50,344 tonnes in 1979 or 8.7 per cent more than the previous record catch of 46,322 tonnes in 1978. Fresh water landings rose by 4,520 tonnes and there was a particularly large rise in landings from Lake Victoria from 23,856 tonnes to some 30,000 tonnes which offset the falls elsewhere. Lake Victoria thus accounted for 60 per cent of fish landings from all sources in 1979. Landings from Lake Turkana which is another important source of fresh water fish, declined by 1,829 tonnes to 13,731 tonnes in 1979. The catch from this lake has thus declined by 19.4 per cent from the record level of 17,044 tonnes reached in 1976. There was an increase of 201 tonnes in the quantity of fish landed from other fresh water sources. Fresh water fishing still accounts for over 90 per cent of total fish landed, as the sea catch is small despite its potential. The total earnings from fish catches from all sources estimated at K£4,710,000 were 8.5 per cent more than the receipts in 1978 and more than double the level of 1975.

QUANTITY AND VALUE OF FISH LANDED, 1975-1979

Table 9.5

	1975	1976	1977	1978	1979
Quantities *Tonnes:*—					
Freshwater fish-					
Lake Victoria	16,581	18,680	19,332	23,856	30,000
Lake Turkana	4,236	17,044	15,473	15,560	13,731
Other areas	1,993	1,148	1,820	2,344	2,545
TOTAL	22,810	36,872	36,625	41,760	46,276
Marine fish	4,220	3,889	4,046	4,178	3,710
Crustaceans	124	159	208	365	331
Other marine products	187	101	82	19	27
GRAND TOTAL	27,341	41,021	40,961	46,322	50,344
Value K£'000:—					
Freshwater fish	1,348	2,200	2,020	3,282	3,702
Marine fish	538	541	679	796	742
Crustaceans	50	70	103	216	199
Other marine products	81	89	58	47	67
TOTAL	2,017	2,900	2,859	4,341	4,710

*Provisional.

9.21. The Fisheries Department of the Ministry of Environment and Natural Resources has conducted a feasibility study to determine the economic viability of deep sea fishing. The area now available to Kenya under its national control has been extended to 322 kilometres or 200 nautical miles into the Indian Ocean. As a result, the Ministry is in the process of drafting

Distribution of Mombasa Oil Refinery Sales

Per cent

	Domestic Demand	Exports	Total
1973	45.7	54.3	100.0
1974	46.0	54 0	100.0
1975	51.4	48.6	100.0
1976	53.3	46.7	100.0
1977	54.1	45.9	100.0
1978	58.6	41.4	100.0
1979	62.6	37.4	100.0

10.7. It seems almost certain that Kenya can never hope to re-establish the pre-1973 position where 54 per cent of more of production from the Mombasa refinery was exported. The continuous increase in oil prices and also the economic position in the countries to which oil products have been exported will continue to adversely affect exports. Also general world economic conditions need to improve materially for there to be any extensive rise in demand for products for bunkering. However, a fall in the export of residues for further processing would be a positive influence ensuring that more economic use was being made of the crude oil imported.

10.8. Information on wholesale prices of petroleum products from the Mombasa refinery from September 1973 to March 1980, is set out in Table 10.2. By March 1980, the prices of premium and regular motor gasoline were 288 and 273 per cent higher respectively, than the prices in September 1973, and similar price rises were recorded in the case of illuminating kerosene and light diesel fuel. The highest rise in prices was recorded for fuel oil which increased by over 600 per cent over the period under review and other fuels like power kerosene and industrial diesel oil increased in price by 342 and 377 per cent respectively, while the price of crude oil has gone up by more than 500 per cent since September 1973.

Wholesale Prices* of Petroleum Products at Mombasa, on 30th September, 1973, 8th April, 1979, 8th June, 1979, 26th September, 1979, and 9th March, 1980

Table 10.2 *KSh. per tonne*

	30-9-1973	8-4-1979	8-6-1979	26-9-1979	9-3-1980	Ratio
						1980/73
L.P.G.**	2,060	3,374	3,374	3,644	4,044	196.3
Premium motor gasoline	1,551	4,180	4,589	5,135	6,022	388.3
regular motor gasoline	1,468	4,001	4,282	4,703	5,475	373.0
Illuminating kerosene	736	1,902	1,902	2,029	2,539	345.0
Power kerosene:blended	763	2,496	2,575	2,785	3,369	441.5
P	892	2,433	2,433	2,671	3,207	359.5
Light diesel oil	471	1,585	1,585	1,774	2,245	476.6
	334	1,045	1,047	1,217	2,518	753.9

*including duties and sales taxes

** liquidified petroleum gases

16.9. OPEC increased crude oil prices three times during 1979 so that the average price in 1979 was 46 per cent higher than in 1978 and for refined products in Kenya the total increase in oil prices which also rose three times during the year was above 25 per cent. As shown below, in March 1980. prices of the major products used by motorists were nearly three times the 1974 level for motor spirit and just over two and half times as high for gas oil.

NAIROBI RETAIL PRICES, 1974-1980

KSh. per tonne

Date	Premium Motor Spirit	Regular Motor Spirit	Gas Oil
12-4-74	2,211.30	2,104.50	1,381.56
20-3-75	2,770.95	2,679.73	1,619.76
6-12-75	3,371.55	3,297.05	1,988.97
10-3-76	3,508 .05	3,437.35	2,108.07
14-4-77	4,135.95	3,535.56	2,191.44
16-6-78	4,613.70	4,092.73	2,513.01
8-4-79	5,023.20	4,433.48	2,751.21
8-6-79	5,692.05	4,714.08	2,751.21
26-9-79	6,579.30	5,261.25	3,096.60
9-3-80		6,032.90	3,632.55

OIL REFINERY: THROUGHPUT AND OUTPUT OF FINISHED PETROLEUM PRODUCTS*, 1975-1979

Table 10.3 '000*tonnes*

	1975	1976	1977	1978	1979
Crude petroleum throughput.	2,837.5	2,574.8	2,570.2	2,584.7	2,739.1
OUTPUT—					
L.P.G.**	17.7	19.2	19.4	19.3	21.0
Motor gasoline: premium	211.4	228.9	221.3	241.8	223.5
Motor gasoline; regular	140.0	122.5	144.8	136.0	147.6
Illuminating kerosen	47.2				
Jet/turbo fuel	424.7	422.0	376.6	386.0	426.2
Light diesel oil	396.1	395.5	446.9	468.5	436.9
Heavy diesel oil	51.2				
Marine diesel oil	90.6	104.0	106.2	81.7	111.5
Fuel oil	896.7	852.9	832.9	746.1	862.7
Export residues	411.9	283.8	276.4	366.5	362.5
Bitumen	40.3	42.2	34.0	22.1	36.7
Intermediates	—5.1	—3.3	8.6	—5.3	0.9
Refinery usage	114.3	107.0	103.0	122.0	109.6
TOTAL OUTPUT	2,837.5	2,574.8	2,570.2	2,584.7	2,739.1

*Excludes lubricants.

**Liquified petroleum gas.

10.10. The total volume of throughput of crude petroleum at the Mombasa refinery, after remaining almost identical for three years, increased moderately to 2,739,100 tonnes in 1979, an increase of 6 per cent over the 2,584,700 tonnes recorded in 1978. Table 10.3 refers. The high increases were recorded in output of illuminating kerosene and jet/turbo fuel, heavy and marine diesel oil, and fuel oil, while only small increases were registered in output of liquified petroleum gas and regular motor spirit and small declines were noted in output of premium motor spirit, light diesel fuel and export residues.

10.11. Domestic sales of petroleum products as shown in Table 10.4 increased from 1,537,900 tonnes in 1978 to 1,567, 900 tonnes in 1979. This increase of only 2 per cent was the lowest for many years. Amongst the main types of liquid fuels sold in the country, fuel oil, light diesel oil, jet/ turbo fuel and motor spirit are the most important, in the stated order of ranking. Altogether they accounted for about 91 per cent of petroleum fuels sold in 1979.

PETROLEUEM SUPPLY AND DEMAND BALANCE, 1975-1979

Table 10.4 *'000 tonnes*

	1975	1976	1977	1978	1979
DEMAND—					
L.P.G	13.7	14.7	17.1	17.3	20.2
Motor spirit premium and regular	234.8	241.0	270.5	290.8	302.0
Aviation spirit	6.0	5.7	6.2	6.5	5.4
Jet turbo fuel*	282.4	305.2	290.0	328.0	338.6
Illuminating kerosene	55.4	53.2	64.3	78.0	89.3
Power kerosene	0.2	0.2	0.2	0.2	0.2
Light diesel oil	255.0	288.3	311.8	324.2	349.2
Heavy diesel oil	32.8	44.7	32.6	29.0	30.6
Fuel oil	398.2	503.3	512.1	463.9	432.4
TOTAL	1,278.5	1,456.5	1,504.8	1,537.9	1,567.9
Refinery usage	114.3	107.0	103.0	122.0	109.6
TOTAL DOMESTIC DEMAND	1,392.8	1,563.5	1,607.8	1,659.9	1,677.6
Exports of Petroleum fuels	1,318.1	1,372.0	1,365.0	1,173.3	1,001.7
TOTAL DEMAND	2,710.9	2,935.5	2,972.8	2,833.2	2,679.2
SUPPLY—					
Imports:					
Crude oil	2,824.9	2,496.7	2,551.5	2,369.2	2,471.5
Petroleum fuels	16.7	47.7	104.7	258.3	288.3
TOTAL	2,841.6	2,544.4	2,656.2	2,627.5	2,759.8
Adjustment**	—130.7	391.1	316.6	205.7	—80.6
TOTAL SUPPLY	2,710.9	2,935.5	2,972.8	2,833.2	2,679.2

*Includes sales to foreign airlines at airports in Kenya.

**Adjustment for inventory changes and losses in production.

10.12. There was a fairly substantial increase in sales of light diesel oil in 1979 but motor spirit showed only a moderate rate of increase. The rise of 8 per cent from 324,200 tonnes in 1978 to 349,200 tonnes in 1979 in sales of light diesel oil is due to the greater use of diesel locomotives on the railway system. This changeover to diesel locomotives also accounts for a fall in fuel oil sales of 7 per cent. As for heavy diesel oil the total sold rose from 29,000 to 30,600 tonnes but these figures were well below the total of 44,700 tonnes sold in 1976 when increased use for generation of thermal electricity was necessary.

10.13. The rise in sales of both regular and premium motor spirit was a modest 4 per cent each from a total of 290,800 tonnes in 1978 to 302,000 tonnes in 1979. In 1979 there was again a fairly substantial rise in the stock of motor vehicles in use. While the evidence is not yet conclusive, there could have been a small reduction in petroleum consumption per vehicle. This has happened at a time of falling real incomes and higher relative fuel prices. The rise in motor spirit sales in 1979 at 4 per cent compares with an increase of 12 per cent in 1977 and 7 per cent in 1978.

10.4. Transport and industry sectors are the major users of petroleum fuels in Kenya followed by agriculture and commerce sectors. The private household uses petroleum fuels directly as paraffin for lighting, gas for cooking and motor spirit for vehicles. The largest use is in motor vehicles and it is difficult as per current data to disentangle private motoring from business use but for illuminating paraffin and gas the total usage accounts for about 7 per cent of the total domestic demand for petroleum. If motor spirit is added households probably use directly up to 20 per cent of the petroleum fuels sold in Kenya. Their indirect use is of course, higher when private travel, electricity and other factors are added. This indicates that the bulk of the retained imports of increasingly costly petroleum are used after processing, in Kenya's industries, and transport, agriculture and commerce sectors. It is thus difficult to be able to make substantial economies since the proportion used by households is small.

Electricity

10.15. Some broad measures have already been taken for the development of alternative energy sources that could lead to a reduction in the proportion of energy generated from imported oil. These include the current construction of a plant to produce electricity from geothermal sources which is expected to be commissioned in mid-1981. This plant will assist in phasing out existing thermal capacity based on imported petroleum which adds to Kenya's structural weakness regarding the supply and of demand for fossilised energy due to dependence on imported oil. The planning for increases in generating capacity for electricity continues to be based on a high growth rate in consumption together with attempts to replace some of the electricity generated from imported oil.

10.16. Table 10.5 shows that the total installed generating capacity both for hydro and thermal electricity after rising continuously since 1975 changed little in 1979. The slight fall in overall installed capacity in 1979 is due to a greater fall of 8.7 MW in thermal capacity than the rise of 6.5 MW in hydro

INSTALLED CAPACITY AND GENERATION OF ELECTRICITY, 1975-1979

Table 10.5

	INSTALLED CAPACITY* MW**			GENERALTION* GWH+		
	Hydro	Thermal	Total	Hydro	Thermal	Total
1975	139.1	144.0	283.1	649.1	322.2	971.2
1976	171.4	181.7	353.1	583.2	574.7	1,157.9
1977	173.5	182.9	356.4	749.3	364.0	1,113.3
1978	311.5	171.6	483.1	1,072.8	308.9	1,381.7
1979	318.0	162.9	480.9	1,308.2	259.4	1,567.6

*Includes estimates for industrial establishment with generation capacity.

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

+1gigawatt hour=1,000,000 kilowatt hours.

capacity. By 1979 hydro capacity had risen to 318 MW. The increase in hydro capacity was the result of the commissioning of new capacity at Gitaru. The level of total capacity is expected to reach 630 MW by 1983 when additional hydro and 30 MW geothermal electricity is put on stream. Demand and supply of electricity had been projected to grow as per figures detailed below.

PROJECTED SUPPLY AND DEMAND FOR ELECTRICITY, 1983-2000

Megawatts

	1983	1988	1993	
Hydro	600	600	600	
Geothermal	30	170	500	
Total supply potential	630	770	1,100	
Projected demand	362	517	747	
Surplus/deficit	268	253	353	

10.17 These projected figures are now expected to change substantially. Because of the present electricity crisis, plans are being worked out for the Turkwell River scheme project with construction work scheduled to begin jn 1983. The whole project is planned to come on stream in 1985-1986, and is estimated that an additional 125 MW will be added to the hydro generating capacity, raising its total to 725 MW. There are plans also to produce hydro electricity using low-head power generating units in smaller rivers.

10.18. Taking both hydro and thermal generation together total domestic production has increased by 61 per cent from 971.2 million KWh in 1975 to 1567.7 million in 1979. Except for 1976 when drought caused a reduction in the level of domestically generated hydro-electricity most of the increase has occurred in hydro-electricity. Thermal generation has been declining since 1976 and thus resulting in savings on imports of oil. This shift to hydro power means that in 1979 about 83 per cent of electricity was hydro and only 17 per cent thermal.

10.19. Total consumption of electricity as shown in Table 10.6 has continued to grow, though the increase from 1370.5 million KWh in 1978 to 1409.0 KWh in 1979, was only 3 per cent compared to an increase of 7.6 per cent in 1978. Major new loads connected during 1979 included the furfural plant in Eldoret, and a plastics plant and Kenya Pipeline Company at the Coast. Expansion has also taken place in the capacity of existing food processing plants especially the sugar manufacturing plants while large scale irrigation facilities have been added to certain coffee plantations. Industry consumed 51 per cent of electricity sold in 1979 while commercial and light industrial consumers accounted for about 24 per cent of the total. The domestic consumers use only about 24 per cent of electricity and growth in this sector has been fairly small since 1975. Imports of electricity fell sharply in 1979 accounting for only 11 per cent of the total supply, from a high of 24 per cent in 1975.

ELECTRICITY ENERGY SUPPLY AND DEMAND BALANCE, 1975-1979

Table 10.6 *million KWH*

	1975	1976	1977	1978	1979
DEMAND—					
Residential	300.9	300.1	303.5	328.5	340.0*
Commercial and light Industrial	263.3	272.9	301.2	321.2	335.0*
Industrial	496.6	568.9	658.1	710.4	724.0*
Street Lighting	10.7	10.6	10.8	10.4	10.0
TOTAL	1,071.5	1,152.5	1,273.6	1,370.5	1,409.0
Transmission losses and unallocated demand	121.1	169.6	83.7	203.2	69.1
TOTAL DEMAND = TOTAL SUPPLY	1,192.6	1,322.1	1,357.3	1,573.7	1,478.1
Of which imports from Uganda	260.8	241.9	271.8	217.0	160.0
Net generation	931.8	1,080.2	1,085.5	1,356.7	1,318.1

*Division estimated based on previous tariff which was changed in 1979. Under the new tariff industrial consumption was 891 million Kwh.

Energy Balance

10.20. Table 10.7 details figures on demand and supply of energy from local production and import of fossilised fuels and hydro-power converted to a common equivalent in terms of oil. As shown the proportion of local production, i.e. hydro-power has continued to grow and accounted for 17.2 per cent of total energy consumed in the modern sector in 1979 compared with 12.8 per cent in 1978. Local generation of hydro-electricity is expected to rise substantially when current and planned projects noted above come on stream. The low rate of growth in energy consumption in 1979—2 per cent against an annual average of 6 to 7 per cent for the years 1976 to 1978 is particularly striking. This low growth rate in 1979 relates both to a relatively poor overall economic growth rate and to the attempts being made to economise on imported fuels.

PRODUCTION, TRADE AND CONSUMPTION OF ENERGY* EXPRESSED IN TERMS OF THE PRIMARY SOURCES, 1975-1979

Table 10.7 *"000 Tonnes Oil Equivalent*

	1975	1976	1977	1978	1979
COAL AND COKE IMPORTS	32.1	44.9	43.8	34.8	11.3
OIL—					
Imports of crude oil	2,824.9	2,496.7	2,551.5	2,369.2	7,471.5
Net exports of petroleum fuels	-1,301.4	-1,324.3	-1,260.3	-915.0	-713.4
Stock changes and balancing item	-130.7	391.1	316.6	205.7	-80.6
TOTAL CONSUMPTION OF LIQUID FUELS	1,392.8	1,563.5	1,607.8	1,659.9	1,677.5
HYDRO ENERGY—					
Local production of hydro-power	155.8	140.0	167.4	275.5	314.0
Imports of hydro-power	62.6	58.1	65.2	52.1	38.4
TOTAL CONSUMPTION OF HYDRO-ENERGY	218.4	198.1	232.6	309.8	352.4
TOTAL LOCAL ENERGY PRODUCTION	155.8	140.0	167.4	257.5	314.0
TOTAL IMPORTS	1,618.2	1,275.5	1,400.2	1,541.1	1,807.8
Use of stock and balancing item	-130.7	391.1	316.6	205.7	-80.6
TOTAL ENERGY CONSUMPTION	1,643.3	1,806.5	1,884.2	2,004.3	2,041.2
LOCAL PRODUCTION AS PERCENTAGE OF TOTAL	9.5	7.7	8.9	12.8	15.4
PER CAPITA CONSUMPTION IN TERMS OF KILOGRAM OF OIL EQUIVALENT	125	130	131	135	133

*Modern sector only: fuelwood and charcoal are excluded.

