



REPUBLIC OF KENYA

# *ECONOMIC SURVEY*

1978



*Central Bureau of Statistics  
Ministry of Finance and Planning*

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## **ECONOMIC SURVEY, 1978**

### **CHAPTER 0—CURRENT APPRAISAL AND OUTLOOK**

The recovery in the growth rate of the Kenyan economy, which started in 1976, continued into 1977. The GDP in 1977 grew by 7.3 per cent at constant prices—the highest growth rate since 1968, when GDP had risen by 7.8 per cent. When the growth in GDP of 7.3 per cent is further compounded by the effects of the favourable change in terms of trade, the increase in real resources in 1977 amounts to 13.8 per cent. The buoyancy in terms of trade yielded a surplus for the first time in 13 years on the current account of the balance of payments which along with the increase in capital receipts, contributed to the rise in the overall surplus in balance of payments, from K£35 million in 1976 to K£112 million in 1977. As a result the foreign assets of the country rose from a total of K£114 million in December 1976, to K£209 million in December 1977. The upward trend in capital formation first noted in 1976 after the decline of the past few years, was continued in 1977 with a significant increase of K£97 million. In 1972 prices this amounts to an increase of K£30 million. At 21.2 per cent of total GDP, this level of investment is an insurance for future growth of the economy.

0.2. The year was not, however, such a successful one on the international scene since world output increased at only the same rate as in 1976 and the volume of world trade did not grow as fast. Forecasts suggest that world production and world trade in 1978 will not grow at a higher rate than the growth of 4 to 5 per cent that occurred in 1977. Inflation in most of the developed countries has slowed down, but unemployment remains at a high level. There is, however, no indication of a generally agreed international viewpoint emerging on economic policy that will ensure a sustained growth. In particular the outcome of the North-South dialogue has so far been a disappointing one for the developing countries. Despite many proposals and meetings there are no indications of any general agreement on many crucial issues being considered in this dialogue. Since the recovery of the Kenyan economy is due to the high prices and receipts for its coffee and tea exports, the need for some progress in this dialogue, particularly in respect to more effective commodity agreements including the setting up of buffer stocks has become all the more apparent.

0.3. Fortunately, the movement of relative prices in international trade has worked to Kenya's advantage in 1977. The terms of trade in 1977 shifted for the first time above the 1972 level. Much of the advantage, however, is likely to be a short-term one, since it was mainly the result of substantial temporary increases in the prices of coffee and tea. Indeed a significant fall back in prices has already occurred though the present prices seem unlikely to sink back to their pre-1976 levels.

0.4. The effects of the high export incomes in 1977 were transmitted to the rest of the economy quickly, either directly or by the expectations they generated. There was an upsurge in activity in practically all fields, and a confident belief in recovery spread through the economy. In particular the Government seized the opportunity to ensure, through greatly increased expenditures and revenues, that part of the gain in its receipts would find its way into development and an improvement of current services.

0.5. The immediate impact of the boom in prices of coffee and tea and the increase in their production was seen in the balance of visible trade in which substantial surpluses were registered in the first and second quarters of 1977. These surpluses were changed into deficits in the third and fourth quarters of the year by the ensuing increases in imports and the decline in exports. During 1977 as a whole, exports and imports in value terms increased by 45.4 and 30.6 per cent respectively over 1976 levels. As a result the deficit of K£61.8 million in merchandise account in 1976 was reduced to K£29.6 million in 1977, while for the current account as a whole the deficit of K£35 million in 1976 was transformed into a surplus of over K£24 million in 1977. Net inflows of capital also increased from K£71 million in 1976 to K£90.4 million in 1977, as a result of the increase in the funds borrowed by Government to establish institutions to succeed the East African Community corporations on the latter's dissolution.

0.6. The favourable movement in balance of payments resulted in a substantial rise in foreign reserves which rose from K£114 million at the end of 1976 to K£209 million at the end of 1977—having reached a peak of over K£230 million in the third quarter of the year. As a consequence there was an excess of liquidity during most of 1977, and indeed the liquidity ratio had risen to over 37 per cent by the middle of the year. The Government raised the required legal minimum for the liquidity ratio from 18 to 20 per cent at the beginning of 1978; and by further calling on the commercial banks to take up nearly K£20 million of Government stock, the effective liquidity ratio in fact went up to 22 per cent. Since the actual liquidity ratio had by December 1977 come down to 28 per cent, the difference between the actual and effective ratios was reduced to 6 per cent; an average which has been common in recent years.

0.7. Nevertheless money supply did increase substantially by 46.8 per cent and there was continuing inflation during the calendar year 1977. It is estimated that the rate of inflation was about 15 per cent. Although this is a lower rate of inflation than that which prevailed in a number of other developing countries, the inflationary pressures had a particularly sharp impact on the property market. Rents and property values both went up substantially.

0.8. Expenditure and revenue of Central Government increased very considerably. This was partly due to the Government's intention, expressed in the 1977 Budget to ensure that the windfall gains of export prices should be used for development purposes. The increase in expenditure, however, was also reinforced by the Government's decision to spend more on defence and by the need to set up successor organizations to replace those which had been run by the East African Community. The Government expenditure in 1977/78 is likely to rise by about 49 per cent above the 1976/77 level, while revenue is estimated to increase by about 50 per cent over the same period. After financing the overall deficit of about K£134 million the Government will still have secured an increase of about K£12 million in its cash balances. The Government has increased expenditure on all its activities, but most significant increases have occurred in expenditure on defence, agriculture, water development, and transport services. In fact development expenditure on agriculture and transport has more than doubled and that on water tripled in 1977/78.

0.9. As already emphasized. 1977 was a very good year for agriculture. The earnings of producers of coffee doubled and of producers of tea tripled, compared to their receipts in 1976. Producers of sugar, milk and maize also had a good year but the production of wheat, pyrethrum and sisal was disappointing. while the meat industry encountered severe difficulties of supply—partly because of the price system which was not acceptable to the producers. Meat prices were raised in early 1978 and should resolve some of these difficulties. The prices of all crops, except rice paddy, also went up in 1977. As a result there was a very substantial improvement in the terms of trade of the agricultural sector in relation to the rest of the economy. The large increase of 72 per cent in agricultural money incomes had an even more significant impact on activity in the rest of the economy, than may be apparent from the increase of 7.5 per cent in the contribution of agriculture sector to GDP at constant prices.

0.10. The manufacturing sector also had another very successful year with a 15 per cent increase in the volume of output in 1977. Nearly all sections of this sector registered increases in production and particularly noticeable gains of 20 per cent or more were recorded in the output of clay and glass products, transport equipment, clothing, textiles, canned fruit and vegetables, cooking fat. beverages, plastic products, electrical machinery and paper and paper products. The closure of the border with Tanzania may have reduced the rate of growth but did not prevent it. Many industries found alternative export markets, and in any case the increase in domestic demand more than compensated for the loss of the Tanzania market.

0.11. Activity in building and construction sector showed some recovery in 1977 but it still remained relatively depressed. This is partly due to time lags between the completion of a few large scale projects and the initiation of work on others, and partly due to the gap in the time when capital

becomes available and the initiation of construction work. This sector is expected to show much better results in 1978. Work is now well underway on rural water supplies and a few large construction projects like the Sabaki and Tana river projects; and there has also been a large increase in the number and value of building plans approved by municipal councils.

0.12. The commerce sector benefited from the higher throughput of imports, exports, and home produced goods. The tourist component of the restaurants and hotels sector also appears to have done reasonably well although the number of business visitors decreased substantially. This decline, which was partly the result of the closure of the border by Tanzania, reduced the numbers of visitors to Nairobi. The level of activity generated by tourism at the coast, however increased. The overall decline of 3 per cent in the number of non-East African visitors was also partly off-set by an increase in average stay during 1977. Earnings from tourism in 1977 were estimated at K£48 million as compared to K£41 million in 1976.

0.13. The increased volume of goods also raised the output of the transport and storage sector, but the sector as a whole registered a decline in real terms in 1977 because of the break in the continuity of air transport and related services following the collapse of the East African Airways Corporation. By the end of the year Kenya Airways Limited was fully operational and it is expected that 1978 will be a better year. The closure of the Tanzania border also reduced long distance road haulage operations not only to that country but also to countries further south.

0.14. Consumption of energy went up by 4 per cent in 1977. Most of this increase occurred in consumption of electricity. The output of electricity increased by over 10 per cent in 1977. The good and enhanced river flows contributed to increases in production of hydro-electricity. There was no change in throughput of the oil refinery between 1976 and 1977. The adverse balance on the oil account amounted to K£32 million in 1977 compared to K£34 million in 1976. Consumption of motor spirit, kerosene and light diesel oil increased but that of jet-turbo fuel and heavy oil went down.

0.15. Numbers in paid employment increased by 5.3 per cent in 1977. Numbers employed in the private sector increased by 5.1 per cent and in the public sector by 5.6 per cent. The increase was spread over all sectors except for mining and quarrying which had a poor year in 1977. In a geographical context the largest relative change occurred in Western Province where the number of those in wage employment went up by over 20 per cent mainly due to the growth of the sugar industry. The proportion of female employees increased from 16.2 per cent in 1976 to 17.1 per cent of the total in 1977 while that of non-citizen employees declined further from 2.2 per cent to only 1.7 per cent over this period. The total number of non-citizen employees had fallen to 15,400 by 1977.



0.16. Average wage earnings per employee went up by nearly 8 per cent in current terms compared with an average increase of 12.8 per cent in consumer prices. Real earnings as a result declined by an average of 4.3 per cent in 1977. Since average earnings in the private sector had gone up by 9 per cent, compared to an increase of 6.8 per cent in the public sector, the fall in real earnings in the public sector was larger than the decline in the private sector.

### **Outlook for 1978**

0.17. The prices of coffee and tea have already fallen appreciably from the high level of 1977. Producers appear to be acting to try to ensure that the falls are not overprolonged or too drastic and present indications are that the average prices in 1978 will fall by about 30 per cent below the 1977 level. Also it is forecast that while there will be some increase in the production of tea in Kenya in 1978, that of coffee, due to adverse effects of excessive rain, will fall.

0.18. However, apart from adverse effects on coffee production, the good rainfall in 1978, will help agriculture production. Growth in output of manufacturing sector will also continue and there are signs of a large recovery in construction activity. The transport and communications sector too is anticipated to have a better year in 1978, as operations of the Kenyan corporations which have been set up to succeed the East African Community corporations became more effective, and benefit from the ripple effect of a better level of confidence in the economy as a whole. It is forecast that the economy may register a growth rate of 5.5 to 6.5 per cent in GDP at constant prices in 1978.

### **Longer Term Prospects**

0.19. The pressure of the unemployed on job vacancies will continue to be intense in the foreseeable future. The size and intractable nature of the problem derives from the pressure of the growing population on land and employment opportunities. It is not surprising therefore that the provision of employment has become a matter of paramount importance. The creation of jobs in industry, however, requires substantial capital investment. In some recently approved projects, the cost of capital investment per job has ranged from K£300—when an extension of an existing factory was involved to K£15,000. These costs are one reason for emphasis on the development of agriculture to provide a majority of the school leavers with gainful employment. However, the required development of marginal and semi-arid lands, as population pressures build up also calls for capital investment on an increasing scale.

0.20. The magnitude of the problems to be faced can be appreciated by noting that even with the benefits of particularly favourable export prices in much of 1976 and in 1977, the rates of growth of the GDP at constant

prices were respectively 6.1 and 7.3 per cent, while the Plan target was 7.4 per cent per annum. In addition unless the growth rate of imports can be kept at moderate levels, balance of payments constraints will act as an effective straitjacket on the growth rate of the economy. Even with the attention now being given, the earnings from exports of items other than coffee and tea will have to grow very rapidly indeed to replace the windfall gains which accrued from exports of coffee and tea in 1977.

0.21. Thus the problems facing Kenya in the foreseeable future are complex and were summed up by the Minister for Finance and Planning in the speech given at "The Kenya We Want" conference, as marking a transition from the era of soft to hard options. The era of soft options he said had now passed and Kenya was entering a period of hard options. The situation was exemplified by stating that the contrasts included Kenyanization of the public sector which was a soft option vis-a-vis the Kenyanization of the private sector—a hard option: re-distribution of scheduled areas vis-a-vis raising agricultural productivity and the reclamation of marginal lands: import substitution vis-a-vis diversification of industry and its integration with agriculture: and extension of basic education facilities vis-a-vis generating employment opportunities and modifying the educational system to meet future needs.

## CHAPTER I—THE INTERNATIONAL SCENE

The growth in world output and trade in 1977 appears to have been lower than expected. The rise in GDP in the OECD countries was around 4 per cent and world figures might be slightly higher. The volume of world trade increased by about the same proportion, a more normal rate of increase than the exceptional figure of 11 per cent in 1976 which followed the recovery from the 1975 recession.

1.2. Thus after the 1975 recession the world economy recovered fairly strongly in 1976 and then made further advances in 1977 but in general it is still true that the losses of the traumatic year 1975 and the changed trading patterns following the oil price rise in 1974 are still influencing developments. Inflation in the industrial countries is now much lower than in the period 1974 to 1976 and there is some evidence that these countries are beginning to think more seriously about growth policies to be able to reduce unemployment. However, the emphasis is still on caution.

1.3. The developing countries would like to see higher real growth rates in the developed world because the links in the international trading system would assure them of better markets for their products, and provide better prospects for the continued inflow of foreign resources required to maintain or increase domestic GDP growth rates. However, despite verbal utterances and steps being taken to convene another economic summit of the world's major developed market economies, it seems as if 1978 will be a year in which the growth of the world economy will not be any better than that achieved in 1977.

1.4. As regards the developing countries, their growth prospects should also be similar or slightly less in 1978 as compared with 1977 but much will depend on the fortunes of their agriculture based industries and the likelihood of better prices for their mineral exports. Concerted action on an international scale continues to be required with developing countries working together to try to achieve the new international economic order which has been under negotiation for the last few years. Progress to date on this issue has been slow and very unsatisfactory and present indications do not give rise to optimism in a speeding up of the results of negotiations.

1.5. Under the umbrella of the emerging international economic order much has been done on individual commodity agreements or arrangements. However, the current emphasis is to attempt to make progress on the common fund for commodities. Negotiations to date have run into difficulties over the financing of measures other than buffer stocks within the framework of international commodity arrangements; financing measures outside international commodity arrangements, and financing measures for commodities without international arrangements.

1.6. The current negotiations under GATT to achieve a more equitable trading system for the developing countries may achieve some reductions in tariffs. However, present indications are that protective mechanisms in the developed countries will not operate through the customs tariff but through an extension of the already existing quota arrangements and the imposition of surcharges, advance deposits, anti-dumping duties and such methods as "voluntary" restrictions on export volumes imposed in the producing countries at the request of customer countries.

1.7. The development of inter-African trade is of particular importance to Kenya and other African countries with a high rate of growth in and potential for manufacturing industry. The recent Lusaka talks on the establishment of a preferential trade area involving 16 eastern and southern African countries are an encouraging indicator of potential progress in this direction.

1.8. Kenya benefitted to a substantial degree from the sharp rise in prices of coffee and tea from the middle of 1976 but the coffee price increases were outside the range indicated in the international coffee agreement which came into force in October, 1976. It is difficult to see the real benefits of an agreement such as this which is inoperable when prices rise to the extent that has occurred. The fall back in prices of both coffee and tea in 1978 will have some adverse impact on the Kenya economy, particularly in 1979.

1.9. Kenya is one of the countries covered by the Lome Convention between the EEC and the African, Caribbean and Pacific countries. One of the features of this convention apart from the creation of special aid funds, is the STABEX scheme for the stabilization of export earnings of particular products. Such a scheme may help compensate Kenya in the future for some of the deficiencies in international commodity agreements of which she is a signatory.

1.10. Some progress has been made over debt repayments. Some creditor countries have been or are in process of cancelling existing debts owed to them by developing countries but the countries concerned are generally those with relatively low outstanding loans. More generally there has been acceptance of the principle of making future aid payments in grant form especially to the poorer developing countries. Rescheduling of debt arrangements have also been made in a number of cases. A new supplementary facility—commonly called the Witteveen facility, was agreed by the IMF in 1977 and expands the resources available to help countries with balance of payments problems.

1.11. In line with the rise in primary commodity prices the terms of trade of the developing countries—excluding major oil exporters, improved by about 8 per cent in both 1976 and 1977 but these terms of trade are currently

expected to worsen in 1978 as primary commodity prices have not increased or are expected to fall while import prices seem likely to be higher than in 1977. One complicating factor in this prognosis is the instability of exchange rates of several of the major world currencies. The fall in the exchange value of the US dollar against the Japanese Yen, the West German Mark and the Swiss Franc was fairly substantial in the first quarter of 1978 and as pricing of most internationally traded primary commodities is denominated in the US dollar, any further falls could trigger off a whole series of unexpected price changes.

1.12. At a meeting in December, 1977, OPEC countries froze the price of crude petroleum until mid-1978 when it was forecast a rise of 5 per cent would be effected. However, by early 1978 there was a world glut of oil helped by greatly increased production from the North Sea, Alaska and Mexico. There were also the adjustments being made to the value of the US dollar discussed above. Both these movements may result in continued restraint over price rises for crude oil. There is also an increasing desire among oil producers to price their product in SDR's rather than the US dollar.

1.13. The index of commodity export prices of primary producers is given in Table 1.1. In 1977 there was a fairly substantial increase in the all commodities index up to the second quarter of the year but then a fall occurred in the last two quarters. The average for the year at 238.1 compares with 196.3 for 1976. In the first quarter of 1978 prices were generally below the average for the same period of 1977 but then there was some strengthening associated to a considerable extent with the weakness of the US dollar.

#### Prices of Primary Producers' Commodity Exports

Indices, 1970 = 100

Table 1.1

	Food Products	Agricultural Industrial Materials	Metals and Minerals	All Commodities
1976—				
1st Quarter	192.6	184.9	143.5	176.7
2nd Quarter	218.4	200.1	156.5	196.2
3rd Quarter	224.3	208.7	162.1	202.7
4th Quarter	241.4	214.3	154.0	209.7
1976 Year	219.1	202.0	154.0	196.3
1977—				
1st Quarter	300.7	211.7	167.2	242.9
2nd Quarter	326.3	219.6	162.6	253.0
3rd Quarter	288.4	210.4	158.5	231.9
4th Quarter	274.1	203.7	163.9	225.2
1977 Year	297.1	213.9	163.0	238.1

1.14. Kenya's two most important primary commodities, coffee and tea, showed a similar trend as in the all commodity index with sharp increases to the second quarter of 1977 followed by a substantial fall back in the second half of the year. One IMF index based on dollar quotations shows an overall rise of 61 per cent for coffee in 1977 but the average price for the last quarter of 1977 was only 70 per cent of that of the first quarter of the year. For tea the average increase in 1977 was 73 per cent but prices were 12 per cent less in the last quarter of the year than in the first and 32 per cent below those of the second quarter. Current trends for 1978 indicate some continuing fall in the prices of these commodities or at best stability at about the level of the last quarter of 1977.

1.15. In 1977 the most favoured solution to the world's moderate rate of economic growth was provided by the proponents of the locomotive theory. It was maintained that the three large western economies- USA, West Germany and Japan—should speed up their domestic growth rates thereby stimulating the economies of countries elsewhere in the world. The caution shown in West Germany and Japan together with speculative pressures on their currencies vis-a-vis the USA prevented this policy being put into full effect. In 1978 the emphasis appears to have shifted in favour of a concerted effort by a substantial number of countries. Whether such concerted efforts will be any more successful in 1978 remains to be seen. However, there appears to be a need for some change in emphasis whereby an increased resource flow to the developing countries could in itself offer a means of achieving a somewhat faster world economic growth rate.

1.16. Thus the unsatisfactory result of efforts to stimulate growth in 1977 is already having some impact on the forecaster's anticipations for 1978. Presently it is estimated that OECD countries will only attain a rate of growth in GDP of about 4 per cent accompanied by a growth in world trade of some 5 per cent. The year 1978 thus seems likely to be one in which there will again be only a moderate growth of GDP and external trade in the world as a whole. Inflation may be somewhat less than in 1977 but unemployment in the major economies will only show a marginal improvement.

## CHAPTER 2—THE DOMESTIC ECONOMY

The recovery of the growth rate of Kenya's economy continued in 1977. There had been an encouraging upward movement in 1976, due primarily to an improvement in the terms of trade and the increase in coffee prices. This improvement continued in 1977, further helped by rises in tea prices, and for the first time the terms of trade registered an improvement above the 1972 level. The improvement in the terms of trade reached its peak in April of the year after which prices began to fall back. GDP at constant prices rose by 7.3 per cent in 1977 compared with the growth rate of 6.1 per cent in 1976. This is the highest rate of growth since 1968 when GDP rose by 7.8 per cent. When the growth in GDP of 7.3 per cent is further compounded by the effects of the favourable change in terms of trade, the increase in real resources in 1977 amounts to 13.8 per cent. Since the increase in GDP at current prices, in 1977, was 28.3 per cent the deflation factor between current and constant prices amounted to 19.6 compared to 15.7 per cent in 1976.

2.2. The Government had in the middle of 1977 proposed a substantial increase in its development programme, which will have absorbed some of the increase in real resources noted above. The full measure, of the increase in Government's capital expenditure programme for 1977/78 will, however, only become apparent in 1978. The consumption of resources by the entire public sector increased by 26 per cent in 1977, compared to a rise of 28 per cent in GDP at current market prices. The proportion of GDP, consumed by the public sector as a result declined slightly from 17.3 per cent in 1976 to 17.1 per cent in 1977. Also over this period the contribution of the public sector to GDP at factor cost in current prices fell from 24.2 per cent of the total in 1976 to 21.9 per cent in 1977.

2.3. The surplus in the current account of the balance of payments—for the first time in the past 13 years, plus an increase in capital receipts in 1977, contributed to the rise in the overall surplus in balance of payments, from K£35 million in 1976 to K£112 million in 1977. A large part of this increase was registered in the Government account and has been utilized in financing its expenditure and the setting up of the successor organizations to take over from the East African Community corporations.

2.4. All sectors of the economy benefited from the stimulus provided by the increase in export receipts which accrued to the agriculture sector in 1977. The only decline was registered in the real product of transport.

storage and communications sector, and is accounted for by the collapse of the East African Airways Corporation in the first quarter of 1977. The respective increases of 12.3 per cent, and 15 per cent in real terms, in production of monetary agriculture, and manufacturing sectors boosted the overall increase in the GDP of the monetary economy to 8.3 per cent in 1977.

2.5. Agriculture generally had a good year in 1977 and its contribution to the monetary economy at current prices rose from K£219 million in 1976 to K£379 million in 1977, an increase of 72 per cent, after having recorded an increase of 62 per cent between 1975 and 1976. The terms of trade of the agriculture sector *vis-a-vis* the rest of the economy shifted in its favour by a further 25.6 per cent in 1977, after an increase of 37.5 per cent in 1976. Overall there has been a positive shift of 52 per cent in terms of trade in favour of the agriculture sector compared with 1972, all of it occurring in the last two years.

2.6. This relative improvement in the real incomes of the farmers was not repeated for wage earners in general in the economy. As noted later in Chapter 5, real average earnings fell by 4.3 per cent in 1977. Thus relative increase in the share of earnings of the farmers was accompanied by a reduction of the share of wages in total factor incomes.

2.7. As a result of the overall increase in total GDP at current prices, per capita GDP increased to K£113 in 1977, compared with K£91.2 in 1976 and K£76.7 in 1975. At 1972 prices, however, the rise amounted to 3.7 per cent from K£55.6 in 1976 to K£57.7 in 1977. The later average when compared with an average per capita GDP of K£54.5 in 1972 indicates an indifferent growth record in relation to the increase in population over this five-year period.

2.8. Capital formation increased substantially at current prices by over K£95 million between 1976 and 1977. In constant prices the volume of capital formation increased by 20.6 per cent, while its proportion of total GDP at constant prices went up from 18.8 per cent in 1976 to 21.2 per cent in 1977. Especially large increases were recorded in capital formation in agriculture, one of 41 per cent, and transport—30 per cent. Much of the capital formation occurred in transport equipment and in machinery and other equipment. The volume of investment in transport equipment went up by 58.1 per cent and in machinery and other equipment by 23.2 per cent in 1977.



## GROSS DOMESTIC PRODUCT, 1974 - 1977

Table 2.1

K£million

	CURRENT PRICES				CONSTANT (1972) PRICES			
	1974	1975	1976	1977*	1974	1975	1976	1977*
<b>A. Semi-Monetary Economy</b>								
Agriculture, Forestry and Fishing	137.05	181.04	199.99	232.49	118.76	119.41	116.47	120.31
Building and Construction	14.79	19.35	21.86	25.83	11.31	11.54	11.86	12.25
Water	5.28	6.78	8.90	11.11	5.15	5.25	5.32	5.51
Ownership of Dwellings	18.81	25.39	29.36	35.89	14.12	14.73	15.35	15.97
<b>Total Semi-Monetary Economy</b>	<b>175.93</b>	<b>232.56</b>	<b>260.11</b>	<b>305.32</b>	<b>149.34</b>	<b>150.93</b>	<b>149.00</b>	<b>154.04</b>
<b>B. Monetary Economy</b>								
<b>1. Enterprises and Non-Profit Institutions</b>								
Agriculture	123.08	135.39	219.64	378.58	96.15	96.21	100.04	112.32
Forestry	5.42	5.93	6.33	7.18	4.45	4.46	4.46	4.88
Fishing	1.45	1.65	2.36	2.64	1.11	1.11	1.27	1.32
Mining and Quarrying	3.14	3.32	4.15	4.64	2.90	2.98	3.41	3.53
Manufacturing	119.07	127.13	167.41	205.38	94.50	94.31	111.80	128.61
Electricity and Water	10.43	13.20	14.20	21.64	10.10	11.20	13.14	14.25
Building and Construction	43.39	44.39	46.20	51.98	32.02	30.87	29.44	31.22
Wholesale, Retail Trade, Restaurants and Hotels	115.87	121.86	144.46	190.36	71.67	66.24	71.72	79.41
Transport, Storage and Communications	53.73	60.25	69.15	69.28	41.94	40.67	44.91	42.36
Finance, Insurance, Real Estate and Business Services	46.80	54.67	68.03	78.49	38.39	40.64	45.79	48.21
Ownership of Dwellings	35.39	40.40	46.13	53.60	29.39	29.98	29.98	30.58
Other Services	19.33	21.69	24.84	27.88	16.49	17.62	17.90	19.49
<b>Total</b>	<b>577.10</b>	<b>629.88</b>	<b>812.90</b>	<b>1,091.65</b>	<b>439.11</b>	<b>435.99</b>	<b>473.86</b>	<b>516.18</b>
<b>2. Private Households (Domestic Services)</b>	<b>7.27</b>	<b>8.86</b>	<b>10.93</b>	<b>14.04</b>	<b>6.45</b>	<b>7.42</b>	<b>8.52</b>	<b>9.80</b>
<b>3. Producers of Government Services</b>								
Public Administration	34.24	38.30	43.08	..	31.92	32.31	32.66	..
Defence	7.43	8.51	9.63	..	5.63	6.08	6.57	..
Education	55.00	66.49	76.91	..	49.32	55.05	59.53	..
Health	13.93	15.24	17.43	..	12.26	13.29	13.41	..
Agricultural Services	8.73	9.65	11.41	..	8.44	9.03	9.94	..
Other Services	15.67	18.53	20.45	..	15.01	16.06	16.78	..
<b>Total</b>	<b>135.00</b>	<b>156.72</b>	<b>178.91</b>	<b>209.20</b>	<b>122.58</b>	<b>131.82</b>	<b>138.89</b>	<b>146.78</b>
<b>Total Monetary Economy</b>	<b>719.37</b>	<b>795.46</b>	<b>1,002.74</b>	<b>1,314.89</b>	<b>568.14</b>	<b>575.23</b>	<b>621.27</b>	<b>672.76</b>
<b>Total Gross Product at Factor Cost (Monetary and Semi-Monetary)</b>	<b>895.30</b>	<b>1,028.02</b>	<b>1,262.85</b>	<b>1,620.21</b>	<b>717.48</b>	<b>726.16</b>	<b>770.27</b>	<b>826.80</b>
<b>Gross Domestic Product per Capita</b> K£	<b>69.34</b>	<b>76.72</b>	<b>91.20</b>	<b>113.01</b>	<b>55.57</b>	<b>54.19</b>	<b>55.63</b>	<b>57.67</b>

\*Provisional

## GROSS DOMESTIC PRODUCT: PERCENTAGE RATES OF GROWTH AND THE PLAN TARGETS, 1972-1977

Table 2.2

Percentage

	CURRENT PRICES				CONSTANT (1972) PRICES				Plan Targets
	1974-1975	1975-1976	1976-1977*	1972-1977* Cumulative	1974-1975	1975-1976	1976-1977	1972-1977* Cumulative	
A. SEMI-MONETARY ECONOMY									
Agriculture, Forestry and Fishing	32.1	10.5	16.3	15.0	0.5	-2.5	3.3	0.8	..
Building and Construction	30.8	13.0	18.2	19.1	2.0	2.8	3.3	2.7	..
Water	28.4	31.3	24.8	17.3	1.9	1.3	3.6	1.9	..
Ownership of Dwellings	35.0	15.6	22.2	22.6	4.3	4.2	4.0	4.2	..
TOTAL SEMI-MONETARY ECONOMY	32.2	11.8	17.4	16.1	1.1	-1.3	3.4	1.4	3.0
B. MONETARY ECONOMY									
1. Enterprises and Non-Profit Institutions									
Agriculture	10.0	62.2	72.4	32.0	0.1	4.0	12.3	3.5	6.7
Forestry	9.4	6.7	13.4	15.1	0.2	—	9.4	6.5	9.0
Fishing	13.8	43.0	11.9	15.9	—	14.4	3.9	1.0	5.0
Mining and Quarrying	5.7	25.0	11.8	15.8	2.8	14.4	3.5	9.6	16.9
Manufacturing	6.8	31.6	22.7	21.4	-0.2	18.5	15.0	10.5	10.2
Electricity and Water	26.6	7.6	52.4	19.3	10.9	17.3	8.4	9.9	9.0
Building and Construction	2.3	4.1	12.5	7.7	-3.6	-4.6	6.0	-2.7	7.2
Wholesale, Retail Trade, Restaurants and Hotels	5.2	18.5	31.8	23.5	-7.6	8.3	10.7	3.7	7.2
Transport, Storage and Communications ...	12.1	14.8	0.2	12.6	-3.0	10.4	-5.7	2.1	7.2
Finance, Insurance, Real Estate and Business Services	16.8	24.4	15.4	20.1	5.9	12.7	5.3	8.9	7.2
Ownership of Dwellings	14.2	14.2	16.2	14.5	1.0	1.0	2.0	2.3	
Other Services	12.2	14.5	12.2	13.7	6.9	1.6	8.9	5.9	
TOTAL	9.1	29.0	34.3	22.2	-0.7	8.7	8.9	5.1	..
2. Private Households (Domestic Services)	21.9	23.4	28.5	22.3	15.0	14.8	15.0	13.8	7.2
3. Producers of Government Services									
Public Administration	11.9	12.5	..	..	1.2	1.1	..	..	..
Defence	14.5	13.2	..	..	8.0	8.1	..	..	..
Education	20.9	15.7	..	..	11.6	8.1	..	..	..
Health	9.4	14.4	..	..	8.4	0.9	..	..	..
Agricultural Services	10.5	18.2	..	..	7.0	10.1	..	..	..
Other Services	18.3	10.4	..	..	7.0	4.5	..	..	..
TOTAL	16.1	14.2	16.9	14.5	7.5	5.4	5.7	6.7	10.1
TOTAL MONETARY ECONOMY	10.6	26.1	31.1	20.7	1.2	8.0	8.3	5.6	8.4
TOTAL GROSS PRODUCT AT FACTOR COST	14.8	22.8	28.3	19.7	1.2	6.1	7.3	4.7	7.4
	10.6	18.9	23.9	15.7	-2.5	2.7	3.7	1.2	..