Household Energy Consumption

1021. A household survey was conducted in late 1978 and early 1979 to collect information to help understand the overall energy consumption in Kenya. The survey secured information on consumption of fuelwood and charcoal as well as purchases of paraffin, gas and electricity by households in rural and peri-urban areas. Figures on average consumption per household of each of these sources of energy are given in Table 10.8. The first row

AVERAGE MONTHLY HOUSEHOLD CONSUMPTION OF SELECTED ENERGY SOURCES, 1978/1979

Table 10.8

	Wood	Charcoal	Paraffin	Gas	Electricity
	Kg.	*Kg.*	*Litres*	*Kg.*	*KMh*
Average for households using source..	332.0	36.8	3.6	3.2	41.5
Average for all households	248.6	19.4	3.3	0.6	11.6

shows consumption of those households which actually used the energy source under reference, and the figures in the second row show the averages for all households taking part in the survey. The more wealthy households in Nairobi in particular were not covered in the survey and these households are, of course, major users of electricity. The survey also excluded uses of energy outside households and this means that where fuelwood and charcoal are used for certain purposes, e.g. catering and industry, such consumption would not have been covered. The grossed-up figures therefore relate only to household consumption for cooking and heating. It is obvious from the survey that fuelwood is the major source of energy in rural households while charcoal usage becomes more common in peri-urban and urban areas. Paraffin is used in virtually all households in rural and peri-urban areas but where electricity is available this is the most favoured form of fighting.

10.22. Table 10.9 provides estimates on absolute consumption of various sources of energy by a total of more than 2 million households represented in the survey referred to above. Consumption of fuelwood is estimated in

HOUSEHOLDS' ESTIMATED ANNUAL CONSUMPTION OF SELECTED ENERGY SOURCES, 1978/1979

Table 10.9

Energy Source	Units	Estimated Consumption
Fuel	'000 tonnes	6,921
Charcoal	'000 tonnes	540
Paraffin	Million litres	91.9
Gas	'000 tonnes	16.7

the region of 6.9 million tonnes and charcoal 540,000 tonnes a year while for paraffin and gas the estimated totals are 91.9 million litres and 16,700 tonnes, respectively. The total of charcoal at 540,000 tonnes would gross up to anything between 2.5 and 5 million tonnes of wood. Since the methods of charcoal making are particularly inefficient it would seem likely that the upper figure of wood used for charcoal could be more realistic. Thus total wood used for fuel by households including that converted into charcoal was in the region of 10 to 12 million tonnes in 1979.

10.23. This total is high in relation to the total stock of trees in the country which cover some 1.7 million hectares. Continued heavy use of wood as fuel means that every effort needs to be made to conserve and increase the forest area.

10.24. By converting the different types to energy to oil-equivalent it is possible to measure the relative importance of fuelwood and charcoal in the total energy supply in Kenya. In 1979 as shown below wood and charcoal accounted for 58.5 per cent of the known uses of energy in Kenya. If industrial and catering uses are added then it seems likely that these two fuel sources accounted for two thirds of the country's energy consumption.

ENERGY CONSUMPTION BY FUEL IN 1979

	Per cent
Hydro-electricity	7.2
Petroleum fuels	34.1
Fuelwood	50.5
Charcoal	8.0
Coal and Coke	0.2
Total	100.0

Energy Policy

10.25. Recognizing the importance of energy and power for national development the Government, through its newly-created Ministry of Energy, is developing an overall energy policy based on petroleum products, hydro-electricity, conventional fuels such as wood and charcoal and other non-conventional renewable energy sources. Such an energy policy will, it is hoped, play its part in resolving the problems created by the current high dependence on imported energy.

10.26. The importance of crude petroleum in the energy supply has already been highlighted. The difficulties that have been created by the continuing escalation in prices of the already high-priced petroleum plus uncertainties over its future supplies have emphasised the need to move more swiftly to

domestically based energy sources. At the same time better use of the imported crude petroleum by improving the refining facilities available must be investigated. Intensification of exploration for deposits of petroleum is also now a priority objective.

10.27. Greater use of indigenous resources, apart from the hydro-electric and geothermal resources already discussed, includes the suply from the power alcohol plants currently under construction. These plants will utilize either molasses or cane juice or both. The two plants under construction will produce 250,000 barrels of power alcohol annually for blending with premium motor gasoline. The possibility of using agro-industrial materials as primary sources of energy is also being investigated.

10.28. Solar energy and windpower are both very commonly available in the climatic conditions of the country, and it is hoped to be able to utilise both sources of energy on a substantial scale in the future.

CHAPTER 11—MANUFACTURING

Growth in the manufacturing sector slowed down with the volume of output rising 7.1 per cent in 1979. after sharp rises of 15.9 and 12.6 per cent in 1977 and 1978 respectively. During the three-year period wage employment in the private manufacturing sector increased by 8 per cent in 1977, 11 per cent in 1978 and 6 per cent in 1979, rising from 94,684 in 1977 to 105,266 in 1978 and 111,991 in 1979. These more moderate increases in output and employment in 1979 were below the 9 per cent target annual growth rate for the current plan period and can be attributed to the more difficult economic problems experienced in 1979 which have continued into 1980. The most pressing among these were the increasing import prices of crude petroleum, the continuous problems in Uganda and the closure of the border with Tanzania which has interrupted the flow of exports of Kenya's manufactured goods not only to Tanzania but also to the countries lying further south of it. At the same time the poor commodity prices in the world market have caused the stagnation of domestic demand in 1979 while the extensive exchange control requirement of import deposits with the Central Bank on certain imported products has reduced the imports of some of industry's basic materials.

11.2. These problems coupled with the bad weather conditions which continued into the first four months of 1980 and resulted in the shortage in supply of such essential commodities as dairy products, wheat and maize flour, and the rationing of electric power will influence adversely the level of performance of the manufacturing sector in 1980.

11.3. As shown in Table 11.1 in terms of value added at current factor cost the contribution of manufacturing industry to GDP in 1979 increased to K£275 million from K£243 million in 1978 while the estimated value of output increased by 13 per cent to K£1,137 million. Value added represented about 20 per cent of total value of output in both 1978 and 1979.

MANUFACTURING SECTOR: OUTPUT AND PRODUCT*, 1977-1979

Table 11.1 *K£million*

	Value of Output	Intermediate Consumption	Value Added
		At Current Prices	
1977	1,033	827	206
1978**	1,201	958	243
1979**	1,357	1,082	275

*Includes tea processing.

**Provisional.

Output

11.4. Table 11.2 shows in detail, indices of industrial output for the period 1975 to 1979. The indices highlight the high growth rate stimulated by greatly increased incomes from coffee and tea in 1977 as these influenced demand in 1977 and 1978, and the subsequent slowing down in the growth rate in the output of manufacturing sector in 1979 basically because of lower consumer demand. The rates of increase in the output of individual sub-groups of manufacturing sector varied widely. The rates of increase in the output of printing and publishing and sugar and confectionery, basic industrial chemicals, clothing, rubber products and plastic products have

QUANTITY INDEX OF MANUFACTURING PRODUCTION, , 1977-1979

Table 11.2 1976 = 100

	1977	1978*	1979*	Percentage Change 1978 to 1979*
Meat and Dairy Products	102.2	70.4	60.4	-14
Canned Vegetables, Fish and Oils and Fats	130 0	139.8	143.5	3
Grain Mill Products	98.2	99.8	97.6	-2
Bakery Products	102.9	107.6	84.3	-22
Sugar and Confectionery	108.6	125.0	149.0	19
Miscellaneous Foods	114.9	122.6	130.4	6
Food Manufacturing	109.4	106.0	110.5	4
Beverages	118.6	134.5	135.1	3
Tobacco	106.5	125.3	125.5	
Beverages and Tobacco	112.7	128.9	131.6	2
Textiles	129.4	140.3	152.5	9
Clothing	164.0	205.4	234.2	14
Leather and Footwear	95.2	115.0	100.4	-13
Wood and Cork Products	113.3	121.2	130.1	7
Furniture and Fixtures	112.8	94.0	93.4	-1
Paper and Paper Products	117.3	144.9	156.2	8
Printing and Publishing	128.0	157.2	214.7	36
Basic Industrial Chemicals	103.1	127.1	147.2	16
Petroleum and Other Chemicals	118.0	128.6	136.5	6
Rubber Products	119.4	123.0	140.0	14
Plastic Products	135.0	179.0	196.7	10
Clay and Glass Products	220.5	239.2	246.9	3
Non.MetallicMinerals	117.5	112.6	115.5	3
Metal Products	111.1	123.6	134.9	9
Non.Electrical Machinery	98.2	100.0	97.4	-3
Electrical Machinery	119.1	159.5	152.5	-4
Transport Equipment	207.9	574.7	597.1	4
Miscellaneous Manufactures	116.0	98.2	104.8	
TOTAL MANUFACTURING	115.9	130.5	139.8	7

*Provisional.

been high in 1979 mainly because of the expansion of the existing capacity and creation of the new manufacturing capacity brought on stream in 1977 and 1978. This development has been encouraged by suitable concessions to take over more of the domestic market. In contrast certain sub-groups engaged in food processing and manufacture of footwear and machinery have recorded declines while other sub-groups registered moderate growth only.

11.5. The overall increase of 4 per cent in die volume of output of enterprises engaged in food processing in 1979 may be compared with a decline of about 3 per cent in 1978. This modest increase was due to the rise in output of sugar and canned products which offset falls in bakery, meat, dairy and grain mill products. In fact the output of all types of processed food products except sugar and confectionery, miscellaneous foods and canned vegetables, fish, oil and fats in that order of ranking, registered declines in output. The largest increase of 19 per cent amongst the sub-groups engaged in food processing was noted in the output of sugar and confectionery whilst the most significant declines of 22 and 14 per cent occurred in output of bakery and meat and dairy products, respectively.

11.6. The production of meat continued its declining trend, falling further by 14 per cent in 1979. This coupled with declines in output of milk-related industries caused a further reduction of 14 per cent in aggregate output of meat and dairy products. Although the export sales of canned beef rose by 25 per cent from 1,070 tonnes in 1978 to 1,341 tonnes in 1979, the overall total quantity of meat products exported fell by 12.8 per cent. The continuous decline in meat production by the Kenya Meat Commission is a reflection of the stiff competition from private slaughter-houses which the Kenya Meat Commission has faced. It suggests the need for adoption of a policy to restore and recognize the strategic role of the Kenya Meat Commission in the meat industry.

11.7. The output of dairy products including baby foods declined by nearly 14 per cent in 1979, despite a large rise in the production of liquid milk which rose from 185,557,000 litres to 212,255,000 litres, an increase of 14 per cent. However, output of most other dairy products, especially evaporated milk, dried whole milk and skimmed milk powder, all declined substantially. To some extent the overall decline in milk sold by farmers from 270 million litres in 1978 to 241 million in 1979 can be attributed to the paucity of the short rains from September 1979, onwards. The continued drought in 1980 led to substantial importations of milk powder to supplement domestic supply to meet the demand. The school milk programme introduced in 1979 was the major source of the much higher demand for liquid milk. Despite the setback in 1979/80 the Kenya Co-operative Creameries Limited is continuing with its efforts to modernize its existing processing units, the construction of new delivery centres and the extension °f the hours for milk reception in the delivery centres.

11.8. The output of canned fruit and vegetables increased moderately in 1979 by 3 per cent. Export demand was not an expansionary factor in 1979, especially for tinned pineapples which continued to decline by a further 2 per cent from 42,082 tonnes in 1978 to 41,048 tonnes in 1979.

11.9. The output of grain mill products detailed in Table 11.3 declined by about 2 per cent in 1979 inspite of a significant increase in the output of maize products from 227,000 tonnes in 1978 to a record level of 255,700 tonnes in 1979, an increase of 10 per cent. The volume of wheat flour milled declined from 156,900 tonnes in 1978 to 141,700 tonnes in 1979 and was a major contributory factor in the reduction of the aggregate level of output of grain mill products. Domestic consumption of wheat flour declined by 14 per cent and was identical with the level of consumption of 158,000 tonnes in 1977. As a result the output of bakery products too declined sharply by 22 per cent. This decline in output cannot, however, be attributed to a decline in demand since domestic consumption of wheat would have been much higher had it not been for a drop in the level of local wheat supplied which was attributed to too much rain in 1978 when the crop was ripening. There was also a large reduction in the level of wheat imported into the country which declined from 90,888 tonnes in 1978 to only 21,154 tonnes in 1979.

PRODUCTION OF GRAIN MILL PRODUCTS, 1975-1979

Table 11.3 '000*tonnes*

Year	Wheat Flour	Sifted Maizemeal	Rice	Broken Rice
1975	111.9	199.3	21.0	1.7
1976	137.8	219.2	24.2	1.5
1977	149.4	190.9	20.1	1.8
1978	156.9	227.1	18.3	4.5
1979*	141.7	255.7	22.6	1.7

*Provisional.

11.10. However, the wheat industry has already begun to benefit from the increase in wheat prices from K.Sh. 120 to K.Sh. 135 per 90 kg. bag in June 1979 and will also benefit further from a recent K£20 million loan to be used to raise wheat production and other crops in the Narok Development Project area. The Government is also introducing a new and more efficient credit facility to farmers to replace the GMR Loan Scheme which was discontinued earlier in 1979.

11.11. The output of sugar and confectionery increased by 19 per cent. This increase is accounted for by the increase in local production of sugar by 25 per cent from 238,413 tonnes in 1978 to 296,000 tonnes in 1979. This has enabled Kenya to enter the export market for sugar with 15,239 tonnes

of sugar valued K£2.2 million being exported in 1979. However, 10,983 tonnes of certain quantities of sugar were also imported for specific industrial uses in 1979. The rise in local sugar production is due to an increase in supply of cane to all sugar plants, and the measures taken to expand the processing capacity of some of the existing sugar plants.

11.12. The sugar industry is continuing to expand at a fast rate. This could make it possible to export surplus output so as to be able to benefit from world market prices which had increased to about K£210 per tonne in April, 1980. In accordance with a long term programme there is a plan to rehabilitate the four major sugar factories, at Miwani, Chemelil, Muhoroni—all in the Nyanza sugar zone and Ramisi at the Coast, at a total cost of K£55.2 million from the loan facility made available by the World Bank and African Development Bank. The planned expansion will raise the crushing capacity of the four sugar factories from 7,000 to 8,759 tonnes of sugar-cane daily. Details on projected production and domestic consumption of sugar from 1979 to 1983 are shown below:

		'000 *tonnes*
	Production	*Consumption*
1979	295	253
1980	373	286
1981	388	314
1982	420	340
1983	440	369

11.13. The latest sugar factory at Awendo in South Nyanza which has just been completed at a cost of K£40 million and is ready for the first stage of its operations, will eventually have capacity for producing 60,000 tonnes of sugar a year. In 1980 its output could reach 36,000 tonnes. In addition, the Mumias Sugar factory has been expanded to more than double its capacity to produce 184,000 tonnes of sugar per year.

11.14. The output of enterprises in the miscellaneous food group rose by 6 per cent in 1979. This group includes tea and coffee processing, and the manufacture of animal feeds and salt. The output of processed tea increased by 10 per cent while output of salt doubled reaching a record level of 45,021 tonnes. Salt production is expected to continue rising but it will be a further two to three years before operations on an additional 2,000 hectares of coastal land at Gongoni in Kilifi District start producing salt from a series of evaporation ponds. This will reduce the quantity of salt imported into the country.

11.15. Details on production of beverages and tobacco are set out in Table 11.4. The increase of 3 per cent in the output of beverages and tobacco in 1979 was due to an increase in production of mineral waters and to a lesser extent of spirits since output of beer and cigarettes remained almost the same as in 1978. The production of spirits and mineral waters increased

by 2 and 28 per cent respectively. The output of this sub-group is expected to grow substantially when the current construction work on a K£14 million brewery in Kisumu and the expansions of various soft drink plants are eventually completed.

PRODUCTION OF BEVERAGES AND TOBACCO, 1975-1979

Table 11.4

	Spirits	Bcsr	Mineral waters	Cigarettes
	litres	'000 *litres*	'000 *litres*	*Million*
1975	362,297	153,812	68,159	3,562
1976	356,838	165,817	81,193	3,703
1977	420,180	195,160	99,411	3,944
1978	407,796	211,365	108,019	4,546
1979	415,694	212,712	137,926	4,554

11.16. Output of textile mills went up by 9 per cent in 1979 following the rise of 8 per cent in 1978. The increase in 1979 was due to the rise in the output of cotton ginneries and items like blankets, bedsheets and canvas bags. The output of ginned cotton increased by over 100 per cent and of blankets, bedsheets and convas bags by 29, 35 and 24 per cent respectively. However, the production of rope and twine and knitted fabrics all declined. A decline of 10 per cent in the output of rope and twine was caused by a drop in export demand, exports declined from 28,392 tonnes in 1978 to 18,282 tonnes in 1979.

11.17. The clothing industry also registered a rise in output of 14 per cent in 1979. The increase is attributed especially to the rise in the local production of shirts, dresses, vests, singlets, underwear and trousers—helped by the restrictions on imports of second-hand clothing. The output in this sector is expected to rise further with the completion of a new factory in Nairobi which will manufacture about 300 suits daily for local and export markets.

11.18. The reduction of 13 per cent in the output of leather products and footwear is accounted for partly by the large decline in the production of finished leather including sole leather, and moderate declines in the output of unfinished sheep and goat skins. The output of footwear also declined by 12 per cent.

11.19. Rising domestic demand and expansion in the paper industry led to an increase of 8 per cent in the output of paper and paper products. This increase was accompanied by a growth of 36 per cent in output of enterprises engaged in printing. The increase of 10 per cent in production of paper is accounted for by the rise in the output of kraft and wrapping papers required to meet domestic and export demand. Exports of paper earned the country

K£9 million in 1979. Increases were also recorded in output of other paper products except corrugated packing containers. Inspite of these increases, the country continues to import some paper and paper products to satisfy demand for products not made locally. Indeed the value of imports increased by 22 per cent from K£10.26 million in 1978 to K£12.56 million in 1979. The imports of newsprint and other printing papers increased from 6,577 tonnes in 1978 to 10,456 tonnes in 1979. Imports of newsprint are expected to decline when the current improvement and balancing programme to increase the output of paper from the present level of about 48,000 tonnes to about 60,000 tonnes per annum at a cost of K£7.63 million is completed. The additional output of paper will include production of bleached grades of paper to meet the increasing domestic demand for these grades including newsprint.

11.20. The output of basic industrial chemicals increased by a further 16 per cent in 1979 after rises of 3 and 23 per cent in 1977 and 1978 respectively. These increases have occurred despite a fall in the output of pyrethrum extract since 1976, coupled with the cessation of the production of fertilizer in 1977. The output of wattle extract rose by 58 per cent in 1979 after falling to its lowest level in 1978. Activity in this important sector will be strengthened by the recent completion of a plant to manufacture furfural and other related products from maize cobs at Eldoret and the current construction work on another plant at Kisumu which in its first phase will turn about 180,000 tonnes of molasses annually into nearly 20 million litres of power alcohol, 30,000 tonnes of citric acid, 1,800 tonnes of baker's yeast and 2 million litres of vinegar amongst its list of products.

11.21. In 1979 the output of enterprises engaged in production of petroleum and other chemical products rose by 6 per cent. Chapter 10 on Energy discusses petroleum products in detail. The output of other chemical products which include paints, varnishes and lacquers and soaps, drugs and medicines increased substantially mainly due to increases in export sales.

11.22. The increase of 14 per cent in the output of rubber products is attributed to an increase in domestic demand partly derived from the three automobile assembly plants. The production of tyres of all kinds increased while output of retreaded tyres also went up even more significantly by over 100 per cent in 1979 to a record level of 375,151 retread tyres. The local production of new motor vehicle tyres has been increasing since the closure of the border by Tanzania in 1977 which stopped the import of new tyres completely from that country. Production of new tyres has risen by 31, 13 and 11 per cent in 1977, 1978 and 1979 respectively.

11.23. Production of plastic products increased further by 10 per cent in 1979. This relatively moderate increase was influenced by slight declines in output of plastic shoes, polythene film bags, and containers partly offsetting r''ses in output of other plastic products. The continuous rise in prices of

crude petroleum used after refining to produce the feedstock for plastic containers has reduced their competitive advantage in relation to other types of containers. The quantity of plastic products exported declined from 850 tonnes in 1978 to 599 tonnes in 1979, but output of PVC pipes and plastic holloware increased by 36 and 11 per cent respectively. These products are still competitively priced in relation to metal substitutes.

11.24. The output of clay and glass products which had shown marked increases in 1977 and 1978 after declining in 1975 registered only a moderate increase in 1979. This last increase of 3 per cent was due to a slow rise in domestic demand particularly for glass bottles where plastic seems to have made inroads into this market. The building and motor vehicle industries both took increased supplies of glass products in 1979.

11.25. An increase of 3 per cent in the output of non-metallic minerals is accounted for by the increase in the output of cement, a major component of the output of this sub-group. Although both production and domestic consumption of cement went up in 1979, exports of cement as shown in Table 11.5 dropped from 610,100 tonnes in 1978 to 510,206 tonnes in 1979, a decline of 16 per cent.

CEMENT PRODUCTION AND UTILIZATION, 1975-1979

Table 11.5 *000 tonnes*

	PRODUCTION	IMPORTS		EXPORTS		CONSUMPTION AND STOCKS
		From Uganda and Tanzania	From Overseas	To Uganda and Tanzania	To Overseas	
1975	897.1		0.2	38.7	511.8	346.8
1976	986.9			27.4	601.0	358.5
1977	1,144.4			5.8	656.3	482.5
1978	1,133.3		0.2	12.8	597.3	523.4
1979*	1,136.2		0.9	16.8	510.2	610.2

*Provisional.

11.26. The growth of 9 per cent in the output of metal products was mainly due to increases in the production of galvanized corrugated iron sheets and iron bar and rods. The increase was accounted for by higher domestic demand for sheets for the erection of private houses, schools and dispensaries in the rural areas.

11.27. The growth of 7 per cent in the output of transport equipment is attributed to an increase in the output of assembled vehicles but the growth rate was reduced because of the decline in the output of coach, bus and lorry bodies.

New Investment in Manufacturing Industry

11.28. Expansion in the capacity of existing industrial plants, the long-term effort to develop supporting structures to assist the growth of agriculture in the rural areas, and erection of plants planned for new lines of production continue to be the main fields for investment in the manufacturing sector. These developments have continued inspite of the difficult economic conditions in 1979.

11.29. Kenya Industrial Estates Limited continues to assist small entrepreneurs all over the country to establish enterprises. In 1979 Kenya Industrial Estates Limited provided assistance for 57 projects in the Nairobi Industrial area at a total cost of K£2.12 million creating jobs for 1196 people; its estates in Nakuru, Eldoret and Kericho received assistance for 53 projects at a cost of K£1.2 million creating 417 jobs; in Mombasa and Malindi for 19 projects costing K£0.52 million employing 201 persons; in Western Province for 18 projects costing K£0.24 million employing 271 persons; and in Nyeri and Eastern and North-Eastern provinces for 52 projects all at total cost of K£0.18 million employing 625 persons.

11.30. The Industrial and Commercial Development Corporation continues to initiate and implement projects and has entered into an agreement for establishing a K£10 million complex to produce 18 million litres of power and industrial alcohol, 1,154 tonnes of active dry bakers yeast, and other by-products. It is providing assistance to expand the manufacture of sanitary-ware and glazed wall tiles, at a cost of K£1.15 million. It has also participated in setting up a K£3.5 million glass container project to manufacture mainly high quality bottles. This project is expected to become operational in 1980/81.

11.31. The Industrial Development Bank Limited approved 21 investment projects costing K£6.78 million in 1979. Both the number of projects and value of new investment involved were higher than those recorded in 1978. Loans accounted for K£6.06 million and equity investments for K£0.67 million. The new investments by the Bank were concentrated in the engineering and allied industries, agro-industries, and textile industries.

11.32. The Development Finance Company of Kenya Limited continues to provide loans for small and medium projects, and in 1979 approved investments amounting to K£4.30 million for 28 projects as compared with the similar number in 1978 at a cost of K£3.56 million. Out of the 28 projects for which loans were approved 6 new projects and one expansion project were in the small-scale industries programme. Some K£1.42 millions of the total amount approved in 1979 was committed for 5 existing projects which had not previously been assisted while K£1.95 million was committed for 15 entirely new projects and the balance of K£0.93 million was directed to existing projects which were already being supported by the company. As a result the total value of commitments by the company rose by 26 per cent

from K£12.48 million in 1978 to K£15.77 million—spread over a total of 101 projects. The new and supplemental investments approved in 1979 included those for manufacture of chemicals and pharmaceuticals, metallic and plastic products, textiles, and engineering and vehicle assembly.

11.33. Table 11.6 provides details of the number of enterprises in the manufacturing sector for 1976, 1978 and 1979. There were 15,421 enterprises in manufacturing sector in 1979. The numbers indicate expansion in most areas of production with the total number of enterprises rising by 1,154 since 1976.

ENTERPRISES IN THE MANUFACTURING SECTOR, 1976-1979

Table 11.6 *Number*

Activity	1976	1978	1979*
Meat and dairy products	20	35	20
Canned vegetables, fish, oils and fats	30	21	34
Grain products	2,735	2,914	2,921
Bakery products	345	327	351
Sugar and confectionery	58	55	77
Miscellaneous food	95	88	115
Beverages and tobacco	13	17	24
Textiles	63	87	199
Clothing	4,394	4,620	4,734
Leather products and footwear	955	1,027	1,001
Wood and cork products	230	212	308
Furniture and fixtures	1,204	1,256	1,285
Paper and paper products	31	45	60
Printing and publishing	145	158	240
Industrial chemicals	198	40	38
Petroleum and other chemicals	133	77	123
Rubber products	27	25	40
Plastic products	25	33	49
Pottery and glass products	9	7	11
Non-metallic mineral products	82	61	85
Metal products	380	383	438
Non-electrical machinery	82	54	60
Electrical machinery	57	64	42
Transport equipment	2,674	2,907	2,832
Miscellaneous manufactures	281	250	334
TOTAL	14,267	14,764	15,421

*Provisional.

CHAPTER 12—BUILDING AND CONSTRUCTION

Activity in the construction industry was at a high level in 1979 judging from the available indicators. Cement consumption rose by more than 10 per cent, employment by 10.8 per cent and the contribution to GDP at constant prices by 10.1 per cent. At current prices, the increase in value added is estimated at the high level of 21.4 per cent because of the rise in construction costs.

12.2. Building plans passed by Nairobi City Council and in the other major urban areas in Kenya rose by 14 per cent in 1979 to a value of K£96.5 million but the quarterly figures show that there was a sharp downward trend in the totals for the last six months of the year probably reflecting the impending end to the current building boom which was sparked off by the coffee boom of 1977/1978. It seems likely that building activity will start to decline in 1980 and that there will be a more significant downward trend in 1981.

12.3. Figures detailing the trend in all building plans approved since 1977 are noted below:

K£'000

	Nairobi	Other Towns	Total
1977 1st Quarter	6,091	4,885	10,976
2nd Quarter	12,354	4,011	16,365
3rd Quarter	14,577	4,318	18,895
4th Quarter	9,434	1,474	10,908
1978 1st Quarter	14,509	5,471	19,980
2nd Quarter	10,539	4,248	14,787
3rd Quarter	13,026	13,485	26,511
4th Quarter	20,165	2,994	23,159
1979 1st Quarter	22,902	6,364	29,266
2nd Quarter	16,565	13,425	29,990
3rd Quarter	15,871	7,074	22,945
4th Quarter	12,114	2,179	14,293

The figures show that in general there was a firm upward trend in plans approved up to the first quarter of 1979 when a peak level was established which persisted for two quarters. However, since the middle of 1979 the trend has been reversed with the value of building plans approved in the last quarter of 1979 being only 62 per cent of the level reached in the fourth quarter, 1978. This probably means that, after the normal time lag between plans passed and completions and allowing for postponements due to changed expectations, the building boom which reached a peak in 1979 has already started to wane. The impact of this waning will probably be felt most in 1981.

12.4 Table 12.1 indicates that the overall building and construction costs index rose sharply by 13.2 per cent in 1979 as compared with rises of 8.3 and 7.4 per cent in 1978 and 1977, respectively. This rise in construction costs in 1979 is attributed to the impact of the increase in building activity on both material inputs and labour costs. The rate of increase in the prices of construction materials accelerated and increased by 14.1 per cent in 1979 as compared

PERCENTAGE INCREASE* IN BUILDING AND CONSTRUCTION COST INDICES, 1977-1979

Table 12.1

	MATERIAL			LABOUR			TOTAL		
	1977	1978	1979	1977	1978	1979	1977	1978	1979
Residcnthl Buildings	11.2	10.4	14.1	4.5	-	10.6	9.9	6.4	13.4
Non-Residential Buildings	7.7	11.3	14.2	4.5	-	10.6	6.9	9.6	13.4
All Buildings	9.6	10.9	14.1	4.5		10.6	8.4	9.0	13.4
"Other" Construction	7.9	10.9	14.1	4.5	-	10.6	6.6	6.8	12.9
TOTAL COST INDEX	8.8	10.9	14.1	4.5	-	10.6	7.4	8.0	13.2

*From December to December.

with a rise of 10.9 per cent in 1978. The prices of both sand and aggregate remained constant, while the price of cement, a major ingredient of material inputs increased by 9.1 per cent. In fact apart from few items including timber, doors and corrugated steel which remained constant and wiring which declined, the prices of all other material inputs increased, thereby pushing up the cost index of materials. The more notable increases occurred in the cost of paints, sanitary fixtures, glass, oil-based products, iron rods and some of the roofing materials. Labour costs which had not changed in 1978, and only rose by 4.5 per cent in 1977 increased sharply by 10.6 per cent in 1979. This increase gave workers some belated compensation for the general price rises which had occurred in the period 1977 to 1979 and helped to some limited extent to restore real incomes in this sector. The strong demand for labour continued for most of the year. As a result total indices for both residential and non-residential buildings and other construction rose by 13.4 per cent and 12.9 per cent respectively in 1979 as compared with the increases of 6.8 to 9.6 per cent in 1978. The rise in the prices of both labour and material inputs coupled with strong demand, particularly in respect of residential buildings, caused the prices of residential buildings to continue rising, affecting both the middle and low income groups which face the most acute shortages of dwelling houses. This makes the current problem facing the Government of providing adequate housing for workers at prices they can afford even more grave.

12.5. Tables 12.2 and 12.3 show the reported supply of new private buildings including extension works to existing buildings, in terms of both number and value of units completed for the period 1975 to 1979 in the main towns. The demand for residential buildings in these main towns has continued to be influenced by the rapid increase in the population growth

THE VALUE OF ALL REPORTED PRIVATE BUILDING** WORK COMPLETED IN MAIN TOWNS 1975-1979

Table 12.2 *K£million*

	Nairobi	Mombasa	Nakuru	Kisumu	Kitalo	Eldoret	Thika	Others	Total
	Total for Year								
1975	9.47	2.64	0.25		0.02	0.14	0.13	0.68	13.33
1976	9.02	1.80	0.42	0.15		0.10	0.83	0.19	12.51
1977	8.86	2.53	0.10	0.02		I.55	0.71	0.15	13.92
1978	10.19	2.85	0.29			0.11	1.05	0.13	14.62
	Returns received to date*								
1978	6.61	2.57	0.23	..	..	..	0.26	..	9.67
1979	22.23	4.28	0.48	0.40	..	0.12	0.73	—	28.24

*Provisional and incomplete. The late receipt of returns adds significantly to the year's total. 1978 figures for comparison only.

**Including the value of extensions.

rates especially in Nairobi and Mombasa. The new firms which have been established in these two cities particularly affected demand and supply for high quality residential and non-residential buildings, followed by a ripple effect on demand for all categories of residential buildings as well as to some extent non-residential buildings. Rents for both residential and non-residential buildings have therefore continued to rise. This induced an increase in building construction and as a result the total value of new private buildings completed and extension works carried out rose by 93 per cent at current prices from K£14.62 million in 1978 to K£28.24 million in 1979. The reported number of new private residential buildings increased from 1,216 units, valued at K£8.83 million in 1978 to 2,273 units valued at K£19.93 million in 1979. These units in 1979 included over 1,200 maisonettes worth about K£9 million, all of them having been built in Nairobi and Mombasa. The number of new private non-residential buildings completed, however, declined from 89 units in 1978 to 80 units in 1979 though their value rose from K£3.92 million in 1978 to K£5.04 million in 1979.

12.6. Nairobi with its rapid population growth and growing tertiary and industrial sectors continues to attract more development than other towns and accounted for 79 per cent of K£28.4 million of total provisional value of building completions in 1979. The share for Nairobi in 1978 had been K£10.9 million or 70 per cent of a total value of K£14.62 million reported in that year. Most other towns also registered a rise in the value of private building completions in 1979. However, the estimated value for the supply of new private non-residential buildings outside Nairobi continued to fall in 1979 and the value of residential buildings in all towns accounted for about 80 per cent of the total values recorded for all buildings as compared with 73 per cent in 1978 and as opposed to 44 per cent in both 1976 and 1977.

REPORTED COMPLETIONS OF NEW PRIVATE BUILDINGS** IN MAIN TOWNS, 1975-1979

Table 12.3

	Number		ESTIMATED COST *K£million*		
	Residential	Non-Residential	Residential	Non-Residential	Total
TOTAL FOR YEAR					
1975	1,691	98	8.98	3.17	12.15
1976	791	114	4.88	6.25	11.13
1977	815	68	5.08	5.51	10.59
1978	1,216	89	8.83	3.92	12.75
RETURNS RECEIVED TO DATE*					
1978	835	74	6.04	2.26	8.30
1979	2,273	80	19.93	5.04	24.97

*Provisional and incomplete. The late receipt of returns adds significantly to the year's total. 1978 figures for comparison only.

**Excluding the value of extensions.

12.7. Table 12.4 shows that the provisional estimates of the value of public buildings reported completed in the main towns in 1979 is substantially below the corresponding figure for 1978 as recorded at the same time last year. Late returns on completions in 1978 more than doubled the value of buildings completed. Nevertheless the final figures for 1978 showing completion of 76 non-residential buildings valued at K£5.41 million was still

REPORTBD COMPLETIONS OF NEW PUBLIC BUILDINGS IN MAIN TOWNS, 1975-1979

Table 12.4

	Number		COST K£'000			
	Residential	Non-Residential	Residential	Non-Residential	Total	Total**
TOTAL FOR YEAR						
1975	1,017	171	2,917.5	4,099.7	7,017.2	7,385.9
1976	1,068	149	4,004.1	2,166.9	6,171.0	6,308.5
1977	475	131	1,944.4	8,991.5	10,935.9	10,983.9
1978	582	76	2,634.5	2,775.7	5,410.2	5,452.9
RETURNS RECEIVED TO DATE*						
1978	257	58	1,043.0	1,183.0	2,226.0	2,268.7
1979	207	5	1,005.7	40.2	1,045.9	1,562.4

*Provisional and incomplete. The late receipt of returns adds significantly to the year's total. 1978 figure*for comparison only.

**Including the value of extensions.

very much lower than the reported completion of 131 buildings valued at K£10.94 million in 1977. As for residential buildings the totals in 1977 and 1978 were both well below those of 1976 and the returns to date in 1979 suggest a further fall in 1979. Public sector building activity measured by reported completions over the last few years has been in inverse relation to the activity in private sector. The decline in activity in the public sector has been matched by a rise in the activity of the private sector and vice-versa.

12.8. There are a number of building projects at a fairly advanced stage and the list of non-residential public buildings expected to be finished in 1980 includes the Kenya Polytechnic extensions, the Co-operative Bank House, the new Nairobi Provincial Headquarters, and the recently completed new Treasury Building. In Mombasa construction is currently underway on the Bondeni College and a finance office block both of them being built for the Kenya Ports Authority at a total cost of K£3.1 million. Other new buildings currently under construction in Mombasa include an office block being built for the National Assurance Company Ltd. at a cost of K£1.5 million; another office block being built for the Kenya Reinsurance Corporation at a cost of K£1.3 million; and a new creamery being built for the K.C.C. at a cost of K£6.2 million.

12.9. Table 12.5 details total expenditure on housing by the Central Government throughout the country and this has continued its upward trend. The actual expenditure incurred by the Central Government on housing rose from K£7.10 million in 1977/78 to K£7.76 million in 1978/79, an increase of 9 per cent. The expenditure approved for 1979/80 indicates a further rise of 7 per cent above the level that had been approved for 1978/79. This trend is consistent with the Government object of helping to provide

APPROVED AND ACTUAL CENTRAL GOVERNMENT EXPENDITURE ON HOUSING, 1974/75 -1979/80

Table 12.5 K£'000

Year	Approved	Actual	Approved Expenditure as percentage of Development Expenditure
1974/75	5,571.2	4,862.4	5.7
1975/76	4,721.5	4,439.9	4.3
1976/77	3,451.0	3,416.6	2.7
1977/78	7,686.1	7,098.9	3.9
1978/79	8,490.6	7,764.8	2.8
1979/80*	9,092.5	–	–

*Provisional.

housing facilities to middle and low income groups in particular through the National Housing Corporation and the Housing Finance Company of Kenya, the two public agencies charged with this responsibility. The level of loans to the National Housing Corporation went up from K£5.54 million in 1978/79 to K£6.53 million in 1979/80.

12.10. Table 12.6 shows that the National Housing Corporation completed 1,632 housing units in 1979. This is the highest number of dwelling units that have been supplied by the corporation during the period 1975 to 1979, and represents an increase of 6 per cent over the number completed in 1978. In terms of value—K£3.90 million and completions—1,316 units, respectively

80 per cent and 86 per cent of total units completed in 1979 by the Corporation are located in Nairobi. This is in response the great demand for housing in Nairobi. The rest of the units—316, valued at K£0.66 million were built in Rift Valley province. Of the units completed in Nairobi, 720 are in the Kariobangi Housing Estate, 519 in the Ayany Estate and 76 in the Ngei Estate. Kitale, Nakuru and Kericho respectively account for 150, 120, and 46 units from the total of 316 units built in Rift Valley Province.