### **Sectoral Analysis of Production**

2.9. As shown in Tables 2.1 and 2.2 the total contribution of the agriculture sector to GDP at current prices rose by a further 45 per cent in 1977, after an increase of 32.2 per cent in 1976. At constant prices, the contribution of the agriculture sectors to GDP went up by an equivalent of 7.5 per cent in 1977. For the first time in 1976, and then in 1977, monetary agriculture's contribution at current prices to total value added was higher than the contribution from semi.monetary agriculture.

2.10. The increase in the incomes of agriculture sector led to an increase in the production of the manufacturing sector. This sector recorded rates of growth at constant prices of 18.5 per cent in 1976 and 15.0 per cent in 1977, after particularly disappointing years in 1974 and 1975. Production of electricity and water and building and construction sectors, also went up by 8.4 per cent and 6.0 per cent respectively, in 1977, while commerce also had a good year resulting in an increase in GDP of wholesale and retail trade and hotels and restaurants of 31.8 per cent at current prices, which is equal to an increase of 10.7 per cent at constant prices. The output of the service sectors also rose in line with the buoyant economy.

### **Structure of the Economy**

2.11. Production accounts for the economy for 1976 and 1977 are set out in Table 2.3, while Table 2.4 details a percentage distribution of GDP at constant prices by the various sectors of the economy for the last few years. The relative share of the contribution of monetary economy has grown from 78 per cent of total GDP in 1972 to 81.4 per cent in 1977 due to the low rate of growth of the semi-monetary sector. Within the monetary economy manufacturing sector has increased its relative share from 11.9 to 15.6 per cent and the share of Government services has risen from 16.1 to 17.8 per cent, while most other sectors have declined in relative importance. In particular the importance of agriculture, forestry and fishing sectors when combined has declined from 32.6 per cent in 1972 to 29.0 per cent in 1977. If, however, measurement is made at current prices instead of constant prices, the commodity boom is seen to have raised the contribution of agriculture, forestry and fishing from 32.6 per cent of total GDP at current prices in 1972, to 33.9 per cent in 1976 and 38.3 per cent in 1977.

Table 2.3

## PRODUCTION ACCOUNTS, 1976-1977

K£million

	1976					1977*				
	Gross Output at approx. Basic Prices+	Inter-mediate Consumption	Gross Domestic Product at Factor CoSt			Gross Output at approx. Basic Prices+	Inter-mediate Consumption	Gross Domestic Product at Factor Cost		
			Total	Labour Costs	Operating Surplus**			Total	Labour Costs	Operating Surplus**
A. SEMI-MONETARY SECTOR										
B. MONETARY SECTOR	280.47	20.36	260.11	7.54	252.57	329.31	24.00	305.32	8.99	296.33
1. Enterprises and Non-Profit Institutions										
Agriculture										
Forestry										
Fishing	264.00	44.36	219.64	40.06	179.58	431.31	52.73	378.58	44.42	334.16
Mining and Quarrying	7.36	1.04	6.33	5.62	0.71	8.39	1.21	7.18	6.29	0.89
Manufacturing	2.61	0.25	2.36	0.65	1.71	2.95	0.31	2.64	0.74	1.90
Electricity and Water	11.69	7.54	4.15	1.79	2.36	13.56	8.92	4.64	2.00	2.64
Building and Construction	809.91	642.50	167.41	70.83	96.58	1,034.62	829.24	205.38	89.33	116.05
Wholesale, Retail Trade, Restaurants and Hotels	28.01	13.81	14.20	5.23	8.97	35.37	13.73	21.64	5.63	16.01
Transport, Storage and Communications	162.22	116.02	46.20	37.82	8.38	184.25	132.27	51.98	42.91	9.07
Finance, Insurance, Real Estate and Business Services	248.56	104.10	144.46	65.47	78.99	326.28	135.92	190.36	84.91	105.45
Ownership of Dwellings	208.31	139.16	69.15	41.20	27.95	203.61	134.33	69.28	38.95	30.33
Other Services	88.67	20.64	68.03	32.07	35.96	102.88	24.39	78.49	37.25	41.24
TOTAL	50.92	4.79	46.13	—	46.13	59.17	5.57	53.60	—	53.6
TOTAL	61.64	36.80	24.84	17.15	7.69	77.41	49.52	27.88	19.93	7.95
2. Private Households (Domestic Services)	1,943.90	1,131.01	812.90	317.89	495.01	2,479.80	1,388.14	1,091.65	372.36	719.29
3. Producers of Government Services ..	10.93	—	10.93	10.93	—	14.04	—	14.04	14.04	—
TOTAL MONETARY SECTOR ..	257.85	78.94	178.91	177.05	1.86	324.07	114.87	209.20	205.47	3.73
TOTAL SEMI-MONETARY AND MONETARY SECTOR ..	2,212.68	1,209.95	1,002.74	505.87	496.87	2,817.91	1,503.01	1,314.89	591.87	723.02
	2,493.15	1,230.31	1,262.85	513.41	749.44	3,147.22	1,527.01	1,620.21	600.86	1,019.35

\*Provisional.

\*\*Including consumption of fixed capital.

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

# GROSS DOMESTIC PRODUCT

Percentage

Table 2.4

Sector Shares, at Constant (1972) Prices, 1974 - 1977

	1974	1975	1976	1977*
A. Semi-Monetary Economy				
Agriculture, Forestry and Fishing ..	16.6	16.4	15.1	14.6
Building and Construction	1.6	1.6	1.5	1.5
Water	0.7	0.7	0.7	0.7
Ownership of Dwellings	2.0	2.0	2.0	1.9
Total Semi-Monetary Economy	20.8	20.8	19.3	18.6
B. Monetary Economy				
1. Enterprises and Non-Profit Institutions				
Agriculture	13.4	13.2	13.0	13.6
Forestry	0.6	0.6	0.6	0.6
Fishing	0.2	0.2	0.2	0.2
Mining and Quarrying	0.4	0.4	0.4	0.4
Manufacturing	13.2	13.0	14.5	15.6
Electricity and Water	1.4	1.5	1.7	1.7
Building and Construction	4.5	4.3	3.8	3.8
Wholesale, Retail Trade, Restaurants and Hotels.	10.0	9.1	9.3	9.6
Transport, Storage and Communications.	5.8	5.6	5.8	5.1
Finance, Insurance, Real Estate and Business				
Services	5.4	5.6	5.9	5.8
Ownership of Dwellings	4.1	4.1	3.9	3.7
Other Services	2.3	2.4	2.3	2.4
Total	61.2	60.0	61.5	2.4
2. Private Households (Domestic Services)	0.9	1.0	1.1	1.2
3. Producers of Government Services				
Public Administration	4.4	4.4	4.2	..
Defence	0.8	0.8	0.9	..
Education	6.9	7.6	7.7	..
Health	1.7	1.8	1.7	..
Agricultural Services	1.2	1.2	1.3	..
Other Services	2.1	2.2	2.2	..
Total	17.1	18.2	18.0	17.8
Total Monetary Economy	79.2	79.2	80.7	81.4
*Provisional Total Gross Product at Factor Cost ( Monetary and Semi—Monetary)	100.0	100.0	100.0	100.0

## 2.12. Details on the contribution of the various tiers of the public sector

to GDP at current prices are noted in Table 2.5. Despite an increase of 16.2 per cent in the public sectors contribution to GDP between 1976 and 1977, there was a decline in its share of total GDP, between these two years, as noted above. Government services, as opposed to enterprise activities of the public sector account for about 59 per cent of its total contribution to GDP, while the share of parastatal bodies in total GDP of the public sector has declined from 56.8 per cent in 1976 to 53.6 per cent in 1977.

CONTRIBUTION OF THE PUBLIC SECTOR TO GROSS DOMESTIC PRODUCT, 1976 AND 1977

Table 2.5

K£million

	1976				1977*			
	Kenya Government	Local Authorities	Para-statal Bodies**	Total	Kenya Government	Local Authorities	Para-statal Bodies**	Total
MONETARY ECONOMY								
<i>Enterprises and Non-Profit Institutions</i>								
Agriculture	—	—	2.02	2.02	—	—	2.42	2.42
Forestry	1.87	—	—	1.87	1.92	—	—	1.92
Fishing	—	—	—	—	—	—	—	—
Mining and Quarrying	—	—	0.61	0.61	—	—	0.64	0.64
Manufacturing	0.76	0.64	25.54	26.94	0.95	0.64	27.63	29.22
Electricity and Water	2.26	3.40	8.52	14.18	2.09	4.36	15.16	21.61
Building and Construction	8.32	0.85	6.76	15.93	9.87	1.20	7.66	18.73
Wholesale, Retail Trade, Restaurants and Hotels	—	—	0.53	0.53	—	—	-0.22	-0.22
Transport, Storage and Communications	0.09	—	39.63	39.72	2.16	—	40.63	42.79
Finance, Insurance, Real Estate, Business Services	0.45	—	19.63	20.08	0.51	—	22.59	23.10
Ownership of Dwellings	0.70	2.96	0.59	4.25	0.81	3.44	0.69	4.94
Other Services	0.47	—	0.21	0.68	0.57	—	0.23	0.80
TOTAL	14.92	7.85	104.04	126.81	18.88	9.64	117.43	145.95
<i>Producers of Government Services—</i>								
Public Administration	35.67	3.91	3.50	43.08	—	3.91	1.95	—
Defence	9.63	—	—	9.63	—	—	—	—
Education	9.34	3.62	63.95	76.91	—	3.71	69.46	—
Health	16.04	1.28	0.11	17.43	—	1.36	0.06	—
Agricultural Services	10.10	0.21	1.10	11.41	—	0.24	0.75	—
Other Services	14.34	5.06	1.05	20.45	—	6.44	0.59	—
TOTAL	95.12	14.08	69.71	178.91	120.73	15.66	72.81	209.20
TOTAL PUBLIC SECTOR.	110.04	21.93	173.75	305.72	139.61	25.30	190.24	355.15

\*Provisional.

\*\*Including Public Companies.

### Resource Allocation

2.13. As shown in Table 2.6, there has been a significant turnaround from a sharp increase in the import surplus in 1974, into a substantial export surplus in 1977. In fact in 1977 the export surplus amounted to an equivalent of 3.6 per cent of GDP whereas in 1974 the import surplus had provided additional resources equivalent to 7.5 per cent of GDP. Respectively, 21.0 and 22.0 per cent of the total resources were translated into investment in 1976 and 1977, while public consumption accounted for 17.4 and 17.7 per cent, with the residual 61.6 and 60.4 per cent being used for private consumption. A continuing average proportion of 20 per cent or more of GDP needs to be translated into investment to maintain a growth rate of around 6 per cent in GDP in the future. This proportion has been achieved in all the years from 1973 to 1977 with an overall average of 22 per cent.

TOTAL USE OF RESOURCES, AT CURRENT PRICES, 1974-1977				
Table 2.6	K£million			
	1974	1975	1976	1977*
G.D.P. at Factor Cost	895.30	1,028.02	1,262.85	1,620.21
Of Which—				
Semi-Monetary	175.93	232.56	260.11	305.32
Monetary	719.37	795.46	1,002.74	1,314.89
+ Indirect Taxes	123.66	139.94	167.00	213.15
—Subsidies	1.83	0.81	0.77	0.69
=G.D.P. at Market Prices	1,017.13	1,167.15	1,429.08	1,832.67
+ Imports of goods and services	433.80	417.90	471.80	584.40
—Export of goods and services	357.20	356.90	478.00	649.70
=Import Surplus	+ 76.60	+ 61.00	-6.20	-65.30
Total Resources available for Domestic Investment and Consumption	1,093.73	1,228.15	1,422.88	1,767.37
Gross Fixed Capital Formation	203.76	212.54	291.99	388.69
Change in Stocks	+ 85.76	-13.76	+ 6.64	-0.72
Gross Investment	289.52	228.78	298.63	387.97
Public Consumption	176.51	212.81	247.15	312.51
Private Consumption	627.70	786.56	877.10	1,066.89
TOTAL CONSUMPTION	804.21	999.37	1,124.25	1,379.40

\*Provisional.

2.14. As per Table 2.7, there was a change in the distribution of factor incomes in 1977. The share of the semi-monetary economy fell from 20 Per cent of GDP at market prices in 1972, to 18.2 per cent in 1976 and 16.7 Per cent in 1977. During the period 1972 to 1977 the combined total of employees and the gross operating surpluses has on average accounted for

about two thirds of GDP at market prices. However, while in 1972 the remuneration of employees and operating surpluses amounted respectively to an equivalent of 41.4 and 25.9 per cent of GDP at market prices, in 1977 the percentages had altered to 32.3 per cent and 36.5 per cent respectively. The remuneration of employees in private enterprises has fallen from 26 per cent of GDP in 1972 to 20.3 per cent in 1977, and that of employees in Government services from 14.7 per cent to 11.2 per cent over the same period. The commodity boom in 1976 and 1977 aggravated this change in relative importance of wages and operating surpluses.

Table 2.7 Gross National Product at Current Prices, 1974-1977 *K£million*

	1974	1975	1976	1977*
FACTOR INCOMES—				
A. Semi-Monetary Economy	175.93	232.56	260.11	305.32
B. Monetary Economy—				
1. Remuneration of Employees:				
Enterprises	249.10	273.98	317.89	372.36
Private Households	7.27	8.86	10.93	14.04
Producers of Government Services	135.00	155.45	177.05	205.47
	391.37	438.29	505.87	591.87
2. Rental Surplus (including depreciation)	35.39	40.40	46.13	53.60
3. Other Operating Surplus (including depreciation)	292.61	316.77	450.72	669.43
Total Monetary Economy	719.37	795.46	1,002.74	1,314.89
Total Factor Incomes=Gross Domestic Product	895.30	1,028.02	1,262.85	1,620.21
Add: Indirect Taxes	123.66	139.94	167.00	213.15
Deduct: Subsidies	1.83	0.81	0.77	0.69
Gross Domestic Product at Market Prices	1,017.13	1,167.15	1,429.08	1,832.76
Add: Factor Incomes Received from Abroad	15.60	21.40	17.60	18.60
Deduct: Factor Incomes Paid Abroad	57.90	62.80	72.20	89.30
Gross National Product	974.83	1,125.75	1,374.48	1,761.97

\*Provisional.

#### Investment Account

2.15. Table 2.8 sets out figures on financing of gross capital formation in 1976 and 1977. In 1976 domestic savings provided for 85.9 per cent of the cost of capital formation and the remaining 14.1 per cent was financed by grants—2.4 per cent; and net borrowing from the rest of the world 11.7 per cent. In 1977 the total of domestic savings at K£400 million was more than enough to finance capital formation. Taking into account grants received amounting to K£12 million, the Kenya economy lent a total of K£24 million to the rest of the world. This was the difference between the



increase in Kenya's net foreign assets held abroad and the net inflow of capital. It is almost certain that the experience in 1977 will prove to be very exceptional as the conditions for a large balance of payments surplus seem unlikely to be repeated in the foreseeable future.

Table 2.8 BALANCE OF PAYMENTS AND CAPITAL FORMATION, 1976-1977 K£million

Gross Capital Formation		Financing of Gross Capital Formation	
1976			
Gross Fixed Capital Formation	292.0	Net Borrowing from Rest of the World	34.9
Increase in Stocks	6.6	Grants from Rest of the World	7.1
		Domestic Savings (including consumption of fixed capital)	256.6
TOTAL	298.6	TOTAL	298.6
1977*			
Gross Fixed Capital Formation	388.7	Net Borrowing from Rest of the World	-24.1
Increase in Stocks	-0.7	Grants from Rest of the World ..	12.0
		Domestic Savings (including consumption of fixed capital)	400.1
TOTAL	388.0	TOTAL	388.0

\*Provisional.

### Gross Fixed Capital Formation

2.16. Table 2.9 analyses gross fixed capital formation by type of asset at current and constant prices. The total value of capital formation at current prices rose from K£291.99 million on 1976 to K£388.69 million in 1977, and the corresponding totals at constant prices were K£145.00 and K£175.25 million. A previous trend towards a declining volume of new investment since 1972 has changed, and an upward trend appears to have started in 1976. Most of the rise in the volume of total capital formation in 1977 was due to the considerable increases in investment in machinery and transport equipment, of 23 per cent and 58 per cent respectively, over 1976. The purchases of locomotives by Kenya Railways Corporation and aircraft by Kenya Airways Limited account for a substantial part of the increased expenditures on transport equipment by the public sector in 1977. The growth in investment in transport equipment by the private sector during 1977 is mainly due to a very sharp increase in purchase of utility vehicles and station wagons. These vehicles should improve transport facilities considerably in both urban and rural areas.

2.17 Details on gross capital formation by investing sector are given in Table 2.10. The bulk of the increase in investment at constant prices in 1977 took place in the agriculture and transport sectors. These two sectors accounted almost £14 million of the overall increase of K£30 million in 1977.

Table 2.9

## Capital Formation By Type of Asset, 1974 - 1977

K£million

	Current Prices				Constant (1972) Prices			
	1974	1975	1976	1977*	1974	1975	1976	1977*
<b>Dwellings</b>								
Private:								
Traditional	15.17	20.12	23.01	27.55	11.60	12.00	12.48	13.06
Modern	13.38	15.55	9.45	12.05	9.74	10.14	5.28	6.32
<b>Total</b> ..	28.55	35.67	32.46	39.60	21.35	22.14	17.76	19.38
<b>Public</b>	5.86	6.80	6.75	10.06	4.27	4.43	3.77	5.28
<b>Total</b> ..	34.41	42.47	39.81	49.66	25.62	26.57	21.53	24.66
<b>Residential Buildings—</b>								
Private	13.63	10.99	17.41	16.34	9.16	6.55	8.75	8.07
Public .. ;.. .. ---	16.94	20.43	19.34	27.46	11.39	12.18	9.73	13.56
<b>Total</b>	30.57	31.42	36.75	43.81	20.55	18.72	18.48	21.63
<b>Other Construction Works</b>								
Private	4.98	4.52	3.32	4.28	3.56	2.72	1.75	2.17
Public	43.69	52.62	62.44	66.03	31.23	31.62	32.88	33.48
<b>Total</b>	48.67	57.14	65.76	70.31	34.79	34.34	34.63	35.65
<b>Land Improvement and Plantation Development—</b>								
private	5.41	5.73	5.71	5.93	5.08	4.50	3.87	4.04
Public	0.07	0.09	0.10	0.10	0.07	0.09	0.07	0.08
<b>Total</b>	5.47	5.82	5.81	6.03	5.14	4.59	3.94	4.12
<b>Transport Equipment—</b>								
Private	22.42	27.66	33.45	44.60	16.24	15.10	17.05	20.20
Public	4.66	5.76	6.86	27.11	3.38	3.15	3.49	12.28
<b>Total</b>	27.09	33.42	40.31	7.70	19.61	18.25	20.54	32.47

## CAPITAL FORMATION BY TYPE OF ASSET, 1974-1977

Table 2.9—(Contd.)

K£million

	CURRENT PRICES				CONSTANT (1972) PRICES			
	1974	1975	1976	1977*	1974	1975	1976	1977*
<b>MACHINERY AND OTHER EQUIPMENT</b>								
<b>PRIVATE</b>	35.95	57.34	75.66	118.66	25.33	32.25	32.99	45.19
<b>Public</b>	20.82	15.62	27.01	26.28	14.67	8.78	11.78	10.01
<b>TOTAL</b>	56.77	72.96	102.67	144.95	40.00	41.03	44.77	55.20
<b>BREEDING STOCK AND DAIRY CATTLE—</b>								
<b>PRIVATE</b>	0.77	—0.69	1.48	2.23	0.63	—0.50	1.11	1.52
<b>TOTAL</b>								
<b>Traditional Dwellings</b>	15.17	20.12	23.01	27.55	11.60	12.00	12.48	13.06
<b>Other</b>	96.55	121.10	146.47	204.09	69.74	70.76	67.80	87.50
<b>TOTAL PRIVATE</b>	111.72	141.22	169.48	231.64	81.35	82.75	83.28	100.56
<b>TOTAL PUBLIC</b>	92.04	101.32	122.50	157.04	64.99	60.25	61.72	74.69
<b>TOTAL PRIVATE AND PUBLIC</b>	203.76	242.54	291.99	388.69	146.34	143.00	145.00	175.25

\*Provisional.

## CAPITAL FORMATION BY INDUSTRY, 1974!1977

Table 2.10

K£million

	CURRENT PRICES				CONSTANT (1972) PRICES			
	1974	1975	1976	1977*	1974	1975	1976	1977*
<b>A. OUTSIDE MONETARY ECONOMY</b>								
Traditional Dwellings	15.17	20.12	23.01	27.55	11.60	12.00	12.48	13.06
<b>B. MONETARY ECONOMY</b>								
Enterprises and Non-Profit Institutions								
Agriculture	21.13	23.19	26.49	43.78	16.30	14.37	13.95	20.06
Forestry	0.23	0.15	0.34	0.82	0.16	0.09	0.17	0.38
Mining and Quarrying	3.60	1.53	1.62	1.76	2.53	0.86	0.72	0.69
Manufacturing	29.86	31.23	45.96	60.67	20.88	17.68	20.92	24.14
Electricity and Water	10.03	17.19	33.15	32.94	7.15	10.26	16.76	16.38
Building and Construction	7.00	7.81	9.72	13.94	4.95	4.41	4.34	5.59
Wholesale, Retail Trade, Restaurants and Hotels	10.19	14.47	20.61	28.29	7.19	8.20	9.25	11.38
Transport, Storage and Communications	35.46	50.39	50.41	72.73	25.33	28.64	25.35	32.92
Finance, Insurance, Real Estate and Business Services	4.01	4.76	3.46	4.44	2.75	2.79	1.63	1.90
Ownership of Dwellings	19.82	23.09	17.12	23.32	14.42	14.99	9.45	12.06
Other Services	8.52	7.16	11.63	13.06	5.89	4.17	5.53	5.70
<b>TOTAL</b>	<b>149.85</b>	<b>180.97</b>	<b>220.52</b>	<b>295.76</b>	<b>107.55</b>	<b>106.46</b>	<b>108.09</b>	<b>131.26</b>
General Government								
Public Administration	4.90	5.35	4.00	7.50	3.35	3.13	1.97	3.44
Defence								
Education	4.12	4.89	5.10	6.61	2.81	2.87	2.49	3.05
Health	3.30	4.35	7.01	9.00	2.25	2.57	3.47	4.29
Agricultural Services	2.96	5.71	8.66	10.88	2.07	3.37	4.43	5.07
Other Services	23.45	21.15	23.69	31.38	16.71	12.62	12.07	15.08
<b>TOTAL</b>	<b>38.73</b>	<b>41.45</b>	<b>48.46</b>	<b>65.37</b>	<b>27.19</b>	<b>24.55</b>	<b>24.43</b>	<b>30.93</b>
SEMI-MONETARY ECONOMY	15.17	20.12	23.01	27.55	11.60	12.00	12.48	13.06
MONETARY ECONOMY	188.58	222.42	268.97	361.13	134.74	131.00	132.52	162.19
<b>TOTAL</b>	<b>203.76</b>	<b>242.54</b>	<b>291.99</b>	<b>388.69</b>	<b>146.34</b>	<b>143.00</b>	<b>145.00</b>	<b>175.25</b>
<b>C. PERCENTAGE RATES OF GROWTH—</b>								
Outside Monetary Economy	19.1	32.6	14.4	19.7	5.1	3.4	4.0	4.7
Monetary Economy	11.8	17.9	20.9	34.3	8.7	2.8	1.2	22.4
<b>TOTAL</b>	<b>12.3</b>	<b>19.0</b>	<b>20.4</b>	<b>33.1</b>	<b>—7.8</b>	<b>2.3</b>	<b>1.4</b>	<b>20.9</b>

\*Provisional.

### CHAPTER 3—THE DEVELOPMENT PLAN 1974-78

Kenya's third Plan for economic and social development covering the period 1974 to 1978 had to contend with the world oil crisis in the first year and the consequent world recession thereafter. Thus the first half of the Plan coincided with a period of great world economic strain and painful adjustment which had the most profound consequences on the Kenya economy.

3.2. The overall objective of the third Development Plan was to continue to promote the growth of the economy to achieve fuller participation of all the people, by creating greater employment opportunities and securing a more equitable distribution of resources and income. The expansion and diversification of health and education services and the attainment of a more efficient transport system and the modernization of agriculture were identified as priority areas for action.

3.3. The potential for overall economic progress during the Plan period was changed fundamentally by the oil crisis and a number of the projects listed in the original plan document had to be re-phased. Economic pressures were particularly severe in 1975 and 1976. However, having withstood the readjustment process, which had to be instituted to contain the balance of payments problem, Kenya was then able to benefit nationally from the surge in coffee and tea prices which began in late 1976 and continued into 1977.

3.4. The Government published its Sessional Paper No. 4 entitled "On Economic Prospects and Policies" in 1975. It was noted in the paper that the difficulties arising from the oil crisis and the world recession had led to a severe balance of payments problem in Kenya which could only be contained by curtailing domestic demand for foreign goods and services. Indeed growth in the Kenya economy almost came to a halt in 1975 and per capita incomes actually fell.

3.5. As a result of the changes in the prices of imports and exports which took place in 1974 there was a significant deterioration in Kenya's terms of trade. The Kenya economy was unable to continue to import the same relative quantities of goods and services, and it was therefore decided to hold the growth rate in the quantity of imports to less than 2 per cent a year. At the same time it was expected that exports would grow in volume by 8 per cent a year. Apart from directly restraining imports and promoting exports the economic strategy also required that domestic production be further stimulated to help promote import substitution developments and the encouragement of export industries. The longer term objectives of promoting growth, employment and an improved distribution of income it was felt could still be attained.

3.6. These changes in policy were adopted in response to the external situation which had generated three interrelated squeezes: a price squeeze—caused by import prices rising more swiftly than export prices; a commodity squeeze—caused by the need to increase exports to pay for the same quantity of imports which in turn reduced the volume of goods available for domestic consumption; and a credit squeeze—caused by a decline in flow of funds from abroad to finance residual deficits in the balance of payments.

3.7. All forecasts in 1975 were subject to great uncertainty and the course chosen to deal with an exceptional situation had to be worked out very carefully gauging the relative dangers of both inflation and recession. The Government through fiscal measures in this period endeavoured to broaden the tax base by imposing higher rates of duty on non-essential and luxury consumer goods; to induce industry to adopt more labour using techniques by raising duties on imported capital goods; and to effect economies in the consumption of petroleum products. Income tax was also made more progressive.

3.8. It was also decided that the expansion of total domestic credit should be limited to 16 per cent, although the agriculture sector was to be allowed to raise its share of total credit to 17 per cent of net deposits of commercial banks. In July 1976 the liquidity ratio of the commercial banks was raised from 15 to 18 per cent. These restrictions together with the fiscal measures noted above were aimed at reducing the exceptional deficit on the balance of payments.

3.9. These policies were not altogether successful, particularly in so far as the control of inflation was concerned. However, in 1976 there was very real evidence of a return to a more normal balance of payments situation. Consequently the credit restrictions were eased in 1977, and a calculated risk taken to secure a higher rate of growth in the domestic economy despite the attendant problems that might arise from continued inflationary pressures.

3.10. In retrospect, it seems likely that the very sharp decline in imports in 1975 did not adversely affect the economy as it might otherwise have done because of the overstocking that had taken place in 1974 when imports had been overbought in anticipation of continuing price rises. This cushion of high stocks ensured supplies to all sectors of the economy.

3.11. For the Plan period as a whole, the economy achieved a growth rate in GDP of about 4.7 per cent a year, compared with the original target of 7.4 per cent. Some basic data on growth rates in GDP by sectors for the years 1973 to 1977 are presented in Table 3.1. There has been a substantial growth in GDP as a whole from mid-1976 onwards—probably in the region of 6.5 per cent a year. This figure is slightly lower than the rate of growth registered in the second Plan but is a distinct improvement on the average rate of growth of only 2.8 per cent a year recorded in the first half of the current Plan period.

DEVELOPMENT PLAN, 1974-1978

MAIN SECTORAL GDP GROWTH TARGETS AND PERFORMANCE AT CONSTANT (1972) PRICES

Table 3.1

Percentage

	Plan Targets Average rate of growth 1972-78	Cumulative rate of growth 1972-77*	PERFORMANCE			
			1973-74	1974-75	1975-76	1976-77*
Agriculture+	4.7	2.2	1.6	0.40	0.4	7.5
Manufacturing	10.2	10.5	5.2	-0.2	18.5	15.0
Building and Construction**	7.2	-2.7	-9.7	-3.6	-4.6	6.0
Wholesale and Retail Trade	7.2	3.7	-2.7	-7.6	8.3	10.7
Transport and Communications	7.2	2.1	-1.0	-3.0	10.4	-5.7
Finance, Ownership of Dwelling, Other Services**	7.2	6.1	11.4	4.4	6.5	4.9
Government Services	10.1	6.7	11.6	7.5	5.4	5.7
TOTAL GDP	7.4	4.7	3.7	1.2	6.1	7.3

\*Provisional.

\*\*Monetary Sector only.

+Including Forestry and Fishing.

3.12 As shown in Table 3.2 the total volume of capital formation in the period 1974-78 actually achieved amounted to only 70 per cent of the target set in the Plan. The disruptions in Kenya's economic prospects and the need to curtail both private and public capital formation in order to restore the balance of payments to a more healthy situation had their greatest impact in these early years and the volume of capital formation declined to 77 and 69 per cent of the targets respectively set for 1974 and 1975. The two succeeding years were also no more favourable and the levels of capital formation in relation to the targets in 1976 and 1977 were respectively 64 and 71 per cent. External loans and grants actually received were substantially below the level that had been forecast over the Plan period as a whole and although the position was more satisfactory in the second half of the Plan period, inflation had caused sharp rises in actual capital costs which could not be met by higher inflows of resources.

DEVELOPMENT PLAN, 1974-1978

CAPITAL FORMATION TARGETS AND PERFORMANCE, AT CONSTANT (1972) PRICES

TABLE 3.2

K£million

	1974	1975	1976	1977*	Total 1974-77*
Performance	146	143	145	175	609
Target	189	206	225	246	866
Ratio ( <i>per cent</i> )	77	69	64	71	70

\*Provisional.

3.13. Besides the impact on capital spending, deterioration in economic condition also affected the pattern of Government expenditure, during the years under review. As a result the outturn in many directions was somewhat different from that planned. A comparison of the distribution of planned and actual recurrent and development expenditure for the Plan period is detailed in Table 3.3. In general the level of expenditure on the social services declined below the level intended in the Plan while recurrent expenditure on economic services was also below the level planned and the development expenditure has risen above the target in the Plan. Some of the discrepancies between planned and actual expenditures are accounted for by the need to increase expenditure on defence and to take over the Kenyan section of the communications network previously managed by the East African Community.

Patterns of Central Government Expenditure: Development Plan Targets and Performance, 1973/74-1977/78

Table 3.3

Percentages

	1977/78			1973/74 -1977/78		
	Target	Actual	Actual/ Target	Target	Actual	Actual/ Target
Recurrent Expenditure						
Social Services						
Education	29.2	19.9	68	28.3	24.0	85
Health	7.2	6.2	86	7.2	7.2	100
Other	2.0	1.9	95	2.1	2.1	100
Economic Services						
Agriculture	5.2	4.8	92	5.8	5.5	95
Power, Works and Communi- cations	9.6	7.7	80	9.4	7.8	83
Other	7.6	6.6	87	7.8	6.7	86
All other Services*	39.2	52.9	135	39.4	46.7	119
Total	100.0	100.0		100.0	100.0	
Development Expenditure						
Social Services						
Education	2.1	2.2	105	3.9	2.9	74
Health	7.2	4.6	64	6.1	4.5	74
Housing	8.1	3.9	48	7.3	4.5	62
Other	1.8	1.1	61	1.4	0.9	64
Economic Services						
Agriculture	16.7	13.5	81		14.2	
Water Development	8.1	15.7	194	22.3	10.0	109
Power, Works and Communi- cations	20.7	28.4	137	26.8	31.9	119
Finance and Planning	4.9	9.6	196	7.1	10.5	148
Other	14.7	13.0	88	14.6	12.9	88
All other services	15.7	8.0	51	10.5	7.7	73
Total	100.0	100.0		100.0	100.0	

\*Includes expenditure on consolidated fund services, defence, home affairs and police.



3.14. Figures in Table 3.4 highlight the major differences between the Plan targets and the actual pattern on disposal of GDP. The share of private consumption in the period 1973-1977 at 62.6 per cent of total GDP was higher than the Plan target of 60.2 per cent and at 2 per cent the level of the import surplus was less than half the target figure of 4.2 per cent. This latter decline is entirely due to the favourable shift in terms of trade and the ensuing commodity boom in 1977. While the share of private consumption in the disposal of total GDP has fallen from 64.4 per cent in 1973 to 58.2 per cent in 1977; there has been little change in the share of public consumption at around 17 per cent, and the share of gross investment has risen from 20.1 per cent to 21.2 per cent over this period.

Distribution of Expenditure: Development Plan Targets and Performance, 1973-1977

Table 3.4

Percentages

	1973		1977		1973-77	
	Target	Actual	Target	Actual	Target	Actual
Private Consumption	61.2	64.4	59.2	58.2	60.2	62.6
Public Consumption	18.5	16.9	20.0	17.1	19.2	17.4
Gross Investment	24.1	20.1	25.4	21.2	24.8	22.0
Exports less Imports	-3.8	-1.4	-4.6	3.6	-4.2	-2.0
Total GDP	100.0	100.0	100.0	100.0	100.0	100.0

3.15. Financing of gross investment has varied markedly in the years under review. While a particularly high proportion of gross investment was financed by foreign resources in 1974 and 1975, in 1977 domestic savings were actually higher than total investment. As a result the resources borrowed from abroad in 1977 plus some small part of the domestic savings contributed to the net increase in the country's foreign reserves. However, over the five-year period 1973-77 gross investment totalled K£1,371 million and of this 80 per cent was financed from domestic savings and the balance by the net inflow of foreign resources. In the Plan 76 per cent of investment had been intended to be financed by domestic savings by 1978.

#### Impact of External Events

316. Kenya has an open economy very much dependent on the export receipts from a handful of primary commodities and its growing exports of manufactured products assisted by invisible earnings from tourism and transport services. Imports of fuel, raw materials, semi-finished products, manufactures and machinery and transport equipment are essential to help keep the economy functioning. In 1974 fuel imports more than quadrupled in value after the rise in oil prices and a very heavy deficit appeared in the balance of payments. The immediate impact of these external events was in the form of the price, commodity and credit squeezes noted above.

3.17. The price squeeze was manifested in the worsening of the terms of trade, which deteriorated from a base of 100 in 1972 to 85 in 1974 and 78 in 1975. Fortunately late in 1976 and in the first half of 1977 coffee prices rose very rapidly and the switch from coffee to tea by consumers also sparked off increases in prices of tea. As a consequence the terms of trade recovered to 91 in 1976 and even more significantly to 120 in 1977.

3.18. The impact of the commodity squeeze is best illustrated by the effect it had on the volume of external trade. In terms of index numbers the volume of exports had by 1974 risen to 111 from a base of 100 in 1972. Exports then declined to 101 in 1975, but have since picked up steadily and by the end of 1977 had reached the 1974 level of 111. Over this period imports declined from a figure of 104 in 1974 to 82 in 1975 and 78 in 1976. Although there has since been an increase in the volume of imports, the index by 1977 had only risen to 96.

3.19. The third aspect of the impact of external events concerns the credit squeeze. There was a large reduction in the country's international reserves in 1974, despite a large rise in the net capital inflow, as a result of the sharp increase in the deficit on Kenya's balance of payments current account. Money supply in consequence fell in real terms, credit was restricted, and the Kenya shilling devalued by 14 per cent in September 1975. By January 1976 the actual liquidity ratio of the commercial banks had declined to the minimum level of 18 per cent. There was a turnaround in 1976 and 1977, following the boom in commodity prices which resulted in a significant swing in the balance of payments, and restoration of a reasonable rate of growth in the economy as a whole. By the end of 1977 the level of domestic credit had risen by 23 per cent over December 1974. Although the liquidity ratio of the commercial banks was raised to 20 per cent in January 1978, the actual ratio at the end of December 1977 was 28.4 per cent.

3.20. As shown in Table 3.5, over the five year period 1973-1977, net capital inflows from abroad amounted to K£367.7 million, and receipts of transfers totalled K£76.2 million. A prominent feature on the current account

Table 3.5 Balance of Payments, 1973-1977 K£million

	Current Account			Capital Account	
	Goods	Services	Transfers	Capital* Inflow	Changes in Reserves and Related Items
1973	-54.7	0.1	7.8	57.7	-10.9
1974	-161.0	39.8	6.9	83.8	30.5
1975	-128.6	26.2	18.5	67.0	16.9
1976	-96.7	48.3	13.5	70.6	-35.7
1977	-64.2	58.8	29.5	88.6	-112.7

\*Includes errors and omissions.

of balance of payments was the substantial rise in net receipts from services, which in 1977 had reached a peak of K£58.8 million compared to K£39.8 million in 1974.

#### **Growth of Domestic Economy**

3.21. The failure to reach the target growth rate of GDP in the first half of the Plan period is accounted for by the traumatic impact on the world economy of events beyond the control of any individual country. Inflation world wide rose to unprecedented levels and Kenya's experience of a rise of 71 per cent in the index on consumer prices in Nairobi from December 1973 to March 1978 was not out of line with the general trend.

3.22. Agriculture.—The average rate of growth of production in monetary agriculture from 1972 to 1977 was only 2.2 per cent a year. The performance in the years 1973 to 1975 was particularly disappointing due to indifferent weather conditions, but the policy action to raise producer prices for items in domestic demand together with high coffee and tea prices in 1976 and 1977 caused the contribution of monetary agriculture at constant prices to rise by 4 per cent in 1976 and this was followed by a particularly sharp rise in 1977 of 12.3 per cent in the value added.

3.23. Manufacturing.—This sector has been relatively successful in the Plan period and recorded an average rate of growth in production of 10.5 per cent a year between 1972 and 1977, although most of the growth occurred in the years 1976 and 1977. Policy action designed to continue with import substitution of manufactured goods has in the more recent years been complemented with measures designed to promote export oriented industries. A continuous search has been instituted for new markets and for the development of products in demand in these markets.

3.24. Tourism.—During the period 1972 to 1977 the number of bed-nights spent in hotels by foreign visitors to Kenya rose by 9.9 per cent a year.

This is a much lower rate of growth than that achieved in the 10 years to 1972. As a result the annual growth in bed-nights spent at hotels in Kenya by foreigners was only half the target growth rate of 19.7 per cent a year set in the Plan. Since the growth in bed capacity was lower than the increase in actual occupancy, the bed occupancy rate increased from 50 per cent in 1972 to 55 per cent in 1977. Most of the additional hotel capacity was created at beach hotels at the coast and in Nairobi.

3.25. Transport and Communications.—The disruption of the transport system brought about by the break-up of the East African Community will it appears make it virtually impossible for the transport and communications sector to achieve the growth target of 7.2 per cent laid down in the Plan. The sector is estimated to have averaged a growth rate of 2.1 per cent between 1972 and 1977. The communications component of the sector performed much better than the sector as a whole as it proved to be a more simple operation to domesticise the Kenya operations of the East African Posts and Telecommunications Corporation.

### The Social Scene

3.26. As far as the social scene is concerned significant strides were made in the provision of education, health care and water supply facilities during the Plan period. However, the creation of new job opportunities and provision of housing particularly for those in the low income category has lagged behind the targets set in the Plan. Some of the indicators on these facilities have been set out in Table 3.6, detailing both the Plan targets and the figures on actual achievement.

3.27. Enrolment figures on both primary and secondary schools in 1977 exceeded the Plan targets. The pupil/teacher ratio of 33.1 for primary schools in 1977 was slightly better than the target ratio of 33.5. Although the number of graduate, SI, PI, and P2 trained teachers was substantially higher than the target in the Plan, a higher than intended number of untrained teachers have had to be recruited to cater for the expansion in enrolment, as a result of the larger than planned expansion in the intake of pupils.

3.28. There has been a sharp increase in the provision of health facilities in rural areas during the Plan period. A total of 1,145 units had been established by 1977 as compared to the planned figure of 688. There has also been a general improvement in the proportion on provision of hospital beds and trained staff per 1,000 persons, over the Plan period.

#### Development Plan, 1974—1978

##### Selected Social Indicators: Performance in Relation to Targets

	Target 1977	Actual 1977	Actual/ Target Ratio
Employment			
Modern Sector	952,000	902,898	95
Urban Informal Sector	154,000	103,900	67
Education			
Primary School Enrolment	2,951,000	2,971,239	101
of which Standard I	582,000	602,076	103
Secondary School Enrolment*	110,300	127,996	116
of which Form I	24,600	30,587	124
Health			
Rural Health Facilities—units	688	1,145	166
Central Government Staff			
Doctors	550	564	102
Registered Nurses	1,350	1,233	91
Medical Assistants	965	1,002	104
Housing			
Allocations of development funds 1973/74-1977/78— K£million	82.2	61.0**	74

\*Aided Secondary Schools only.

\*\*Gross Capital formation on residential dwellings, 1973-77 at constant (1972) prices—Monetary Sector only.

3.29. The creation of employment opportunities, however, in the years to 1977 did not come up to the Plan target. As shown in Table 3.6 there were 903,000 persons in employment in the modern sector in 1977 against a target of 952,000. Besides this failure to meet the target on employment, average wages also declined in real value. Wages at current values rose on average by 66 per cent between 1972 and 1977 but in the same period consumer prices had risen by 85 per cent, with the result that real wages fell by about 10 per cent.

## CHAPTER 4—MONEY, BANKING AND BALANCE OF PAYMENTS

The large earnings from coffee and tea exports, were the most significant feature of both the money and banking and balance of payments situations in 1977. They had repercussions throughout the economy. The main features of the monetary situation in 1977 are depicted in the following indicators:—

		<i>Foreign Assets K£m.</i>	<i>Domestic Credit K£m.</i>	<i>Money and Quasi-Money K£m.</i>	<i>Liquidity ratio per cent</i>	<i>Advances/ Deposits ratio per cent</i>
1976	Dec. ..	114	368	423	24.0	74.3
1977	Mar. ..	161	389	505	30.6	67.4
	June ..	222	382	548	32.0	63.9
	Sept. ..	233	407	594	36.8	64.1
	Dec. ..	209	454	621	28.4	68.8

4.2. Foreign assets rose by K£47 million an equivalent of 41 per cent in the first quarter of 1977 and by a further K£61 million or 38 per cent in the second. The rise in the third quarter was much smaller, and during the fourth quarter the assets declined, partly because of high imports, though at the end of the fourth quarter they were still about 83 per cent higher than the level at the end of 1976.

4.3. As foreign assets accumulate they are automatically reflected in the amount of currency and commercial bank deposits. These constitute the main components of the money supply and quasi-money. The total of money and quasi-money rose throughout the year in 1977 until at the end of the year it was about 47 per cent above the level at the end of 1976. This rise is one indicator of the potential of the inflationary trends which were prevalent in the economy during 1977. However, the rise in domestic credit in 1977 at about 23 per cent was considerably lower. This overall increase of 23 per cent was the result of divergent trends in the components of domestic credit; the net claim on the Government declined by K£7 million or 8 per cent, while domestic credit to remainder of the public sector rose by K£12 million or 35 per cent, and that of the private sector went up by K£81 million or 33 per cent.

4.4. The liquidity and advances/deposits ratios quoted above represent the fluid situation of the commercial banks and provide an indication on the excess of liquidity in the system throughout most of 1977. To a certain extent this rise in the level of liquidity was unavoidable. The payments received for tea and coffee exports, as is to be expected, took some time to work through to the final recipient from the marketing organizations, and indeed the adjustment payments, to take account of the high level of coffee and tea prices, were not made to the recipients until the second half

of the year. Also it is difficult, in any case, for banks and other financial institutions to expand their advances to meet a large and sudden change in liquidity. Projects for such support require careful planning and evaluation, which take time to effect. This aspect shows up in the movement of the advances/deposits ratio in 1977 with its initial decline and subsequent recovery. In any case, the rise of 36 per cent in advances that did occur, was only achieved by the active policy of banks to seek out appropriate projects, and by a change in Government policy whereby finance for foreign projects approved by the Central Bank could be raised locally.

4.5. For reasons stated above, therefore some of the excess liquidity was a temporary phenomenon except in so far as the fall in foreign assets which has occurred since September, 1977 is being offset, as per indications, by a rise in domestic credit. Indeed but for the negative effect of the increase in Government deposits with the Central Bank there would have been a particularly large rise in domestic credit.

4.6. The liquidity ratio of the commercial banks was raised to 20 per cent with effect from 1st January, 1978. The subsequent stock issue of K£60 million by the Government of which K£19.2 million was taken up by the commercial banks increased their effective liquidity ratio further to 22 to 23 per cent. This is still, however, below the ratio of 28.4 per cent prevailing at the end of 1977, while at the end of 1976 the ratio was 24 per cent, against an official requirement of 18 per cent.

4.7. Consumer prices which are another indicator of inflation went up by an average of 12.8 per cent in 1977 and by 16.3 per cent from December, 1976 to December, 1977, though given the level of liquidity prevalent during most part of 1977, the rate of inflation could have been higher; under the circumstances this can be attributed to various reasons. First, despite the substantially increased value of exports there was still a deficit of K£64.2 million in visible trade in 1977. Secondly, Government collected a total of K£169 million in recurrent revenue in the last six months of 1977 which was K£59 million or 54 per cent more than the revenue collected in the second half of 1976. As a result net Government demands on the banking system actually decreased in 1977. The level of treasury bills went up by K£23.4 million during the year; K£5.6 million of these were taken by the Central Bank whose holdings of Government stock rose by K£11.5 million. However, Government's deposits with the Central Bank also rose by K£59.9 million, and as a result the overall Government account with the Central Bank changed from a debit of K£32 million at the end of 1976 to a credit of K£10 million at the end of 1977. Thirdly, the commercial banks as stated above, could not rapidly become "fully banked" in relation to their expanded resources. Finally, import prices rose only slightly so that the impact from outside the economy was relatively small, particularly in relation to the experience of the years 1974 to 1976.

4.8. The effect of inflation in 1977 was, as usual, felt differently by different sections of the community. Real receipts of the agricultural sector in aggregate went up, but it was mainly the tea and coffee producers who saw a substantial increase in real terms. The impact of inflation on different categories of wage employees is discussed in further detail in Chapter 5. The pressure of demand in the real estate market resulted in rapidly increasing property prices and rents, especially in the main towns.

### Foreign Exchange Rates

4.9. The value of the Kenya shilling against the currencies of its major trading partners, continued its slow descent in 1977, as indicated in Table 4.1. Between 31st December, 1976 and 31st December, 1977, its value index dropped by 5.1 points. This decline in the value of the shilling would have been larger, were it not for depreciation in the value of the US dollar, Canadian dollar, Swedish krona, Italian lira, Zambian kwacha and other smaller currencies in the latter part of the year. In particular, the appreciation of the shilling against the US dollar which was quite marked was more than off-set by the rise in the value of the Pound Sterling.

FOREIGN EXCHANGE RATES FOR SELECTED CURRENCIES, 1974-1977

Table 4.1

Currency	MEAN RATES IN KENYA SHILLINGS			
	31st Dec. 1974	31st Dec. 1975	31st Dec. 1976	31st Dec. 1977
1 U.S. Dollar	7.143	8.260	8.310	7.947
1 Pound Sterling	16.754	16.120	14.150	15.207
1 Deutsche Mark	2.963	3.150	3.530	3.785
1 French Franc	1.609	1.850	1.680	1.697
1 Swiss Franch	2.805	3.150	3.400	3.967
100 Italian Lira	1.103	1.208	0.951	0.912
100 Japanese Yen	2.374	2.710	2.840	3.310
1 Indian Rupee	0.894	0.922	0.931	0.966
1 Zambian Kwacha	11.111	12.850	10.480	10.479
1 SDR	8.747	9.658	9.655	9.653
Overall Weighted Percentage Change from 1973	8.217	15.100	13.702	18.806
Overall Weighted Index*—31st Dec. 1973 = 100	91.783	84.900	86.298	81.194

\*For twenty currencies.

### Interest Rates

4.10. Interest rates, with the exception of Central Bank's re-discount rate on treasury bills did not change, despite the high level of liquidity that prevailed throughout 1977. Lending was a problem for some financial institutions and particularly in the middle of the year some reserves available for short term borrowing could not find lending outlets even at near zero



rates of interest. As shown in Table 4.2, the re-discount rate on treasury bills fell from 4.37 per cent at 31st December, 1976 to 1.52 per cent at 31st December, 1977.

Principal Interest Rates, 1975-1977

Table 4.2

Per cent

	3 1st December		
	1975	1976	1977
Central Bank of Kenya			
Re-discount Rate for Treasury Bills	6.00	4.37	1.52
Advances against Treasury Bills	7.00	6.50	6.50
Bills and Notes under Crop Finance Scheme:-			
Discounts	6.50	6.00	6.00
Advances	6.50	6.00	6.00
Other Bills and Notes:—			
Discounts	7.00	6.50	6.50
Advances	7.00	6.50	6.50
Advances against Kenya Government Securities	7.00	6.50	6.50
Kenya Commercial Banks			
Time Deposits:—			
Minimum 30 days (7 days notice)	5.125	5.125	5.125
3 months—less than 6 months	5.125	5.125	5.125
6 months—less than 9 months	5.375	5.375	5.375
9 months—12 months (incl.)	5.625	5.625	5.625
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 (Minimum)	8.00	Free	Free
Other Financial Institutions			
Kenya Post Office Savings Bank deposits	5.00	5.00	5.00
Agricultural Finance Corporation, Loans ..	8.00	9.00	9.00
Hire-Purchase Companies and Merchant Banks:—			
Deposits (time)	5.00-7.50	5.00-8.00	5.00-8.00
Loans	8.00-12.00	10.00-12.00	10.00-12.00
Building Societies:—			
Deposits	5.50-6.50	6.00-8.50	6.00-8.50
Loans	7.50-11.00	8.00-12.00	8.00-12.00

#### Foreign Exchange Reserves

4.11. Table 4.3 details changes in the net foreign assets and liabilities of the central monetary authorities. Their net foreign assets excluding liabilities to the IMF, increased by K£94.6 million, from K£114 million at 31st December, 1976, to K£208.6 million at 31st December, 1977. This sharp rise in reserves, was due to exceptionally high receipts from coffee and tea exports, and a substantial capital inflow. The drop in the liability to the IMF was due to repayment of the loans extended under the Fund's 1974 Oil Facility programme. As a result Kenya's total use of Fund resources was reduced from 277 per cent of her quota at 31st December, 1976, to 199 per cent at 31st December, 1977.

Central Monetary Authorities: Foreign Exchange Reserves, 1973-1978

Table 4.3

K£'000

As at end of	Central Bank of Kenya				Total Net Foreign Reserves of Central Government	Total Net Foreign Reserves 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**			Subscription	IMF holding of Kenya Currency	Net use of Fund Credit*	
1973	7,115	66,729	560	73,284	3,013	76,297	19,977	14,866	5,111	6,493
1974	802	66,373	473	67,066	1,733	68,799	20,989	35,002	—14,013	6,721
1975	1,818	69,129	806	70,141	414	70,555	23,179	56,281	—33,102	6,721
1976	1,388	112,944	1,134	113,198	799	113,997	23,171	64,219	—41,048	6,721
1977—										
January..	1,388	113,923	733	114,578	774	115,352	23,176	64,231	—41,055	6,721
February	1,388	130,836	773	131,451	807	132,258	23,166	64,205	—41,039	6,721
March	675	160,782	1,894	159,563	1,046	160,609	23,230	64,380	—41,150	6,721
April	675	195,343	2,728	193,290	777	194,067	23,179	64,240	—41,061	6,721
May	2,313	202,955	1,346	203,922	886	204,808	23,167	64,207	—41,040	6,721
June	2,252	220,539	1,460	221,331	673	222,004	23,224	57,891	—34,667	6,721
July	2,252	232,017	1,693	232,576	1,333	233,909	23,082	57,537	—34,455	6,721
August	6,372	223,186	2,236	227,322	1,240	228,562	23,195	46,220	—23,025	6,721
September	6,372	226,751	2,160	230,963	2,071	233,034	23,222	46,274	—23,052	6,721
October	6,373	227,723	3,604	230,492	1,173	231,665	23,253	46,337	—23,084	6,721
November	5,988	218,598	3,360	221,226	1,075	222,301	23,129	46,090	—22,961	6,721
December	5,988	204,408	3,019	207,377	1,214	208,591	23,168	46,167	—22,999	6,721
1978—										
January	6,953	200,638	3,016	204,575	910	205,485	23,196	46,222	—23,026	6,721
February	6,578	193,454	3,196	196,836	1,898	198,734	23,214	46,258	—23,044	6,721

\*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

## Money Supply

4.12. The total supply of money as shown in Table 4.4 increased by 46.8 per cent from K£422.7 million at 31st December, 1976 to K£620.7 million at 31st December, 1977. The supply of money proper increased by 48.5 per cent and that of quasi-money by 43.3 per cent. Table 4.5 details changes in components of money, as well as causes of these changes, in the year. Demand and time deposits more than doubled during the year. Demand deposits having increased by K£33.5 million in 1976 rose by a further K£80.8 million in 1977, while time deposits increased by K£20.4 million and K£58.6 million respectively in the comparable periods. The main cause of the huge rise in money supply was the above mentioned increase in foreign assets which triggered a chain reaction by raising the liquidity of the commercial banks. These in turn increased their holdings of treasury bills by K£17.8 million, local bills by K£16.6 million, investments by K£17.7 million and deposits with the Central Bank by K£29.8 million, thus enabling them to increase their loans and advances substantially. The Central Bank also increased its holding of Government stock by K£11.5 million and injected into the economy a further K£27.9 million in notes and coins. The increase in the supply of money would have been much faster were it not for a reduction in the level of Government borrowing from the banking system, as a result of a favourable budgetary out-turn referred to above.

MONEY AND QUASI MONEY SUPPLY, 1973-1978

Table 4.4

K£000

As at end of	Money*	Quasi-Money**	Total
1973	193,083	74,719	267,802
1974	200,801	90,163	290,964
1975	226,996	113,711	340,707
1976	283,715	139,081	422,733
1977—			
January	297,335	143,369	440,704
February	318,620	148,142	466,762
March	351,081	154,074	505,155
April	364,392	154,027	518,419
May	370,170	161,504	531,674
June	374,800	174,802	547,602
July	393,565	176,632	570,197
August	403,729	179,135	582,864
September	406,553	187,183	593,736
October	435,350	184,930	620,280
November	400,701	200,818	601,519
December	421,368	199,287	620,655
1978—			
January	412,658	207,236	619,894
February	420,260	223,351	643,611

\*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.

Table 4.5

K£'000

	CHANGE DURING YEAR		CHANGES DURING EACH QUARTER OF 1977			
	1976	1977	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
CHANGES IN MONEY SUPPLY AND SAVINGS DEPOSITS						
1. Deposit of Commercial Banks—						
1.1 Demand	33,518	80,847	39,840	37,144	23,670	—19,807
1.2 Time	20,387	58,581	30,312	2,056	11,076	15,137
1.3 Savings	11,942	28,056	3,553	7,081	6,719	10,703
2. Notes and Coins in Circulation	19,531	27,864	6,852	149	8,338	12,525
<b>TOTAL</b>	<b>85,378</b>	<b>195,348</b>	<b>80,557</b>	<b>46,430</b>	<b>49,803</b>	<b>18,558</b>
EXPLANATORY CHANGES						
3. Advances, Discounts, Borrowing: from Central Bank	2,235	17,054	117	6,504	6,546	3,887
3.1 Advances and Discounts of Central Bank	—1,291	475	—425	—	—	900
3.2 Borrowings by Commercial Banks	950	—	—	—	—	—
3.3 Local Bills discounted by Commercial Banks	2,576	16,579	542	6,504	6,546	2,987
4. Loans and Advances	8,199	80,108	17,293	15,851	17,934	29,030
4.1 Central Bank Loans to Government	—17,157	80,108	17,293	15,851	17,934	29,030
4.2 Commercial Banks	25,356	—	—	—	—	—
5. Treasury Bills held by	9,902	—36,501	13,945	—44,962	—2,605	—2,879
5.1 Central Bank	—13,215	5,633	—850	—149	1,400	5,232
5.2 Commercial Banks	25,875	17,754	16,946	7,204	—1,363	—5,033
5.3 Government Deposits with Central Bank	—2,758	—59,888	—2,151	—52,017	—2,642	—3,078
6. Investments	34,275	29,204	—7,933	17,666	4,350	15,121
6.1 Central Bank	7,341	11,477	—4,551	16,766	556	182
6.2 Commercial Banks	6,934	17,727	—3,382	900	4,906	15,303
7. Foreign Assets	46,647	92,696	60,362	40,906	14,289	28,861
7.1 Central Bank	43,385	96,064	47,125	61,334	10,332	—22,727
7.2 Commercial Banks	3,262	—3,368	13,237	—14,428	3,957	—6,134
8. Deposits of Non-Resident Banks	—5,335	15,114	1,931	5,798	7,553	—168
8.1 With Central Bank	—8,149	16,196	—760	6,936	10,878	—858
8.2 Commercial Banks	2,814	—1,082	2,691	—1,138	—3,325	690
9. Other Inter-Bank Deposits	—3,058	12,118	2,290	768	6,761	2,299
10. Other deposits with Central Bank*	1,781	—2,100	—2,185	—2,868	3,046	—93
11. Bills payable by Commercial Banks	—3,556	—4,449	593	—939	—6,510	2,407
12. Other Assets (net)+Revaluation	—2,997	—3,924	—5,587	2,666	787	—1,790
13. General Reserve Fund	—2,715	—3,972	—269	—960	—2,348	—395
<b>TOTAL</b>	<b>85,378</b>	<b>195,348</b>	<b>80,557</b>	<b>46,430</b>	<b>49,803</b>	<b>18,558</b>

\*Deposits other than those of Government, Kenya Commercial banks and non-resident banks.

4.13. Although an exact relationship between the supply of money and the level of prices is difficult to establish, there is no doubt that a rapid increase in the supply of money has some significant effects on the level of prices, sometimes after a time lag. Between December 1976 and December 1977 the consumer price index of wage earners in the lower income group increased by 21 per cent and those of the middle and upper income groups by 13.5 and 14.4 per cent, respectively.

#### Liquidity Ratio

4.14. Table 4.6 details figures on the liquidity ratio of the commercial banks. The liquidity ratio was 28 per cent at December, 1977, compared to 24 per cent at December, 1976 having risen to a peak level of 37 per cent in the middle of the year. A levelling out of the liquidity ratio in 1978 is anticipated. As indicated earlier, in an attempt to slow down the growth in supply of money the legal minimum was raised from 18 per cent to 20 per cent effective from 1st January, 1978.

Commercial Banks—Liquid Assets, 1974-1978

Table 4.6

	Deposit Liabilities+	Liquid Assets+*	Current Liquidity Ratio**
	<i>K£m.</i>	<i>Km.</i>	<i>Per cent</i>
1974 December	180.0	47.8	27.0
1975 December	271.0	51.5	19.0
1976 December	346.0	83.1	24.0
1977—			
January	351.1	83.8	24.0
February	371.0	101.0	27.0
March	404.5	123.8	31.0
April ..	421.8	140.4	33.0
May ..	437.6	150.1	34.0
June ..	468.0	150.0	32.0
July ..	466.4	172.6	37.0
August	487.1	182.4	37.0
September	506.0	186.0	37.0
October	515.8	177.8	34.0
November	508.6	160.0	31.0
December	510.0	144.7	28.0
1978—			
January	508.5	130.8	26.0
February	514.2	131.5	26.0

\*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 January 1978 the prescribed minimum was fixed at 20%.

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

Central Bank of Kenya: Chances in Assets and Liabilities, 1976 - 1977

k£'000

Table 4.7

	Change During Year		Change During Each Quarter of 1977			
	1976	1977	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1. Deposits of Kenya commercial banks with the Central Bank	- *	29,838	25,280	31,478	9,315	-36,235
	Explanatory Changes					
2. Advances and Discounts	-1,291	475	-425	—	—	900
3. Net Advances to Government—						
3.1 Advances to Government, Treasury Bills and Government Securities	-30,372	5,633	-850	-149	1,400	5,232
3.2 Government deposits	-2,758	-59,888	-2,151	-52,017	-2,642	-3,078
3.3 Net Advances	-33,130	-54,255	-3,001	-52,166	-1,242	2,154
4. Other Securities	17,341	11,477	-4,551	16,766	-556	-182
5. Foreign Exchange	43,385	96,064	47,125	61,334	10,332	22,727
6. Other Assets (net)	1,234	-8,344	-1,942	114	-3,185	-7,331
7. Deposit Liabilities—						
7.1 Non-Resident	- 8,149	16,196	-760	6,936	10,878	558
7.2 Resident	1,781	-2,100	-2,185	-2,868	1,046	-93
7.3 Total	- 6,368	14,096	-2,945	4,068	13,924	951
8. Notes and Coins in Circulation	-21,075	-29,675	-8,981	1,362	- 9,958	-12,098
9. General Reserve Fund	—	—	—	—	—	—
Gross Total	96	29,838	25,280	1,478	9,315	-36,235

4.15. The changes in the balances of the commercial banks with the Central Bank are set out in Table 4.7. Deposits with the Central Bank increased very rapidly in the first half of the year but dropped by more than half in the last quarter. For the whole of 1977, the increase amounted to K£29.8 million. The increase in the level of foreign exchange reserves, and Central Bank holdings of Government securities, more than off-set increases in other liabilities.