HOUSING UNITS COMPLETED BY THE NATIONAL HOUSING CORPORATION, 1975-1979

Table 12.6

	1975	1976	1977	1978	1979
Units Completed					
PROVINCE—					
Central	326	49	15	159	—
Coast	20	216	300	51	—
Eastern	60	—	—	51	—
Nairobi	172	1	586	862	1,316
North Eastern	—	—	—	—	—
Nyanza	105	26	9	300	—
Western	181	25	6	—	—
Rift Valley	572	—	—	121	316
TOTAL NUMBER	1,436	317	916	1,544	1,632
Value of Units Completed K£'000					
Central	733	76	30	284	—
Coast	35	372	488	74	—
Eastern	86	—	—	99	—
Nairobi	616	3	1,406	2,622	3,898
North Eastern	—	—	—	—	—
Nyanza	285	41	14	277	—
Western	326	30	9	—	—
Rift Valley	957	—	—	295	655
TOTAL VALUE	3,038	422	1,947	3,651	4,553
Site and Service Plots Completed: No.	363	1,128	355	1,077	2,153

12.11. The Corporation is also involved in the site and service scheme, and in 1979 the number of plots completed under this scheme rose to 2,153 compared to 1,077 in 1978. This increase of 100 per cent in the number of plots completed is the result of the intensified efforts the Government has directed towards this particular scheme. In fact because of its low average cost, the Corporation now has similar schemes in a number of different towns in various provinces. Smaller towns which have been experiencing housing shortages are beginning to benefit from the schemes. A greater supply of site and service scheme plots will have an impact on the housing stock and should help to abate the ever increasing housing rents caused by the strong

demand. Out of the 2,153 site and service plots completed in 1979, a total of 1,741 plots were located in Nairobi at Dandora. Some 77 plots were completed in Central Province, 38 of which are located at Karatina and the rest in Kiambu. The Coast Province accounted for 190 plots—all at Voi while Molo in Rift Valley Province had 145 plots completed.

12.12. Given the high population growth rate and the increase in the number of firms mainly in major towns, demand for both residential and non-residential buildings has been rising steadily, particularly in Nairobi since 1976. This trend continued in 1979. As shown in Table 12.7 the total value

PRIVATE AND PUBLIC BUILDING PLANS APPROVED BY THE NAIROBI CITY COUNCIL, 1975-1979

Table 12.7 *Estimated Cost KÃ'000*

	Private			Public			All Buildings
	Residential	Non-Residential	Total	Residential	Non-Residential	Total	
1975	7,961	10,465	18,426	1,415	4,757	6,172	24,598
1976	6,927	8,832	15,759	598	3,397	3,995	19,754
1977	15,177	15,609	30,786	2,965	8,705	11,670	42,456
1978	26,202	25,206	51,408	4,115	2,716	6,831	58,239
1979	33,641	23,478	57,119	1,765	8,570	10,335	67,454
1977—							
IstQr.	3,089	2,717	5,806	134	151	285	6,091
2nd Qr.	4,010	3,761	7,771	1,704	2,879	4,583	12,354
3rd Qr.	4,244	4,558	8,802	419	5,356	5,775	14,577
4th Qr.	3,834	4,573	8,407	708	319	1,027	9,434
1978—							
IstQr.	6,870	7,399	14,269	14	226	240	14,509
2nd Qr.	4,970	3,818	8,788	3	1,748	1,751	10,539
3rd Qr.	6,107	4,563	10,670	2,186	170	2,356	13,026
4th Qr.	8,255	9,426	17,681	1,912	572	2,484	20,165
1979—							
1st Qr.	10,179	6,070	16,249	936	5,717	6,653	22,902
2nd Qr.	6,852	7,843	14,695	132	1,738	1,870	16,565
3rd Qr.	8,820	6,236	15,056	1	650	815	15,871
4th Qr.	7,789	3,328	11,117		465	997	12,114

of both private and public plans approved by the Nairobi City Council increased by 16 per cent from K£58.2 million in 1978 to K£67.5 million in 1979, as compared with an increase of 37 per cent in 1978. The private sector accounted for K£57.1 million or 85 per cent of total value of building plans approved in 1979. Inspite of a large drop in the value of residential building plans approved for the public sector, the total value of residential building plan approved accounted for K£35.4 million equivalent to 52 per per of the total value for plans approved for all buildings. This is a change from the trend that existed in 1975 and 1976 when the values of plans approved for non-residential buildings contributed over 50 per cent of the total value of plans approved. The increase of K£7.4 million or 28 per cent over 1978 in the value of plans of new private residential buildings for which consent to commence work was given in 1979 is an indication of the developers' intentions to try to cash in on the current demand for dwelling

houses. The plans included 137 houses for K£1.88 million in Loresho, 157 houses at Mathare and 36 maisonettes valued at K.£506,500 on Ngong Road. Meanwhile, a decline of 57 per cent or K£2.4 million in value of new residential building plans approved for the public sector is an indication that the Government is attempting to restrict its role to that of a catalyst in making the basic conditions suitable for private sector development. However, the large number of shanty-type units now in being in particular areas may call for more enhanced provision of housing by the public sector in future. Details of the number of shanty-type units are given in Chapter 15.

12.13. Table 12.8 shows that the demand for buildings in other municipalities too has remained strong. Value of building plans approved by these other municipalities increased by 11 per cent from K£26.20 million in 1978 to K£29.04 million in 1979. In 1978 and 1979 the bulk of plans for public sector buildings in these other municipalities were for non-residential buildings. This tendency is not so apparent for the private sector and in 1979 residential buildings accounted for about 51 per cent of private plans approved compared to 34 per cent in 1978.

PRIVATE AND PUBLIC BUILDING PLANS APPROVED BY OTHER MUNICIPALITIES, 1975-1979

Table 12.8 *Estimated Cost* K£'000

	PRIVATE			PUBLIC			All Buildings
	Residential	Non-Residential	Total	Residential	Non-Residential	Total	
1975	2,870	5,195	8,065	46	1,218	1,264	9,329
1976	4,440	7,709	12,149	1,364	430	1,794	13,943
1977	4,072	8,432	12,504	125	2,059	2,184	14,688
1978	8,266	16,132	24,398	540	1,260	1,800	26,198
1979*	12,808	12,551	25,359	693	2,991	3,684	29,043
1977—							
1st Qr.	981	3,246	4,227		658	658	4,885
2nd Qr.	1,083	2,636	3,719	50	242	292	4,001
3rd Qr.	1,488	1,596	3,084	75	1,159	1,234	4,318
4th Qr.	520	954	1,474				1,474
1978—							
1st Qr.	2,113	3,320	5,433	30	8	38	5,471
2nd Qr.	2,123	2,123	4,246		2	2	4,248
3rd Qr.	2,687	9,283	11,970	265	1,250	1,515	13,485
4th Qr.	1,343	1,406	2,749	245		245	2,994
1979*—							
1st Qr.	4,094	2,011	6,105	23	236	259	6,364
2nd Qr.	3,644	6,678	10,322	350	2,753	3,103	13,425
3rd Qr.	3,829	2,928	6,752	320	2	322	7,074
4th Qr.	1,241	938	2,179				2,179

*Provisional.

Roads and Other Construction

12.14. Road construction expenditure by Ministries of Works/Transport and Communications is estimated to increase by about 9 per cent from K£41.32 million in 1978/79 to K£44.97 million in 1979/80, the comparable increase from 1977/78 to 1978/79 was 21 per cent. As shown in Table 12.9

TOTAL EXPENDITURE ON ROADS, 1977/78-1979/80

Table 12.9 K£'000

	1977/78	1978/79	1979/80*
DEVELOPMENT			
Trunk Roads	9,920.0	11,490.0	11,300.0
Primary Roads	3,035.0	4,950.0	7,339.9
Secondary	900.0	1,610.0	3,525.1
Unclassified Roads	895.0	1,320.0	65.0
Miscellaneous Roads	9,574.4	10,789.0	9,207.6
Implementation of road maintenance organization	200.0	600.0	100.0
TOTAL	24,524.4	30,759.0	31,537.6
RECURRENT (maintenance and repair)	9,724.3	10,564.3	13,430.8
TOTAL	34,248.7	41,323.3	44,968.4

*Provisional.

expenditures on primary and secondary roads were expected to increase by 48 and 120 per cent respectively in 1979/80. Meanwhile, expenditure on trunk roads declined slightly while there was a more significant fall in expenditure on miscellaneous road projects. After allowing for increased costs, there was probably no increase in overall road construction activity in this financial year. The Mtwapa and Nyali bridges which are nearing completion have cost K£8.4 million and K£1.8 million, respectively. The Nyali bridge across Tudor Creek linking Mombasa Island with the mainland will replace the present toll bridge. Mtwapa bridge with its two lanes and 12 metres width will replace the present single lane suspension bridge which crosses Mtwapa Creek, 15 kilometres north of Mombasa.

12.15. The Masinga Dam on Tana River and construction work on Olkaria geothermal site in Rift Valley Province for the production of geothermal electricity are two other major construction projects underway currently. Further Chapter 9 provides information on the construction activity generated by water development projects. These are efforts directed towards improving domestic urban/rural water supplies and will continue to make a significant contribution to the level of construction activity in 1980.

CHAPTER 13—TOURISM

As anticipated earlier, 1979 was an indifferent year for tourism. Although the number of visitor arrivals and departures increased moderately, tourists receipts in 1979 only rose by K£2 million to K£62.0 million. This total when account is taken of the rise in prices, is probably less in real terms than the 1978 figure of K£60.0 million. It seems certain that the tendency of more tourists to travel on package tours reduces their spending capacity in Kenya. In 1979, 40 out of every 100 tourists to Kenya came on package tours.

13.2. The liberation war in Uganda during the first quarter of 1979 had little impact on tourism in the rest of the East African region. However, reports of isolated cases of outbreaks of sickness and disease together with the shortages of electricity, water and various foodstuffs in the first part of 1980 have had some adverse impact leading to cancellation of bookings particularly at coast hotels. The basic cause of the shortages and also the disease outbreaks was the drought which developed because of a relative failure of the short rains in the last months of 1979 and the poor start to the long rains in 1980.

13.3. The 1979-1983 Development Plan had forecast that 4.1 million bednights would be occupied in 1979 and increase by 11.4 per cent a year thereafter. In actual fact there were 4,338,000 bednights spent at hotels in 1979 of which 3,154,000 were accounted for by foreign residents. For such foreigners the plan had forecast an occupancy of 3.4 million bednights. A total of 347,200 visitors left Kenya in 1979 and reported a total stay of 5.4 million days. While it may be too early to make any changes to the forecasts given in the 1979-1983 Development Plan, any significant departures from these forecasts will have to be carefully monitored over the next year or two to establish whether the 1983 targets can still be met. The plan targets anticipated 508,000 visitors staying 7.9 million days and spending K£124.9 million in the year 1983.

13.4. Information on visitor arrivals and departures for the period 1977-1979 is set out in Table 13.1. The total arrivals rose by 6.2 per cent from 360,600 in 1978 to 383,100 in 1979 while departures rose less rapidly by 4.2 per cent from 333,300 to 347,200. Based on arrival figures the proportion of holiday visitors in the total in any year has generally been 73 per cent, with business and transit visitors sharing equally the balance of 27 per cent. This pattern was continued in 1979. In contrast and probably because expectations change after arrival or perhaps some visitors combine a business trip with a holiday, departure statistics indicate that 80 per cent of total visitors come to Kenya on holiday, 10 per cent on business and 10 per cent are in transit. This pattern was approximately established in 1979 too.

ARRIVING AND DEPARTING VISITORS BY PURPOSE OF VISIT, 1977-1979

Table 13.1 '000

Quarter/Purpose		ARRIVALS			DEPARTURES		
		1977	1978	1979	1977	1978	1979
1st Qr.	Holiday	82.4	79.9	78.6	98.8	84.3	90.5
	Business	10.1	10.6	13.1	4.8	5.1	8.3
	Transit	12.5	100	11.9	9.1	7.8	7.7
	TOTAL	105.0	100.5	103.6	112.7	97.2	106.4
2nd Qr.	Holiday	44.9	45.1	48.5	51.1	46.9	48.9
	Business	8.8	12.3	10.4	4.4	7.7	6.1
	Transit	12.1	11.7	11.3	9.2	10.1	7.5
	TOTAL	65.8	69.1	70.2	64.7	64.8	62.5
3rd Qr.	Holiday	63.1	62.8	72.6	68.8	70.6	70.8
	Business	7.4	13.2	15.2	5.1	5.1	8.3
	Transit	9.7	14.4	14.7	9.8	10.3	8.8
	TOTAL	80.1	90.3	102.5	83.6	86.0	87.8
4th Qr.	Holiday	70.7	75.1	79.2	69.2	66.6	64.5
	Business	13.5	12.7	12.9	5.3	8.3	15.2
	Transit	11.4	12.8	14.6	8.7	10.5	10.7
	TOTAL	95.6	100.7	106.8	83.3	85.3	90.5
Year	Holiday	261.1	263.0	278.9	288.0	268.4	274.7
	Business	39.7	48.9	51.6	19.7	26.1	37.8
	Transit	45.7	48.8	52.6	36.8	38.8	34.7
	TOTAL	346.5	360.6	383.1	344.4	333.3	347.2

13.5. Details on visitor departures by countries are shown in Table 13.2. The total number of holiday visitors rose by 2.3 per cent from 268,400 in 1978 to 274,600 in 1979. Of this total, 66 per cent came from Europe, 11 per cent from North America, 15 per cent from Africa and 6 per cent from Asia. Africa was the only continent to register a decline in the number of holiday makers in 1979 compared to 1978. This was due to a further decline in the number of visitors from Tanzania from 11,800 in 1978 to 6,100 in 1979 which caused an overall decline of 2.8 per cent in the holiday visitors from African countries.

13.6. The same number of Italians came to Kenya on holiday in both 1979 and 1978 while there was a decline of 5 per cent from 24,800 to 23,600 in the number of holiday visitors from Switzerland. However, there were increases in the number of visitors to Kenya in 1979 from other countries compared with 1978. The number of holiday makers from the five leading countries in 1979 were, West Germany 59,000, the United Kingdom 39,800, USA 25,600,

VISITOR DEPARTURES BY COUNTRY OF RESIDENCE, 1977-1970

Table 13.2

	HOLIDAY VISITORS			ALL VISITORS*		
	1977	1978	1979	1977	1978	1979
United Kingdom	36.0	38.3	39.8	43.0	48.1	49.4
West Germany	48.9	53.0	59.0	51.0	55.9	61.7
Italy	20.7	16.3	16.3	22.3	18.1	18.0
France	13.8	13.7	14.2	15.1	15.7	16.0
Switzerland	24.1	24.8	23.6	25.0	26.0	24.8
Other Europe	35.1	32.1	28.3	39.0	36.4	32.7
TOTAL EUROPE	178.7	178.3	181.2	195.4	200.3	202.6
United States	29.1	22.4	25.6	33.0	26.9	31.0
Canada	4.4	3.8	4.1	5.2	4.6	4.9
TOTAL N. AMERICA	33.5	26.2	29.7	38.1	31.4	35.9
TOTAL ASIA	16.2	16.8	17.5	24.3	25.5	25.7
Uganda	6.7	5.2	7.4	9.5	8.5	14.9
Tanzania	22.7	11.8	6.1	27.3	15.0	9.8
Zambia	5.7	4.4	4.5	10.2	8.7	9.1
Other Airica	19.6	21.2	23.5	33.5	38.3	43.0
TOTAL AFRICA	54.6	42.6	41.4	80.6	70.5	76.7
TOTAL OTHER	4.9	4.6	4.8	6.0	5.7	6.3
GRAND TOTAL	288.0	268.4	274.6	344.4	333.3	347.2

*Includes business visitors and persons in transit.

Switzerland 23,600, and Italy 16,300. These five countries together accounted for 61 per cent of all holiday makers in Kenya during the year 1979. The largest increase of 6,000 or 11.3 per cent occurred in the number of holiday visitors from West Germany.

13.7. Table 13.3 details information on visitor departures by method of travel. It is evident from the table that road, lake and rail have ceased to be important since 1977 when Tanzania closed its border with Kenya. About 94 per cent of all visitors in 1979 left by air which is as expected given the increased numbers of visitors from long-haul generating countries.

13.8. Information on length of stay of departing visitors by purpose of visit and region of residence is given in Table 13.4. After recording successive declines in 1977 and 1978, there was a recovery in the total number of days spent by visitors in Kenya in 1979. Visitors stayed 5.4 million days in 1979 or slightly more than the 5.3 million days spent in 1976 and an increase

VISITORS DEPARTURE BY TRAVEL, 1975-1979

Table 13.3 '000

	1975	1976	1977	1978	1979
Air	311.6	337.7	315.8	309.6	326.3
Sea	2.0	1.6	0.8	1.5	0.9
Road	71.8	84.9	27.8	22.2	20.0
Lake	0.6	—	—	—	—
Rail	0.1	0.1	—	—	—
Total	386.1	424.2	344.4	333.3	347.2

TOTAL STAY OF DEPARTING VISITORS AND AVERAGE LENGTH OF VISIT, 1975-1979

Table 13.4

Length of Stay	1975	1976	1977	1978	1979
	Total Stay—'000 Days				
0-14 Days	1,864	1,942	1,569	1,547	1,586
15-28 Days	1,229	1,458	1,459	1,478	1,510
Over 28 days	1,871	1,908	2,072	1,720	2,300
TOTAL	4,963	5,308	5,101	4,745	5,397
	Average Lengthof Stay—Days				
0-14 Days	6.3	6. 0	6.5	6.6	6.7
15-28 Days	20.2	20.3	20.2	20.2	20.2
Over 28 days	68.2	61.2	65.4	64.2	62.2
TOTAL	12.9	12.8	14.8	14.2	15.5
	Total Stay by Orignating Areas—'000 Days				
East Africa	893	944	541	348	368
Other Africa	425	421	469	443	602
United Kingdom	850	860	819	840	931
West Germany	585	700	846	893	1,054
Other Europe	1,081	1,284	1,417	1,323	1,346
North America	702	640	591	478	599
Asia	328	335	323	329	409
AH Other	99	123	94	91	89
TOTAL	4,963	5,308	5,101	4,745	5,397
	Total Stay by Purpose of Visit—'000 Days				
Holiday	4,383	4,688	4,800	4,382	4,851
Business	530	561	243	307	492
Transit	48	59	58	57	55

of 13.7 per cent over the 4.75 million days recorded in 1978. The 5.4 million days are, however, still below the plan target of 5.8 million days in 1979. The longer stay in 1979 was due to a 33.7 per cent rise in the number of days

stayed by visitors who holidayed for more than one month in Kenya. The continued closure of the border by Tanzania and the military events in Uganda probably had some effect in confining visitors to the region to Kenya. This may have influenced the increase in length of stay from an average of 14.2 to 15.5 days between 1978 and 1979.