Commercial Banks—Bills, Loans and Advances, 1974-1978

Table 4.8

K£'000

	1974 Dec.	1975 Dec.	1976 Dec.	1977 Dec.	1978 Jan.	1978 Feb.
Public Sector—						
Central Government	4	210	870	114	29	953
Local Government	1,497	1,225	871	843	710	825
E.A. Community	1,248	4,228	2,705	4,311	4,344	208
Total	2,749	5,663	4,446	5,268	5,083	1,986
Enterprises, Parastatal bodies and other Public entities ..	8,027	9,221	6,818	7,421	8,189	7,836
Treasury	16,280	24,917	50,792	68,546	55,885	57,974
Private Enterprises—						
Agriculture*	20,472	36,848	40,658	54,395	52,814	55,150
Mining and Quarrying	5,397	5,382	6,754	7,087	6,432	6,326
Manufacturing	40,883	41,926	46,200	61,294	69,394	69,600
Building and Construction ..	14,704	10,865	14,832	17,086	17,957	19,084
Transport, Storage and Com- munication	7,008	7,159	8,933	13,466	16,096	17,336
Trade:						
Exports	17,719	15,161	15,725	17,446	19,270	22,470
Imports	15,145	13,276	14,480	16,900	18,089	21,533
Domestic	26,119	25,936	26,547	41,945	45,143	46,032
Financial Institutions	6,899	6,400	10,031	20,934	22,193	18,427
Other Businesses	24,090	34,295	42,428	61,397	66,364	66,718
Total Private Enterprises ..	178,436	197,248	226,588	311,950	333,752	342,676
Private Households— (including non profit-making institutions)	18,950	21,957	27,868	36,622	36,548	40,422
Total Bills, Loans and Advances	224,442	259,006	316,512	429,807	439,457	450,894

\*Including Forestry, Fishing and and Wildlife.

**Commercial Banks' Bills, Loans and Advances**

4.16. Table 4.8 sets out details on commercial banks', loans and advances, and their holdings of treasury bills and commercial bills. Total credit to private enterprises including private households increased by 37 per cent from K£254.4 million at December, 1976 to K£348.6 million at December,

1977. The commercial sector had the largest increase, especially for domestic trade which alone received increased credit facilities worth K£15.4 million. The manufacturing and agriculture sectors, and financial institutions also obtained substantial increases. The relaxation of the rules on limitation of domestic borrowing by foreign owned enterprises was one of the prime causes which influenced the increase in supply of credit to the manufacturing sector, from K£46.2 million at December, 1976 to K£61.3 million at December, 1977, while credit to financial institutions more than doubled over this period. The supply of credit to other businesses, rose by 44.7 per cent from K£42.4 million to K£61.4 million, a substantial part of the increase probably being used to finance purchases of real estate.

#### **Stock Market**

4.17. The Nairobi Stock Exchange was very active throughout the year. Purchases led to the share index rising from 229 at 31st December, 1976, to 390 on 31st December, 1977. The index had reached 428 by middle of April 1978. Given the general economic upsurge, lack of new share issues was a noticeable feature of the market, though the Government did float a record amount of stock, and various rights issues were made.

#### **Balance of Payments**

4.18. The performance of Kenya's balance of payments in 1977 was exceptional. An overall surplus of K£112.7 million was achieved compared to K£35.7 million attained in 1976. In the current account, a surplus of K£24.1 million was recorded compared to a deficit of K£34.9 million in 1976. The last time a surplus on the current account was realized was 13 years ago.

4.19. As shown in Table 4.9, imports increased by 31.2 per cent from K£407.9 million in 1976 to K£535.1 million in 1977, while exports increased by 51.3 per cent from K£311.2 million in 1976 to K£470.9 million. The deficit on merchandise account was as a result reduced by K£32.5 million from K£96.7 million in 1976 to K£64.2 million in 1977. The increase in the value of exports was entirely due to receipts from coffee and tea sales which accounted for 58.7 per cent of total exports in 1977. The high level of coffee and tea prices were chiefly responsible for the favourable shift in terms of trade, since the overall volume of exports did not change significantly, and in fact, the quantity of exports of goods other than coffee, tea and petroleum products declined.

4.20. The deficit on merchandise account was more than off-set by the increase in net credit on all "invisible" earnings which rose by K£26.5 million from K£61.8 million in 1976 to K£88.3 million in 1977. The increase in net credit from freight and insurance of K£1.4 million raised the total of such net receipts to K£24.3 million while net credit receipts on other transportation increased by K£8.9 million, to K£56.8 million. The larger



## Kenya Balance of Payments. 1975—1977

Table 4.9

K£million

	1975			1976			1977*		
	Debits/ Assets	Credits/ Liabili- ties	Net Credits	Debits/ Assets	Credits/ Liabili- ties	Net Credits	Debits/ Assets	Credits/ Liabili- ties	Net Credits
<b>A. Current Account</b>									
1. Merchandise transactions; Imports (c.i.f.); Exports (f.o.b.)	357.4	232.4	Dr. 125.0	407.9	311.2	Dr. 96.7	535.1	470.9	Dr. 64.2
2. Non-Monetary Gold Movements	3.6	—	Dr. 3.6	—	—	—	—	—	—
3. Freight and Insurance	1.5	20.3	18.8	4.6	27.5	22.9	4.0	28.3	24.3
4. Other Transportation	29.8	52.4	22.6	27.9	75.8	47.9	17.7	74.5	56.8
5. Foreign Travel	4.7	33.4	28.7	13.0	42.9	29.9	7.5	49.7	42.2
6. International Investment Income	54.7	19.3	Dr. 35.4	63.1	15.5	Dr. 47.6	77.1	17.6	Dr. 59.5
7. Government Transactions n.e.s.	13.9	4.5	Dr. 9.4	11.6	8.5	Dr. 3.1	17.2	9.5	Dr. 7.7
8. Other Services	15.1	16.0	0.9	15.9	14.2	Dr. 1.7	15.1	17.8	2.7
9. Private Transfers	9.6	8.2	Dr. 1.4	9.3	7.2	Dr. 2.1	8.0	11.5	3.5
10. Government Transfers	8.0	27.9	19.9	9.2	24.8	15.6	3.5	29.5	26.0
<b>Total Current Account</b>	498.3	414.4	Dr. 83.9	562.5	527.6	Dr. 34.9	685.2	709.3	24.1
of which: Visible Balance	361.0	232.4	Dr. 128.6	407.9	311.2	Dr. 96.7	535.1	470.9	Dr. 64.2
Invisible Balance	137.3	182.0	44.7	154.6	216.4	61.8	150.1	238.4	88.3
<b>B. Capital Movements</b>									
11. Private Long-term	1.1	15.8	14.7	2.5	25.6	23.1	0.6	31.4	30.8
12. Government Long-term	0.7	31.3	30.6	Cr. 0.4	35.1	35.5	0.7	33.9	33.2
13. Government Corporations	2.6	14.7	12.1	4.3	9.4	5.1	Cr. 1.0	22.2	23.2
14. Short-term									
14.1 Government	0.2	—	Dr. 0.2	0.6	—	Dr. 0.6	—	—	—
14.2 Government Corporations	1.6	0.3	Dr. 1.3	0.4	0.3	Dr. 0.1	0.4	0.2	Dr. 0.2
14.3 Deposit Banks	3.4	4.0	0.6	3.3	Dr. 2.8	Dr. 6.1	Cr. 3.4	—	Cr. 3.4
14.4 Private	Cr. 3.0	9.4	12.4	1.1	15.2	14.1	—	—	—
<b>Total</b>	6.6	75.5	68.9	11.8	82.8	71.0	Cr. 2.7	87.7	90.4

## Kenya Balance of Payments, 1975—1977

Table 4.9—(Contd.)

K£million

	1975+			1976			1977*		
	Debits/ Assets	Credits/ Liabili- ties	Net Credits	Debits/ Assets	Credits/ Liabili- ties	Net Credits	Debits/ Assets	Credits/ Liabili- ties	Net Credits
<b>15. Transactions with IMF</b>									
15.1.1 Change in Holdings	1.0	—	Dr. 1.0	Cr. 0. 4	—	0.4	4.6	—	Dr. 4.6
15.1 SDR's	—	—	—	—	—	—	—	—	—
15.12 Counterpart to Allocations	—	—	—	—	—	—	—	—	—
15.2 Change in Reserve Position in Fund (or Use of Fund Credit)	2.2	21.3	19.1	—	7.9	7.9	—	Dr. 18.1	Dr. 18.1
<b>16. Other Changes in Foreign Assets and Liabilities:</b>									
16.1 Central Bank of Kenya	2.8	0.3	Dr. 2.5	43.8	0.3	Dr. 43.5	91.5	1.9	Dr. 89.6
16.2 Kenya Government	Cr. 1.3	—	1.3	0.4	—	Dr. 0.4	0.4	—	Dr. 0.4
16.3 Valuation Changes	—	—	—	—	Dr. 0.1	Dr. 0.1	—	—	—
<b>Total</b>	4.7	21.6	16.9	43.8	8.1	Dr. 35.7	96.5	Dr. 16.2	Dr. 112.7
<b>Total Capital Account</b>	11.3	97.1	85.8	55.6	90.9	35.3	93.8	71.5	Dr. 22.3
<b>Errors and Omissions</b>	—	—	Dr. 1.9	—	—	Dr. 0.4	—	—	Dr. 1.8

\*Provisional.

\*\*Includes Capital Grants.

+Revised.

increases in net credit receipts occurred on foreign travel, and Government transfers accounts, which rose by K£12.3 million and K£10.4 million respectively. The increase in foreign travel receipts was due to a rise in earnings from tourism, while an increase in grants to the Government pushed the net Government transfer receipts to the record level of K£26 million. Increases in net credit receipts were recorded on other accounts too, but these were more than off-set by the net increase of K£11.9 million in overseas payments of investment income.

4.21. Over and above the current account surplus of K£24.1 million a net capital inflow of K£90.4 million was recorded in the private and public sector accounts, and helped to raise the net foreign assets of the central monetary authorities to a new record level of K£208.6 million.

4.22. The net inflow of private long-term capital increased by K£7.7 million from K£23.1 million in 1976 to K£30.8 million in 1977. Some part of this increase was due to the re-investment of earnings within Kenya. A substantial increase of K£18.1 million was also registered in long-term capital inflows in the account of Government corporations, mainly due to drawings on foreign loans by the Kenya Pipeline Company, and the Industrial Development Bank.

4.23. The main features of the account of the central monetary authorities are a reduction in the use of IMF credit, and a near doubling of the foreign assets of the Central Bank. The use of Fund credit was reduced by K£18.1 million, compared to a rise of K£7.9 million in 1976. This was largely due to repayment of SDR's 36 million in June and August 1977 which had been borrowed in 1974. under the Fund's Oil Facility programme.

#### **Outlook for 1978**

4.24. In 1977, as mentioned earlier the balance of payments registered a record surplus of K£112.7 million. This favourable outcome has more than restored the losses in reserves incurred in 1974 and 1975. It must be noted however, that, this large increase in the level of reserves was achieved during a period of exceptionally high prices of coffee and tea which is unlikely to recur. It is possible however, that the present level of tea and coffee prices will be maintained throughout 1978.

4.25. Foreign exchange reserves, even at the current high level are, however, only enough for about four months supply of imports. The reserves have already begun to decline and imports seem certain to increase at a time when exports at least in value terms will fall from the 1977 level. A deficit on current account of the balance of payments is therefore forecast for 1978.

## CHAPTER 5—EMPLOYMENT, EARNINGS AND CONSUMER PRICES

The creation of jobs is the most important issue confronting the Kenya economy. After the experience in 1975, when wage employment in the modern sector of the economy actually fell, it is gratifying to have recorded increases of 4.7 and 5.3 per cent respectively, in 1976 and 1977. These increases were above the target rate of growth of 4.5 per cent in the Development Plan 1974-78, but they were not sufficient to ensure a complete recovery from the crisis years that the economy went through in the early part of the Plan period. The annual rate of growth between 1972 and 1977 was in fact 4.1 per cent and a further 100,000 jobs, equal to an increase of 9 per cent need to be created in the current year to achieve the Plan target of 1,161,000 jobs in paid employment in the modern sector by 1978. The modern sector for the purposes of this chapter, however, provides work for only about one fifth of the total labour force.

### Employment

5.2. As Table 5.1 shows, the numbers in wage employment rose by 45,400 in 1977, a growth rate of 5.3 per cent. Most of the increase, however, was in unskilled jobs, and a large number of job seekers who had left school at the end of 1976, swelled the already large pool of the unemployed especially in the urban areas. There was no change in the level of self-employed and unpaid family workers, while the number employed in the informal sector in urban areas rose by 9,000 or 9.5 per cent, in 1977. The resulting total of 104,000 employed in the informal sector is much below the Plan target of 166,000 for 1978. Grocery and textile retail trade together with eating and drinking places account for nearly three fifths of employment in the informal sector in urban areas. Other important activities of the informal sector in urban areas are tailoring; carpentry; retail of charcoal; shoe repair; and vehicle repair. Informal sector employment is mostly concentrated in the three major towns—Nairobi; Mombasa; and Kisumu. There are indications that employment in the informal sector started to level off in Nairobi in 1977.

Persons Engaged: Recorded Totals, June, 1974-1977

	1974	1975	1976	1977*
Modern Establishments—Urban and Rural Areas—				
Wage Employees	826.3	819.1	857.5	902.9
Self-employed and unpaid family workers	55.9	56.9	57.5	57.0
Informal Establishments—Urban Areas	76.2	74.1	94.9	103.9
<b>Total</b>	<b>958.4</b>	<b>950.0</b>	<b>1,009.8</b>	<b>1,063.8</b>

\* Provisional

5.3. Changes in numbers in wage employment reflect to some extent the effect of weather on production, particularly as far as numbers employed in agriculture and in industries using agricultural products are concerned. Other factors include expansion in existing capacity and the creation of new establishments. From Tables 5.2 and 5.3 it can be seen that out of the increase of 45,400 in numbers in wage employment in 1977, 7,900 were employed in new establishments; 6,900 in existing firms in agriculture and forestry sectors; 10,600 in existing firms in the rest of private sector, and 20,000 were absorbed in the public sector.

WAGE EMPLOYMENT BY MAJOR SECTOR, 1974-1977

Table 5.2

'000's

	1974	1975	1976	1977*	Annual Percentage Change	
					1975-76	1976-71*
PRIVATE SECTOR—						
Agriculture and Forestry	213.7	195.8	197.7	206.4	1.0	4.4
Rest of Private Sector	282.5	280.9	303.4	320.1	8.0	5.5
Total Private Sector	496.2	476.7	501.1	526.5	5.1	5.1
PUBLIC SECTOR	330.1	342.4	356.4	376.4	4.1	5.6
TOTAL	826.3	819.1	857.5	902.9	4.7	5.3

\*Provisional.

WAGE EMPLOYMENT IN NEW ESTABLISHMENTS BY INDUSTRY, 1974-1977

Table 5.3

'000's

	1974	1975	1976	1977*
Agriculture and Forestry	6.8	4.9	3.1	1.8
Mining and Quarrying	0.3			
Manufacturing	1.9	1.5	1.3	0.9
Construction	3.3	2.3	3.1	0.8
Trade, Restaurants and Hotels	2.7	1.5	2.6	1.3
Transport and Communications	0.5	0.4	0.5	0.2
Finance Insurance, Real Estate and Business Services	1.5	0.3	0.7	0.7
Community, Social and Personal Services	1.0	0.8	1.6	2.2
TOTAL	18.0	11.7	12.9	7.9
CHANGE IN OVERALL WAGE EMPLOYMENT	64.9	—7.2	38.4	45.4

\*Provisional.

5.4. Wage employment in the private sector, as shown in Table 5.4, rose by 5.1 per cent in 1977, maintaining the rate of growth achieved in 1976. There was a rise of 4.4 per cent in the numbers employed in the agricultural sector. Employment went up on sugar, tea and coffee plantations, as a result of favourable weather conditions, which increased production on these estates. However, employment on sisal plantations fell. A number of other farmers as noted in Chapter 8 have also reduced the acreage of pyrethrum to turn to ranching, and employment on these farms has therefore declined.

Wage Employment in the Private Sector by Industry, 1974-1977

Table 5.4

'000's

	1974	1975	1976	1977*	Percentage change 1976—77*
Agriculture and Forestry	213.7	195.8	197.7	206.4	4.4
Mining and Quarrying	3.1	2.7	3.1	2.4	—22.6
Manufacturing	81.7	82.1	88.1	94.7	7.5
Construction	29.3	24.6	30.1	29.6	1.7
Trade, Restaurants and Hotels	55.4	51.7	57.9	60.3	4.1
Transport and Communications	17.6	16.5	18.0	19.6	8.9
Finance, Insurance, Real Estate and Business Services	18.7	20.2	20.9	24.2	15.8
Community, Social and Personal Services	76.7	82.9	85.4	89.3	4.6
Total	496.2	476.6	501.1	526.5	5.1

\*Provisional.

5.5. Employment in the mining and quarrying sector, already small in size, was further reduced in 1977 due to the closure of Kenya Mining Industries operations in Kilifi District. The Kinangoni mining complex, a joint venture of the ICDC and Geomin of Rumania established at an estimated cost of K£2 million closed down in the second half of 1976 due to financial and operational difficulties. Employment, in the sector fell steeply by nearly 23 per cent, as a result.

5.6. There were marked increases, in 1977, in employment in establishments in manufacturing sector engaged in food processing, and the manufacture of chemicals and textiles. Employment in the sector as a whole rose by nearly 8 per cent to reach a level of 94.700. The figures relate to June however, and difficulties faced by the textile industry towards the end of 1977 may have had some negative impact.

5.7. The completion of both the construction work on the new Nairobi Airport complex and the building of bridges on Machakos/Kitui road are among factors that have contributed to the decline of employment in the private sector of the construction industry. Other changes in employment

in the rest of the private sector occurred as a result of events such as the hunting ban which reduced the numbers employed in the enterprises concerned; an increase in the number of seasonal workers on coffee and tea plantations and of such workers handling agricultural produce at storage depots and ports; the transfer of Kenya nationals who were working in partner states for the now defunct East African Community; and the opening of new establishments in banking, transport and business services sectors.

5.8. Employment in the public sector went up by 5.6 per cent in 1977, compared to an increase of 4.1 per cent in 1976. Figures on employment in the public sector are set out in Table 5.5. The increase in 1976 occurred mainly in numbers employed in the Central Government; in late 1976, however, the Central Government had instituted a ban on recruitment and the number of its employees fell slightly in 1977. The subsequent relaxation of the ban, after June 1977, resulted in an increase in numbers employed in the Central Government. This increase will be reflected in the employment figures for 1978. Growth of employment in the rest of the public sector therefore, accounted for the overall increase of 5.6 per cent, in 1977. After the break-up of the former East African Community, the Central Government absorbed Kenya nationals who were previously employed by the Community. Employees of the Community corporations such as the Railways, Harbours, Posts and Telecommunications and Airways corporations and Cargo Handling Services became part of the successor parastatal bodies set up by the Government. There was an overall increase in employment in parastatal bodies despite the return of employees of the community corporations who were not nationals of Kenya to their home countries. Only two institutions of the former East African Community now remain; these are the East African Development Bank and the East African Examinations Council. Numbers employed in the parastatal bodies went up by 5.2 per cent in 1977, largely due to expansion of processing capacity by Kenya Cashewnuts Limited, the Kenya Tea Development Authority and the Pyrethrum Marketing Board. The most marked rise in employment in the public sector occurred not in parastatal bodies, but in enterprises in which the public sector holds more than 50 per cent of the equity capital. These enterprises realized an increase of 44 per cent or 5,200 jobs. This is due to the expansion to full capacity by the Mumias Sugar Company, the good tea harvest which kept Kangaita Tea Factory operating at full capacity, and the opening of the new motor assembly plant by General Motors Limited. The construction and engineering departments of Nairobi, Mombasa and Eldoret municipal councils also increased their size and account for much of the increase of 6,600 or 26 per cent in numbers employed by local authorities.

WAGE EMPLOYMENT IN THE PUBLIC SECTOR, 1974-1977

Table 5.5

'000's

	1974	1975	1976	1977*
Central Government	143.7	146.1	157.5	157.2
Parastatal Bodies**	146.0	154.8	161.6	170.0
Majority Control by the Public Sector ..	12.6	15.3	11.8	17.0
Local Government	27.8	26.2	25.5	32.1
Others+	—	—	—	0.1
Total	330.1	342.4	356.4	376.4

\*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.

5.9. Table 5.6 shows that in 1974, Nairobi maintained its leading position as the major employer among provinces. However, the increase in employment opportunities in Nairobi, in 1977, was below the rate of change in the country as a whole. The completion of major construction works, and the ban on hunting are responsible for the small increase in numbers employed in Nairobi in 1977. Growth in numbers employed in the remaining provinces except North Eastern Province was due primarily to the favourable weather which boosted the output of tea, sugar, coffee and cereal crops. The particularly large increase in Western Province is due to the growth of the sugar industry in the province.

Wage Employment by Province, 1974-1977

Table 5.6

000's

Province	1974	1975	1976	1977*	Percentage Change	Percentage Urban
					1976/77*	1977*
Nairobi	227.0	218.6	230.3	235.5	2.3	100.0
Central	133.2	124.0	133.6	143.7	7.6	17.3
Nyanza	60.0	61.7	63.4	64.8	2.2	29.0
Western	34.8	36.7	36.2	44.5	22.9	11.7
Coast	100.5	101.8	105.9	113.8	7.5	77.2
Rift Valley	208.2	209.8	216.9	225.8	4.1	19.5
Eastern	58.8	62.2	66.5	70.1	5.4	18.5
North Eastern	3.8	4.2	4.8	4.7	— 2.1	—
Total	826.3	819.1	857.5	902.9	5.3	47.5

\*Provisional.



## WAGE EMPLOYMENT BY MAJOR TOWNS AND SELECTED INDUSTRIES, 1972-1977

Table 5.7

'000's

	Manufacturing		Construction		Trade, Restaurants and Hotels		Transport and Communi- cations		Finance, Insurances, Real Estate and Business Services		Community, Social and Personal Services	
	1972	1977*	1972	1977*	1972	1977*	1972	1977*	1972	1977*	1972	1977*
Nairobi	36.5	47.2	20.4	31.0	24.0	29.3	18.0	17.7	13.1	21.0	70.2	78.2
Mombasa	12.7	16.3	2.9	3.9	6.6	9.4	20.3	20.8	1.7	4.0	17.4	24.2
Kisumu	3.2	2.9	1.4	1.0	1.7	1.6	1.6	2.2	0.4	0.8	5.0	6.5
Nakuru	3.3	4.9	1.6	1.3	2.1	2.4	1.8	0.9	0.5	0.6	5.0	5.4
Thika	4.5	8.2	0.4	0.3	0.9	0.6	0.2	0.1	0.1	0.4	1.6	2.4
Eldoret	2.6	2.8	0.3	0.4	1.1	1.1	1.0	0.8	0.2	0.3	4.2	2.8
Other Towns	5.7	10.0	3.3	3.2	5.0	8.7	2.1	3.9	1.1	1.8	25.2	29.1
TOTAL	68.5	92.4	30.3	41.0	41.4	53.1	45.0	46.5	17.1	28.9	128.6	148.7

\*Provisional.

5.10. Table 5.7 details the growth in wage employment in selected industries in the major towns between 1972 and 1977. Numbers employed in the major towns account for about 45 per cent of total employment in both 1972 and 1977. Employment in this period increased by 23.7 per cent in Nairobi and by 25.3 per cent in other towns. The increases are accounted for by a rapid increase in manufacturing activity in a number of towns other than Nairobi; and a heavy concentration of finance and business services in Nairobi and Mombasa. Growth in employment in the manufacturing sector and in finance and business services was particularly marked. The increases in the construction sector, community and personal services and distribution sector and restaurants and hotels were more moderate while virtually no rise occurred in numbers employed in the transport and communications sector over the five year period.

5.11. Numbers in wage employment by industry, citizenship and sex are set out in Table 5.8. There was a further drop in the number of non-citizens in employment. By 1977 their numbers were reduced to a mere 1.7 per cent of the total. The decline of 3,300 from 18,700 in 1976 to 15,400 in 1977 was mainly caused by the reduction in the numbers who had been working in transport services for the East African Community and to a lesser extent

Wage Employment by Citizenship and Industry, 1976-1977

Table 5.8

'000's

	Citizens		Non-Citizens		Total	
	1976	1977	1976	1977*	1976	1977*
Agriculture and Forestry	241.9	259.3	1.1	1.0	243.0	260.3
Mining and Quarrying	3.8	3.3	0.1	0.1	3.9	3.4
Manufacturing	105.8	115.3	3.0	2.6	108.8	117.9
Electricity and Water	8.2	9.3	0.4	0.4	8.6	9.7
Construction	45.6	47.8	1.5	1.1	47.1	48.9
Trade, Restaurants and Hotels..	58.2	60.7	2.0	1.9	60.2	62.6
Transport and Communications	45.4	47.3	2.3	0.8	47.7	48.1
Finance, Insurance, Real Estate and Business Services	23.9	28.1	1.5	1.6	25.4	29.7
Community, Social and Personal Services						
Public Administration	87.0	87.1	0.3	0.3	87.3	87.4
Education Services	115.7	122.5	3.1	2.3	118.8	124.8
Domestic Services	53.7	53.9	1.3	1.6	55.0	55.5
Other Services	49.6	53.0	2.1	1.7	51.7	54.7
Total	838.8	887.5	18.7	15.4	857.5	902.9
Of which : Males	703.3	736.2	15.1	12.4	718.4	748.6
Females	35.5	151.3	3.6	3.0	139.1	154.3

\* Provisional

in education services. Over 50 per cent of all non-citizen employees, are engaged in education services—mainly as teachers, in manufacturing and construction sectors—as technical staff, in the transport and communications sector and in financial and business services. The total number of females in wage employment rose by a further 10 per cent in 1977. They now account for 17 per cent of the total in wage employment, while the overall increase in employment of citizens in 1977 was 48,700 or 5.8 per cent.

5.12. Details on employees with selected skills by occupation groups are recorded in Table 5.9. Their numbers rose by 9,200, as a result of the increase in the number of skilled workers and teachers. About 6 per cent of those with special skills were non-citizens, two thirds of them being employed in the private sector. The number of professional workers has gone up by over 2,000 since 1972. The main additions were: architects, engineers and surveyors—400; medical, dental, veterinary and related professionals—700; other scientists—100; lawyers and jurists—200; professional accountants—200; and other professionals—300.

Wage Employment by Selected Occupations. 1976-1977

Table 5.9

000's

	1976		1977*		Total	
	Private	Public	Private	Public	1976	1977*
Skilled Workers	51.9	29.6	54.3	31.1	81.5	85.4
General Managers and Salaried Directors	7.5	3.9	7.8	4.0	11.4	11.8
Teachers	4.0	96.6	4.6	100.7	100.6	105.3
Architects, Engineers and Surveyors	1.3	1.3	1.3	1.3	2.6	2.6
Medical, Dental, Veterinary and Related Professionals	0.5	1.5	0.5	1.5	2.0	2.0
Agronomists and Related Scientists	—	0.6	—	0.6	0.6	0.6
Statisticians, Mathematicians, Systems Analysts and Related Professionals	0.1	0.1	0.1	0.1	0.2	0.2
Other Scientists	0.1	0.4	0.1	0.4	0.5	0.5
Lawyers and other Jurists	0.1	0.3	0.5	0.2	0.6	0.7
Economists	—	0.1	—	0.1	0.1	0.1
Professionals not Elsewhere Classified	0.9	0.8	0.9	0.8	1.7	1.7
Total	67.0	135.3	70.2	141.2	202.2	211.4
Of which: Citizens	59.3	132.0	62.4	137.7	191.3	200.1
Non-Citizens	1.1	3.3	7.8	3.5	10.9	11.3

\* Provisional

### Earnings

5.13. As recorded in Table 5.10 total earnings from wage employment in 1977 rose to K£431.4 million in comparison with K£379.6 million in 1976, an increase of 13.6 per cent. The rise reflects the effects of the increase in numbers in employment and of the Presidential Decree of 1st May 1977 which provided for increases in wages and salaries. A number of enterprises in the private sector awarded salary increases ranging from 5 per cent to 20 per cent. The following awards for salary increases were made in the public sector, civil servants—between 4 and 16 per cent; the Teachers' Service Commission—between 7 and 15 per cent; the University of Nairobi—between 4 and 16 per cent; the Nairobi and Mombasa municipalities—between 5 and 10 per cent; Kenya Tea Development Authority—10 per cent; Cargo Handling Services—between 4 and 12 per cent; and East African Power and Lighting Company Limited—between 10 and 30

Earnings by Major Sector, 1974-1977

Table 5.10

K£million

	1974	1975	1976	1977*
Private Sector—				
Agriculture and Forestry	20.5	22.6	26.8	27.8
Mining and Quarrying	1.0	1.1	1.3	0.8
Manufacturing	34.9	40.2	46.5	56.5
Construction	10.3	10.1	13.6	14.5
Trade, Restaurants and Hotels	27.8	29.8	35.0	39.8
Transport and Communications	11.2	10.2	11.5	13.9
Finance, Insurance, Real Estate and Business Services	16.2	19.4	22.0	27.5
Community, Social and Personal Services	19.6	22.0	26.7	29.3
Total Private Sector	141.5	155.5	183.4	210.0
Public Sector—				
Central Government	51.8	63.8	86.0	99.6
Parastatal Bodies**	64.6	71.9	90.1	96.2
Majority Control by the Public Sector	5.9	8.4	8.1	10.0
Local Government	10.6	12.7	12.1	15.6
Others+	—	—	—	0.1
Total Public Sector	132.8	156.8	196.3	221.4
Total	274.3	312.3	379.6	431.4

\*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.

per cent. Generally speaking, the lower paid workers received the larger percentage increases and the higher salaried workers the lower percentage shown. Taking both the increases and the effect of the annual increments into account, average earnings in the public sector went up by only 6.8 per cent, in 1977, compared to the 9 per cent increase in the private sector. The increase of 9 per cent in average earnings in the private sector is in accordance with the guidelines then in force, which allowed an increase, equivalent to two thirds of the rise in cost of living. Details on average earnings are noted in Tables 5.11 and 5.12.

Average Wage Earnings per Employee, 1974-1977

Table 5.11

K£

	1974	1975	1976	1977*
Private Sector—				
Agriculture and Forestry	95.9	115.6	135.6	134.7
Mining and Quarrying	322.6	401.3	419.4	333.3
Manufacturing	427.2	489.8	527.8	596.6
Construction	351.5	411.0	451.8	490.0
Trade, Restaurants and Hotels	501.8	575.0	604.4	660.0
Transport and Communications	636.4	619.1	638.9	709.2
Finance, Insurance, Real Estate and Business Services	866.3	962.5	1,052.6	1,136.4
Community, Social and Personal Services	255.5	265.4	312.6	328.1
Total Private Sector	285.2	326.2	366.0	398.9
Public Sector—				
Central Government	360.5	436.7	546.0	633.6
Parastatal Bodies**	442	464	557	565.9
Majority Control by the Public Sector ..	468.3	549.0	686.4	588.2
Local Government	381.3	484.7	474.5	486.0
Others+	—	—	—	1,000.0
Total Public Sector	402.3	457.9	550.7	588.3
Total	332.0	381.3	442.7	477.8

\* 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.

Average Changes in Wage Employment and Average Earnings, 1974-1977

Table 5.12

Percent

	Employment		Average Earnings	
	1974-77*	1976-77*	1974-77*	1976-77*
Private Sector—				
Agriculture and Forestry	-1.0	4.4	12.4	-0.7
Mining and Quarrying	-6.9	-22.6	2.8	-20.5
Manufacturing	5.1	7.5	11.8	13.0
Construction	1.6	-1.7	11.8	8.5
Trade, Restaurants and Hotels	3.1	4.1	9.6	9.2
Transport and Communications	3.9	8.9	3.8	11.0
Finance, Insurance, Real Estate and Business Services	9.1	15.8	9.5	8.0
Community, Social and Personal Services		4.6	8.9	5.0
Public Sector—				
Central Government	3.1	-0.2	20.7	16.0
Parastatal Bodies**	6.1	5.2	8.8	1.5
Majority Control by the Public Sector ..	14.2	-44.1	9.3	-14.3
Local Government	5.8	25.9	9.1	2.4
Total Public Sector	4.5	5.6	13.6	6.8
Total	3.0	5.3	12.9	7.9

\*Provisional.