13.9. The proportion of days accounted for by holiday visitors in 1979 was 90 per cent, business visitors 9 per cent and transit visitors 1 per cent. Figures for holiday makers and business visitors rose by 10.7 per cent and 60.3 per cent respectively over the 1978 figures while there was a dccline of 3.5 per cent in the number of days spent by transit visitors,. The sharp increase in the number of days spent by business visitors from 307,000 to 492,000 included a substantial rise in such visitors from Uganda and other African countries. The total number of visitor-days by visitors from Africa was 970,000, from Europe 3,331,000 and North America 599,000. Europeans thus accounted for 62 per cent of the total days spent by all visitors in 1979 with West Germany taking 20 per cent and the UK 17 per cent.

Tourist Receipts

13.10. Although there were increases both in the number of visitors and days that they spent in Kenya in 1979 over 1978, estimated receipts from expenditure incurred by tourists in Kenya rose by only 3.3 per cent from K£60.0 million in 1978 to KE62.0 million in 1979. As noted earlier lack of any real growth in tourist receipts could be a result of the increasing tendency of tourists to resort to package and charter arrangements. The ratio of private to package tours in 1979 was in the order 5 : 3, i.e. about 40 per cent of tourists came on package tours. As in the previous years the highest daily spending was concentrated in the group of visitors staying up to two weeks. The holiday, business and transit visitors accounted for 83 per cent, 14 per cent and 3 per cent of the total receipts, respectively. Residents from Europe brought in 65 per cent of the receipts with West Germany supplying 23 per cent and the UK 12 per cent. Corresponding proportions for Africa, North America and Asia were 14 per cent, 11 per cent and 8 per cent, respectively.

Hotel Occupancy

13.11. Table 13.5 gives occupancy rates of hotel bednights by type of occupant. The number of hotel bednights occupied rose by 9.0 per cent from 3.98 million in 1978 to 4.34 million in 1979. The total capacity, however, rose a little more rapidly by 9.3 per cent from 7.36 million to 8.04 million bednights. As a result there was a slight fall in the average bed occupancy rate from 54.1 per cent in 1978 to 53.9 per cent in 1979. The number of bednights spent by residents of Kenya rose by 10.8 per cent from 1,069,000 to 1,184,000 over the two years while the number of bednights spent by foreign residents increased by 8.3 per cent from 2,913,000 to 3,154.000. Thus tourists accounted for 72.7 per cent of bednights in 1979, the same as in 1978.

HOTEL BED OCCUPANCY, 1975-1979

Table 13.5 '000 *Bed-Nights*

	1975	1976	1977	1978	1979
Permanent occupants*	339	364	356	368	382
Kenya Residents	579	577	642	701	802
Residents of—					
Uganda and Tanzania	142	127	98	84	99
Foreign Residents	2,149	2,506	2,741	2,829	3,055
TOTAL BEDS OCCUPIED	3,209	3,574	3,838	3,982	4,338
TOTAL BEDS AVAILABLE ..	6,584	6,983	7,028	7,358	8,043
Bed Occupancy Rate *per cent*	48.8	51.2	54.6	54.1	53.9

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

13.12. Details of hotel occupancy by major tourist zones are set out in Table 13.6. The number of hotel bednights occupied in Nairobi increased by 6 per cent from 1,410,000 by 1978 to 1,495,000 in 1979. This rise was helped by some increase in the number of business visitors particularly those coming for conferences. For the second year running Nairobi hotels provided accommodation to 35 per cent of all hotel visitors in Kenya, while

HOTEL BEDS OCCUPIED BY AREA, 1975-1979

Table 13.6 '000 *Bed-Nights*

	1975	1976	1977	1978	1979
Nairobi—High Class	572.1	586.2	552.7	570.9	611.0
Other	753.9	847.2	854.7	839.1	884.2
Coastal—Beach	1,149.4	1,354.4	1,543.6	1,654.0	1,809.6
Other	222.2	220.7	234.6	254.5	305.4
Coast Hinterland	104.8	118.8	137.7	121.0	120.5
Masailand	130.0	151.6	156.4	152.2	161.8
Central	207.4	217.7	250.2	269.0	287.0
Other	69.1	77.2	107.7	121.6	158.6
TOTAL	3,208.8	3,573.7	3,837.9	3,982.3	4,338.1
Of which:—					
Foreigners	2,148.9	2,505.5	2,740.8	2,828.6	3,055.1
E.A. Residents*	1,060.0	1,068.2	1,097.1	1,153.7	1,283.0
TOTAL BEDS AVAILABLE	6,584.3	6,983.1	7,028.3	7,358.0	8,043.5
Occupancy rate *per cent*	48.8	51-2	54.6	54.1	53.9

*Includes all persons staying one month or more in one hotel.

Table 13.7

HOTEL ROOM AND BED AVAILABILITY AND OCCUPANCY RATES,BY AREA, 1975-1979

	NAIROBI		COASTAL								All Hotels
	High Class	Other	Beach	Mombasa Island	Coast Hinterland	Masai land	Nyanza Basin	Western	Central	Nothern	
1975—											
Rooms available—'000 nights ..	579	885	1,058	260	135	140	69	39	320	20	3,505
Occupancy rate—per cent	73	60	60	62	42	52	54	36	41	21	59
Beds available—'000 nights	1,092	1,564	2,093	473	284	283	120	57	578	39	6,584
Occupancy rate—per cent	52	48	55	47	37	46	38	29	36	17	49
1976—											
Rooms available—'000 nights ..	592	994	1,119	275	129	141	74	62	319	22	3,728
Occupancy rate—per cent	75	63	67	61	47	60	55	38	43	22	62
Beds available—'000 nights	1,119	1,778	2,202	507	274	286	127	66	579	44	6,983
Occupancy rate—per cent	52	48	62	44	43	53	40	29	38	18	51
1977—											
Rooms available—'000 nights	613	962	1,154	284	128	148	89	41	313	26	3,758
Occupancy rate—per cent	66	63	75	63	58	58	63	44	49	26	65
Beds available—'000 nights	1,124	1,723	2,268	510	265	298	157	68	565	51	7,028
Occupancy rate—per cent	49	50	68	46	52	53	47	34	44	22	55
1978—											
Rooms available—'000 nights	665	906	1,262	290	132	150	114	61	358	27	3,964
Occupancy rate—per cent	68	64	72	64	49	56	56	39	48	21	64
Beds available—'000 nights	1,118	1,621	2,523	531	271	302	196	102	641	53	7,358
Occupancy rate—per cent	51	52	66	48	45	50	42	30	42	18	54
1979—											
Rooms available—'000 nights	664	920	1,414	331	138	156	147	98	462	28	4,359
Occupancy rate—per cent	70	68	70	64	47	56	54	37	42	24	63
Beds available—'000 nights	1,184	1,631	2,382	614	285	312	253	149	777	57	8,043
Occupancy rate—per cent	52	54	65	50	42	52	42	28	37	20	54

beach hotels catered for 42 per cent and the comparable figures for up-country hotels and those on Mombasa IsJand were 16.8 per cent and 7 per cent respectively. The total number of nights spent at beach hotels increased by 9.4 per cent over the 1978 figure to reach 1,809,600, while the figure for Mombasa Island where accommodation is a little cheaper rose even more rapidly with an increase of 20 per cent between 1978 and 1979. However, in absolute terms hotels on Mombasa Island accounted for only 305,400 bed-nights, well below that for the beach hotels,. Visitors from West Germany and Switzerland appear to favour the beach hotels and they largely accounted for the rise in bednights spent in them in 1979. Visitors from North America on the other hand continue to favour up-country hotels.

13.13. Table 13.7 gives more details on hotel utilization by tourist zones. The high room occupancy rates in Nairobi and coast hotels when related to bed occupancy suggest that there is need for more single rooms, in hotels of these areas. The highest bed occupancy rate of 65 per cent in 1979 was recorded by the beach hotels, providing evidence of the need for the extension of beach hotel capacity. The number of bednights available at the coast rose by 11.2 per cent from 3,054,000 in 1978 to 3,396,000 in 1979 but the bed occupancy rate was unchanged. The 11.2 per cent increase in bed capacity at coast hotels in 1979 was four times as large as the 2.8 per cent recorded for Nairobi. The bed occupancy rates of 28 per cent and 20 per cent for Western and Northern Kenya, similar to the past, were far too low to warrant further expansion of capacity unless there is an accompanying development of infrastructure such as roads to open the country for tourists.

13.14. Conference tourism increased in 1979. During the year, a total of 32 international conferences were held at the Kenyatta Conference Centre with 7,145 foreign delegates attending. The number of such conferences in 1978 had been 24 with a total of 6,785 delegates in attendance. So far in 1980, 20 international conferences have been booked and more bookings are expected. The Kenyatta Conference Centre now falls under the Ministry of Tourism and it is hoped that marketing and promotional campaigns will result in more use being made of the centre in future.

13.15. Seasonality still remains a problem feature of Kenya's tourism. Efforts to sell Kenya to tourist-generating countries during the low season from March to June have been made but so far with little success. The low season months of 1979 recorded an average bed occupancy of 35 per cent compared with 80 per cent during the high season months,. A detailed analysis of tourist receipts by quarter for 1979 shows that first, second, third and fourth quarters respectively generated 29 per cent, 15 per cent, 17 per cent and 39 per cent of the K£62.0 million earned during the year.

13.16. Details showing where residents of various countries spent their nights in 1979 are set out in Tabic 13.8. Out of a total of 5,397,000 days spent by visitors in Kenya, 58 per cent were spent in established hotels. This

was lower than the comparable figure of 61 per cent for 1978. Residents of West Germany spent 91 per cent of their total stay in hotels—84 per cent being accounted for by coast hotels, followed by visitors from UK—44 per cent and from Asia—25 per cent.

HOTEL GUEST-NIGHTS BY COUNTRY OF RESIDENCE, 1979

Table 13.8 '000 *Bed-Nights*

Country of Residence	Nairobi	Coast	Lodges	Other	Total
Kenya	248.7	293.9	40.3	218.9	801.9
Uganda	56.2	15.8	0.3	5.9	78.1
Tanzania	14.8	5.4	0.1	0.5	20.8
Other Africa	115.2	25.9	2.4	4.7	148.3
United Kingdom	183.3	176.1	28.2	18.7	406.4
West Germany	90.6	801.8	51.1	15.0	958.5
Franco	34.3	68.5	25.8	6.5	135.1
Italy	36.5	94.6	15.4	6.3	152.8
Switzerland	29.2	338.1	29.9	6.4	403.6
Sandinavia	39.2	41.2	8.0	5.0	93.4
Other Europe	74.8	153.9	27.4	12.9	269.0
U.S.A.	130.7	36.9	53.6	28.3	249.4
Canada	21.8	5.7	5.5	3.6	36.6
Asia	70.6	16.0	8.8	5.2	100.5
All Other	49.7	32.5	11.3	8.0	101.5
Permanent Occupants	299.5	54.4	0.7	27.5	382.1
TOTAL	1,495.1	2,160.9	308.7	373.3	4,338.1

13.17. Information on game lodge occupancy is shown in Table 13.9. The number of nights spent by tourism visitors in lodges situated in the national parks declined by 9.0 per cent from 98,300 in 1978 to 89,500 in 1979. On the other hand, the figure of nights they spent in the game reserves increased by 9.6 per cent from 162,200 in 1978 to 177,800 in 1979.

GAME LODGE* OCCUPANCY, 1977-1979

Table 13.9

LODGE LOCATION/ TYPE	BEDS OCCUPIED '000 *Nights*						BED OCCUPANCY RATE		
	E.A. Residents			Foreign Residents					
	1977	1978	1979	1977	1978	1979	1977	1978	1979
National Parks	33.1	21.4	23.9	157.4	98.3	89.5	51.6	48.8	44.4
Game Reserves	17.1	16.6	17.5	158.7	162.2	177.8	64.1	60.0	61.0
TOTAL	50.2	38.0	41.4	316.1	260.5	267.3	56.1	54.9	53.7
Full Catering	38.1	28.2	30.0	313.0	254.0	257.8	57.8	57.1	56.1
Self-Service	12.0	9.8	11.4	3.1	6.5	9.5	42.0	33.3	33.7

*Lodges in National Parks and Game Reserves only.

13.18. Figures detailing visits to national parks and museums are given in Tables 13.10 and 13.11. The numbers of visitors to national parks rose in 1979 by only 0.8 per cent to reach 565,812. This was well below the figure of 603,899 recorded for 1977. There were major declines in 1979 in the number of visitors to the Lake Nakuru, Nairobi, Meru and Tsavo East national parks. In contrast the marine national parks are becoming more popular with tourists. The total number of visitors to these parks has risen

TOTAL NUMBER OF VISITORS TO NATIONAL PARKS, 1975-1979

Table 13.10 *Numbers*

	1975	1976	1977	1978	1979
Abordarc	43,798	44,904	46,050	39,891	44,892
Amboseli	82,641	100,339	83,233	67,379	80,905
Kisitc Mpunguni	596	1,463	851	852	2,378
Lake Nakuru	78,470	68,098	80,635	94,805	72,399
Marine	34,609	37,764	37,245	41,424	48,705
Marsabit	4,413	3,238	3,781	2,673	2,701
Meru	22,826	25,826	36,945	32,296	25,867
Mt. Elgon	2,414	2,455	2,782	2,634	3,134
Mt. Kenya	8,600	9,790	9,484	8,919	8,260
Nairobi	137,387	134,790	141,861	119,364	108,308
Saiwa Swamp	—	830	1,853	1,719	1,350
Simba Hills	9,999	9,882	12,112	12,124	14,000
Tsavo (East)	68,133	61,588	65,530	57,001	55,081
Tsavo (West)	79,567	89,882	82,537	80,336	97,832
TOTAL	568,453	590,849	603,899	561,417	565,812

VISITORS TO MUSEUMS, SNAKE PARK AND SITES, 1975-1979

Table 13.11 *Numbers*

	1975	1976	1977	1978	1979
National Museum	124,545	154,053	182,293	172,491	143,396
Lamu Museum	6,066	6,169	8,216	7,163	15,829
Snake Park	93,168	131,500	135,139	141,774	141,803
Fort Jesus	93,186	100,160	107,107	121,595	111,639
Gedi	30,876	29,396	25,801	29,747	36,838
Olorgesailie	4,487	3,465	3,991	5,717	4,985
Kariandusi	3,240	2,959	4,539	2,721	2,851
Hyrax Hill	1,284	1,020	1,413	1,285	1,440
Jumba la Mtwana	2,339	4,412	3,009	3,347	4,306
TOTAL	359,191	433,134	471,508	485,840	463,087

from 41,424 in 1978 to 48,705 in 1979. The number of visitors to museums, Snake Park and historic sites also decreased by 5.7 per cent in 1979 to 463,087 mainly due to decrease in the number of visitors to the National Museum and Fort Jesus. The national parks are now administered by the

Ministry of Natural Resources and Environment and more active promotional measures are expected to lead to increases in the visitors to these varying attractions.

Development of Tourism

13.19. The Kenya Tourist Development Corporation increased its investment in the tourist industry in the financial year 1978/79 by K£0.6 million raising the total to K£4.4 million. Loans accounted for K£2.8 million and K£1.3 million of these loans has been disbursed to facilitate the Kenyanization of the industry. The hotel at Homa Bay was completed in 1979 while the capacity of Mt. Elgon and Meru Mulika lodges and at Mombasa Beach Hotel was further expanded in 1979. Plans are underway to extend the capacities of the Panafric and Milimani hotels in Nairobi and the Sunset Hotel in Kisumu. Another three hotels at Eldoret, Kakamega and Kabarnet are under construction.

13.20. A major study on tourism pricing has been completed, on the basis of which the Government intends to determine prices to be charged for the various tourist package components. Policies will be designed to ensure that Kenya obtains maximum benefits from investment in tourism in terms of foreign exchange receipts, total revenue and employment. The Ministry of Tourism is improving the thrust of its tourism promotion campaigns in various overseas countries to support these policies.

13.21. The Wildlife Planning Unit of the Ministry of Natural Resources and Environment has been examining the findings of the study on the very large herbivores, i.e. the elephant, the rhino, the buffalo and the hippo. The study was intended to advise the Government on the best way of conserving these species. Interactions between these animals and the local populations have also been studied.

13.22. The funds so far invested in tourist promotion and publicity have not yet resulted in much improved returns to the industry as had been expected and in fact overhead expenses have grown more than four times as fast as actual expenses on promotional activities. However, it is hoped that the arrangement between the Government and the Kenya Airways in 1979 to mount tourism campaigns in the Far East particularly in Japan and Hong Kong will help bring in more holiday makers from this area.

CHAPTER 14—TRANSPORT AND COMMUNICATIONS

The indicators available for transport and communications have a mixed record in 1979. Increases were recorded in the number of road vehicles in use especially lorries, trucks and light commercial vehicles; through-flow of the pipeUne rose; and the number of passengers handled at Nairobi airport and those travelling on the railways also went up. These increases, however, were offset by virtual stagnation or falls in the amount of freight handled by the railways and Mombasa harbour; the number of passengers handled at Mombasa airport; and the decline in air freight handled at both Nairobi and Mombasa airports. The lack of growth in volume of freight handled by the railways and of goods handled at Mombasa harbour owed much to the continued difficult conditions prevailing in Uganda. This latter factor also had an impact on Kenatco's operations. However, all sections of postal and telecommunication operations registered increases in activity ranging from a rise of 2.4 per cent in the number of ordinary letters handled to increases of 7.8 per cent and 17.2 per cent in the number of manual and external telephone calls, respectively.

14.2. The gross output of the transport and communications sector rose overall by 10.3 per cent in 1979 as detailed in Table 14.1. The contribution of the sector to GDP rose by 13.7 per cent at current prices and 7.2 per cent at constant prices. The leading increase in gross output recorded were in the communications sector with 21.8 per cent, air transport with 28.9 per cent and road transport with 11.8 per cent. The increased tariff charges at Mombasa port in 1978 led to an increased level of profitability from water transport operations, while greater activity aided the Kenya Posts and Telecommunication Corporation and its subsidiary the Kenya External Telecommunications Company, to increase both their output and surpluses. Air transport benefitted from higher fares.

TRANSPORT AND COMMUNICATIONS—VALUE OF OUTPUT, 1975-1979

Table 14.1 K£'000

	1975	1976	1977	1978*	1979*
Railway Transport	25,385	26,700	27,480	28,585	28,985
Road Transport	35,953	52,593	53,004	69,270	77,450
Water Transport	38,553	40,537	43,104	53,868	55,984
Air Transport	39,852	41,416	23,494	34,785	44,844
Services Incidental to Transport	8,168	22,877	36,615	41,091	35,006
TOTAL TRANSPORT	147,911	184,123	183,687	227,599	242,269
Pipeline				6,167	11,246
Communications	22,478	24,187	30,440	38,685	47,105
GRAND TOTAL	170,389	208,310	214,137	272,451	300,620

*Provisional.

14.3. Receipts from road and rail transport are recorded in Table 14.2. Road transport gained in 1979 from a higher overall level of activity as the number of trucks and lorries in operation increased. Haulage receipts from road freight transportation activity increased by 18.8 per cent from K£44.2 million in 1978 to K£52.5 million in 1979 but earnings from road passenger traffic were stagnant at K£25 million. Total receipts from rail traffic increased only marginally from K£28.6 million to K£29 million; the large injections of rolling stock into the system in 1978 and 1979 will not have their full impact until through traffic for Uganda can be fully restored.

EARNINGS FROM ROAD AND RAIL TRAFFIC, 1975-1979

Table 14.2 K£'000

	1975	1976	1977	1978*	1979*
Passenger Traffic—					
Rail	455	1,100	1,200	1,629	2,078
Road	13,653	14,491	18,662	25,107	24,976
TOTAL	14,108	15,591	19,862	26,736	27,054
Freight Traffic—					
Rail	24,930	25,600	26,280	26,956	26,907
Road	22,300	38,102	34,342	44,163	52,474
TOTAL	47,230	63,702	60,622	71,119	79,381
TOTAL RAIL TRAFFIC	25,385	26,700	27,480	28,585	28,985
TOTAL ROAD TRAFFIC	35,953	52,593	53,004	69,270	77,450

*Provisional.

Road Transport

14.4. Details of new registration of road vehicles are given in Table 14.3. The total number of newly registered vehicles declined by 17.9 per cent in 1979. Nevertheless the total of 20,509 new registrations is still a high figure compared with the number of registrations in the years 1975 and 1976 although below the numbers registered in the coffee boom years of 1977 and 1978. There was an increase of 160 to 5,877 in the number of vans and pick-ups which were newly registered in 1979 but new registrations of saloon cars and station wagons fell from 7,842 and 2,749 to 4,780 and 2,252 respectively. New registrations of lorries and trucks also declined from 2,848 in 1978 to 2,598 in 1979 although the 1979 figure was much higher than the average for the period 1975 to 1977. The decrease in new registrations is hardly surprising; importation of motor vehicles especially saloon cars was particularly hit by the restrictions introduced in the form of the import deposit scheme at the end of 1978. However, despite the fall in new registrations, the net increase in the number of road vehicles in use must nevertheless have been substantial in 1979.

NEW REGISTRATIONS OF ROAD VEHICLES, 1975-1979

Table 14.3

	1975	1976	1977	1978	1979*
Saloon Cars	5,575	4,981	7,296	7,842	4,780
Station Wagons	2,047	1,942	2,517	2,749	2,252
Panel Vans, Pick-ups, etc.	3,878	4,156	7,354	5,717	5,877
Lorries/Trucks	1,262	1,417	1,857	2,848	2,598
Buses and Coaches	186	215	171	205	283
Mini Buses	218	202	214	169	219
Special Purposes Vehicles	79	120	100	82	366
Trailers	587	669	827	1,244	977
Rollers, Graders, Cranes	108	89	73	94	140
Wheeled Tractors	1,042	1,129	1,916	2,032	1,129
Crawler Tractors	7	3	46	114	136
Motor and Auto Cycles	986	1,316	1,707	1,861	1,745
Three Wheelers	13	7	27	14	7
ALL VEHICLES	15,988	16,246	24,105	24,971	20,509

*Provisional.

14.5. Table 14.4 details the number of licences issued for vehicles on hire for passenger and freight transport. There was little change in the number of licences that had been issued for passengers vehicles in 1979, while the number of licences issued for freight vehicles declined by 22 per cent. It must be assumed that large users of freight transport must be making more use of their own vehicle fleets than in the past. Further it also appears that the Transport Licensing Board is processing applications rather more strictly than before.

LICENCES ISSUED FOR VEHICLES ON HIRE, 1975-1979

Table 14.4 *Numbers*

	1975	1976	1977	1978	1979
Passenger Service Vehicles	2,711	2,996	2,720	2,959	2,967
Freight Transport Vehicles	3,641	4,388	4,150	4,996	3,897
TOTAL	6,352	7,384	6,870	7,955	6,864

14.6. Kenatco the transport company owned by the public sector continued to move freight to Uganda, Rwanda, Burundi, Zaire and Sudan in 1979 despite the unstable situation in Uganda. The company has taken over a number of enterprises transporting cargo to various parts of Kenya which has proved to be profitable and has had to hire other trucks to cope with requirements.

Railways

14.7. The diversion of some of the freight to the pipeline in 1978, is still having some effect on the volume of freight traffic that is being handled by the railways. The tonnage of freight carried by the railways declined by 1.8 per cent in 1979 below the 1978 level. However, revenue receipts of the railways rose from K£28.6 million in 1978 to K£29 million in 1979. Goods traffic earned K£24.1 million of the total earnings, while passenger traffic and other coaching receipts earned K£2.1 million.

14.8. There was an unprecedented injection of new rolling stock into the railway system in 1979. A total of 56 new 62-class diesel hydraulic locomotives worth K£14 million were put into operation. These new locomotives are part of the programme which was initiated in 1978 to dieselize the operations of the Kenya Railways. A further 21 shunting locomotives out of a total order of thirty-five worth K£6.5 million were also received and entered into operations in 1979. Additionally by December 1979, the railways had received all but 128 of the 1,200 wagons ordered in 1978 for the general improvement of the system. The Kenya Railways has placed a further order for 15 third class coaches worth K£1.6 million from Sweden to supplement the 12 delivered in 1978.

14.9. The major consideration of Kenya Railways in 1979 was to ensure adequate utilization of line capacity especially between Mombasa and Nairobi, where most of the traffic is handled and where most revenue is earned. The steam locomotives have now been replaced by diesel locomotives for economic reasons; the latter operate at higher speeds, have a speedier turn-round and in any case manufacture of steam locomotives is being phased out in favour of diesel and electric engines in the manufacturing countries. Thus spare parts for steam engines are difficult and expensive to obtain.

14.10. The details of Kenya Railways operations are shown in Table 14.5. The volume of goods traffic handled by railways declined from 3.85 million tonnes in 1978 to 3.78 million tonnes in 1979—although the operations measured in tonne/kilometers increased slightly from 1,987 million in 1978 to 2,009 million in 1979. Some data are now available on seat utilization by different classes. Third class seat occupancy appears to exceed availability while for the second and first classes occupancy accounts for about three-quarters of the available capacity.

RAILWAY TRAFFIC, 1977-1979

Table 14.5

	1977	1978	1979
Freight '000 tonnes	3,845	3,853	3,783
million tonne/km	2,211	1,987	2,009
Revenue K£million	24.15	24.55	24.50
Passengers '000	1,521	1,576	1,832
Revenue K£million	1.40	1.63	2.10

Harbours and Shipping

14.11. The port of Mombasa is the major seaport of Kenya. It serves Kenya, Rwanda, eastern Zaire and Sudan. There was a very sharp fall in the tonnage of dry cargo landed in 1979 as a result of the operations of the financial measures to restrict imports to Kenya and because of conditions in Uganda. The total tonnage of dry and liquid cargo, however, declined by only 2.4 per cent, because the quantity of bulk liquid—mainly petroleum, handled, rose by 1.3 per cent and 40 per cent for imports and exports, respectively. Also the volume of exports of dry cargo increased by 6.9 per cent. Substantial rises were recorded in the volume of loadings of soda ash, cement, cement clinker, tea and maize among Kenya's more important export commodities. The number of ships calling at Mombasa dropped from 1,613 in 1978 to 1,531 in 1979. Details on freight handled at Mombasa port are set out in Table 14.6.

FREIGHT HANDLED AT MOMBASA HARBOUR, 1975-1979

Table 14.6 '000 *tonnes*

	1975	1976	1977	1978	1979*
Landed;					
Dry Cargo	856	1,355	1,301	1,482	1,039
Bulk Liquids	3,303	2,618	2,618	2,787	2,822
TOTAL	4,159	3,973	3,919	4,269	3,861
Loaded;					
Dry Cargo	1,366	1,565	1,465	1,488	1,591
Bulk Liquids	423	375	461	314	474
TOTAL	1,789	1,940	1,926	1,802	2,065
TOTAL FREIGHT HANDED	5,948	5,913	5,845	6,071	5,926

*Provisional.

14.12. Good progress was made during the year on the development project aimed at further expansion and modernization of facilities and acquisition of new equipment at the port. In 1979 two forklift trucks of 35 tonnes for containers and other forklift trucks of capacities varying from 3 to 10 tonnes were placed in service. In addition a barge, two launches and two pilot boats were also received. Work on berth 18 and the repairs to surfacing yard 17 were completed but work on the erection of lighting towers to this area of the harbour and on the removal of redundant rail trucks from berth 18 was still in progress at the year end.

14.13. The Eastern Africa National Shipping Line continued its operations during 1979. However, the line continued to suffer from financial difficulties; these became so serious that in March, 1980 the line ceased trading operations. The Government had planned to spend K£2.1 million to establish a national shipping line during the 1979-1983 Development Plan period.

Pipeline Transportation

14.14. The Mombasa-Nairobi oil product pipeline operated by Kenya Pipeline Company was commissioned in February 1978. Initially only motor spirit was pumped but thereafter, other petroleum products have progressively been introduced. In 1979 the company earned gross revenue amounting to K£11.2 million. During the year total throughput rose to 1,371,379 cubic metres compared with 1,016,776 cubic metres in 1978 when the pipeline was operating for less than the whole year. The distribution of these products as soon as they reach Nairobi is undertaken by the petroleum product wholesalers who carry the fuels to their destinations mainly by road tankers. Details on the pipeline throughput are given in Table 14.7. Motor spirit, light diesel oil and jet fuels are the more important products handled by the pipeline.

PIPELINE THROUGHPUT OF WHITE PETROLEUM PRODUCTS, 1978-1979

Table 14.7 *Cubic Metres*

	Motor Spirit Premium	Motor Spirit Regular	Kerosone illumina-ting Oil	Light Diesel Oil	Industrial Diesel Oil	Autur Jet fuel	Total
1978*	277,028	125,902	56,602	275,448	4,990	276,806	1,016,776
1979	316,985	185,105	92,251	396,273		380,764	1,371,379

*Not complete year.

Air Transport

14.15. Kenya Airways entered its third year of operation in 1979. The airline has concluded various pool and bilaterial passenger sharing arrangements with other airlines, thereby placing the national carrier in a stronger operational position as a world airline. However, its performance as detailed in Table 14.8 showed little improvement during 1979. The rate of utilization

KENYA AIRWAYS TRAFFIC PERFORMANCE, 1978-1979

Table 14.8

	DOMESTIC		INTERNATIONAL		TOTAL	
	1978	1979	1978	1979	1978	1979
PASSENGER						
Passenger—Kilometers *Millions*	74.6	79.7	811.6	808.3	886.2	880.0
Utilisation: *Per cent*	66.0	63.1	52.2	52.7	53.2	53.5
FREIGHT						
Total Carried: *Million Kg/Km.*	7.0	7.4	98.7	94.1	105.7	101.5
Utilisation: *Per cent*	54.7	54.4	47.3	45.9	47.7	46.4

of the passenger capacity available on domestic flights fell from 66 per cent in 1978 to 63 per cent in 1979, and for international traffic it rose only slightly, from 52 per cent to 53 per cent. Overall the rate of passenger capacity utilization rose from 53.2 to 53.5 per cent. There was an overall reduction in freight by Kenya Airways from 105.7 million to 101.5 million kilogram/ kilometers so that the overall freight capacity utilization rate fell from 47.7 per cent in 1978 to 46.4 per cent in 1979. Of the total 1.23 million international passengers passing through both Nairobi and Mombasa airports in 1979, Kenya Airways handled 216,237 or 17.5 per cent of them. However, when transit passengers are excluded, Kenya Airway's share of the market stands at 26.5 per cent, that is, 206,434 of the 778,433 international passengers originating and terminating in Kenya. It is estimated that Kenya Airways operated 12 per cent of all flights into and out of Kenya in 1979. During the year domestic routes were operated by the Fokker 27 and DC9 aircraft. International routes were operated by Boeing 707 and Boeing 747 planes, the latter leased from Aer Lingus. In January 1979, the airline commenced operations on the Nairobi to Accra route, but due to lack of traffic the route was suspended in October. Kenya Airways is working on a 5-year development plan which will include consideration of new routes as well as acquisition of aircraft of different types for the various routes planned.

14.16. Flamingo, a subsidiary of Kenya Airways operated 74 cargo charter flights, with a total load in 1979 of 2,456 tonnes of the available 2,648 tonne capacity. This was a 93 per cent performance as compared to the 95 per cent performance planned target. Another subsidiary of Kenya Airways, Kenya Air Freight Handling Company, handled virtually all the cargo at Nairobi airport in 1979.

14.17. The newly completed Jomo Kenyatta Airport, Nairobi, continued to operate smoothly during 1979. Table 14.9 details passenger and freight traffic handled at the airport. After a fall in 1977 and an indifferent performance in 1978, the number of passengers handled at the airport increased by 7.3 per cent and the total is higher than the level attained in 1976. There was, however, no corresponding increase in total cargo handled as this declined by 11.2 per cent from 31,688 tonnes in 1978 to 28,139 tonnes in 1979. Despite this fall there was an appreciable increase in the mail carried both ways.

14.18. The Moi Airport, Mombasa, was opened in 1978 to wide bodied aircraft. However, as shown in Table 14.10, the increase in passenger traffic between 1978 and 1979 is only marginal while freight handled declined significantly from 26,273 tonnes in 1978 to 18,469 tonnes in 1979, as a result of the cessation of coffee traffic from Rwanda/Burundi. The coffee prices no longer justify airfreight haulage from these countries.

COMMERCIAL TRAFFIC AT NAIROBI AIRPORT, 1975-1979

Table 14.9

	1975	1976	1977	1978	1979*
PASSENGER—000's—					
Landed	463.4	459.4	407.3	437.6	469.5
Embarked	479.1	469.1	420.7	431.1	476.0
In Transit..	448.0	493.4	521.8	484.4	506.1
TOTAL	1,390.5	1,421.9	1,349.8	1,353.1	1,451.6
FREIGHT—*tonnes*					
Cargo: Landed	8,662.2	7,837.2	8,585.5	9,418.9	7,744.8
Loaded	22,537.6	23,843.1	24,592.7	20,884.5	18,623.5
Mail: Landed	1,197.6	976.9	855.1	596.8	942.3
Loaded	1,200.9	1,035.1	801.3	787.8	828.9
TOTAL	33,598.3	33,692.3	34,834.6	31,688.0	28,139.5

*Provisional.

COMMERCIAL TRAFFIC AT MOMBASA AIRPORT, 1975-1979

Table 14.10

	1975	1976	1977	1978	1979*
PASSENGERS—000's					
Landed	130.5	140.9	131.5	152.8	154.4
Embarked	133.9	138.5	136.3	156.0	156.2
In Transit..	30.9	75.0	20.3	18.3	17.2
TOTAL	285.3	354.4	288.2	327.1	327.8
FREIGHT—*tonnes*					
Cargp: Landed	237.1	227.4	4,912.2	16,436.1	10,290.0
Loaded	309.6	316.8	1,161.6	9,723.9	8,062.1
Mail: Landed	55.5	55.0	77.7	76.2	80.3
Loaded	44.7	40.1	36.1	36.4	37.5
TOTAL	646.9	639.3	6,187.6	26,272.6	18,469.9

*Provisional.

Posts and Telecommunications

14.19. The Kenya Posts and Telecommunications Corporation had a satisfactory year in 1979. The Corporation had budgeted for revenue receipts of some K£33 million in 1979—the bulk to accrue from telecommunication operations. As detailed in Table 14.11 all the operations of the Corporation recorded an improvement in 1978. The number of post offices increased by 5.4 per cent and private boxes by 5 per cent; the number of ordinary letters handled went up by 2.4 per cent; while there was a substantial recovery of 17.7 per cent in the number of registered and insured items. For the first time in many years there was a reversal of the declining trend in the number of

POSTAL AND TELECOMMUNICATIONS SERVICES, 1975-1979

Table 14.11 *Number*

	1975	1976	1977	1978	1979*
Post Offices	535	550	600	634	668
Post Office Private Boxes	80,831	91,321	112,254	124,131	130,311
Telephone Subscriber's Lines	53,028	57,050	62,408	65,344	69,920
Public Call Offices	354	396	439	474	514
Telegrams Handled—'000'	541	609	718	753	851
Parcels Handled—'000'	608	543	548	379	403
Manual Telephone Calls Made —000'	9,760	10,018	10,555	11,403	12,291
Registered and Insured Items —000'	4,498	4,535	4,530	2,294	2,699
Telex Subsribers	516	757	848	1,017	1,169
Ordinary letters handled *Million*	117	139	140	168	172

*Provisional.

parcels handled—these rose by 6.3 per cent in 1979. The number of telephone subscriber lines increased by 7 per cent; public call offices by 8.4 per cent; telegrams by 13 per cent; and the manual telephone calls by 7.8 per cent.

14.20. As shown in Table 14.12, the services of the Corporation's subsidiary, Kenya Extelcoms, also continued to to expand. The number of paid minutes of telephone service increased by 17.2 per cent in 1979 while the use of telex services rose by 10.7 per cent. The latter increase, however, continued to affect the decline of the telegraphic service.

EXTERNAL TELECOMMUNICATIONS TRAFFIC, 1975-1979

Table 14.12

	1975	1976	1977	1978	1979*
Telegraph Service '000 *cables*	403.1	259.8	253.5	226.0	215.7
Telephone Service '000 *paid minutes*	2,497.6	2,560.6	2,674.5	2,937.3	3,442.3
Telex Service '000 *paid minutes*	1,511.2	1,319.0	1,625.0	1,939.4	2,146.5

*Provisional.

Information and Mass Media

14.21. The Department of Information made considerable progress in 1979 in the setting up of information centres in the country. Kitale information office building was completed and taken over during the year, and Machakos office is nearly ready. An information sub-office was also opened at Makueni in Machakos District at the end of 1979. New SSB/VHF facilities were installed at Meru, Embu, Kitui, Wundanyi and Nakuru in 1979 and plans are underway to install similar facilities at Homa Bay, Nyahururu and Nanyuki in 1980. There is a plan to launch two rural Kiswahili newspapers in Kericho and Kwale or Kilifi in 1980.

14.22. Details on the number of new radio sets bought are given in Table 14.13. The number of radio sets bought increased by 21.6 per cent in 1979 while the purchases of T.V. sets decreased by 2.2 per cent, from 7,309 in 1978 to 7,147 in 1979. It is estimated that there were 1.7 million radio and 70,000 T.V. sets in Kenya in 1979. Construction work on buildings for radio stations at Nakuru, Nyeri and Meru was started during the year and the buildings are scheduled to be complete in 1980.

NEW RADIOS AND T.V. SETS SOLD AND LICENSED, 1975-1979

Table 14.13 *Numbers*

	1975	1976	1977	1978	1979
Radios	87,997	97,971	145,969	131,355	159,657
Television Sets	2,847	3,458	4,901	7,309	7,147

14.23. The Institute of Mass Communications continued to assist in the development of news and information services in Kenya. Two development projects—a film production complex and an engineering training block—were under construction in 1979. The latter has been completed while the former is to be completed in 1980. In May 1979, 90 technicians were undergoing special training in a crash programme at the institute. The training programme aimed at recruiting and training over 300 technicians/senior technicians in the next four years. In addition the Institute continued to run the regular programme of courses for technicians, production assistants, and information assistants.