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

5.14. Since average earnings at the overall level only rose by 7.9 per cent compared with an average increase of 12.8 per cent in consumer prices, real earnings declined by 4.3 per cent in 1977 and fell back to about the same level as in 1974/75. These changes are detailed in Tables 5.13 and 5.14. Average wages at current prices have since 1972 risen at an annual rate of 10.6 per cent while average consumer prices have increased by 13.4 per cent a year. As a result real wages have fallen by more than 2 per cent a year, over this period.

Estimated Real Average Wage Earnings\*\* per Employee, 1974-1977

Table 5.13

K£

	1974	1975	1976	1977*
Private Sector—				
Agriculture and Forestry	109.1	111.7	119.1	104.8
Mining and Quarrying	367.0	387.7	368.2	259.4
Manufacturing	486.0	473.2	463.4	464.3
Construction	399.9	397.1	396.7	381.3
Trade, Restaurants and Hotels	570.9	555.6	530.6	513.6
Transport and Communications	724.0	598.2	560.9	551.9
Finance, Insurance, Real Estate and Business Services	985.6	930.0	924.1	884.4
Community, Social and Personal Services	290.7	256.4	274.5	255.3
Total Private Sector	324.4	315.2	321.3	310.4
Public Sector—				
Central Government	410.1	421.9	479.4	493.1
Parastatal Bodies+	503.4	448.8	489.5	440.4
Majority Control by the Public Sector ..	532.8	530.4	602.6	457.7
Local Government	433.8	468.3	416.6	378.2
Others++				778.2
Total Public Sector	457.7	442.4	483.5	457.8
Total	377.7	368.4	388.7	371.8

\*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.

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

Changes in Wage Employment, Average Wages and Consumer Prices, 1974-1977

Table 5.14

Percentage

	1974	1975	1976	1977*
Wage employment	8.5	—0.9	4.7	5.3
Current prices average wages	9.3	14.8	16.1	7.9
Consumer prices**	15.8	17.8	10.0	12.8
Real average wages..	-5.6	-2.5	5.5	-4.3

\*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. Wage changes have usually followed the inflationary rise in prices, but often after a considerable time lag. For example the basic statutory monthly minimum wage for an adult worker in Nairobi which was fixed at K.Sh. 300 on 1st July 1975 did not rise until October, 1977 when it was raised to K.Sh. 350. This is an increase of 16.7 per cent compared to an increase of 35.4 per cent in the lower income consumer prices index over the same period. This index covers employees earning up to K.Sh. 600. As a result of the changes, real Wages at the minimum level declined by 14 per cent. Between December 1973, when increases in oil prices became effective, marking the beginning of the inflationary period, and December 1977, the percentage changes in minimum wages and in the lower income consumer price index were 55.6 and 73.7 per cent, respectively, representing a decline of 11 per cent in real wages. It is not as readily possible to measure the extent of any changes in real wages for employees in the middle and upper income groups, since it is not easy to ascertain a base point of reference, like the minimum statutory wage in the case of employees in the lower income group. Nevertheless, some fall in real incomes had undoubtedly occurred since 1973.

5.16. In an important statement issued on 19th May, 1977 the Ministry of Labour stated that "In accordance with the Guidelines in their present form, no wage increases based on productivity gains achieved during the years 1974, 1975 and 1976 have been allowed. In future, workers will be allowed to obtain wage increases based on productivity gains achieved during 1977 and beyond. This means that the trade unions will be able to claim in 1978 a wage increase over and above the cost of living increase based on productivity gains achieved by firms. If, however, in any one year, the economy as a whole does not achieve a positive rate of growth no workers would be entitled to productivity-based wage increases even if profitability growth has been achieved by a company during the relevant period of time". This implies that the rises accorded in 1978, seem likely to result in a steady closure of the gap that has arisen between increases in wages and prices.

#### **Consumer Prices**

5.17. Between December 1976 and December 1977 consumer prices for the lower, middle and upper income groups rose by 21.0, 13.5 and 14.4 per cent respectively, as shown in Table 5.15. The high increases in 1977 were due mainly to increases in food prices and rent. The food index went up by 17.2, 14.7 and 17.4 per cent, respectively for lower, middle and upper income groups while the rent index rose by 31.9, 21.4 and 16.9 per cent. Details of changes by income groups and main commodity groups are shown in Table 5.16.



Percentage Changes in Nairobi Consumer Prices: December, 1974-March, 1978

Table 5.15

	Dec. 74 to Dec. 75	Dec. 75 to Dec. 76	Dec. 76 to Dec. 77	Dec. 77 to March 78	Dec. 74 to March 78
Nairobi Lower Income Index	18.4	9.1	21.0	5.2	64.3
Nairobi Middle Income Index	15.1	9.3	13.5	3.7	48.1
Nairobi Upper Income Index	17.1	7.7	14.4	1.8	46.9

Nairobi Consumer Prices Indices, 1974-1978

Table 5.16

January-June, 1975 = 100

	Food	Rent	Others	All Groups
Lower Income—				
December—1974	88.5	95.3	81.2	91.4
December—1975	106.6	114.0	96.1	108.2
December 1976	111.5	124.3	117.5	118.0
December 1977	130.7	164.0	133.0	142.8
March 1978	139.4	173.9	147.3	150.2
Middle Income—				
December—1974	88.2	96.2	84.7	91.3
December—1975	104.8	111.1	94.8	105.1
December—1976	110.8	120.5	116.1	114.9
December—1977	127.1	146.3	127.7	130.4
March 1978	135.9	152.2	128.9	135.2
Upper Income—				
December—1974	93.4	96.9	87.1	93.3
December—1975	109.1	109.3	100.9	109.3
December—1976	119.2	115.6	118.2	117.7
December—1977	139.8	135.0	131.9	134.7
March —1978	142.3	137.8	134.0	137.1

5.18. Prices outside Nairobi are currently being studied. It is easier to monitor changes in one town across time than it is to compare different towns at the same point of time. The information so far collected shows that changes in the prices of food and other commodities, excluding rent, for lower and middle income groups were much the same, in 1977, in Mombasa, Kisumu and Nakuru as in Nairobi. However, rent is an important omission and could alter the overall significance of the impact in areas such as Nairobi where accommodation is in relatively short supply.

5.19. A comparison of average prices of maize, cabbages, potatoes and beans in Nairobi and in rural markets was also undertaken, in 1977. The figures on prices in rural markets could not be weighted as they should be, to take into account the volume of produce handled, due to lack of information. They nevertheless provide a useful guide. The study indicates that average prices in the provinces for maize varied from about 66 per cent in Nyanza Province to 88 per cent in Coast Province, vis-a-vis the Nairobi price, while prices for potatoes and beans varied between 80 to 100 per cent of the Nairobi level. The commodity with the most variable average price was cabbage. In this case the prices ranged from 45 per cent in Central Province to 150 per cent in Coast Province, of the Nairobi standard.

#### **The Period 1972 to 1977 and the Future**

5.20. The five year period 1972 to 1977 has seen a substantial growth in wage employment in Kenya but the rate of growth in wage employment in the modern sector is still below the rate required to meet the aspirations of the people. The growth in wage employment in a period of high inflation has led to some reduction in real wages. As indicated, the figures for the years 1973 to 1977 inclusive suggest that real wages fell by 11 per cent over this period. It also seems likely that wage earners in the lower income group have suffered a larger fall in their real wages than those in the middle and upper income groups.

5.21. Future policy needs to aim at increasing employment if possible at a faster rate than in the past, and this has to be tied to a more effective means of keeping down price rises so that increases in money wages can be related more readily to changes in real wages. This is particularly so in the case of employees most of whom are based in urban areas. Given the favourable changes in the terms of trade for the agriculture sector noted in Chapter 8, the bulk of the population in rural areas has, since 1975, been less adversely affected by the increase in consumer prices, than those in the urban areas.

5.22. Also in line with the policy of creating more employment, labour intensive rather than capital intensive means of production need to be promoted. However, a careful balance has to be preserved between labour intensive and capital intensive methods to ensure that Kenya's growing export industry is not prejudiced by using out-dated methods of production. One particularly suitable means is to ensure more intensive use of the existing modern machinery.

## CHAPTER 6—PUBLIC FINANCE

The Government's activities, are of crucial importance to the economy. The budget for 1977/78 had proposed a substantial increase of 25 per cent in total spending and it was feared that this increase in expenditures would generate substantial inflationary pressure in the economy. Such pressure it was thought would develop from the sizeable budget deficit which the expenditure would create, resulting in a call on the banking system for finance. This method of finance would have intensified demand pressures on goods and services. However, it was considered necessary to run this risk in view of the paramount need to make up for the ground lost in development spending in relation to the Plan targets during the previous three years. The sudden windfall improvement to the economy during 1977, due especially to higher coffee and tea prices, it was intended, could be utilized to achieve this objective.

6.2. In the event total expenditure by the Central Government rose much in excess of the budgeted increase of 25 per cent, by the significantly larger margin of 60 per cent. This large rise was matched by revenue receipts which turned out to be much greater than anticipated. Nevertheless as the GDP at current prices also rose sharply, the total Central Government expenditure as a ratio of GDP at market prices in 1977 was not markedly higher than the ratios for previous years; 29 per cent compared with ratios ranging from 26 to 29 per cent. Generally, there has been a steady upward trend in this ratio. Even an increase in this ratio of only 1 per cent per year represents a sizeable shift of resources from the private to the public sector. However, as long as the rates of growth in the Government expenditure are not in advance of the growth in GDP, no serious problem of economic management is likely to arise. Figures on Government expenditure and GDP in the previous few years are detailed below:—

	<i>Total Government Expenditure</i>	<i>G.D.P. at Market Prices</i>	<i>Ratio Government Expenditure G.D.P</i>
	<i>K£ Million</i>	<i>K£ Million</i>	<i>Per cent</i>
1972	190.96	72135	26
1973	213.79	82797	26
1974	264.87	1,01713	26
1975	337.34	1,16715	29
1976	391.44	1,42908	27
1977	538.85	1,83267	29

6.3. Table 6.1 gives a summary of the Central Government expenditure, and its sources of finance. The rapid growth in current and development expenditures experienced during the last four years continued during the financial year 1977/78. The heightened tension around the borders of Kenya forced the Government to increase the estimated expenditure by the

Ministry of Defence during 1977/78 by almost 150 per cent. The collapse of the East African Community also meant that the Government was forced to incur substantial expenditure, during the financial year 1977/78, on the establishment of wholly owned Kenyan corporations which were set up as replacements for former East African Community corporations. Mainly as a result of both these factors the highest ever supplementary expenditure of more than K£114 million had to be added to the already high estimates proposed in the original budget.

CENTRAL GOVERNMENT  
OUT-TURN\* OF REVENUE AND EXPENDITURE, 1973/74-1977/78

Table 6.1

K£'000

	1973/74	1974/75	1975/76	1976/77	1977/78**
Current Revenue	190,978	226,646	269,171	320,556	476,599
Current Expenditure	162,703	207,377	246,770	285,079	431,103
Current Surplus	28,275	19,269	22,401	35,477	45,469
Development Expenditure	48,230	61,985	74,254	86,034	161,748+
External Grants	3,186	8,228	7,008	10,519	17,246
DEFICIT	—16,769	—34,488	—44,845	—40,038	—99,006
INVESTMENT EXPENDITURE— Purchase of Equity in and Capital Contribution to:					
Financial Enterprises	1,873	556	1,245	949	15,688
Non-Financial Enterprises	2,361	5,062	5,148	10,699	
LOANS TO:					
Financial Enterprises		13,369	14,121	3,871	
Non-Financial Enterprises	""15,000	4,049	8,041	13,147	59,392
General Government		7,519	21,696	8,038	
Other		1,665	1,834	1,947	
Increase in Investment Claims	19,234	32,220	52,085	38,651	75,080+
TOTAL DEFICIT	"—36,003	—66,708	—96,930	—78,689	—174,086
FINANCING OF THE DEFICIT—					
External Loans	14,455	20,065	43,673	29,773	50,000
Long-Term Domestic Borrowing	18,853	15,490	52,782	25,000	90,000
SHORT-TERM BORROWING—					
Cereals and Sugar Finances Corporation	—1,623	—1,095	8,390	6,512	5,500
Tax Reserve Certificates	—1,867	—684	82	2,601	—
Treasury Bills	600	4,400	24,000	25,000	—
IMF Counterpart Facilities	—	5,700	—	—	—
Advances from Central Bank	—	4,400	—	—4,400	—
NET SHORT-TERM BORROWING	—2,890	12,721	32,472	29,713	5,500
CHANGES IN CASH BALANCES: Increase?"+	—5,584	—18,432	+ 31,997	+ 5,797	—28,586+
MEMORANDUM ITEMS—					
(i) Loans to University Students on Recurrent Account included with other loans	—	1,665	1,823	1,935	1,948
(ii) Development Project Earnings on Development Account included with Current Revenue	582	347	—	6,433	1,972

\*This table details Kenya Government's deficit and its financing. The details in this table are set out in such a way as to isolate distortions caused by items of "Investment" expenditure. These items consists 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.

+Ugg the Chapter text. It is suggested that capital spending may be K.£40 million less than these estimates leading to an increase not to a decrease in cash balances.

6.4. For 1977/78 current revenue was estimated at K£476.6 million, current expenditure at K£431.1 million, with the residual recurrent surplus of K£45.5 million being used to finance the record development expenditure of K£161.7 million. Taking the investment expenditure of K£75.1 million also into account, the financing gap was estimated to amount to K£191.3 million. It was proposed that this be closed by external grants of K£17.2 million; external loans of K£50 million; and domestic borrowing of K£95.5 million which included K£54.7 million from the banking system. Cash balances were also to have been run down by K£28.6 million. However, against these estimates it now seems likely that in the final out-turn total capital spending will be reduced by some K£40 million below the total estimated amount of K£236.8 million, and as a result the cash balances will increase, rather than decline.

#### **Scope of Government in the Economy**

6.5. The number of employees in Central Government did not increase between the middle of 1976 and middle of 1977. This led to a slight decline in their overall proportion in total employment. However, with the relaxation of the ban on employment in June, 1977, total employment in Central Government in 1978 is expected to be higher than in 1976. Direct Government expenditure on capital formation at current prices increased by almost K£17 million, from K£48.46 million in 1976 to K£65.37 million in 1977. This increase of 41 per cent compares with one of 30 per cent in total capital formation for the economy as a whole. Despite this, the proportion of direct expenditure incurred by the Government on capital formation has declined from 19.0 per cent of the total in 1974 to 16.8 per cent in 1977.

6.6. Total current and capital expenditure of the Government at constant prices on goods and services increased by almost 9 per cent in 1977. This represents a doubling of the growth rate when compared with the growth rate in the two previous years.

#### **Summary of Government Revenue and Expenditure**

6.7. The increase of about 50 per cent in the current revenue of K£476.6 million in 1977/78 is a very large rise, compared to the trend during previous years of an annual increase of about 20 per cent. However, this has been matched by an equally large increase in current expenditure in 1977/78.

6.8. Total development expenditure is estimated to have increased from K£86 million in 1976/77 to K£161.7 million in 1977/78 while investment expenditure has almost doubled from K£38.7 million in 1976/77 to K£75.1 million in 1977/78. These figures are, however, tentative and there is a possibility that the total of development and investment expenditures may in fact be nearer K£200 million than the K£237 million indicated above. Some of this expenditure it is expected, will be carried forward to 1978/79.

6.9. The overall deficit in 1977/78 was originally forecast to have more than doubled from K£78.7 million in 1976/77 to K£174 million. If the development and investment expenditure as mentioned in the previous paragraph, is adjusted downward for 1977/78, the overall deficit will decline to K£134 million, and this will result in an increase in cash balances of K£12 million.

6.10. The excess of development expenditure over the current surplus indicates the level of additional demand created by the Government in the economy. This excess was estimated to amount to K£191.3 million, in 1977/78, compared with K£89.2 million in 1976/77. Such a stimulus to an economy brings with it the likelihood of further inflationary pressures. Certain measures were, however, taken by the Government to reduce the inflationary pressures. The liquidity ratio of the commercial banks was raised from 18 per cent to 20 per cent and they were required to purchase Government stock which sterilized a further K£19.2 million. Further issues were placed with the general public in the first half of 1978 totalling K£40.8 million. Unlike treasury bills, purchases of Government stock by commercial banks do not count as a component of liquidity base, and as such they do tend to have a deflationary effect, particularly if the Government further deploys these funds with this intention.

#### **Recurrent Revenue**

6.11. The bulk of the recurrent revenue is derived from taxation as shown in Table 6.2. Out of total revenue of K£480.1 million in 1977/78, direct taxes yielded K£150.4 million and indirect taxes K£238.3 million, an increase in receipts of 39 per cent in direct taxes and 51 per cent in indirect taxes. The latter was compounded by the changes introduced in the budget for 1977/78. These included the following: -

- (i) the duty on a wide range of imported raw materials was raised from 10 or 15 per cent to 20 per cent;
- (ii) duties were increased to provide greater protection to textile and clothing manufacturers: thus duties on woven fabrics went up from 45 to 60 per cent: on knitted fabrics from 45 to 55 per cent; on imported clothing from 50 to 70 per cent: and a duty of 100 per cent ad-valorem was introduced on second hand clothing;
- (iii) the duties on imported spirits and cigarettes were increased;
- (iv) taxes on petrol were increased by 20 cents per litre and a sales tax on light diesel fuel was introduced at a rate of 10 cents per litre;
- (v) the sales tax on beer was raised by 30 cents per half-litre bottle; and
- (vi) export taxes on coffee and tea were introduced.

Central Government

Gross Receipts on Recurrent Account, 1974/75-1977/78

Table 6.2

K£million

	1974/75	1975/76	1976/77	1977/78*
Direct Taxation—				
Income Tax	76.57	88.60	107.47	150.00
Other	0.59	1.64	0.56	0.40
Total	77.16	90.24	108.03	150.40
Indirect Taxation—				
Sales Tax	46.86	59.27	65.42	91.00
Import Duties	42.11	49.18	52.86	92.00
Excise Duties	22.67	20.63	28.22	38.00
Export Duties	—	—	—	7.00
Licences and Fees Under Traffic Act ..	2.77	2.86	3.32	3.62
Other	5.49	6.37	8.04	6.65
Total	119.90	138.31	157.87	238.27
Compulsory Fees, Fines and Penalties	2.75	3.59	5.20	7.55
Income From Property	7.23	11.90	15.28	23.95
Current Transfers	0.97	3.59	1.78	0.36
Charges for Goods and Services	14.58	17.01	19.39	25.21
Internal Borrowing	12.72	32.47	29.73	5.50
Loan Repayment	1.91	2.19	3.49	3.65
Othe	1.81	2.31	3.09	25.23
Grand Total	239.03	301.60	343.80	480.13

\*Provisional.

6.12. These changes had been expected to increase revenue by K£24.5 million. However, the receipts from indirect taxes are now expected to rise by K£80.4 million, due to the buoyancy in the economy. The various changes in the rates of import duties yielded as a result a considerable increase in the receipts during 1977 as shown in Table 6.3. Total collections rose from K£66.5 million in 1976 to K£81.8 million in 1977, an increase of 23 per cent. Government policy of imposing high import duties on certain raw materials and goods to protect developing industries has had some effect in 1977. There was for instance, virtually no increase in the import duties collected on textiles although the rates went up considerably. Receipts of duty from imports of machinery rose from K£7.1 million in 1976 to K£12.3 million in 1977, an indication of a rise in imports of machinery in response to the higher level of activity in the economy.

## CENTRAL GOVERNMENT

## IMPORT DUTY COLLECTIONS, 1973-1977

Table 6.3

K£'000

END USE CATEGORY	1973	1974	1975	1976	1977
Food, drink and tobacco	4,268	2,999	3,588	3,938	6,256
Basic materials	1,120	1,756	1,706	2,371	2,459
Fuels	10,108	10,522	13,170	19,160	16,768
Chemicals	1,061	1,316	1,764	3,722	5,575
Textiles	4,119	6,006	5,015	4,726	4,972
Semi-manufactures	1,964	4,206	2,307	2,814	3,866
Metals	1,742	2,907	2,514	6,432	8,248
Transport Equipment	4,784	8,524	8,411	9,512	13,302
Machinery	3,535	3,762	4,286	7,149	12,325
Miscellaneous commodities	2,347	4,573	4,606	6,648	8,067
TOTAL	35,048	46,572	47,368	66,472	81,838

6.13. Table 6.4 gives information on excise revenue collected on beer, spirits, sugar and cigarettes. The total value of collections was K£37.8 million in 1977 compared with K£28.6 million in 1976, an increase of 32 per cent. The increase in the local production of beer and spirit is reflected in the higher excise revenue collected for these items. The changes in the rates of taxation on cigarettes, introduced in the budget last year, accounts for part of the 46 per cent increase in excise revenue from this commodity in 1977. The rest of the increase can be attributed to higher consumption.

## CENTRAL GOVERNMENT

## EXCISE REVENUE BY COMMODITIES. 1973-1977

Table 6.4

K£'000

	1973	1974	1975	1976	1977
Beer and spirits	10,126	11,432	10,890	12,514	14,319
Sugar	2,848	3,556	3,636	5,668	9,091
Cigarettes	5,802	6,776	7,788	8,580	12,533
Other commodities	2,856	2,868	2,580	1,861	1,860
TOTAL	21,632	24,632	24,894	28,623	37,803

**Development Account**

6.14. Details on expenditure incurred on development account and its financing are set out in Table 6.5. As mentioned earlier, the actual development expenditure in 1977/78 will probably be around K£200 million. This, however, still represents an increase of more than 50 per cent over 1976/77. This is accounted for by the sharp rise in both the direct development expenditure, and investment expenditure incurred in the form of loans to



parastatal organizations, particularly the corporations which were set up by the Government in 1977, to take over from their predecessor corporations of the East African Community. Loans were also allocated to the Tana River Development Authority for the construction of the Upper Tana reservoir and to the Agricultural Finance Corporation and Agricultural Development Corporation for investment in crop processing and land purchase. These few but large projects account for over K£34 million of the K£75.1 million allocated for investment expenditure in 1977/78.

CENTRAL GOVERNMENT FINANCING OF DEVELOPMENT ACCOUNT, 1974/75-1977/78				
Table 6.5	<i>K£.million</i>			
	1974/75	1975/76	1976/77	1977/78*
EXPENDITURE				
Development Expenditure	62.0	74.3	86.0	161.7
Investment Expenditure	32.2	52.1	38.7	75.1
TOTAL	94.2	126.4	124.7	236.8
FINANCING				
Surplus on Current Account	19.3	22.4	35.5	45.5
External Loans	20.1	43.7	29.8	50.0
External Grants	8.2	7.0	10.5	17.2
Long Term Domestic Borrowing	15.5	52.8	25.0	90.0
Treasury Bills	4.4	24.0	25.0	—
Other Short Term Borrowing	8.3	8.5	4.7	5.5
From Cash Balances	18.4	32.0	—5.8	28.6
TOTAL	94.2	126.4	124.7	236.8

\*Provisional.

6.15. As indicated above the Government does not intend to resort to treasury bills to fund expenditure on development account in 1977/78. and has instead floated stock issues. Excluding changes in cash balances, 59.5 per cent of the expenditure on development account in 1977/78, is estimated to be financed from domestic sources, compared with 72.3 per cent in 1976/77.

#### Functional and Economic Classification of Expenditure

6.16. The functional classification of recurrent and development expenditure is given in Table 6.6. The largest total expenditures in 1977/78 were incurred on public administration, defence, education and agriculture including forestry activities. The expenditures on each of these activities are estimated to rise by 66 to 89 per cent in 1977/78 over 1976/77 levels, except for education where the increase may only be 20 per cent. Expenditures on most other Government activities are also expected to expand substantially during 1977/78 and in many instances the increases range from between 50 to 133 per cent. However, for certain essential services such as health, social welfare and roads the increase may only range from 18 to 27 per cent.

## CENTRAL GOVERNMENT

## EXPENDITURE ON MAIN SERVICES 1974/75-1977/78

Table 6.6

K£million

	1974/75			1975/76			1976/77			1977/78*		
	Recur- rent Account	Deve- lopment Account	Total	Recur- rent Account	Deve- lopment Account	Total	Recur- rent Account	Deve- lopment Account	Total	Recur- rent Account	Deve- lopment Account	Total
<b>General Public Administration</b>												
General Administration	16.03	5.62	21.65	20.80	24.87	45.67	22.39	13.85	36.24	35.92	30.42	66.34
External Affairs	2.24	0.11	2.35	2.52		2.68	2.62	0.34	2.97	4.32	1.21	5.53
Public Order and Safety	19.03	2.19	21.22	22.57	2.00	24.57	22.19	1.49	23.68	30.31	2.72	33.03
<b>Total</b>	37.30	7.92	45.22	45.89	27.03	72.92	47.20	15.69	62.89	70.55	34.35	104.90
<b>Defence</b>	17.71	1.40	19.11	19.42	1.19	20.62	41.12	1.79	42.91	73.92	7.38	81.31
<b>Education</b>	58.49	5.31	63.80	68.93	3.31	72.24	76.25	4.57	80.82	89.29	6.84	93.13
<b>Health</b>	16.90	3.83	20.73	19.52	4.77	24.29	21.26	8.30	29.56	26.90	10.78	37.67
<b>Housing And Community Welfare</b>	1.26	4.90	6.16	1.25	4.84	6.09	1.18	4.24	5.42	3.38	9.26	12.63
<b>Social Welfare</b>	4.76	1.22	5.98	5.70	2.06	7.76	6.42	2.40	8.82	6.37	4.10	10.46
<b>Economic Services</b>												
General Administration	2.39	6.24	8.63	2.05	9.54	11.59	3.19	5.97	9.16	6.06	11.72	17.78
Agriculture, Forestry and Fishing	13.61	20.43	34.04	20.54	21.52	42.06	19.08	23.98	43.06	26.18	47.39	109.3
Mining, Manufacturing and Construction	5.44	1.28	6.72	5.57	1.52	7.09	5.58	1.71	7.29	8.74	2.20	42.39
Electricity, Gas, Steam and Water	2.62	5.95	8.57	3.70	12.61	16.31	4.62	11.21	15.83	5.48	36.91	35.56
Roads	7.43	18.83	26.26	8.39	17.90	26.29	8.80	20.55	29.14	9.44	26.11	40.37
Transport and Communication	1.69	11.67	13.36	1.60	13.59	15.19	1.92	16.20	18.12	5.60	34.77	11.56
Other Economic Services	5.43	1.77	7.20	4.20	1.53	5.73	4.61	2.16	6.77	8.48	3.08	
<b>Total Economic Services</b>	38.61	66.17	104.78	46.05	78.21	124.26	47.80	81.78	129.57	69.98	162.18	232.16
<b>—Other Services: Including Public Debt</b>	34.03	1.78	35.81	41.83	3.11	44.94	45.80	3.99	49.79	92.66	—	92.66
<b>Total</b>	209.04	92.45	301.58	248.59	124.52	373.11	287.01	122.75	409.76	433.05	234.88	667.93

\*Provisional.

6.17. There has been a change in the pattern of expenditure during 1976/77 and 1977/78 compared with the pattern in previous years. As a result of the necessity to increase the expenditure on defence during the last two financial years, the share of expenditure incurred on defence has risen from 5.5 per cent of the total in 1975/76, to 15.5 per cent in 1977/78. This relative increase in defence expenditure has decreased the proportion incurred on other activities. These include public administration, education, health, other social services and roads.

6.18. The relative shares of the main activities in total development expenditure have also changed during the last three financial years. The share of development expenditure allocated to public administration

CENTRAL GOVERNMENT  
ECONOMIC ANALYSIS OF EXPENDITURE, 1974/75-1977/78

*Table 6.7* *K£million*

	1974/75	1975/76	1977/78	1977/78*
<b>CURRENT EXPENDITURE</b>				
<b>CONSUMPTION EXPENDITURE ON GOODS AND SERVICES</b>				
Labour Costs	64.08	81.52	83.12	125.15
Other Goods and Services	67.30	73.70	101.32	148.43
<b>TOTAL</b>	131.38	155.22	184.44	273.58
SUBSIDIES	0.88	0.81	0.74	0.64
INTEREST	14.53	19.53	23.95	37.47
TRANSFERS TO:				
Households and Un-incorporated Enterprises Including Private Non-profit Institutions	6.30	7.37	8.79	
Financial and Non-Financial Enterprises	2.67	3.99	2.50	
General Government	53.35	62.91	68.23	103.99
Rest of the World	1.23	0.98	1.32	
Funds	0.48	1.98	0.36	
<b>TOTAL TRANSFERS</b>	64.03	77.23	81.20	103.99
OTHER	0.03	0.16	0.12	—
<b>TOTAL CURRENT EXPENDITURE</b>	210.85	252.94	290.46	415.68
<b>CAPITAL EXPENDITURE</b>				
Gross Fixed Capital Formation	48.82	55.27	68.30	127.14
Purchase of Equity in Enterprises	5.62	6.39	11.65	15.69
Loans	26.60	45.69	27.00	59.39
Loan Repayment	9.12	11.51	12.34	40.12
Transfers of Funds	0.57	1.30	0.01	9.91
<b>TOTAL CAPITAL EXPENDITURE</b>	90.73	120.17	119.30	252.25
<b>TOTAL EXPENDITURE</b>	301.58	373.11	409.76	667.93

\*Provisional.

decreased from 21.7 per cent in 1975/76 to 12.8 per cent in 1976/77 and 14.6 per cent in 1977/78, and the proportions allocated for education, health and roads also fell in 1977/78 below the levels in 1976/77.

6.19. Table 6.7 details an economic classification of Central Government expenditure. Current expenditure accounted for 62 per cent of the total in 1977/78, compared to 71 per cent in 1976/77 and 68 per cent in 1975/76. This represents a shift of resources in favour of development expenditure in 1977/78, and is in line with the Government's intentions as stipulated in the budget proposals last year. Expenditure on goods and services is the largest component of current expenditure, and is expected to rise from K£184.4 million in 1976/77 to K£273.5 million in 1977/78 an increase of 48 per cent. This rise reflects especially the increased level of defence commitments.

6.20. Although expenditure on gross fixed capital formation is expected to rise from K£68.3 million in 1976/77 to K£127.1 million in 1977/78, its share of total capital expenditure will be reduced from 57 per cent in 1976/77 to 50 per cent in 1977/78, due to the sudden increase in loans and loan repayments from K£39.3 million in 1976/77 to K£99.4 million in 1977/78. The steep increase in loan repayments in 1977/78 is on account of the redemption of two old loans issued on the London market and certain other loans which had high interest rates.

### Public Debt

6.21. On the 30th June 1977, the total outstanding debt amounted to K£442.4 million as stated in Table 6.8. This represents an increase of K£41.7 million over the previous year's figures. Of the total debt, K£222.9 million was funded and K£219.5 million unfunded. Almost K£20 million of the funded and K£209.3 million of the unfunded debts was held externally. Table 6.9 gives a breakdown of the sources of unfunded debt. The entire increase of K£20 million in the external unfunded debt in 1977, was received from external sources; K£13.5 million bilaterally and K£7.2 million from international organizations. The National Social Security Fund, as shown in Table 6.10, is the largest holder of the funded debt. This fund increased

CENTRAL GOVERNMENT  
PUBLIC DEBT, 1972-1977

Table 6.8 K£ millions

As at 10th June	PUBLIC DEBT*								
	FUNDED			UNFUNDED			TOTAL		
	Exter- nal	Inter- nal	Total	Exter- nal	Inter- nal	Total	Exter- nal	Inter- nal	TOTAL
1972	21.21	77.66	98.87	84.55	10.88	95.43	105.76	88.54	194.30
1973	21.21	99.22	120.42	105.29	10.73	116.01	126.50	109.95	236.43
1974	21.21	118.52	139.72	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	180.44	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

\*Excluding Short. Term Borrowings.

its holding of internal funded debt from K£76.2 million in June 1976 to K£100.5 million in June 1977, almost accounting for the entire increase in funded debt in 1976/77.