14.24. Table 14.14 details the average daily/weekly newspaper circulation. Morning newspapers recorded considerable increases in their sales with the circulation of both English and Swahili dailies increasing by 15 per cent. Weekly newspapers too increased their circulation although such increases were much more marked for the English language papers.

DAILY/WEEKLY AVERAGE NEWSPAPER CIRCULATION, 1977-1979

Table 14.14 *Number*

	1977	1978	1979
MORNING NEWSPAPERS			
English	118,494	140,061	150,704
Swahili	32,334	38,165	54,278
OTHER NEWSPAPERS			
English Weeklies	81,123	95,165	150,301
Swahili Weeklies	87,651	88,912	97,296

CHAPTER 15—THE SOCIAL SCENE

The Central Government has always allocated a very substantial part of its expenditure to social services. As shown in Table 15.1 it is estimated that the Government incurred a further expenditure of K£186 million on social services in 1979/80. An additional K£13 million, as shown in Table

CENTRAL GOVERNMENT EXPENDITURE ON SOCIAL SERVICES, 1976/77—1979/80

Table 15.1 K£'000

	1976/77	1977/78	1978/79	1979/80*
RECURRENT EXPENDITURE—				
Ministry of Education	73,478.7	86,425.2	96,365.3	113,182.3
Ministry of Health	21,259.7	26,874.4	34,155.5	33,090.7
Ministry of Labour	3,163.1	3,991.5	5,138.1	2,845.9
Ministry of Housing and Social Services	2,003.2	2,252.9	3,440.5	4,983.9
DEVELOPMENT EXPENDITURE—				
Ministry of Education	2,975.2	5,100.6	5,098.7	7,7329.8
Ministry of Health	8,092.9	10,740.2	7,756.0	11,804.1
Ministry of Labour	267.9	1,030.2	1,870.7	782.1
Ministry of Housing and Social Services	4,385.9	9,171.9	7,680.7	11,636.7
TOTAL EXPENDITURE	115,626.6	145,586.9	161,505.5	186,065.5

*Estimates.

15.2, was spent by local authorities on social services during this period. Also very large sums were expended by the private sector on education, housing and other social services. This chapter seeks to describe developments in social services except employment which is dealt with in Chapter 5 of the survey.

LOCAL GOVERNMENT EXPENDITURE ON SOCIAL SERVICES, 1975-1979

Table 15.2 K£'000

	1975	1976	1977	1978*	1979*
Education	4,571	4,993	5,548	5,750	7,865
Health	2,846	3,168	3,324	4,156	5,006
Other Social Services	415	407	495	464	620
TOTAL	7,832	8,568	9,367	10,370	13,491

*Provisional.

Education

15.2. Education continued to account for by far the largest share of the total government expenditure on social services in 1978/79. Recurrent expenditure on education rose by 17 per cent to K£113.2 million in 1979/80, while K£7.7 million was spent on the development of education. As detailed in Table 15.3, primary education continues to receive the largest allocation, accounting for 65 per cent of the total recurrent expenditure.

MINISTRY OF EDUCATION EXPENDITURE, 1976/77—1979/80

Table 15.3 *K£'000*

	1976/77	1977/78	1978/79	1979/80*
RECURRENT EXPENDITURE—				
General Administration and Planning	3,303.4	3,977.8	4,428.7	4,809.4
Primary Education	46,595.1	55,421.6	59,740.1	73,843.5
Secondary Education	9,934.2	11,455.0	13,003.4	13,866.4
Technical Education	845.7	1,036.6	1,093.9	1,234.1
Teachers' Training	2,557.4	3,027.7	3,239.6	3,539.2
Special Schools*	295.9	358.9	392.1	439.8
Polytechnic Education	974.5	1,285.8	1,542.0	1,731.1
Higher Education**	8,285.3	8,929.4	11,587.8	1,2354.3
Miscellaneous	687.2	932.4	7,338.1	1,364.5
TOTAL	73,478.7	86,425.2	96,365.3	113,182.3
DEVELOPMENT EXPENDITURE—				
General Administration and Planning	44.4	152.2	128.3	442.5
Primary Education	106.3	308.2	129.1	460.5
Secondary Education	1,101.2	916.1	1,127.5	960.9
Technical Education	777.5	639.5	205.7	800.0
Teachers Training	359.7	2,002.9	548.9	191.1
Special Education	60.0	55.0	87.5	80.0
Polytechnic Education	156.9	728.5	2,278.8	3,643.7
Higher Education**	305.5	251.1	570.2	981.1
Miscellaneous	63.7	47.1	22.6	180.0
TOTAL	2,975.2	5,100.6	5,098.7	7,739.8

*Estimates.

**Includes expenditure on University of Nairobi, Kenyatta University College and other institutions of higher education not specified above.

15.3. The development of education and expansion of educational opportunities continue to be the major policy objectives of the Government. Elimination of school fees for Standards 1 to 6 by 1978 was extended to Standard 7 in 1980. Parent associations formed for each primary school throughout the country are now responsible for the construction of school buildings and furnishing them, as well as raising other funds required by the school for extracuricular activities. Secondly, the Ministry of Education has been split into two ministries of Basic Education and Higher Education

PRIMARY SCHOOL ENROLMENT BY PROVINCE AND SEX, 1978 AND 1979

Table 15.4

Numbers '000

	1978				1979			
	Male	Female	%Cohort Aged 6-12	%Pupils Aged 13 +	Male	Female	%Cohort Aged 6-12	%Pupils Aged 13 +
Central	310.4	305.7	100.7	21.6	333.4	329.2	100.8	24.5
Coast	103.3	67.4	55.0	22.7	126.8	82.8	63.3	25.0
Eastern	313.2	288.6	91.5	14.6	365.5	341.1	98.9	14.3
Nairobi	46.8	44.7	72.2	13.3	48.4	35.8	70.2	14.0
North Eastern	7.1	2.4	8.5	28.2	7.8	2.8	9.0	28.8
Nyanza	286.6	231.9	77.5	13.2	411.8	355.5	109.4	15.3
Rift Valley	309.2	262.5	73.6	15.6	378.7	328.0	84.2	18.6
Western	218.0	197.3	89.8	14.0	280.6	259.3	108.2	17.7
TOTAL	1,594.5	1,400.5	80.2	16.4	1,953.0	1,744.5	92.6	19.1
No. of Schools	9,243				9,621			

to facilitate specialization and hence more efficient management of education in the country. Finally starting from the month of May 1979, the Government has been distributing free milk to all primary schools in the country with each child receiving two glasses of milk per week. The provision of free milk to school children aims at improving the nutritional status of the child which in turn should hopefully reduce the burden of health services as well as help achieve more effective schooling.

15.4. There was a very large increase in the total enrolment in primary schools in 1979, to 3,697,586 a rise of 24 per cent over the figure of 1978. This large expansion in primary school registration occurred after several years of only modest growth. As shown in Table 15.4 enrolments in 1979 approximated 93 per cent of the estimated population aged 6 to 12 as compared with a figure of 80 per cent for 1978. The enrolments of the pupils reported to be within the 6 to 12 year age group in two provinces—Western and Nyanza—exceed the estimated size of this age group which suggests that there may have been errors in age reporting. Enrolments in North Eastern and Coast provinces continue to lag behind the remainder of the country, while Nairobi shows signs of a slow growth in facilities relative to the demand for places.

15.5. Distribution of enrolment in primary schools by standard detailed in Table 15.5 indicates that enrolments in all standards rose between 1978 and 1979. The greatest increase of 63 per cent occurred in enrolment in Standard 1 over the enrolment recorded for 1978. This was the largest increase since 1974 when Standard 1 enrolments had shot up by 153 per cent over the figure for 1973 because of the abolition of tuition fees in Standards 1 to 4. The lack of a comparable expansion in the numbers of classrooms and teachers in 1979 has created pressures on facilities in certain districts.

ENROLMENT IN PRIMARY SCHOOLS BY STANDARD, 1975-1979

Table 15.5 *Numbers*

	1975	1976	1977	1978	1979*
Standard 1	668,166	571,872	602,076	599,057	977,592
Standard 2	722,333	545,406	489,222	479,337	579,511
Standard 3	419,638	597,690	512,296	455,206	507,807
Standard 4	341,927	382,735	510,825	466,977	483,044
Standard 5	264,690	300,670	338,509	433,711	450,774
Standard 6	237,002	253,030	281,386	302,093	417,290
Standard 7	227,439	243,214	236,925	258,610	281,568
Total	2,881,195	2,894,617	2,971,239	2,994,991	3,697,586

*Provisional.

15.6. Secondary schools in Kenya can be divided into three categories—maintained schools, assisted schools, and unaided schools. The Government supplies most of the operating costs for maintained schools through financial grants and the provision of teachers. Assisted institutions, up to 1973, comprised the schools for which the Government contributed a percentage of the salaries of the approved teaching staff, often amounting to 80 per cent, and also provided funds for certain other expenditures, with the remainder of the operating costs being met from fees or other revenues accruing to the school. In 1973 the Government initiated a programme to convert most of

ENROLMENT IN SECONDARY SCHOOLS BY FORM, 1978-1979

Table 15.6

	1978			1979*		
	Maintained	Assisted	Unaided	Maintained	Assisted	Unaided
Form I	29,180	21,575	53,899	37,272	24,328	45,627
Form II	28,928	24,895	55,762	35,047	22,388	38,817
Form 111	29,241	16,450	29,525	35,064	22,247	31,323
Form IV	27,694	12,065	20,497	32,413	15,720	22,342
Form V	5,179	535	666	7,207	259	1,102
Form VI	4,592	448	491	6,556	133	765
TOTAL	124,814	75,968	160,840	153,259	85,075	139,976
Boys	85,438	40,151	91,306	104,177	42,494	76,792
Girls	39,376	35,817	69,534	49,082	42,581	63,184

*Provisional.

the existing schools from assisted to maintained status and in the process reduced the school fees charged by them. As Table 15.6 covers only the years 1978 and 1979 most of the schools categorized as assisted in this table are the 327 Harambee institutions which receive a small amount of aid from the Government, usually through the provision of one or two teachers, while the schools listed as being in the unaided sector do not receive any financial subvention from the Government and include 665 Harambee schools, most of which will be eligible to receive assistance during the current development plan period, 187 private schools owned by individuals and frequently run for profit, and 66 schools operated by religious bodies.

15.7. Total enrolment in secondary schools in 1979 reached 378,310. This represents a growth of 5 per cent in enrolment as compared with a rise of 12 per cent between 1977 and 1978. The low rate of increase in Form 1 enrolments which rose by only two per cent between 1978 and 1979 is another indication of a slow down in the expansion of secondary schools. A reversal of the trends of recent years also occurred in a change in the relative balance of enrolments between the maintained sector and assisted

and unaided schools. Whilst enrolments in maintained schools increased by 23 per cent overall and 28 per cent in Form 1 in 1979, enrolments in assisted and unaided schools declined by 5 per cent in Form I through VI and 7 per cent in Form I in 1979. Consequently the proportion of secondary school enrolment in maintained schools rose from 34 per cent to 41 per cent of the total and from 28 per cent to 35 per cent of the Form I enrolment. Females constituted 41 per cent of secondary school enrolment but only 32 per cent of enrolment in maintained schools. However, female representation in Form I rose to 44 per cent continuing the trend of a move toward greater sex parity in the secondary school enrolment. Further details on enrolment in aided secondary schools are set out in Table 15.7.

SECONDARY SCHOOLS ENROLMENT IN AIDED SCHOOLS BY PROVINCE AND SEX, 1977-1979

Table 15.7 *Numbers*

	1977		1978		1979*	
	Boys	Girls	Boys	Girls	Boys	Girls
Coast	6,456	3,000	5,292	2,716	6,054	2,962
Central	18,865	9,218	19,329	9,443	26,090	14,121
Eastern	12,286	5,684	13,048	6,417	16,775	7,789
Nairobi	10,567	5,619	9,445	5,396	8,763	5,638
North-Eastern	590	146	487	158	603	189
Nyanza	15,743	5,921	14,446	5,279	17,099	6,749
Rift Valley	11,512	5,812	12,205	6,060	14,467	6,984
Western	11,792	4,785	11,276	3,907	14,336	4,650
TOTAL	87,811	40,185	85,438	39,376	104,177	49,082

*Provisional.

15.8. As outlined in Table 15.8 the teaching force in 1979 was composed of 107,861 teachers, of whom 86 per cent were teaching in primary schools. This represents a growth of only 1 per cent in the teaching corps over 1978 despite the significant increase in primary school enrolment. Of the primary school teachers, 74 per cent were trained and the percentage of untrained teachers has declined from 34 per cent in 1977 to 26 per cent in 1979. The vast majority of primary school teachers, 99.4 per cent of the total, were Kenya citizens. A total of 52 per cent of all teachers in secondary schools in 1979 were trained as compared with 53 per cent in 1978. The vast majority of teachers in maintained schools—84 per cent, were trained as compared to 45 per cent in assisted and 22 per cent in unaided schools. The proportion of citizen teachers in secondary schools rose to 84 per cent from 80 per cent in 1978.

15.9. The national pupil/teacher ratio in primary schools rose from 32.4 in 1978 to 39.8 in 1979. Twelve rural districts and one municipality exceeded the Ministry of Education guidelines of maximum size of 40 pupils per

QUALIFICATIONS OF TEACHERS IN EDUCATIONAL INSTITUTIONS, 1977-1979

Table 15.8 *Numbers*

		PRIMARY		SECONDARY		
	1977	1978	1979	1977	1978	1979**
TRAINED—						
Graduate	47	64	109	2,634	3,204	3,867
Approved*	—	—	—	626	714	320
SI	1,163	2,519	2,619	2,471	2,752	2,896
PI	16,466	19,782	22,813	226	244	302
P2	22,572	24,150	25,631	—	—	—
P3	16,200	15,598	15,612	—	—	—
P4	1,687	1,568	1,483	—	—	—
Other	424	420	125	757	811	352
TOTAL	58,559	64,101	68,392	6,714	7,725	7,737
UNTRAINED—						
Graduate	10	24	20	559	487	782
E.A.A.C.E.	541	573	519	3,389	4,185	4,545
E.A.C.E.	18,706	17,865	14,721	1,647	1,944	1,796
K.J.S.E.	8,337	7,791	6,507	—	—	—
C.P.E	2,352	2,022	1,294	—	—	—
Other	151	125	1,374	372	322	174
TOTAL	30,097	28,220	24,435	5,967	6,938	7,297
Citizens	88,766	91,539	92,297	9,686	11,702	12,635
Non-Citizens	890	782	530	2,995	2,964	2,399
TOTAL	89,656	92,321	92,827	12,681	14,663	15,034

*An approved teacher, has completed the equivalent of a University education.

**Provisional.

teacher for rural schools and 45 pupils per teacher in urban areas. The three districts with the greatest strain on facilities were Trans Nzoia District with a 51.8 pupil/teacher ratio, South Nyanza District with a ratio of 49.4 pupils per teacher and Kisumu Municipality which averaged a ratio of 50 pupils per class.

15.10. Facilities in teacher training colleges are also being expanded to accommodate an extra 200 students annually. Of the total enrolment in 1979 about 61 per cent were males and 39 per cent were females. All candidates follow a common course without being graded initially. Individual performance in final examinations is the determining factor in grading of teachers into PI, P2 and P3 categories. Table 19.5 details the enrolment in training colleges for primary school teachers in 1979.

15.11. The Harambee Institutes of Technology have been established throughout Kenya as a result of local initiatives. Their development has been mainly financed locally through contributions. At present, there are 15 such

STUDENTS ENROLMENT IN ALL PRIMARY TEACHERS COLLEGES BY QUALIFICATION, 1979
Table 15.9

	1ST YEAR		2ND YEAR		TOTAL	
	Male	Female	Male	Female	Male	Female
E.A.A.C.E.	15	17	14	7	29	24
E.A.C.E.	2,954	1,831	2,368	1,456	5,322	3,287
K.J.S.E	349	244	284	204	633	448
C.P.E	3	4	33	56	36	60
TOTAL	3,321	2,096	2,699	1,723	6,020	3,879

institutes registered with the Ministry of Higher Education, of which 10 are in operation with a combined enrolment of 1,220 students. One further institute will shortly be in a position to enrol students. The largest enrolment of students is in three types of courses: business studies, secretarial studies, and masonry with smaller numbers being trained in carpentry, plumbing, electrical and mechanical engineering and business administration.

15.12. One of the objectives of the institutes is to train skilled personnel to meet the needs of rural development. School Leaving Certificate is the minimum entrance requirement and in the technical fields the courses are of three years' duration. The courses are very much skill-based and may be equated to the City and Guilds Craft II plus Technical I levels. Syllabi have now been prepared which will enable the better students to follow a further fourth year course leading to a Full Craft Certificate with exemption from Technical II test.

15.13. The main constraints in the development of the institutes fall into three main areas: staffing, raising sufficient funds to meet the development costs of building and equipment, and recurrent expenditure. Initially the majority of teaching staff were expatriates whose services have been made available by various donor agencies together with some key personnel supplied by the Ministry of Higher Education. Although development costs of buildings are met from Harambee fund raising activities, the more costly items of equipment have been provided by some donor agencies. The rapid increase in the number of institutes which require such donor assistance is resulting in delays in the provision of such equipment which in turn is slowing down the development of these institutes. Recurrent costs of the institutes presently amount to K.Sh. 14,000 per student per year which is partly funded by the Government through a grant of K.Sh. 2,600 per student per year. The bulk of the recurrent expenditure thus needs to be raised in the form of fees, which makes such schooling beyond the means of most students, or through sponsorship of students from Harambee funds, which then curtails the development of the institutes. Alternative sources of funding are now being sought, while it is hoped that higher enrolments can effectively reduce the current high recurrent cost per student.

UNIVERSITY OF NAIROBI—STUDENTS BY FACULTY AND SEX, 1978/79—1979/80

Table 15.10

	1978/79			1979/80		
	Males	Females	Total	Males	Females	Total
Undergraduate Coursss—						
Agricultural*	225	81	306	274	79	353
Architecture and Design	146	45	191	182	44	226
Building Economics and Land Economics	113	6	119	106	13	119
Art	562	420	982	803	502	1,305
Commerce	599	137	736	427	162	589
Engineering	484	12	496	540	72	552
Law	137	64	201	149	75	224
Medicine	428	105	533	432	125	557
Science	712	113	825	843	105	948
Veterinary Medicine	273	40	313	288	32	320
Dental Surgery	64	32	96	51	43	94
Pharmacy	79	40	119	82	43	125
Adult Studies	—	—	—	17	4	21
Advanced Nursing	—	—	—	1	49	50
TOTAL	3,822	1,095	4,917	4,195	1,288	5,483
of which Kenya Students	3,731	1,093	4,824	4,051	1,238	5,289
Diploma Courses** Total	44	47	91	18	53	71
of which Kenya Students	43	45	88	18	42	60
Postgraduate Courses—						
Agriculture	132	21	153	171	30	201
Architecture and Design	54	4	58	36	3	39
Arts	120	40	160	135	61	196
Commerce	37	7	44	43	8	51
Education	87	41	128	72	46	118
Engineering	45	—	45	46	—	46
Law	20	3	23	17	6	23
Medicine	75	19	94	134	27	161
Science	197	14	211	204	21	225
Veterinary Medicine	14	4	18	36	7	43
School of Journalism	—	—	—	10	2	12
TOTAL	781	153	934	904	211	1,115
of which Kenya Students	576	113	689	700	164	864
Total Enrolments—						
All Kenya Students	4,350	1,251	5,601	4,769	1,444	6,213
Students from other countries	297	44	341	348	108	456
TOTAL	4,647	1,295	5,942	5,117	1,552	6,669

*Includes courses on Food Science and Technology and Forestry.

**Diploma courses in 1978/79 were offered in Journalism, Advanced Nursing and Adult Studies and 1979/80 in Advanced Nursing and Adult Studies.

15.14. The University of Nairobi and its constituent Kenyatta University College is charged with the task of training high level manpower through its under-graduate and post-graduate programme. An external degree programme is also to be introduced to cater for those who would like to further their academic studies but are not able to undergo a conventional university education. The Government has also decided to establish a second university, suitably located to complement the work of the University of Nairobi.

15.15. There was an increase in total enrolment at the University of Nairobi from 5,942 in 1978/79 to 6,669 in 1979/80. Distribution of students at the university is shown in Table 15.10. While the number of students taking diploma courses has decreased, there has been a marked increase in enrolment for several undergraduate courses including arts, agriculture, science and medicine. Total enrolments in postgraduate courses have also risen particularly in the faculties of medicine and veterinary science. Women accounted for 23 per cent of the total enrolment in 1979/80 and students from other countries numbered less than 7 per cent of the total.

15.16. The trend in declining enrolment at Kenyatta University College which had been experienced upto 1977/78 was reversed in 1978/79 and enrolment rose further in 1979/80. Total enrolment as shown in Table 15.11 increased from 1,405 in 1978/79 to 1,761 in 1979/80 as a result of the transfer of the Faculty of Education from the main campus of the University of Nairobi to Kenyatta College. Post-graduate students in Education, however remained at the main campus.

KENYATTA UNIVERSITY COLLEGE STUDENTS BY COURSES AND SEX, 1978/79—1979/80

Table 15.11

	1978/79			1979/80		
	Males	Females	Total	Males	Females	Total
Diploma in Education	4	6	10	122	66	188
Bachelor of Education	929	466	1,395	980	593	1,573
TOTAL	933	472	1,405	1,102	659	1,761

15.17. The Educational Media Service continued to produce radio programmes with supporting printed material to aid primary schools, and secondary school teachers. During each term 35 programmes for primary school pupils, 20 programmes for secondary school students and 15 programmes for primary school teachers are broadcast during eight weeks of the school term. Broadcasts to primary schools cover subjects such as English, music, history, geography, religious education and agriculture, while programmes for primary school teachers are aimed to improve their knowledge of modern mathematics and Kiswahili.

Health

15.18. The Ministry of Health has adopted the integrated rural health programme to achieve the objective of "Health for all Kenyans by the year 2000". This programme aims at establishing community based health activity projects where the community and individuals have greater responsibility for health.

15.19. Health services are also being improved through additional provision of physical facilities and personnel to dispense health services and through education in personal hygiene. Table 15.12 shows the number of health units, beds and cots in 1979. The number of health units increased

HEALTH INSTITUTIONS AND HOSPITALS BEDS AND COTS BY PROVINCE, 1979

Table 15.12 *Numbers*

	HEALTH INSTITUTIONS				HOSPITAL BEDS AND COTS	
	Hospitals	Health Centres	Health Sub-Centres and Dispensaries	Total	No. of Beds and Cots	No. per 100,000 Population
Nairobi	26	2	112	140	5,043	604
Central	47	41	154	242	4,004	171
Coast	23	18	137	178	2,512	192
Eastern	27	29	191	247	3,630	134
North-Eastern	3	6	18	27	348	93
Nyanza	32	37	112	181	3,873	147
Rift Valley	52	65	317	434	4,954	153
Western	16	35	47	98	2,558	139
TOTAL	226	233	1,088	1,547	26,922	175

from 1,529 in 1978 to 1,547 in 1979. The increase is accounted for by additional 32 health centres and one hospital while the number of dispensaries declined partly because of the conversion of some to health centres. The number of hospital beds and cots increased from 24,708 in 1978 to 26,922—a rise of 9 per cent. As a result the number of beds per 100,000 populations has risen from 166 in 1978 to 175 in 1979. Rapid population growth indicates that the growth in provision of health services will have to be continued at a fast rate if the average number of beds per 100,000 population is to be increased to a level which is adequate to serve the population more effectively.

15.20. The work on the extension of Kenyatta National Hospital is expected to be completed in 1980. New district hospitals at Makueni, Nyamira and Iten are now in various stages of completion. Work is scheduled to

start on construction of 10 hospitals at Vihiga, Webuye, Marigat, Rumuruti, Bondo, Mwingi, Mkowe, Othaya, Msambweni and Nairobi in 1980.

15.21. The family planning and maternal and child health programme of the Ministry of Health is intended to reduce ma:ernal. perinatal and infant mortality rates and increase and encourage family planning activities to curb the present high population growth in order to enhance social and economic development. To achieve this objective 22 rural health demonstration centres will be constructed to support training of various cadres of staff. Information and education activities are to be extended and further recruitment of field educators and establishment of additional service points is to be undertaken.

15.22. Table 15.13 details the number of registered medical personnel including those in training institutions. The number of doctors increased from 1,466 in 1978 to 1,541—a 5 per cent increase while there were further increases in other cadres of medical personnel including clinical officers. The number of clinical officers refers to those in public service. It is estimated that there are also about 200 clinical officers in the private sector adding up to a total of about 1,750 in 1979. As can be seen in Table 15.14 all types of medical personnel increased in 1979 and in all cases the proportion per 100,000 population increased over the 1978 level. There has also been a general increase in the number of trainees of all categories in 1979/80 as compared to 1978/79.

REGISTERED MEDICAL PERSONNEL, 1977-79

Table 15.13 *Number*

	1977	1978	1979		IN TRAINING	
			Number	No. per 100,000 Population	1978/79	1979/80
Doctors	1,479	1,466	1,541	10.07	510	555
Dentists	112	130	141	0.92	94	99
Clinical Officers*	1,002	1,459	1,534	10.03	337	330
Pharmacists	197	245	272	1.78	118	124
Registered Nurses	6,173	6,388	6,542	42.76	798	863
Enrolled Nurses	7,426	7,908	8,317	54.36	1,447	1,765

*Data refer to registered clinical officers in Government Services.

15.23. The Government has put greater emphasis on the control of communicable and vector borne disease. Outbreaks of cholera in Taveta, Kwale, Turkana and West Pokot and plague in Kiambu, Kitui, Taveta and Kajiado were quickly detected and brought under control. Surveillance has been intensified and indicates a drop in deaths resulting from communicable and vector borne diseases.

15.24. Table 15.14 shows that contributions made to the National Hospital Insurance Fund rose by K£409,038 in 1978/79 while benefits paid dropped by K£553,581 thus leaving the Fund with a high net balance of K£995,900 compared to a net balance of K£33,281 reported in 1977/78.

NATIONAL HOSPITAL INSURANCE FUND, 1972/73—1978/79

Table 15.14 *K£*

	Receipts*	Benefits**	Contribution Net of Benefits
1972/73 Annual Average	1,189,255	883,152	306,103
1973/74 Annual Average	1,166,705	1,072,758	93,947
1974/75 Annual Average	1,420,338	1,311,911	108,427
1975/76 Annual Average	1,741,671	1,649,669	92,002
1976/77 Annual Average	1,629,411	1,984,798	-355,387
1977/78 Annual Average	2,166,762	2,133,481	33,281
1978/79 Annual Average	2,575,800	1,579,900	995,900

*Includes both compulsory and voluntary contributions and other receipts.
**Benefits exclude other payment, e.g. management expenses.

Child Nutrition

15.25. The Government conducted a second survey of the nutrition status of young children between November 1978 and January 1979. The survey covered a sample of 3,525 children aged between 6 and 60 months from all parts of Kenya except North-Eastern Province and some parts of other arid areas. Information was obtained on the weight and height of the children and the mothers were asked to provide information on their age, food consumption and health. The results of the survey show that 58 per cent of all children had heights lower than the shortest 10 per cent of the American reference children of the same age, whereas only 12.1 per cent of the nursery school children in Nairobi fell into this category. The proportion of children with a low height compared to that expected for their age is greatest in the rural parts of the Coast and Nyanza provinces and lowest in the urban areas of the larger towns. The proportion of children with a low weight compared to that expected for their height is also highest in the rural and urban parts of the Central and the Western provinces. The average weight and height of children between 48 and 60 months of age was higher in the urban areas than in the rural areas. The survey revealed that mothers in the rural areas breastfeed their children for an average of 14 months while urban mothers breastfeed for an average of 10 months. However, children breastfed for longer than 12 months tended to be more stunted than those breastfed for shorter periods.

15.26. More than half of the children in the rural areas and nearly three quarters of urban children were given a weaning porridge in which the major ingredient was maize flour. Cassava was a popular ingredient of

children's porridge in Nyanza Province and bananas were frequently used in Eastern Province. Children fed porridge in which cassava or bananas was one of the main ingredients tended to be more undernourished than children in the same areas who were fed porridge made from other ingredients. The survey also showed that 30.3 per cent and 72.5 per cent of the rural and urban children respectively had been given a commercially prepared baby food at some time. Compared to the results of the earlier survey undertaken in 1977, the later survey indicates a small overall improvement in the nutritional status of the children.

Other Social Services

15.27. *Youth Development.*—The number of village polytechnics rose from 220 in 1978 to 250 in 1979 while there was a drop of 4,540 in the enrolment from the 1978 figure of about 22,000. This occurred despite an increase in the number of instructors from 1,200 in 1978 to 1,304 in 1979. The increase of 30 in the number of village polytechnics is part of the plan to increase the number of village polytechnics to 370 by the end of the current plan period. Most of the polytechnics teach carpentry, masonry, motor mechanics, tailoring and dress making, and agriculture.

15.28. *National Security Fund.*—The total number of employees registered with the National Social Security Fund rose to 1,185,100 in 1979 an increase of 73,500 compared with 1978 while the number of employers rose from 28,400 to 29,500 over the same period. The annual benefits paid were still only a small part of the contributions received—K£1.35 million out of total receipts of K£24.6 million. It was therefore possible to invest the difference after deducting administrative expenses. The increase in investments in 1979 amounted to K£26.55 million so that total level of accumulated funds from 1968 to 1979 rose to K£161.93 million. Details of the funds activities are given in Table 15.15.

NATIONAL SOCIAL SECURITY FUND, 1975-1979

Table 15.15

	1975	1976	1977	1978	1979
Employers registered '000	24.8	26.2	27.4	28.4	29.5
Employees registered '000	855.0	982.0	1,044.9	1,111.6	1,185.1
Membt rs paid out '000	58.4	65.8	75.8	85.3	90.8
Annual contributions K£m.	12.43	12.05	16.55	19.55	24.60
Annual benefits paid K£m.	11.6	10.1	1.80	1.86	1.35
Increase in investments K£m.	11.33	18.75	23.40	28.11	26.55

15.29. *Community Development.*—Community development programmes consist of Harambee self-help projects, family life training centres, craft development and women's programmes. These programmes are geared to mobilise people to co-operate in nation-building activities to supplement the

Government efforts in development. In 1978 a total of 11,712 projects were undertaken compared with 14,410 in 1977. Although the number of projects dropped in 1978, their value rose from K£8.7 million to K£10.4 million. This rise in value is due to the increase in prices of building materials and labour. As can be seen in Table 15.16, educational projects continued to dominate the self-help movement in 1978, accounting for 55 per cent of the total number of projects and 59 per cent of the total contributions.

VALUE OF SELF-HELP PROJECTS*, 1977-1978

Table 15.16

Category	1977		1978	
	No. of Projects	Value £'000	No. of Projects	Value £'000
Education:				
Primary Schools	5,146	3,101	3,743	3,322
Secondary Schools	717	1,981	675	2,322
Teachtrs Houses	316	221	440	234
Nurseries	1,395	163	1,629	239
SUB-TOTAL	7,574	5,466	6,487	6,117
Health	320	325	307	502
Social Welfare and Recreation	1,574	1,063	1,386	1,388
Domestic	207	74	540	120
Water Supply	1,100	869	854	1,074
Transport and Communications	180	75	435	58
Agriculture	2,916	352	1,211	357
Miscellaneous	539	427	492	823
TOTAL	14,410	8,651	11,712	10,439

*Number of projacts continued from the previous year plus the number started less numbers abandoned and completed.

15.30. The Family Life Training Programme aims at educating mothers on nutrition and other subjects related to child health in an attempt to eradicate malnutrition. Eight and nine Family Life Training Centres were operating in 1978 and 1979 respectively as compared to 7 in 1977. In 1978 the centres had an enrolment of 1,692 monthers and 2,970 children as compared to 1,291 mothers and 2,479 children in 1977. The enrolment increased to 2,269 mothers and 4,063 children in 1979.

15.31. *Vocational Rehabilitation.*—The number of vocational rehabilitation centres in 1979 remained the same as in 1978. The eight centres at Bura, Embu, Nyandarua, Kericho, Kisii, Kakamega, Irandu and Nairobi had an enrolment of 226. These centres aim to restore persons suffering from physical or mental impairements to useful employment and economic independence. With the declaration of 1980 as the National Year of the Handicapped and 1981 the International Year of the Handicapped, more centres are likely to be opened and the programme intensified.

15.32. *National Youth Service.*—A total of 4,539 youth were enrolled in this service in 1979 of whom 3,995 were men and 544 women. The total revenue earned from sales of produce from the farms run by the service rose to K.Sh. 303,000. The service also constructs roads, dams and helps build airstrips but these development projects do not earn the service any revenue. Completed projects included 13 dams in Kitui District and an air-strip at Bura. The road construction projects are of fairly long gestation and the present ones in hand will take several years to complete. A number of new units were established in 1979. Among new projects an agricultural training school is proposed to be built at the Yatta Field Unit.

Urban Housing

15.33. A survey conducted in 1979 shows that nine major urban centres in the country had 284,738 privately owned and 59,968 publicly owned dwelling units. A dwelling unit was defined as a place of residence for a family, individual or group of persons eating together and sharing the budget for common provisions. A dwelling unit therefore ranges from one roomed units to much larger self-contained houses. As shown in Table 15.17, out

URBAN AND PERI-URBAN DWELLINGS, 1979

Table 15.17

	Number of Units	Total number of occupants	Average monthly rent per unit KSh.	Total rent per month K£million	Total rent per annum K£million
PRIVATELY OWNED—					
Urban Areas	220,520	913,345	564	6.22	74.63
Peri-Urban Areas	64,218	271,337	72	0.23	2.78
TOTAL	284,738	1,184,682	453	6.45	77.40
PUBLICLY OWNED—					
Urban Areas	59,968	250,341	193	0.58	6.95
TOTAL PRIVATE AND PUBLIC	344,706	1,435,023	408	7.03	84.36
Nairobi	150,233	630,979	689	5.18	62.11
Mombasa	121,832	499,511	218	1.32	15.90
Kisumu	20,757	93,407	138	0.14	1.72
Nakuru	20,017	82,070	161	0.16	1.93
All Other Areas	31,867	129,056	141	0.22	2.70
TOTAL	344,706	1,435,023	408	7.03	84.36

of the 284,738 privately owned units, 64,218 or 23 per cent were peri-urban mainly shanty-type units. Occupants reported an average of 4.16 persons per household so that privately owned units were accommodating 1,184,682 persons of which some 250,000 were living in shanty-type units. Urban and peri-urban units had an average of 4.14 and 4.23 occupants per unit. Poor

building materials and a lack of sanitation and other amenities like water and lighting are the main characteristics of shanty-type dwelling units. Publicly-owned dwelling units accounted for 17 per cent of the total stock of dwelling units with a reported average of 4.17 persons per unit. Nairobi and Mombasa accounted for 79 per cent of the total dwelling units in the urban areas and all other urban centres contained only 21 per cent of the total housing stock.

15.34. The average monthly rent for privately owned permanent dwelling units was K.Sh. 564 while for the peri-urban dwelling unit it was K.Sh.72. The average monthly rent of K.Sh. 193 for publicly owned dwelling units when compared with K.Sh. 564 for permanent private dwellings means that government, local authority and public corporation housing is highly subsidised. Table 15.18 shows average monthly rent by

AVERAGE MONTHLY RENT BY SIZE OF DWELLING UNIT, 1978-1979

Table 15.18 *KSh.*

	One Roomed Dwelling unit		Five or More Roomed Dwelling Unit	
	1978	1979*	1978	1979*
Nairobi	129	129	4,539	4,985
Mombasa	98	106	1,011	1,011
Kisumu	98	106	1,425	1,565
Nakuru	88	95	1,230	1,230

*1979 figures are estimated from Average Rent Index_Growth.

size of dwelling unit in the four main urban centres of the country. The monthly rent charged for a 5-roomed dwelling unit in Nairobi, increased by 10 per cent between 1978 and 1979 while in the three other towns the average monthly rent for a one-roomed unit rose by about 8 per cent between 1978 and 1979. Total rent collected or imputed in 1979 amounted to K£84.36 million of which K£77.40 million accrued for privately owned properties.

Demographic Trends

15.35. The population census conducted in August 1979 counted 15,322,000 persons. This total is still provisional until the final results from the computer tabulations are available. Even as it stands it indicates an increase of 40 per cent from the total of 10,943,000 counted in the census conducted in August 1969. The apparent annual growth rate over this ten year period was 3.4 per cent a year though it is anticipated when final adjustments have been effected that the current growth rate may range upto a figure of 3.9 per cent. Such a growth rate would indicate a young population with a high proportion, probably approaching 50 per cent, under 15 years of age. This growth rate is a very high one and has few equals amongst African countries.

It has important implications for the economy, government expenditure, the facilities required for education and health services and future employment.

15.36. Apart from raising the numbers in the eligible school age groups and increasing the labour force as children finish their education, high rates of population growth mean that the increase in agricultural production must be raised to keep pace with the increase in the number of mouths to be fed. In the 1970s food production has increased by only half the rate of population growth. While the population has been becoming younger the fact that a child needs less food than an adult until he reaches 10 to 12 years has meant that it is only recently that shortages have begun to appear. In order to rectify this situation and to stay ahead of demand a particular efforts is needed to raise food production in order to eliminate current shortages and to be able to meet future requirements from this rapidly growing population.

GPK 698—3,500—4/80