CENTRAL GOVERNMENT

SOURCES 01 UNFUNDED DEBT, 1972-1977

Table 6.9

K£'000

Outstanding as at June, 30th	1972	1973	1974	1975	1976	1977
EXTERNAL DEBT						
<i>Tending Countries</i>						
United Kingdom	47,209	48,014	47,098	43,826	40,786	37,164
U.S.A	7,272	13,611	13,476	15,902	18,380	19,868
West Germany	4,889	4,869	6,319	14,223	16,122	20,530
Japan	599	690	1,058	2,738	6,710	11,384
Sweden	1,119	2,954	6,678	10,004	11,981	12,245
Netherlands	272	1,245	1,674	5,157	4,491	6,134
Denmark	1,078	1,131	798	2,035	2,788	3,948
Finland						6,766
Other	1,829	4,091	3,999	6,410	8,523	5,216
TOTAL	64,267	76,605	81,100	100,295	109,781	123,255
<i>International Organisations</i>						
I.B.R.D	6,640	9,122	11,143	16,296	39,101	42,423
I.D.A	13,048	18,674	21,371	27,739	37,531	40,946
African Development Bank	595	885	1,508	1,970	2,243	2,672
TOTAL	20,283	28,681	34,022	46,005	78,875	86,041
TOTAL EXTERNAL	84,550	105,286	115,123	146,300	188,656	209,296
INTERNAL DEBT						
Central Bank of Kenya	10,000	10,000	10,000	10,000	10,000	10,000
Other	880	728	614	497	434	174
TOTAL INTERNAL	10,880	10,728	10,614	10,497	10,434	10,174
TOTAL UNFUNDED DEBT ..	95,430	116,013	125,737	156,796	199,091	219,470

CENTRAL GOVERNMENT

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

Table 6.10

K£'000

	1972	1973	1974	1975	1976	1977*
INTERNAL:—						
PUBLIC BODIES:—						
National Social Security Fund	26,134	30,427	48,181	62,185	76,220	100,478
Central Government	17,469	25,260	19,448	20,581	23,921	16,812
Local Government	948	778	780	721	838	734
Kenya Post Office Savings Bank	3,384	5,644	4,851	6,186	7,320	7,832
East African Community Institutions	395	3,809	5,191	6,562	6,388	8,152
Central Bank	3,665	4,234	8,311	7,156	36,349	37,730
Other Public Sector	507	423	1437	382	564	1,375
OTHER INTERNAL:—						
Commercial Banks	8,093	10,836	10,184	9,732	8,888	8,697
Insurance Companies	6,133	6,106	6,357	5,964	7,082	9,718
Other Companies	8,889	10,314	12,236	13,192	11,943	11,263
Private Individuals	291	317	450	282	270	296
EXTERNAL	1,753	1,068	1,090	661	654	203
TOTAL	77,661	99,216	118,516	133,604	180,438	203,290

\*Provisional.

6.22. Table 6.11 details the annual debt servicing charges and Table 6.12 sets out the service charges on external debt alongside the value of exports of goods and services. The total debt service charges amounted to about 2.0 per cent of GDP in 1977. The debt service charges on external debt were also only 2.3 per cent of the value of exports of goods and services in 1977. This is one of the lowest external debt service ratios among developing countries.

CENTRAL GOVERNMENT

DeBT SERVICING CHARGES, 1972-1977

Table 6.11

K£ million

Year ending 30th June	ANNUAL DEBT SERVICING CHARGES			INTEREST AND LOAN REPAYMENT RECEIPTS			NET SERVICING CHARGES			Sinking Funds at Market Value
	Exter- nal	Inter- nal	Total	Exter- nal	Inter- nal	Total	Exter- nal	Inter- nal	Total	
1972	7.23	9.47	16.70	0.59	4.50	5.09	6.64	4.97	11.61	15.51
1973	8.88	7.67	16.55	0.68	3.97	4.64	8.20	3.70	11.91	15.94
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

\*Includes interest payments of K£million:—

1972—8.72; 1973—10.64; 1974—11.98; 1975—14.63; 1976—19.64; 1977—23.95.

CENTRAL GOVERNMENT

DEBT SERVICE CHARGES ON EXTERNAL DEBT RELATED TO EXPORTS OF GOODS AND SERVICES,  
1971-1977

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	
1971	11.5	181.9	6.3
1972	7.2	204.5	3.5
1973	8.9	253.6	3.5
1974	8.6	357.2	2.4
1975	10.1	356.9	2.8
1976	12.0	478.0	2.5
1977	14.8	849.7	2.3

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

6.23. As mentioned above the total debt service charge was an equivalent of 2.0 per cent of GDP in 1977. This proportion will rise fairly rapidly over the next six years because substantial expenditures on purchases of equipment are expected to continue through 1978 and 1979. To some extent,

these are to be financed by drawing on suppliers credits and other short term Government borrowing, which will be repaid over the next ten years thus adding further to the already increasing burden of loan repayments. This trend will also raise the ratio of external debt service charge to exports of goods and services. This ratio has been below 3 per cent in the last four years but is expected to rise to between 6.5 and 7 per cent by 1983.

#### Local Authorities

6.24. Total expenditures by the local authorities are given in Table 6.13. The figures are based on the published estimates for 1976 and 1977 as audited accounts were not available for all the councils. The total expenditures by all local authorities are estimated to have risen from K£34.67 million in 1976 to K£40.94 million in 1977 an increase of 18 per cent. The whole increase was due almost entirely to the increase in expenditure incurred by Nairobi City Council. This council is extending considerably its housing estates projects as well as water and sewerage works to cope with the ever-increasing population. The bulk of the investment programmes are financed by foreign loans especially from USAID and the World Bank.

EXPENDITURE OF LOCAL AUTHORITIES, 1973-1977

*Table 6.13* *K£million*

	MUNICIPALITIES			TOWN AND COUNTY COUNCILS	TOTAL
	Nairobi City Council	Other Municipal Councils	Total		
1973	13.05	6.00	19.05	3.86	22.91
1974	13.80	7.92	21.72	3.96	25.68
1975	15.35	8.53	23.89	5.25	29.14
1976*	17.43	10.64	28.07	6.60	34.67
1977*	22.82	10.97	33.79	7.15	40.94

\*As shown in Councils' Estimates.

6.25. Details on expenditures by municipal councils on main services are shown in Table 6.14. This total expenditure is expected to rise from K£28.07 million in 1976 to K£33.79 million in 1977, an increase of about 20 per cent. The most significant increases have taken place in expenditures on sanitary services, water undertakings and housing estates. As shown in Table 6.15 expenditure by municipalities on wages and salaries rose by only about 7 per cent in 1977. This, however, does not include expenditures on wages paid as components of total costs of capital projects.

Municipal Councils: Recurrent and Capital Expenditure on-  
Main Services, 1973-1977

Table 6.14

K£'000

	1973	1974	1975	1976*	1977*
Administration-	1,385	1,517	1,840	2,318	2,393
Community Services-					
Roads	2,061	1,858	1,869	2,231	2,401
Sanitary Services	1,919	2,793	2,741	3,662	4,757
Other	450	700	695	820	1,191
Total	4,431	5,351	5,305	6,714	8,349
Social Services—					
Health	1,813	1,375	1,733	2,252	2,181
Education	4,131	3,866	4,389	4,958	5,212
Other	1,147	2,254	2,126	2,323	2,532
Total	7,090	7,495	8,247	9,533	9,924
Trading Services—					
Water Undertakings	2,253	2,226	2,649	3,918	5,561
Markets and Slaughter Houses	321	381	410	514	791
Breweries and Beer-shops	205	128	35	118	145
Housing Estates (including Staff Housing)	3,160	4,213	4,715	4,261	5,975
Hostels	24	14	24	11	22
Other	47	238	194	368	498
Total	6,011	7,200	8,027	9,191	12,993
Unallocable Expenditure..	133	153	467	312	132
Total	19,050	21,716	23,886	28,070	33,792

\*As shown in Councils' Estimates.

Municipal Councils: Economic Analysis of Expenditure, 1973-1977

Table 6.15

K£'000

	1973	1974	1975	1976*	1977*
Expenditure on:					
Wages, Salaries and Allowances	9,649	9,075	11,220	12,604	13,542
Other Goods and Services	4,141	5,238	6,052	6,004	7,774
Loan Charges	2,843	3,372	3,470	4,251	4,193
Transfers (Excluding Compensation and Gratuities)	839	558	389	419	469
Capital Projects	2,943	3,823	3,706	5,689	9,018
Net Inter-Departmental Transfers	—1,364	—350	—950	—897	—1,204
Total	19,050	21,716	23,886	28,070	33,792

\*Provisional.



6.26. Table 6.16 sets out the details on revenue received by municipalities. The increase in expenditures during 1977 of 20 per cent mentioned above, has been matched by an increase of only 5 per cent in revenue. The low increase has been off-set by the sharp rise in 1976. Since the graduated personal tax was abolished the municipal councils have had difficulties in expanding their revenue base. This tax was replaced by Government grants, and these over the years have generally been used to ensure a balanced budget. Municipal councils are, however, also receiving funds for capital projects through overseas loans, particularly from the World Bank. The increase in indirect taxes of about 20 per cent between 1976 and 1977 is partly explained by higher rates paid in Nairobi.

Municipal Councils: Economic Analysis of Revenue, 1973-1977

Table 6.16

K£'000

	1973	1974	1975	1976	1977*
Graduated Personal Tax	3,234	24	—	—	—
Indirect Taxes (Licences, Cesses and Rates)	4,146	5,004	6,006	5,792	7,095
Income from Property (Buildings and Rents)	2,250	2,714	3,239	4,582	3,746
Interest on Investments	300	203	350	177	154
Sale of Goods and Services—					
School Fees	1,137	578	581	553	671
Sale of Water	2,005	2,386	3,685	3,651	5,206
Sale of Beer	142	75	32	32	157
Markets and Slaughter Charges	25	104	106	276	213
Sewerage and Refuse Removal Charges	1,214	1,542	1,934	2,227	2,797
Other Sales	671	1,164	1,420	2,672	1,264
Government Grants	1,431	4,335	4,874	5,031	5,136
Loans Raised	3,008	3,886	3,016	6,934	7,096
Miscellaneous (including Court fines, sale of capital assets, loan repayments, and non-Government grants)	283	294	229	364	385
Total	19,844	22,309	25,472	32,291	33,920

\*Provisional.

6.27. An economic analysis of the expenditure and revenue of town and county councils is shown in Table 6.17. There was only a moderate increase in their expenditure between 1976 and 1977, while their revenue receipts went up by 17 per cent. This increase is accounted for by the higher cesses collected, especially from coffee farmers during 1977.

Town and County Councils: Economic Analysis of Expenditure and Revenue,  
1973- 1977

Table 6.17

K£'000

	1973	1974	1975	1976	1977*
Expenditure—:					
Wages, Salaries and Allowances	2,034	1,948	2,259	2,873	3,196
Other Goods and Services	958	1,045	1,213	1,703	2,063
Loan Charges	231	224	272	410	486
Transfers (including Compensation and Gratuities)	68	113	501	184	223
Capital	562	686	1,005	1,404	1,274
Net Inter-Departmental Transfers	+ 9	—54	—2	+ 26	—98
<b>Total</b>	<b>3,862</b>	<b>3,962</b>	<b>5,249</b>	<b>6,600</b>	<b>7,145</b>
Revenue:—					
Graduated Personal Tax	—	—	—	—	—
Indirect Taxes (Licenses, Cesses and Rates)	3,138	2,161	2,338	2,730	3,714
Income from Property (Building and Land Rent)	747	689	792	921	1,069
Interest on Investment	73	101	165	134	224
Sale of Goods and Services:—					
School Fees	—	—	—	—	—
Other	981	1,126	1,333	1,697	1,898
Government Grants	28	24	37	136	150
Loans Raised	6	8	385	860	464
Miscellaneous (including Court fines, sale of Capital assets and non-Government Grants)	131	84	91	79	154
<b>Total</b>	<b>5,104</b>	<b>4,193</b>	<b>5,141</b>	<b>6,557</b>	<b>7,672</b>

\*Provisional

## CHAPTER 7—TRADE

Kenya's external trade increased very substantially in 1977. There was a rise of 30.6 per cent in the value of imports and 45.4 per cent in that of exports. The high coffee and tea prices in export markets together with a more moderate rise in import prices enabled the trade deficit to be reduced from K£61.8 million in 1976 to K£29.6 million in 1977. However, a repeat of the 1977 performance is not expected in 1978 as total imports are likely to rise while export realizations are falling due to the decline in commodity prices. As a result the trade deficit is anticipated to be substantial. Total exports and imports in 1977 rose to record levels of K£501.8 million and K£531.4 million, respectively.

7.2. The trade deficit with markets outside East Africa was reduced by 23 per cent from K115.3 million in 1976 to K£89.3 million in 1977, while the trade surplus with the traditional markets in Uganda and Tanzania increased by 11.6 per cent, from K£53.5 million in 1976 to K£59.7 million in 1977. The rise was mainly in exports to Uganda coupled with a large drop in imports from and exports to Tanzania. The latter was prompted by the border closure by Tanzania. It is in fact likely that the surplus in East African trade would have been higher but for the border closure. Not only would existing markets have been largely maintained but additionally the higher purchasing power injected by the favorable export prices which raised the propensity to import, would have worked in Kenya's favour. The details on exports and imports since 1973 are given in Table 7.1.

Table 7.1	Balance of Trade, 1973-1977					<i>k£million</i>
	1973	1974	1975	1976	1977	
Imports—						
From outside East Africa ,	215.2	369.4	352.1	393.8	529.2	
Commercial	196.8	350.3	319.5	364.1	493.3	
Government	18.4	19.1	32.6	29.7	35.9	
From Uganda and Tanzania	-3.4	14.5	10.4	13.1	2.2	
Total	228.6	383.9	362.6	407.0	531.4	
Exports—						
To Markets outside E.Africa, ,	122.6	163.0	169.0	268.8	428.9	
Re.exports	6.2	7.1	7.5	9.7	11.0	
To Uganda and Tanzania	51.8	65.6	61.5	66.6	61.9	
Total	180.7	235.7	238.0	345.1	501.8	
Balance of Trade—						
With Markets outside E.Africa	—86.4	—199.3	—175.7	—115.3	—89.3	
With Uganda and Tanzania	+38.4	+ 51.1	+ 51.1	+ 53.5	+ 59.7	
Total	—48.0	—148.2	—124.6	—61.8	—29.6	

\*Described in the Annual Trade Report as "Direct Imports".

\*\*Described in the Annual Trade Report as "Domestic Exports".

7.3. The overall picture over the five year period 1973-77 shows an average annual growth rate of 18.4 per cent in the value of imports compared with an average annual increase of 22.6 per cent in the value of exported merchandise. The deficit in 1977 was reduced to the level of 20 per cent of the peak deficit of K£148.2 million in 1974 which had resulted from the high oil price rises. The deficit with markets outside East Africa fell over this period from K£199.3 million in 1974 to K£89.3 million in 1977, while the surplus with the East African markets increased moderately from K£51.1 million in 1974 to K£59.7 million in 1977.

#### Price Changes

7.4. Table 7.2 sets out the new price indices for the years 1973 to 1977. Average import prices for all commodities rose by 7.7 per cent in 1977 compared with a rise of 16 per cent in 1976. While average import prices of food and live animal products fell by 12.6 per cent, there was a small rise in the import prices of manufactured goods. It should also be noted that the average prices of imported fuels increased by 7.7 per cent in 1977, compared to an increase of 18.1 per cent in 1976.

Table 7.2 Price Indices, 1974-1977 1972=100

Imports	1974	1975	1976	1977
Food and live animals	126	238	238	208
Beverages and tobacco	116	147	168	193
Crude materials, inedible	109	137	178	177
Mineral fuels	339	452	534	575
Animal and vegetable oils and fats	158	212	198	270
Chemicals	208	276	342	341
Manufactured goods	174	192	205	223
Machinery and transport equipment	141	172	219	250
Miscellaneous manufactured articles	166	189	195	214
All Imports	178	225	261	281
Non-oil Imports	158	194	225	245
Exports				
Food and live animals	131	137	224	375
Beverages and tobacco	90	116	145	139
Crude materials, inedible	184	160	180	202
Mineral fuels	230	322	387	434
Animal and vegetable oils and fats	174	227	262	272
Chemicals	126	163	205	216
Manufactured goods	134	183	219	280
Machinery and transport equipment	131	166	211	253
Miscellaneous manufactured articles	150	148	208	258
All Exports	152	175	238	337
Non-oil Exports	139	150	214	321

7.5. The overall export price index rose by 42 per cent in 1977 compared with a rise of 36 per cent in 1976. Notable rises were recorded in the indices on export prices of food and live animal products—67.4 per cent; manufactured goods—27.9 per cent; and mineral fuels—15.5 per cent. The price index on exports of non-oil products increased by 50 per cent in 1977, compared to a rise of 42.7 per cent in 1976. The shift in export prices, on the whole was more favourable in 1977, than in 1976.

#### Volume Changes

7.6. Table 7.3 details the new quantum indices on imports and exports. Despite the significant recovery in volume of imports in 1977, they were still at a level of 96 per cent when compared to the quantity of imports in 1972. Although the volume of exports had risen by 11 per cent in this period, they were nevertheless still at the level attained in 1974. This comparison makes it obvious in retrospect, that the oil crisis has had a serious impact on the growth in volume of trade since 1974. The break-up of the East African Community was also a secondary factor in this stagnation in the level of trade.

Table 7.3 Quantum Indices, 1974-1977 1972=100

Imports	1974	1975	1976	1977
Food and live animals	89	37	39	45
Beverages and tobacco	137	95	139	80
Crude materials, inedible	171	103	108	162
Mineral fuels	114	100	92	96
Animal and vegetable oils and fats	144	96	146	132
Chemicals	129	71	62	90
Manufactured goods	119	69	78	90
Machinery and transport equipment	94	97	81	110
Miscellaneous manufactured articles	89	73	83	89
All Imports	109	82	79	95
Non-oil Imports	108	78	76	96
Exports				
Food and live animals	102	100	116	134
Beverages and tobacco	93	62	66	102
Crude materials, inedible	133	120	122	104
Mineral fuels	102	94	92	98
Animal and vegetable oils and fats	152	133	192	48
Chemicals	130	91	87	74
Manufactured goods	105	103	102	75
Machinery and transport equipment	176	143	147	78
Miscellaneous manufactured articles	107	90	69	54
All Exports	111	101	107	111
Non-oil Exports	113	104	112	114

7.7. The overall volume of imports rose in 1977 by 21.5 per cent, while the rise in volume of non-oil imports was 26.3 per cent. Imports of crude materials went up by 50 per cent, chemicals by 45.2 per cent, and machinery and transport equipment by 35.8 per cent. The quantity of imports of beverages and tobacco, however, declined by 42.4 per cent due mainly to the reduction in imports of raw tobacco as the supplies from Tanzania were cut off by the border closure.

7.8. Overall volume of exports increased moderately in 1977. The rise in volume of exports of beverages and tobacco was 54.5 per cent, due to the expansion in exports of beer and cigarettes. However, the increase of 15.5 per cent in the volume of exports of food and live animal products was more significant, and resulted from the increase in exports of coffee and tea. The large falls in volume of exports of animal and vegetable oils and fats were caused by the loss of the markets in Zambia for cotton seed and sunflower oils due to withdrawal of transit facilities across Tanzania.

7.9. Excluding exports of oil, coffee and tea, the volume of the rest of the exports fell by 23 per cent between 1976 and 1977. The decline is due largely to the loss of markets in Tanzania, which in 1977 was compensated for by the high level of domestic demand. When domestic demand is less buoyant the effects of the decline in exports will be felt if this market has in the meantime not been replaced by other alternative outlets.

#### Terms of Trade

7.10. As shown in Table 7.4 the terms of trade shifted very much in Kenya's favour in 1977. At the overall level, terms of trade moved in Kenya's favour by 32 per cent in 1977 over 1976, and were 20 per cent above the 1972 level. The increase excluding oil was 38 per cent. The high coffee and tea prices raised the trade terms of food and live animal products by 80 per cent above the 1972 level. Terms of trade for manufactured goods and crude materials also went up by 21 per cent and 14 per cent respectively.

*Table 7.4* Terms of Trade, 1974-1977 1972=100

	1974	1975	1976	1977
All Items	85	78	91	120
Non-Oil Items	88	77	95	131

#### Analysis by Broad Economic Categories

7.11. Imports.—Table 7.5 provides an analysis of imports by broad economic categories, while details on selected imports are noted in Table 7.6. Although the overall pattern of imports did not change very much in 1977, there was a substantial increase in the relative proportion of imports of

machinery and transport and other capital equipment, while the relative shares of fuels and lubricants and food and beverages declined. Proportions for the rest of the commodity groups remained unchanged.

TOTAL IMPORTS, 1973-1977

By Broad Economic Category

Table 7.5

k£'000

	1973	1974	1975	1976	1977
1. Food and Beverages	21,813	25,395	21,393	26,310	27,459
<i>Primary</i>	6,932	4,675	6,609	2,786	4,977
For Industry	4,815	2,654	4,712	393	2,894
For Household Consumption	2,117	2,021	1,897	2,393	2,083
<i>Processed</i>	14,881	20,720	14,784	23,524	22,482
For Industry	4,692	7,806	8,925	11,379	14,575
For Household Consumption	10,189	12,914	5,859	12,145	7,907
2. Industrial Supplies (Non-Food)	88,978	153,094	105,007	124,011	160,780
<i>Primary</i>	5,360	9,281	7,734	11,488	13,147
<i>Processed</i>	83,618	143,813	97,273	112,523	147,633
Fuels and Lubricants	22,317	81,565	95,805	103,884	117,147
<i>Primary</i>	16,708	67,465	87,242	94,159	101,007
<i>Processed</i>	5,609	14,100	8,563	9,725	16,140
Motor Spirit	1,079	2,200	1,006	796	2,652
Other	4,530	11,900	7,557	8,929	13,488
4. Machinery and other Capital Equipment	42,728	43,028	61,660	72,521	103,006
<i>Machinery and other Capital Equipment</i>	39,580	38,918	56,307	64,259	91,439
<i>Parts and Accessories</i>	3,148	4,110	5,353	8,262	11,567
5. Transport Equipment	27,641	44,373	46,789	44,116	76,054
<i>Passenger Motor Vehicles</i>	4,760	9,495	6,230	8,410	12,412
<i>Other</i>	9,135	12,652	19,072	16,955	38,502
Industrial	8,985	12,393	18,836	16,618	38,059
Non-Industrial	150	259	236	337	443
<i>Parts and Accessories</i>	13,746	22,226	21,487	18,751	25,140
6. Consumer Goods not elsewhere specified	24,617	35,304	31,273	35,219	46,355
<i>Durable</i>	5,385	7,179	5,277	7,009	9,034
<i>Semi-Durable</i>	9,924	15,657	12,989	16,578	21,431
<i>Non-Durable</i>	9,309	12,468	13,007	11,632	15,890
7. Goods not elsewhere specified	456	1,116	659	936	644
TOTAL	228,552	383,875	362,586	406,997	531,446
PERCENTAGE SHARES					
1. Food and Beverages	9.5	6.6	5.9	6.5	5.2
2. Industrial Supplies (Non-Food)	38.9	39.9	29.0	30.5	30.3
3. Fuels and Lubricants	9.8	21.2	26.4	25.5	22.0
4. Machinery and other Capital Equipment	18.7	11.2	17.0	17.8	19.4
5. Transport Equipment	12.1	11.6	12.9	10.8	14.3
6. Consumer Goods not elsewhere specified	10.8	9.2	8.6	8.7	8.7
7. Goods not elsewhere specified	0.2	0.3	0.2	0.2	0.1
TOTAL	1000	100.0	1000	100.0	1000

7.12. The largest increase in value terms in 1977 occurred in imports of transport equipment. These rose by 72.6 per cent, from K£44.1 million in 1976 to K£76.1 million in 1977. Within this category, while the value of the imports of passenger motor vehicles went up by 47.6 per cent, that of other transport equipment rose by 124.5 per cent. Imports of lorries and trucks and railway locomotives featured prominently in this latter group.

7.13. Values of imports of machinery and other capital equipment rose from K£72.5 million in 1976 to K£103 million in 1977, an increase of 42.1 per cent. Agricultural tractors and sugar processing machinery accounted for about 20 per cent of these imports. The import of sugar refining machinery was mainly for the sugar factory currently under installation at Nzoia and for the expansion of some of the existing sugar factories.

7.14. Imports of consumer goods excluding food products and beverages rose by 31.6 per cent in value, from K£35.2 million in 1976 to K£46.4 million in 1977. The heaviest rise occurred in the value of imports of non-durable consumer goods, which went up by 36.6 per cent. Most significant increases occurred in imports of medical products and some types of textiles. As far as durable consumer goods are concerned, a substantial increase occurred in imports of radios and radio kits.

7.15. Imports of non-food industrial supplies rose by 29.7 per cent from K£124 million in 1976 to K£160.8 million in 1977. Most of this increase is accounted for by a rise of 31.2 per cent in imports of processed goods. Dyeing and related materials and fertilizers featured prominently amongst these, while tobacco, natural rubber, raw cotton and jute accounted for about 60 per cent of total value of imports of primary industrial supplies.

7.16. Imports of fuels and lubricants increased from K£103.9 million in 1976 to K£117.1 million in 1977, an increase of 12.7 per cent. The cost of imported crude oil rose by 7.2 per cent compared with a rise of 7.7 per cent in 1976, while imports of motor spirit rose by 233 per cent, from K£0.8 million in 1976 to K£2.7 million in 1977. This is imported to top up local production and does vary from year to year according to demand.

7.17. The increase in imports of food products and beverages in 1977, was a relatively modest one of 4.6 per cent. The bulk of this increase took place in imports of food products and beverages for commercial use, as opposed to household consumption.

Table 7.6 SELECTED IMPORTS, 1973-1977 K£million

	1973	1974	1975	1976	1977
Crude Petroleum	16.36	67.02	86.82	93.47	100.16
Motor Vehicles and Chassis	11.27	22.38	22.96	23.63	40.80
Agricultural Machinery and Tractors	3.23	5.59	6.56	7.06	16.60
Industrial Machinery (including Electrical)	41.71	45.44	61.13	69.89	92.13
Iron and Steel	15.81	28.44	15.56	28.17	32.64
Cotton Fabrics	2.70	2.30	1.38	0.97	0.44
Synthetic Fabrics	7.22	8.76	5.98	3.30	3.20
Paper and Paper Products	10.78	19.94	11.13	7.60	9.03
Pharmaceuticals	4.49	7.42	7.60	6.74	10.18
Fertilizers	5.18	13.36	11.23	5.22	9.47

7.18. *Exports.*—Table 7.7 sets out details on exports analysed by broad economic categories. The substantial increase in value of exports of food products and beverages reduced the relative share of the value of exports



of fuel and lubricants and non-food industrial supplies in the total. While the share of the former category of exports rose from 47.6 per cent in 1976 to 65.6 per cent in 1977, that of the other two Categories declined respectively from 20.8 and 23.4 per cent to 13.3 and 13.5 per cent. The overall increase in earnings of 97.4 per cent in 1977 in value of exports of food products and beverages was caused by higher quantities and 80 per cent and 91 per cent increases respectively in the average prices of coffee and tea. As a result total earnings from exports of coffee rose by 119 per cent and from tea by 126 per cent. Other but much smaller increases took place in exports of canned pineapples and cashew nut kernels.

Total Exports\*, 1973-1977

By Broad Economic Category

Table 7.7

K£'000

	1973	1974	1975	1976	1977
1. Food and Beverages	74,983	83,028	82,417	159,586	315,102
Primary	59,912	67,328	67,676	135,873	289,158
For Industry	37,310	40,532	36,278	95,926	206,258
For Household Consumption	22,602	26,796	31,398	39,947	82,901
Processed	15,071	15,700	14,741	23,713	25,941
For Industry	1,970	2,275	2,395	2,805	2,117
For Household Consumption	13,101	13,425	12,346	20,908	23,826
2. Industrial Supplies (Non-Food)	56,651	75,415	65,196	78,480	64,790
Primary	28,630	36,888	30,617	34,836	27,911
Processed	28,021	38,527	34,579	43,644	36,879
3. Fuel and Lubricants	21,673	46,035	58,957	69,730	83,198
Primary	88	98	268	323	220
Processed	21,585	45,937	58,689	69,407	82,978
Motor Spirit	3,317	6,027	8,246	8,966	13,578
Other	18,268	39,910	50,443	60,441	69,400
4. Machinery and other Capital Equipment	3,272	5,390	5,303	6,589	1,228
Machinery and other Capital Equipment	2,934	4,710	4,398	5,319	1,162
Parts and Accessories	338	680	905	1,270	66
5. Transport Equipment	4,026	4,199	4,190	4,005	999
Passenger Motor Vehicles	156	196	460	484	
Other	322	1,057	1,570	1,283	492
Industrial	318	1,053	1,467	1,269	488
Non-Industrial	4	4	103	14	4
Parts and Accessories	3,548	2,946	2,160	2,238	507
6. Consumer Goods not elsewhere specified	13,657	14,473	14,092	16,712	14,627
Durable	582	595	528	762	346
Semi-Durable	4,861	4,400	3,279	3,925	4,113
Non-Durable	8,214	9,478	10,285	12,025	10,168
7. Goods not elsewhere specified	157	223	200	293	314
TOTAL	174,420	228,763	230,356	335,395	480,259

	Percentage Shares				
1. Food and Beverages	43.0	36.3	35.8	47.6	65.6
2. Industrial Supplies (Non-Food)	32.5	33.0	28.3	23.4	13.5
3. Fuel and Lubricants	12.4	20.1	25.6	20.8	17.3
4. Machinery and other Capital Equipment	1.9	2.4	2.3	2.0	0.3
5. Transport Equipment	2.3	1.8	1.8	1.1	0.2
6. Consumer Goods not elsewhere specified	7.8	6.3	6.1	5.0	3.0
7. Goods not elsewhere specified	0.1	0.1	0.1	0.1	0.1
TOTAL	100.0	100.0	100.0	100.0	100.0

\*Excluding Re-exports.

7.19. Table 7.8 contains information on quantities of some principal overseas exports, for the years 1973 to 1977, while Table 7.9 details unit prices over the period and Table 7.10 shows the respective changes in quantities, values and prices between 1976 and 1977. The main increases

Table 7.8 Quantities of Principal Exports, 1973-1977

	Unit	1973	1974	1975	1976	1977
Coffee	Tons	75,317	71,680	67,728	77,586	94,344
Tea		51,712	49,600	52,450	59,285	70,220
Petroleum Products	Million Litres	1,867	1,368	1,528	1,564	1,634
Pyrethrum products	Tons	3,438	4,569	4,907	4,170	3,694
Meat Products	"	6,665	6,780	8,167	9,768	9,344
Sisal	"	44,916	72,074	43,986	29,368	24,925
Hides and skins	"	8,229	9,082	11,940	14,158	11,389
Soda ash	"	204,609	139,867	81,009	101,131	101,787
Felspar, Fluorspar	"	24,855	37,857	49,684	91,371	100,208
Cement	"	448,914	530,025	549,130	628,436	662,132
Maize (raw)	"	226,986	60,465	120,812	113,231	8,136
Canned pineapples	"	13,396	8,678	20,399	29,905	45,329
Butter and ghee	"	2,774	2,028	1,105	1,182	1,063
Beans and peas	"	18,730	11,646	19,050	11,470	22,020
Cotton (raw)	"	4,780	3,318	3,005	2,073	763
Wool	"	1,498	1,343	1,223	1,288	1,360
Animal feeds	"	35,609	15,288	16,046	27,223	17,730
Cashew nuts	"	9,381	20,363	14,327	11,543	1,100

Table 7.9 Export Prices, 1973-1977 *KSh./Unit*

	Unit of Quantity	1973	1974	1975	1976	1977
Coffee unroasted	Kg.	9.50	10.71	10.40	24.06	43.33
Tea	Kg.	6.56	7.82	8.74	10.72	20.44
Petroleum products	1,000 Lt.	172.76	497.14	636.84	736.62	866.22
Maize	100 Kg.	56.32	81.36	79.50	99.70	162.11
Meat and products	Kg.	11.85	11.45	12.57	17.17	16.26
Pyrethrum extract	Kg.	163.75	192.00	223.33	225.91	238.17
Sisal	100 Kg.	213.40	470.54	333.69	285.45	315.65
Hides and skins, undressed ..	Kg.	12.62	9.78	9.07	12.09	14.09
Wattle extract	Kg.	1.92	2.12	2.46	2.78	3.13
Soda ash	100 Kg.	27.94	38.74	60.13	59.98	52.80
Felspar, Fluorspar	100 Kg.	26.91	28.36	40.25	48.92	49.69
Cement	100 Kg.	12.22	17.13	21.87	25.68	25.88
Beans, peas, etc	Kg.	1.43	2.88	2.42	2.89	2.49
Cashew nuts, raw	Kg.	1.30	1.58	1.59	1.73	2.29
Wool	Kg.	10.76	10.31	6.97	8.18	11.46
Animal feed	100 Kg.	62.88	75.36	79.58	99.97	134.55
Cotton, raw	Kg.	5.74	6.85	8.53	11.02	11.39
Pineapples, canned	Kg.	2.22	3.26	3.54	4.67	4.64
Butter and ghee	Kg.	8.06	8.90	9.68	9.69	12.25
Wattle bark	100 Kg.	51.90	66.42	79.61	100.52	108.74

in 1977 were recorded in quantities of exports of coffee, tea, fluorspar, cement, canned pineapples and beans and peas, while exports of pyrethrum, sisal and particularly maize declined.

Table 7.10

EXPORTS CHANGES IN VALUE, QUANTITY AND PRICE, 1976-1977\*

	VALUE K£'000			PERCENTAGE CHANGE IN		
	1976	1977	Change	Value	Quantity	Price
Coffee, unroasted	93,348.5	204,366.2	111,017.7	118.9	21.6	80.1
Tea	31,763.2	71,779.3	40,016.1	126.0	18.5	90.7
Petroleum products	57,603.4	72,398.2	14,794.8	25.7	4.5	20.3
Meat and products	8,386.5	7,597.0	789.5	-19.4	4.3	-15.3
Pyrethrum extract	5,726.8	4,975.3	-1751.5	-13.1	-117.6	5.4
Sisal	4,191.6	4,113.9	-177.7	-11.8	-115.2	10.6
Hides and Skins, undressed	8,561.2	8,023.3	-1537.9	-16.3	-119.6	16.5
Wattle extract	2,686.3	1,832.5	-1853.8	-131.8	-139.4	12.6
Soda ash ..	3,032.9	2,687.0	-1345.9	-111.4	0.6	-112.0
Felspar, Fluorspar	2,235.1	2,489.5	254.4	11.4	9.7	1.6
Cement	8,069.7	8,566.4	496.7	6.2	5.4	0.8
Beans, peas etc.	1,656.3	2,755.7	1,099.4	66.4	92.0	-113.2
Cashew nuts, raw	998.5	126.2	-1872.3	-187.4	-190.5	32.4
Wool	526.4	779.2	252.8	48.0	5.6	40.1
Animal feed	1,365.7	1,192.8	-1172.9	-112.7	-134.9	34.6
Cotton, raw	1,142.1	434.8	-1707.3	-161.9	-163.2	3.4
Pineapples, canned	6,979.8	10,512.8	3,533.0	50.6	51.6	-10.6
Butter and ghee	572.5	650.8	78.3	13.7	-110.1	26.4
Wood carvings	486.5	560.0	73.5	15.1	8.6	6.1
Metal scrap	365.6	385.6	20.0	5.5	-120.7	33.1
Wattle bark	115.6	63.7	51.9	-129.1	-149.1	39.1
All other items	78,844.0	73,968.7	-14,875.3	-18.6	0	0
TOTAL	318,658.2	480,258.9	161,600.7	+ 50.7	..	..

\*Excluding Re-Exports.

### Direction of Trade

7.20. Details on Kenya's imports by areas and principal countries of origin are noted in Table 7.11. EEC countries accounted for 43 per cent of the total value of imports in 1977 compared to 40 per cent in 1976. Of the EEC states the United Kingdom continued to be the main supplier, contributing 42 per cent of all imports from the EEC countries, an equivalent of 18 per cent of the overall total. The value of imports from the Far East and Australia, western Europe excluding the EEC, and USA increased by 50.5, 44 and 35 per cent respectively, in 1977. Among the Far East and Australia group of countries, Japan accounted for 12 per cent

in 1977 and this led to a fall in total imports from middle eastern countries of 7.2 per cent. Imports from African countries also fell by more than one half, from K£16.6 million in 1976 to K£8.1 million in 1977. This was solely due to the fall in imports from Tanzania which declined from K£2.4 million in 1976 to K£1.6 million in 1977.

Origin of Total Imports, 1973 - 1977

Table 7.11

K£'000

	1973	1974	1975	1976	1977
E.E.C.—					
United Kingdom	57,137	71,123	75,707	77,043	95,218
West Germany	20,933	38,515	29,186	40,974	57,852
Italy	8,419	13,117	13,284	12,914	22,006
France	6,818	12,849	9,968	10,820	26,316
Netherlands	8,194	14,587	7,429	9,601	10,901
Other	5,307	8,995	9,441	11,645	16,859
Total	106,807	159,186	145,015	162,997	229,152
Other Western Europe Total	11,853	20,501	17,978	19,621	27,969
Eastern Europe Total	5,847	10,903	3,496	3,742	4,246
U.S.A.	17,259	21,376	25,556	23,672	30,482
Canada	3,838	2,814	5,799	6,270	5,276
Africa—					
Tanzania	8,528	10,686	9,166	12,406	1,622
Uganda	4,860	3,843	1,486	818	581
Zambia	604	1,996	549	824	1,030
Other	1,740	2,206	1,461	2,546	4,923
Total	15,732	18,731	12,662	16,594	8,156
Middle East—					
Iran	15,114	36,528	51,355	68,381	45,506
Other	4,702	34,971	32,261	28,997	44,860
Total	19,816	71,499	83,616	97,378	90,366
Far East and Australia—					
Australia	2,243	2,187	5,666	2,211	5,291
Japan	27,125	41,954	31,384	45,034	65,603
India	4,346	6,763	6,379	7,922	11,720
China (Mainland)	1,677	4,627	1,471	3,055	5,814
Other	9,172	17,185	11,906	17,492	25,552
Total	44,563	72,716	56,806	75,714	113,980
All other countries	2,574	5,879	11,435	353	21,260
Parcel Post and Special Transactions	263	270	223	656	559
Total	228,552	383,875	362,586	406,997	531,446

7.21. Table 7.12 sets out details on the direction of Kenya's exports by areas and principal countries of destination. The overall direction of exports remained virtually unchanged in 1977, with the EEC countries being the main destination, followed by African states and then USA in that order. These accounted for, respectively 46, 22 and 5.5 per cent of the total value of Kenya's exports. Exports to the EEC states increased by 95 per cent in value; from K£118.9 million in 1976 to K£232.2 million in 1977. More moderate rises were recorded in value of exports to USA, western Europe excluding the EEC, Canada and African countries. Large increases of 351. per cent and 111 per cent respectively were also recorded in value exports to new markets in Eastern Europe and the Middle East in 1977.

Destination of Total Exports\* 1973-1977

Table 7.12

K£,000

	1973	1974	1975	1976	1977
E.E.C.—					
United Kingdom	20,622	18,700	22,691	36,072	63,594
West Germany	13,571	17,874	19,189	42,123	85,951
Italy	3,687	4,440	5,771	13,874	13,442
France	1,460	1,863	1,459	3,415	6,074
Netherlands	8,096	11,445	7,477	17,052	51,345
Other	4,380	10,582	4,407	6,349	11,761
Total	51,816	64,904	60,994	118,885	232,167
Other Western Europe Total	11,110	11,637	11,287	21,012	26,273
Eastern Europe Total	2,256	2,968	2,301	3,301	14,891
U.S.A	7,532	8,028	8,409	18,378	27,592
Canada	2,706	3,329	5,039	6,096	8,458
Africa					
Tanzania	22,227	25,949	28,540	33,442	9,822
Uganda	29,557	39,676	32,910	33,162	51,992
Zambia	7,282	10,913	8,218	9,018	6,897
Other	13,054	19,345	25,360	32,227	41,550
Total	72,120	95,883	95,028	107,849	110,261
Middle East—					
Iran	592	331	964	955	2,065
Other	3,048	4,297	4,619	5,040	10,561
Total	3,640	4,628	5,583	5,995	12,626
Far East and Australia—					
Australia	670	1,140	1,740	1,393	1,848
Japan	5,031	5,364	6,333	4,551	5,233
India	1,587	2,820	2,862	2,545	1,623
China (Mainland)	3,070	1,787	1,402	413	1,463
Other	6,856	10,874	7,503	17,295	16,612
Total	17,214	21,985	19,840	26,197	26,779
All Other Countries	5,271	8,200	10,884	13,653	11,833
AIRCRAFT AND SHIPS STORES	7,047	14,135	18,617	23,696	30,939
ALL Exports	180,712	235,697	237,982	345,062	501,819

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

7.22. Exports to Africa as shown in Table 7.13 increased by only 2.2 Per cent from K£107.8 million in 1976 to K£110.3 million in 1977. The Largest increase was recorded in the value of exports to Uganda which rose by 56.8 per cent from K£33.2 million in 1976 to K£52.0 million in 1977. Uganda accounted for 47 per cent of exports to all African countries. Other notable increases were recorded in exports in 1977 to Egypt, almost entirely tea, Mozambique, Ghana, and Nigeria amounting respectively to 173,137 and 35 per cent. Exports to Tanzania and Zambia, however, fell and those to other African states remained relatively unchanged.

Table 7.13

## Trade with African Countries, 1973-1977

k£'000

	Exports,					Imports				
	1973	1974	1975	1976	1977	1973	1974	1975	1976	1977
Mainland—										
Uganda	29,557	39,676	32,910	33,162	51,992	4,860	3,843	1,486	818	581
Tanzania	22,227	25,949	28,540	33,442	9,822	8,528	10,686	9,166	12,406	1,622
Zambia	7,283	10,913	8,219	9,018	6,897	604	1,996	549	824	1,030
Ethiopia	1,800	2,315	1,189	1,701	1,923	174	158	104	56	245
Burundi	513	593	809	1,306	1,855		22	32	5	
Somalia	1,290	1,502	3,061	2,373	2,397	69	245	126	103	105
Sudan	1,046	924	1,818	4,165	5,035	1	6		136	1,161
Rwanda	1,579	2,978	4,922	6,269	6,241		300		765	1,259
Zaire	909	1,105	1,920	2,184	3,445	534	367	462	410	606
Malawi	317	494	310	415	376	5	15	15	8	104
Mozambique	187	92	366	243	577	96	15	81	11	484
Egypt	242	1,924	2,631	2,669	7,309	23	53	59	21	58
Algeria and Libya	420	551	533	124	51					
Ghana and Nigeria	233	644	1,022	655	884	351	445	10	30	20
Other	960	2,052	1,733	2,935	4,819	422	541	544	977	865
Total	68,563	91,712	89,983	100,661	103,623	15,667	18,692	12,634	16,570	8,140
Indian Ocean Islands—										
Mauritius	1,376	984	1,463	2,474	3,286	1	6	21	8	10
Reunion	654	854	984	1,524	772					
Other, , "	1,527	2,333	2,597	3,190	2,580	64	33	7	16	6
Total	72,120	95,883	95,028	107,849	110,261	15,732	18,731	12,662	16,594	8,156
Percentage of all Exports/ Imports	39.9	40.7	39.9	31.2	22.0	6.9	4.9	3.5	4.1	1.5

\*Including Re-exports.

\*\*Madagascar and Seychelles.

## Exports of Domestic Manufactures

7.23. The main groups of exports of domestic manufactured products are shown in Table 7.8 to 7.10. Main items of manufactured products include six petroleum products, cement, canned pineapples, canned beef, pyrethrum extract, tanned hides and skins and insecticides. Petroleum products alone account for a high proportion of total exports of manufactured goods. The distribution of individual petroleum products exported has changed since 1975. Exports of jet fuel, motor spirit and gas oil have risen substantially while exports of residual fuel oils have fallen.

7.24. Amongst the other manufactures identified above, there has been a particularly sharp growth in the volume of exports of canned pineapples from 20,399 tonnes in 1975 to 45,329 tonnes in 1977, while the value of these exports went up from K£3.58 million to K£10.51 million over this period. Exports of cement have risen more steadily from 549,130 tonnes in 1975 to 662,132 tonnes in 1977 with a comparable increase in values from K£6 million to K£8.57 million. Exports of insecticides, batteries and building structures such as window frames also rose in both 1976 and 1977.

7.25. The markets for the manufactured items examined above, include African countries which accounted for about 36 per cent of such exports in 1977. The bulk of the exports to Africa were of oil products which made up 78 per cent of the total.

## Vj g'Rewgt p'qh'Gzvt pcdVt cf g'tpf 'Geppqo le'F g'xgnr o gpv'

7.26. Two principle features of the pattern of Kenya's external trade, were the steep rise in oil prices in late 1973, and the exceptionally high prices for coffee and tea in late 1976 and 1977. As pointed out in Chapter 10, before the increase in oil prices in 1974 the values of fuel oil imports and exports were nearly in balance in Kenya. Since then the value of fuel oil imports has risen from 9.8 per cent of total imports in 1973 to 21 per cent in 1977, while the share of exports of fuel oil has gone up from 12.4 to 17.3 per cent of total exports over the same period. As a result the deficit on trade in fuel oil has risen from K£1.2 million in 1973 to K£32.4 million in 1977. Sales to Uganda and sales for aircraft and ships stores, which accounted for 56 per cent of all oil exports in 1973 and 69 Per cent in 1977, are the two main outlets for oil exports.

27. The value of exports of non-oil products, as a proportion of imports non-oil products has risen since the early 1970s. The percentages of such exports to imports are: —

1971-73 (average)	61.7
1974	60.5
1975	54.2
1976	87.7
1977	95.8

The proportion of imports that can be financed by exports has therefore been increasing although, as already mentioned, the 1977 figure is the result of special circumstances which are not likely to be repeated in the immediate future and the situation will certainly be different in 1978.

7.28. Processed exports constituted about 40 to 42 per cent of total exports between 1965 and 1975. In 1976 the proportion fell to 36 per cent and then to 20 per cent in 1977, due to the increases in the value of coffee and tea exports which are classified as primary goods. Disregarding the decline in 1976 and 1977, there are still no signs of an upward trend in the proportion of processed exports, a development which is desirable since it leads to an increase in the level of local output.

7.29. As far as the pattern of imports is concerned the proportion of the value of imports classified as consumer goods has fallen fairly steadily from about 23 per cent in 1968 to about 14 per cent in 1977. Within this group, imports of primary food products and beverages have declined from 2.2 per cent in 1968 to 0.5 per cent in 1977, and imports of processed foods and beverages have fluctuated between 2 and 4 per cent except for 1971 and 1972, when the proportion rose to 5 and 6 per cent. The value of imports of machinery and equipment on the other hand has risen substantially from a level of about 25 per cent in the late 1960s and early 1970s to a level of about 30 per cent in 1975 and 1976 and of over 34 per cent in 1977. There has therefore been a substantial switch in the composition of imports from consumer goods into machinery and equipment necessary for capital formation in both the public and private sectors.

#### **Kenya External Trade Authority**

7.30. Kenya External Trade Authority was created in April 1976 and during 1977 its marketing section organized successful sales missions to the Middle East and Europe. Special marketing reports for Somalia, Saudi Arabia and Malawi were prepared. Commercial representation was arranged at seven trade fairs in Western Europe and certain African countries. The authority organized the Kenya Trade Fair which opened in New York on 9th May, 1978. Arrangements are in hand for participation in fairs in eastern Europe, Asia and West Africa with the aim of opening new marketing channels for Kenya produce.

7.31. Assistance was rendered by a section of the authority to a number of industries based on food and wood. Advice was given on prospective new ventures which could assist the export trade. Export information is circulated and a fortnightly newsletter provides the latest foreign market information.



7.32. Two new sections have recently been formed one to deal with handicrafts, giftware and hand-finished wearing apparel, and the other for the issue of certificates of origin required under various schemes and conventions. Other sections of the authority deal with trade policy, trade facilitation and freight. The trade policy section was involved in an evaluation of the Export Compensation Scheme in 1977 and is responsible for implementing the Export Credit Guarantee Scheme.

## CHAPTER 8—AGRICULTURE

The predominance of agriculture in the economy was accentuated in 1977 with its contribution to total GDP rising to 38.3 per cent compared to 32.9 per cent in 1976 when measured at current prices.

8.2. This impressive performance is due primarily to the increased production of coffee and tea. Earnings of producers from coffee rose by more than twice, and from tea by nearly three times. It should further be noted that nearly all receipts were passed on to growers. The Government's tax on coffee and tea exports collected only about K£4 million in 1977 amounting to about 1.4 per cent of total receipts from exports of these commodities. Sugar, milk and maize producers also had a good year. Output of wheat, pyrethrum and sisal crops, however, was disappointing. The prices of all crops except rice paddy went up, and there was substantial improvement in the terms of trade of the agricultural sector vis-a-vis the rest of the economy.

8.3. An effective marketing system is a necessary condition to promote further expansion of agricultural production, particularly of the small farmer. Some of the first results from a study, of the existing market structure, being currently undertaken by the Government, are given later in this chapter.

### Value of output and Contribution to GDP

8.4. The contribution of monetary agriculture to GDP at current prices amounted to K£379 million, an increase of 72 per cent over the previous year. The increase in real terms discounting the price change was 12 per cent. Value added at current prices in 1977 amounted as a result to four times the 1972 figure, but as shown in Table 8.1, at 1972 prices, the increase was only 19 per cent. A comparison of these figures indicates the strong rise in prices over this period.

Agricultural Output Less Recorded Input: Monetary Sector  
*Table 8.1* *K£'million*

	1973	1974	1975	1976	1977*
At Current Prices—					
Total Output	133.20	161.79	175.08	264.00	431.31
Less Recorded Inputs	25.77	38.72	39.69	44.36	52.73
Value Added	107.43	123.08	135.39	219.64	378.58
At Constant (1972) Prices—					
Total Output	118.92	119.72	119.85	126.55	140.90
Less Recorded Inputs	22.20	23.57	23.63	26.52	28.58
Value Added	96.72	96.15	96.21	100.04	112.32
Quantum Indices (1972= 100)					
Output	102.16	102.85	102.96	108.72	121.05
Input	100.72	106.94	107.21	120.33	129.67
Price Indices (1972 = 100)					
Output	112.01	135.14	146.08	208.61	306.11
Input..	116.08	164.28	167.96	167.27	184.50

\*Provisional.

## Marketed Production

8.5. Index numbers on prices and quantities of marketed production are given in Table 8.2. In terms of output, there was an increase in volume of output of all items except cereals, in 1977, with the result that the total volume of gross marketed production rose by nearly 12 per cent. All price indices also show rises, the increase overall being nearly 50 per cent. This huge increase in prices is due primarily to coffee and tea, reflected in the index for permanent crops which rose by 63 per cent. For the second year in succession the figures on output of coffee and tea dominated the values of marketed production given in Table 8.3. Marketed production was valued in total at K£415 million compared with K£250 million in 1976 and K£162 million in 1975.

Agricultural Marketed Production Indices, 1974-1977

Table 8.2

1972 = 100

	1974	1975	1976	1977*
Quantum Indices—				
Cereals**	103.5	119.9	145.0	115.2
Temporary Industrial Crops	123.5	132.7	125.1	138.9
Permanent Crops	111.9	106.0	121.2	151.3
Total	111.3	113.6	126.8	139.7
Livestock and Products	85.7	86.3	81.4	94.8
Total Gross Marketed Production	102.6	104.5	111.1	124.0
Price Indices—				
Cereals	131.7	186.2	209.5	238.1
Temporary Industrial Crops	118.9	143.4	167.2	195.1
Permanent Crops	151.6	144.2	260.1	431.3
Total Crops	142.1	150.7	231.7	364.6
Livestock and Products	120.4	133.1	145.0	159.3
Total Gross Marketed Production	136.5	146.2	212.4	316.0

\*Provisional.

\*\*Based on sales to Marketing Boards only.

Gross Marketed Production, at Current Prices, 1973-1977

Table 8.3

K£'000

	1973	1974	1975	1976	1977*
Cereals					
Wheat	3,865	6,925	8,275	12,047	11,877
Maize	8,571	8,482	17,022	21,628	18,843
Others	2,055	2,251	3,626	5,658	4,818
Total	14,491	17,658	28,923	39,333	35,538
Temporary Industrial Crops					
Pyrethrum	3,259	4,206	4,551	4,089	4,188
Sugar Cane	4,453	5,916	8,230	9,618	13,364
Others	1,660	2,080	3,041	3,670	4,967
Total	9,372	12,202	15,822	17,377	22,519
Other Temporary Crops	3,563	5,356	7,123	8,626	7,680
Permanent Crops—					
Coffee	32,772	35,326	35,345	101,333	192,197
Sisal	7,051	18,350	7,038	3,920	4,755
Tea	16,766	19,255	22,914	32,757	92,729
Others	2,817	3,177	3,274	3,477	3,181
Total	59,406	76,108	68,571	141,487	292,862
Total Crops	86,832	111,324	120,439	206,823	358,599
Livestock and Products					
Cattle and Calves ..	16,353	17,610	19,827	19,056	21,739
Dairy Products	11,305	10,100	10,781	12,050	18,844
Others	4,514	4,747	5,515	6,003	6,901
Total	32,172	32,457	36,123	37,109	47,484
Unrecorded Marketed Production	4,299	4,668	5,404	6,115	9,005
Total, , . .	123,303	148,449	161,966	250,047	415,088

\*Provisional.

\*\*Does not agree with the total shown in Table 8.1 as the latter includes the increase in the value of immature stock and trees and various other items

8.6. Prices for individual products are given in Table 8.4. Average prices of coffee and tea rose to record levels of K.Sh. 3,960 and K.Sh. 2,149 per 100 kg. respectively. Prices of other products also increased and among these the increases in prices of maize and milk were significant for most smallholders.

Average Gross Commodity Prices to Farmers, 1973-1977\*

Table 8.4

*KSh. per stated Unit*

	Unit	1973	1974	1975	1976	1977
Coffee	100 kg.	921	1,008	1,069	2,524	3,960
Tea	99	593	721	808	1,057	2,149
Sisal	99	243	424	323	234	282
Pyrethrum (extract equivalent)	kg.	415	430	447	492	579
Seed Cotton	100 kg.	122	155	192	209	288
Maize	39	46	70	77	89	127
Sugar Cane	tonne	52	62	89	105	136
Rice Paddy	100 kg.	50	59	104	137	133
Wheat	99	57	80	105	120	133
Beef (third grade)	99	346	413	474	479	519
Bacon Pigs		426	567	636	655	684
Milk	100 Litres	77	77	85	105	132

\*These prices are for calendar year deliveries and reflect actual payouts, although average prices for two seasons which overlap during a calendar year might have differed.

8.7. The share of production marketed by small and large farmers, respectively, has shown some fluctuation centered around the figure of 50 per cent each as per Table 8.5. In 1977, the difficulty of selling maize through the marketing board and the resulting removal of Government restrictions on maize marketing was a feature, which may have raised the relative share of smallholders in marketed production above the level indicated in this table. As a subsequent section shows, small farmers market much of their maize through informal channels and it is not yet possible to quantify the amounts so disposed.

Gross Marketed Production from Large and Small Farms, 1973-1977

Table 8.5

	Large Farms		Small Farms		Total		Percent- age Share of Small Farms
	<i>K£million</i>	Annual Per cent change	<i>Kimillion</i>	Annual Per cent chang	<i>K£million</i>	Annual Per cent change	<i>Per cent</i>
1973	60.0	19.2	63.3	13.8	123.3	16.4	51.3
1974	73.4	22.3	75.0	18.5	148.4	20.4	50.6
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*	204.5	67.5	210.6	64.5	415.1	66.0	50.7

\*provisional.

8.8 Quantity and price indices of agriculture inputs are shown in Table 8.6 value figures in Table 8.7. The quantity index for all inputs went up nearly 9 per cent, as a result of an increase of just under 10 per cent consumption of material inputs and, of about 4 per cent in consumption is service inputs. The substantial increase of 46 per cent in use of fertiliser accounted for partly by the buoyancy of the agricultural sector and partly

by a fall in its price. Prices of all other inputs rose, adding up to an overall increase of 10 per cent, made up of an increase of 11 per cent in prices of materials and of about 4 per cent in prices of service inputs.

Table 8.6 Agricultural Input Indices, 1974-1977 1972=100

	1974	1975	1976	1977*
Quantum Indices—				
Fertilizers	99.1	88.8	89.3	130.3
Fuel and Power ..	104.1	106.3	96.3	93.9
Bags	97.5	102.0	107.2	118.0
Manufactured Feeds	138.6	131.3	233.2	241.1
Purchased Seeds ..	183.8	239.7	229.8	211.8
Other Material Inputs	105.7	96.5	105.1	109.9
Total Material Inputs	110.2	106.8	119.9	131.6
Service Inputs	98.8	105.8	122.5	127.0
Total Inputs	108.3	106.7	120.3	130.8
Price Indices—				
Fertilizers	307.4	266.0	256.2	250.0
Fuel and Power ..	148.0	183.7	212.1	248.0
Bags	163.0	191.3	187.9	197.3
Manufactured Feeds	156.5	158.4	130.3	143.3
Purchased Seeds ..	109.0	136.4	154.6	184.5
Other Material Inputs	114.9	131.4	145.6	163.7
Total Material Inputs	170.0	176.0	175.0	194.3
Service Inputs	118.6	125.0	121.0	125.5
Total Inputs	162.1	167.5	165.8	183.1

\*Provisional.

Table 8.7 Agricultural Inputs,\*\* 1973-1977 K£'000

	1973	1974	1975	1976	1977*
Material Inputs—					
Fertilizers	5,893	12,876	9,974	9,664	13,4765
Other Agricultural Chemicals	3,124	4,090	3,719	4,277	4,918
Livestock, Drugs and Medicines	1,488	1,762	2,321	2,848	3,230
Fuel and Power	3,782	5,328	6,754	7,063	8,052
Bags	1,806	2,328	2,858	2,952	3,409
Manufactured Feeds	2,841	4,606	4,417	6,456	7,339
Purchased Seeds	1,206	1,475	2,407	2,615	2,887
Other Material Inputs	1,557	1,756	1,904	2,460	3,120
Total	21,697	34,221	34,354	38,335	46,710
Service Inputs Total	3,843	4,314	4,871	5,455	5,866
Total Inputs	25,540	38,535	39,225	43,790	52,576

\*Provisional.

\*\*Except Labour.

### O c t n g v g f ' R t q f w e k q p ' l t q o ' U o c n j q r f g t u '

8.9. As mentioned above the percentage contribution of small farms to gross marketed output, shown in Table 8.5, covers that proportion of smallholder production which is marketed through the formal channels, e.g. the co-operatives and the various commodity marketing boards. Information is now forthcoming, which shows that other marketing outlets in fact accept the greater part of smallholder produce.

8.10. The information also indicates that although farm production is the major source of income of smallholders, on the average about 43 per cent of the total income of such households is nevertheless derived from non-farm sources. Table 8.8 shows the average value per smallholding of farm sales in 1974/75. These figures indicate that more than 50 per cent of farm production on small holdings is still retained on the holding for consumption. In all but Central and Rift Valley provinces, food crops made up most of the sales. Amongst these, sales of maize were the most important, contributing on average K.Sh. 217 per annum to the income of a smallholder. In the Central Province, export crops were more important. It is worth noting however, that 10 per cent of all smallholders in the country, have export crops as the main source of their income. Such smallholders, appear as a dis-advantaged group, in the small farm sector, unless they can augment their incomes from other sources. The dramatic rise in both tea and coffee prices over the last two years, however, must have considerably increased the contribution of export crops to sales revenue in most provinces. Livestock and livestock products add significantly to the income of smallholders, especially in Rift Valley Province. Of particular interest, is the importance of milk which contributed an average of 17 per cent to the value of sales.

AVERAGE VALUE PER SMALL HOLDING OF PRODUCTION AND SALES BY PROVINCE. 1974/75  
Table 8.8

	Central Province	Coast Province	Eastern Province	Nyanza Province	Rift Valley Province	Western Province	National Average
Food Crops Sales	369	168	421	994	475	291	528
Export Crop, Sales	411	2	337	192	115	20	231
Net cattle Sales	218	154	299	161*	577	136	143
Net livestock sale	122	99	134	10	260	42	88
Milk Sales	371	126	143	149	479	61	201
Total sales.	1,491	549	1,334	1,184	1,906	550	1,192
Sales as % of Total Production	47.5	45.0	53.6	38.2	47.2	36.2	44.8

\*Negative value due to extensive cattle purchases.

8.11 Table 8.9 shows data for the year 1976/77 which highlight the comparatively insignificant role played by co-operatives and marketing boards as an outlet for smallholder sales of many products. Co-operatives form outlet for milk sales only and the Maize and Produce Board

purchases the major part of the sorghum and millet crops offered for sale; but with regard to maize and beans the board or its agents buy less than one fifth of the produce placed by smallholders on the market. For all other listed products institutional buyers play little or no role. Indeed the major proportion of marketed production of smallholders is disposed of either directly by the producer to the consumer or else through the small-scale trader. In either case the local market appears as the most regularly used point of sale. This "informal" sector itself is a busy and thriving one which has grown up specifically in response to the needs of both the small-scale producer and the rural consumer. In fact the small-scale farmer uses this sector almost exclusively as an outlet for disposal of produce rather than the marketing boards. In terms of specific products local traders are the smallholders' main outlet for potatoes, tomatoes and livestock. They also purchase more than one half of the smallholders' sales of maize, beans and cabbages.

Percentage Distribution of Smallholder Sales by Commodity and Type of Buyer, 1976/77

	Per cent					
	Co-operative Society	Marketing Board or its Agent	Trader	Consumer	Other	Total
Maize	8	20	59	12	1	100
Finger Millet	—	56	16	26	2	100
Sorghum	—	66	—	33	1	100
Beans	—	16	55	28	1	100
Potatoes	—	—	84	7	9	100
Cabbages	3	—	54	42	1	100
Tomatoes	—	—	96	4	—	100
Bananas	—	—	36	63	1	100
Chicken	—	—	43	47	10	100
Eggs	—	—	13	86	1	100
Milk	63	9	11	16	1	100
Sheep	—	—	56	33	11	100
Goats	—	—	71	21	8	100
Cattle	6	—	73	10	11	100

8.12. Average prices received by smallholders during 1976/77 for most of the major commodities are shown in Table 8.10. These averages conceal considerable variation of prices, dependent on the season and locality, eg- the post-harvest price for maize in some localities has recorded a drop of as much as 100 per cent when compared to the pre-harvest price. It is interesting to note how closely the prices in the table match those offered by the "formal" marketing sector. Official gazetted prices for maize and milk for the same period for instance, were 77 cents and K.Sh. 1.05 respectively and the discrepancy at the overall average level is therefore minor.



Average Prices Received by smallholders by Commodity and Type of Buyer, 1976/77

Table 8.10

KSh.

		Local Trader	Consumer
Maize	Per Kilo	0.70	0.90
Beans	Per Kilo	2.30	2.30
Eggs	Per Dozen	4.05	3.65
Milk	Per Litre	1.00	1.05
Sheep	Per Head	56.20	56.10
Goats	Per Head	64.50	61.20
Cattle	Per Head	421.00	403.00
Chickens	Per Head	8.90	9.25

#### Terms of Trade—Agriculture Sector

8.13. The consumption and production of small farmers are intertwined and it is not possible to present figures detailing their "terms of trade" until the data required to compute these have been compiled for a number of years. However, it is now possible to present some data on the terms of trade for the agricultural sector as a whole. These are detailed below. The index of prices received covers the main export and domestic crops, livestock and dairy produce—the domestic sale prices being derived mainly from those paid by the marketing boards, while the index of prices paid is a composite of the indices on input prices and on consumer prices.

Prices Received And Paid By Farmers: Indices, 1972=100

	Prices received by farmers	Prices paid by farmers	Sector Terms of Trade
1973	111	115	96
1974	129	142	91
1975	145	165	88
1976	216	178	121
1977	310	205	152

The figures show that after a continuing and substantial decline in the farmers of trade until 1975 there was a rapid and substantial rise 1976 and in 1977. This increase was largely caused by the upsurge in coffee and tea prices. Accordingly whilst the change in the terms of trade have average for the whole agricultural sector, tea and coffee farmers will ex course done much better than the average. If export sales are Were the terms of trade are probably a little higher in 1977 than they for in 1972. This provement is due to the increases in prices of products domestic consumption, e.g. cereals, sugar-cane and milk.

New Agricultural Credit Issued by Type of Farmer, 1973/74- 1976/77

Table 8.11

K£'000

	1973/74	1974/75	1975/76	1976/77*
Small Scale Farmers—				
Short term loans	745	1,223	2,137	1,817
Medium term loans	509	1,287	599	595
Long term loans	27	—	50	29
Other loans	189	22	26	22
Total	1,469	2,531	2,813	2,462
Large Scale "Farmers—				
Short term loans	142	2,223	846	92
Medium term loans	4	—	30	—
Long term loans	896	1,695	2,321	2,294
Other loans	—	—	—	348
Total	1,042	3,918	3,197	2,735
Co-operative Societies				
Short term loans	1,599	5,579	10,926	7,963
Medium term loans	909	4,063	4,281	1,883
Long term loans	74	10	21	—
Other loans ..	—	—	—	—
Total	2,582	9,651	15,228	9,846
Other Farmers—				
Short term loans	—	663	3,421	5,579
Medium term loans	26	673	376	—
Long term loans	93	40	—	338
Total	119	1,377	3,797	5,916
All Recipients—				
Short term loans	2,485	9,687	17,330	15,451
Medium term loans	1,448	6,023	5,287	2,477
Long term loans	1,090	1,745	2,392	2,661
Other loans	189	22	26	370
Total	5,212	17,477	25,035	20,959

\*Revised Series.

#### Agricultural Credit

8.15. Table 8.11 details credit provided to the agriculture sector by the eight major non-bank institutions. As the figures show, total credit extended in 1976/77 from these sources was less than the amount issued in 1975/76. This was due partly to a drop in the amount of credit provided by the Co-operative Bank and partly to a slowing down in the total credit made available by the Agricultural Finance Corporation. The high prices for coffee and tea increased the net earnings of the producers substantially, and

therefore reduced their demand for credit. Instead such farmers utilized the opportunity to repay old debts and also to improve their farms. While the amount of credit made available by non-bank institutions declined in 1976/77, advances by the commercial banks, to the agriculture sector, as shown in Chapter 4 went up by nearly K£14 million in 1977. Over the last three years the increase in total agricultural credit from eight non-bank institutions and from the commercial banks is indicated by the figures detailed below: —

	Non-Bank Institutions*	Commercial Banks	Total
1975	17.5	16.4	33.9
1976	25.0	3.8	28.8
1977	21.0	13.7	34.7

\*Per agricultural season.

Total credit to the agricultural sector by the commercial banks had reached K£54.4 million at December 1977. The programme under which the Agricultural Finance Corporation provided huge loans for the purchase of large scale farms came to an end during the year. During 1976/77 the Co-operative Finance Limited was formed to provide long-term loans to co-operative societies, but has yet to start operations.

### Crop Production

8.16. Maize.—The favourable weather conditions in the major maize growing regions of Rift Valley Province and western Kenya, ensured a total crop in 1977 equal in size to that harvested in 1976—which in itself was a record. However, as shown in Table 8.12 the Maize and Produce Board was only able to buy 424.000 tonnes of the crop harvested in 1977, considerably less than the amount purchased in 1976. This was due to a severe strain on the board's storage capacity which has yet to be eased. By late 1977, the board was holding more than 2 million bags over and above its strategic reserve, which could not profitably be exported on account of the world market prices. Millers and institutions such as schools and hospitals, etc. were allowed to purchase maize directly from producers, while restrictions on the free movement of the crop were also lifted so<sup>1</sup> farmers could move their stocks to any market destination in the country, order to relieve the board of some of its purchase commitments. Farmers increased maize production especially during the last three years. This response to the increases in producer prices during the period which further encouraged the use of hybrid seed. It is likely that the trend of increased output will continue given favourable weather conditions. The board intends to increase its storage capacity so that the maize crop in future is promptly purchased from farmers.

Table 8.12 MARKETING\* PRODUCTION OF SOME MAJOR CROPS, 1973-1977 Tonnes

Crop	1973	1974	1975	1976	1977
Wheat	124,572	159,462	145,459	186,774	169,880
Maize ..	440,801	365,354	487,826	564,748	423,964
Rice Paddy .. .. .	36,128	33,210	32,113	38,738	41,415
Pyrethrum (Extract Equivalent)	156-9	195-6	203-9	166-1	144-5
Sugar-Cane	1,545,062	1,719,083	1,654,583	1,652,597	1,888,140
Cotton ..	16,177	15,024	16,121	15,803	16,257
Coffee ..	71,190	70,103	66,152	80,303	97,066
Sisal .. .. .	58,054	86,526	43,639	33,555	33,776
Tea	56,578	53,440	56,730	61,984	86,291

\*Sales to Marketing Boards.

8.17. *Wheat* — Despite favourable weather conditions, 1977 was a poorer year for wheat than 1976. Total deliveries to the Wheat Board fell to 170,000 tonnes—9 per cent below the 1976 record level of 187,000 tonnes. The main factors responsible for the decline were the continued fragmentation of large-scale farms within the major mixed farming districts of Nakuru, Uasin Gishu and Trans-Nzoia thus rendering wheat farming uneconomical; change of farm ownership often resulting in changes in the pattern of farming and management; and increased temptation to grow barley.

8.18. Wheat flour consumption in recent years has been as follows:—

Year	Tonnes
1973	130,222
1974	128,669
1975	112,057
1976	136,488
1977	158,400

The level of consumption has increased substantially and it is estimated that currently Kenya's national annual requirement is over 200,000 tonnes of wheat equivalent. Because of the high demand Kenya has currently to import part of the domestic requirement. However, the level of imports is likely to decline following the steps taken by the Wheat Board to make the country more self-sufficient. About K£6.5 million is being invested in the construction of a new wheat processing and storage complex at Narok which is expected to be ready by August, 1978. With the establishment of this processing and storage facility it is anticipated that production in this area will expand to cover more than 24,000 hectares. The Narok complex is part of a triple site expansion plan of the Wheat Board. The other two projects are at Enongiperi near Mau Narok, and at Kitale. The combined cost of the three projects is estimated at K£16 million.

8.19. *Pyrethrum*.—The decline in pyrethrum production first observed in 1976 continued during 1977 when the output of dried flower equivalent dropped by another 12 per cent. Several factors were responsible for the deterioration but the main one was the relatively low price offered to the producers *vis-a-vis* other crops so that growers switched to more income generating options. In addition, poor management of the smallholder marketing co-operatives was a contributory factor, while the growers too failed to adopt high yielding seed varieties, especially in Kisii District which produces about 60 per cent of Kenya's total output.

8.20. The current strong world demand prompted the Kenya Pyrethrum Marketing Board in 1977 to increase the price offered to producers by nearly 18 per cent. Together with smallholder credit facilities, the increase in price is intended to achieve the board's current plan target of 25,000 tonnes of dried flower harvest in the period 1977-1983.

SUGAR CANE PRODUCTION BY TYPE OF GROWERS, 1974-1977

Table 8.13

Tonnes

	1974	1975	1976	1977
Factory Estates	622,056	551,752	487,328	584,248
Large Farms	228,358	124,721	138,353	239,619
Small-Holders	427,595	443,654	500,479	630,374
Co-operative Societies	238,117	326,562	332,603	278,345
Settlement Schemes	202,957	207,894	193,834	155,524
<b>TOTAL</b>	<b>1,719,083</b>	<b>1,654,583</b>	<b>1,652,597</b>	<b>1,888,140</b>

8.21. *Sugar-cane*.—Total cane deliveries to sugar factories in 1977 reached a record level of just under 1.9 million tonnes. The 235,000 tonnes or 14 Percent increase was partly the result of rehabilitation and extension programme mounted in 1976 by the Kenya Sugar Authority and was partly caused by the heavy rains which were conducive to higher sugar-cane output.

Cane deliveries by co-operative societies and settlement schemes declined in 1977, but deliveries from all other sources—factory estates, large and small growers—increased substantially. Details of cane deliveries by growers as shown in Table 8.13.

8.22. Projects for the establishment of two additional sugar factories, the Nzoia Sugar Mill in Bungoma District and South Nyanza Sugar factory are in an advanced stage of planning. When these are completed Kenya will have seven major sugar factories as well as small additional sugar manufacturing plants such as the one currently operating in Kakamega District. The increased capacity should help ensure sufficient white sugar supplies to satisfy domestic demand.

8.23. *Horticulture*.—A total of 18,843 tonnes of horticultural products were exported during 1977. The increase of 4.9 per cent in the volume was also accompanied by a rise in prices and export earnings as a result rose by over 25 per cent to K£6.4 million. New markets were established in Djibuti, the Middle East and Sweden. Considerable increases were recorded in exports of cut-flowers, beans, pineapples, and other vegetables. The export of beans to France could have been even higher had it not been for a ban imposed by France during the third quarter of 1977. The United Kingdom continued to be the largest market, accounting for 44 per cent of the total produce. Unfortunately the importation of fruit and vegetables, continued to be restricted by other European Economic Community countries. Table 8.14 gives details on exports of horticultural produce since 1973.

EXPORTS OF FRESH HORTICULTURAL PRODUCE, 1973-1977

Table 8.14

	Volume Tonnes	Value K£
1973	10,158	1,478,553
1974	11,335	1,692,475
1975	13,115	4,163,700
1976	17,963	5,117,040
1977	18,844	6,435,815

8.24. Lack of air space continues to be a bottleneck holding back more rapid expansion of production. A trial shipment of pineapples by sea proved successful, but further research is needed to streamline this mode of transportation. Trial shipments of other crops are also to be carried out in 1978, for the Middle East markets.

8.25. *Coffee*.—The years 1976 and 1977 were the best in the history of coffee industry so far. Extremely good weather prevailed throughout this period and there were no outbreaks of diseases and pests. As a result, the industry realized its highest crop turnover. The total recorded increased during 1977 to 97,066 tonnes—16,763 tonnes or 21 per cent above the 1976 total of 80,303 tonnes. Deliveries from co-operative societies accounted for about 47 per cent of the total deliveries in 1977. Locally, the industry experienced problems arising from smuggled coffee which by the end of the season had reached such levels as to threaten the reputation of Kenya's coffee crop. The specifically Kenyan production is probably less than 90,000 tonnes out of the total of 97.066 tonnes delivered in 1977.

8.26. The effects of the Brazilian frost of 1975 on world coffee supplies continued to affect the market in 1977. The world coffee shortage generated considerable anxiety in consuming countries, and this caused the dramatic price rise to a peak of K£3,000 per tonne at Kenya's coffee auctions and to well over K£4,000 per tonne at the London Terminal Market, by the early

part of 1977. Such a situation was of course very favourable to producer countries, but the ensuing months saw a reaction in persistent and intensified consumer resistance. Coffee consumption in the USA and European countries as a result declined by over 20 per cent. The ensuing drift in world prices is expected to continue further in 1978.

8.27. Total payments to coffee planters soared to K£192.2 million in 1977. This is more than double the amount paid out in 1976. It is estimated that farmers retained about 30 per cent of their coffee earnings in the banking system in 1977. Some of the remaining 70 per cent has been used in investments which should improve productive performance during the years to come and the Co-operative Bank has been encouraging investment in the building and extension of coffee factories. The Development Plan target is to extend this crop's area of production by a further 35,000 hectares, most of it in 1979. This extension, together with the smallholder coffee rehabilitation programme expected to start early in the next Development Plan period should ensure that the output of Kenya coffee will continue to increase.

8.28. *Tea*.—The upsurge in tea production which started in 1975 continued uninterrupted through the year 1977 when output rose by 24,307 tonnes, an equivalent of 39 per cent, to 86,291 tonnes in 1977. Extremely good weather in the main tea growing areas, mainly accounts for this increase. Growers' cash receipts, as a result rose from K£32.8 million in 1976 to K£92.7 million in 1977, though part of the increase in receipts is also due to the increase in world price of tea. The volume of tea exports rose to 71,779 tonnes in 1977 from the low figure of 31,763 tonnes in 1976—an increase of 126 per cent. Great Britain continues to be the largest importer of Kenya tea.

8.29. Smallholder tea producers under the management of the Kenya Tea Development Authority increased the area planted under tea by 3,896 hectares in 1976 from 39,740 hectares to 43,636 hectares in 1977. This raised the total area planted since 1974 to 9,252 hectares compared with the 1974-78 Plan target of 14,768 hectares. Table 8.15 shows that there were 115,648 smallholder tea growers in 1977 who produced leaf which when processed yielded 27,720 tonnes of ready made tea in 1976/77.

The Development of Small-Holder Tea—to 1976/77

Table 8.15

	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
1972/73	30,895	79,314	0.39	14,617
1973/74	34,384	90,135	0.38	14,658
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

8.30. Sisal.—Production of sisal has been on the decline since 1975 following the sharp drop in world prices from US \$1,080 per tonne in 1974 to US \$525 in 1977. The weakening of the world prices was the result of stiff competition from synthetic fibres. As a consequence, Kenya's crop whose output had risen to 86,000 tonnes in 1974 has since declined substantially. Total production during 1977 was almost the same as that for 1976, despite a price increase of 20 per cent. Present indications do not suggest better prospects for sisal since world prices seem unlikely to improve much during the next few years. Consequently, only a very modest increase in production can be anticipated, although the share of sisal sold locally for the manufacture of twine and bags is likely to increase.

8.31. Cotton.—Total annual production of cotton has stagnated at around 16,000 tonnes since 1973 and only a slight improvement was recorded in 1977. The production of 16,257 tonnes in the year could have been higher but for the wet weather conditions which had adverse effects in the picking season. Cotton prices have been increased on two occasions by the Government in the last two years mainly to stimulate production to meet the growing domestic demand currently estimated to be the equivalent of 37,000 tonnes of seed cotton. The 1977 average producer price of K.Sh. 288 per 100 kilogrammes of seed cotton was well above the 1976 average price of K.Sh. 209.

8.32. A campaign has been mounted by the Cotton Seed and Lint Marketing Board to encourage producers, the majority of whom are smallholders, not only to put more land under cotton plantation but also to carry out proper land preparation and timely planting. In addition to this, the board offers producers credit facilities for the purchase of seed, insecticide and spraying pumps. It is hoped that both the increased prices and the credit facility will increase the interest in cotton growing so that the board's 1977/78 planting target of 154,720 hectares and a yield of 79,500 bales is achieved.

#### **Livestock Production**

8.33. The good rain in 1977 and the resultant improved grazing conditions were welcomed by livestock producers after the preceding three lean years. The main results were an increase of nearly one quarter in the deliveries of milk to Kenya Co-operative Creameries and a restocking of herds to make up the losses suffered during the drought. Details on milk deliveries to the co-operative and its production of milk products are given in Table 8.16. Although milk production went up by one quarter it still did not recover enough to equal the 1973 level. Within milk sales, the proportion of U11T milk has increased substantially, average daily sales rising steadily from 17,000 litres in 1975 to 64,000 litres in 1977. The main markets for this type of milk are in the Nanyuki, Kisumu and Machakos areas. Sales



of all other dairy products, except evaporated milk, also rose substantially in 1977, though again the increases were not sufficient to equal the 1973 level of sales, except for sales of dried whole milk powder.

Dairy and Livestock Production, 1973-1977

Table 8.16

	Unit	1973	1974	1975	1976	1977
Kenya Co-operative Creameries Recorded Milk Production*	'000 litres	279,658	249,843	230,607	208,658	259,450
Milk Processed:						
Wholemilk and cream	'000 litres	148,816	160,009	157,956	150,422	157,880
Butter and ghee	Tonnes	5,543	4,366	4,191	3,067	4,342
Cheese	"	988	558	462	177	445
Evaporated milk	"	5,129	3,249	1,626	2,099	1,321
Dried Wholemilk powder	"	3,697	2,592	2,289	3,009	5,262
Dried skim-milk powder	"	3,814	3,019	2,772	1 489	3,440
Other Products	"	159	71	1	2	1
Kenya Meat Commission Intake of:						
Cattle and calves	'000 Head	155	160	134	228	158
Sheep	"	12	7	15	12	8
Lambs	"	5	5	11	1	3
Goats	"	18	6	7	5	6
Total Production of Carcass Beef	Tonnes	22,694	19,770	16,600	26,865	20,637
Uplands Bacon Factory Intake of pigs for:						
Bacon	'000 Head	31	30	33	34	36
Pork	"	1	3	2	2	3
Manufactures	"	2	2	2	2	2

\*Including sales licensed by the Kenya Dairy Board.

8.34. There was a substantial fall of 70,000 head or 31 per cent in the intake of cattle and calves by the Kenya Meat Commission. The drop was particularly noticeable in the last two quarters when only 44,000 and 16,000 head were slaughtered. The commission faced increasing competition from the growing number of private abattoirs in rural areas, and the sellers were resisting a price structure which had become uneconomic. A price increase of one quarter in retail prices of different cuts of beef was announced in January 1978 and it is expected that this will go some way to restoring the situation.

8.35. The average weight of carcass beef increased by 8 per cent from 118 kilos in 1976 to 128 kilos in 1977, and high grade animals constituted 31 per cent of the total intake. However, the total production of beef fell with the drop in total intake of animals. Output fell from 26,165 tonnes to 20,637 tonnes, a fall of 23 per cent. Value of local sales of Kenya Meat Commission rose from K£3.6 million in 1976 to K£4.2 million in 1977, while export sales declined from K£7.5 million to K£6.8 million over this Period.

8.36. The total intake by the Commission of sheep, lambs and goats was at about the same level as in 1976, but the proportion of lambs increased. The intake of pigs by the Uplands Bacon Factory also increased by 3,000;

about 15,000 pigs being purchased from large farmers and 26,000 from small producers. The price of bacon pigs went up by 4 per cent with an average realization of K.Sh. 6.84 per kg.

8.37. The activities of the Livestock Marketing Division of the Ministry of Agriculture were reduced during 1977 due to the unwillingness on the part of most producers to sell. The division purchased 22,844 head of mature cattle during the first half of 1977 but was able to purchase only 983 head of cattle between July 1977 and March 1978. As a result of consumer price changes in early 1978, the division has adjusted its prices offered for live cattle from between K.Sh. 1.70 and K.Sh. 1.85 per kg. live weight for slaughter stock to between K.Sh. 2.20 and K.Sh. 2.35 per kg.

### Agricultural Development Services

8.38. *Training.*—The numbers of students enrolled for degree courses both in Agriculture and Veterinary Medicine at the University of Nairobi increased to 123 and 101 respectively. Of the students studying agriculture, 20 were taking courses in food science technology, while ten students were training in forestry. A total of 150 students are expected to graduate from the two faculties in the current academic year including 73 in veterinary medicine. In addition, 74 students were taking postgraduate courses in various disciplines in agriculture ranging from crop and soil science to food science technology and animal production, and another 20 in veterinary medicine.

8.39. Table 8.17 gives details on total enrolment of students at the agricultural training institutions in 1977. The number of students taking diploma courses at the Egerton College was virtually unchanged. However, a substantial increase was recorded in the enrolment at the Animal Health and Industry Training Institute at Kabete, where 285 students were admitted in 1977 as compared to 215 students in 1976. Bukura and Embu institutes enrolled a total of 345 students during 1977 while 405 students took short courses at the Naivasha Dairy Training School. A number of short courses were also offered at the large-scale farmers' training institutes at Nyahururu and Eldoret.

TOTAL ENROLMENTS AT AGRICULTURAL TRAINING INSTITUTIONS, 1973-1977

*Table 8.17*

	<i>Numbers</i>				
	1973	1974	1975	1976	1977
DEGREE LEVEL					
University of Nairobi-Faculty of Agriculture	120	163	185	202	284
Faculty of Veterinary Medicine	296	304	312	313	329
DIPLOMA LEVEL					
Egerton College	630	624	643	682	687
CERTIFICATE LEVEL					
Bukura Institute of Agriculture				187	176
Embu Institute of Agriculture	160	153	161	190	169
Animal Health and Industry Training Institute	255	264	215	215	285
SHORT-TERM VOCATIONAL COURSES					
Narokura Farm Mechanization Training Scheme	60	100	100*	..	..
Naivasha Dairy Training School	120	402	454**	490	405

\*Includes short courses of 1—2 weeks.

\*\*Includes short course seminars.

8.40. *Irrigation.*—Table 8.18 sets out details on progress and performance of the six schemes owned and managed by the National Irrigation Board. Most of the schemes recorded excellent performance during 1976/77. The only exception was the Bunyala scheme which had a slight production setback. The total irrigated area increased from 8,285 hectares in 1975/76 to 8,728 hectares in 1976/77. An improvement was also recorded in the total gross value of output which rose from K£2.45 to K£2.88 million. The average payout to ploholders was, however, lower than in the previous year because of rising production costs. Paddy rice production increased by 18 per cent from 36,996 tonnes in 1975/76 to a record level of 43,638 tonnes in 1976/77. This increase was partly due to the contribution from the new 810 hectares West Kano Scheme. When fully developed, this latter scheme will also produce sugar-cane.

PROGRESS AND PRODUCTION AT SIX IRRIGATION SCHEME AREAS, 1972/73-1976/77

Table 8.18

	1972/73	1973/74	1974/75	1975/76	1976/7
—MWEA					
Area Cropped— <i>Hectares</i>	4,766	5,534	5,379	5,609	5,616
Plot-holders— <i>Number</i>	2,562	3,001	2,917	2,972	2,973
Gross value of output—K£'000	761	919	1,349	1,851	2,088
.. Payments to plot-holders—K£,000	495	620	903	1,346	1,083
—ALL (6) SCHEME AREAS					
Area cropped— <i>Hectares</i>	7,821	8,517	8,471	8,285	8,728
Plot-holders— <i>Number</i>	4,094	4,604	4,405	4,554	4,744
Gross value of output—K£'000	1,110	1,282	1,874	2,450	2,880
Payments to plot-holders—K£'000	651	768	1,180	1,652	1,553
CROPS PRODUCED— <i>Tonnes</i>					
Mwea—Paddy	31,220	30,819	28,423	32,060	35,960
Ahero—Paddy	2,977	2,273	2,467	3,747	5,127
West Kano—Paddy	—	—	—	—	1,477
Bunyala—Paddy	746	471	674	1,189	1,074
Tana—Cotton	2,004	2,272	2,288	2,209	2,507
Perkerra—Onions	994	1,644	1,267	775	1,083
Chillies	165	186	188	178	172

8.41. In addition to the six large schemes, work has also started on several minor schemes. These include the Kibirigwe scheme in Central Province; and Ishiara scheme in Embu, Mitunguu scheme in Meru and Muka Mukuu scheme in Machakos districts of Eastern Province, respectively. These small schemes when fully operational will cover about 820 hectares. However, the most important development in this field is the construction of the huge upper reservoir on the Tana River mentioned in Chapter 9. When completed, it will have the potential to promote irrigation covering approximately 45,000 hectares. This area is exclusive of the Bura scheme on the west of Tana River which is planned to cover 14,500 hectares catering for 10,800 families.

8.42. Agricultural Research.—During 1977 the Scientific Research Division of Ministry of Agriculture in co-operation with Nairobi University concluded research on the development of suitable farming systems for medium potential land areas. The research was centered on sorghum, millet, cassava, grain legumes, sunflower, pastures and fodder crops and on soil/moisture conservation techniques. In October 1977 a dryland farming mission toured these areas and formulated a Dryland Farming and Development Project to be included in the 1979-83 Development Plan. The United Nations will be assisting the Government of Kenya in executing the project and will contribute US \$1.7 million of the total proposed budget. The programme is to focus initially on medium potential areas in Eastern and Central provinces. Research on seed production of horticultural crops also expanded in the year. Research is being undertaken at the National Horticultural Research Station at Thika. The grain legume project released three bean varieties that are to be grown in the Mwea-Tebere area.

8.43. The scope of seed inspection services was further expanded during the year. The area now covered under seed certification scheme extends to over 16,400 hectares of which maize, wheat, barley and pastures constitute 46, 29, 14 and 9 per cent respectively. During 1976/77, about 33,000 tonnes of seed were certified as compared with 21,012 tonnes during 1975/76.

#### Land Adjudication and Registration

8.44. Considerable progress was made in land adjudication and registration during 1977 and the cumulative position is given in Table 8.19. The area registered, adjudicated or under adjudication as at 31st December 1977 rose by 4.3 million hectares to a total of 11 million hectares. The total area of holdings already registered was 4.9 million hectares while the area adjudicated but not registered was 4.1 million hectares. Adjudication was in progress during the year for nearly 2 million hectares and 347,000 additional hectares are yet to be declared for adjudication in 1978. The largest area covered was in Rift Valley Province. Satisfactory progress was also made at the coast

Table 8.19 Programme of Land Registration and Adjudication by Province as at 31st December.

	Registered Areas		Area Adjudicated but not Registered		Area in Progress	Total Land Registered Adjudicated or under Adjudication	
	(MX) Holdings	000 Hectares	000 Holdings	000 Hectares	000 Hectares	000 Hectares	Registrable Land
Western	250.4	583.8			8.7	592.5	92.5
Nyanza	276.5	567.4	11.0	39.8	322.6	929.8	82.7
Central	238.0	412.7				412.7	99.3
Rift Valley	97.9	2,697.2	4.4	4,011.2	1,044.1	7,752.5	64.1
Eastern	133.4	398.4	5.6	31.9	404.0	834.3	6.1
Coast	27.9	281.1	4.8	62.7	177.3	521.1	19.6
All Provinces	1,024.1	4,940.6	25.8	4,145.6	1,956.7	11,042.9	37.3

where 104,300 hectares were brought on to the register during 1977. For the country as a whole, however, only 37.3 per cent of the total registerable land has so far been registered, adjudicated or is under adjudication. Details of the area of holdings added to the register during 1977 are shown in Table 8.20.

AREA OF HOLDINGS ADDED TO THE LAND REGISTER, 1973-1977

Table 8.20

'000 Hectares

	1973*	1974	1975	1976	1977
Kisumu	9.9	6.3	9.2	8.8	0.9
Siaya	42.5	—	23.0	23.0	2.6
Kisii	20.7	4.1	13.0	2.8	—
South Nyanza	46.6	45.5	15.4	15.8	9.3
Kakamega	82.7	15.1	8.1	7.6	—
Bungoma	36.8	—	—	4.7	—
Busia	26.1	3.5	—	2.5	—
Nakuru	—	—	—	—	12.0
Kericho	15.7	16.6	34.6	20.7	20.2
Nandi	7.5	6.2	11.8	8.7	2.9
ElgeyoMarakwet	11.8	4.2	—	3.0	—
Baringo	5.2	17.1	0.5	2.5	12.2
Kajiado	178.8	96.5	202.3	161.7	88.1
Narok	93.4	37.4	11.7	34.6	79.8
West Pokot	—	—	42.9	10.6	7.5
Samburu	—	—	65.7	—	236.2
Kirinyaga	1.4	—	4.2	—	—
Embu	—	4.1	12.7	5.8	14.0
Meru	—	17.4	4.9	5.6	—
Machakos	22.9	11.7	16.6	24.2	8.3
Kitui	—	4.8	15.0	4.9	4.4
Taita	—	—	2.5	0.6	1.5
Kitale	—	49.7	2.3	65.1	3.0
Kilifi	1.5	4.6	1.7	76.9	23.3
TOTAL	619.4	544.8	498.1	490.1	526.2

\*12,700 holdings comprising 41,600 hectares registered by March, 1974 are included in 1973 totals.

## CHAPTER 9—NATURAL RESOURCES

### Remote Sensing

The acquisition of data on Kenya's natural resources- land, water, minerals, vegetation and wildlife—has, in the past, been a difficult task involving long processes of intensive field and aerial surveys. Timeliness in the acquisition of such data has therefore been impossible.

9.2. However, over the last five years techniques have been developed to facilitate timelier acquisition of information on natural resources by use of orbiting satellites. Since 1972, the Kenya Government through the Ministry of Natural Resources has acquired from the United States National Aeronautics and Space Administration data collected by the orbiting satellites—Landsat I and Landsat II. These data have been in the form of images or "photographs" of Kenya taken by the satellites.

9.3. The co-ordination of activities related to the use of these data has been handled by the National Council for Science and Technology through its ad-hoc Committee for the Application of Space and Satellite Technology.

9.4. A number of uses for these data in the field of natural resources have been demonstrated in several projects in this country, notably the Kenya Rangeland and Ecological Monitoring Unit under the Ministry of Tourism and Wildlife, the Kenya Soil Survey Project under the Ministry of Agriculture, and the Kenya Remote Sensing Census Project under the Ministry of Finance and Planning. The Survey of Kenya, the Mines and Geological Department, and the Ministry of Water Development have also used these data in their various mapping projects.

9.5. Not only has it been possible to obtain a synoptic view of the extent and spatial distribution of our rangelands and water and vegetation resources on a timely and repetitive basis, but it has also been possible to keep track of major changes in our land-cover especially those changes arising from human settlements. It has also made it feasible to observe the differences in the vegetation cover and water flows at different times of the year resulting from different intensities of rainfall.

### Water

9.6. The storage of water and adequate supplies are crucial for the development of agriculture and industry, while supplies of clean water essential to improve the everyday lives of the people especially those in the rural areas. A National Master Water Plan has been under preparation since September 1976. The original date of completion, August 1978 has been extended to January 1979 because of the expansion of the plan include the Tana River Basin Project. The initial target is to prepare groundwork for a more comprehensive plan of water development.

9.7. A full report on water availability is expected to be presented for review shortly. Considerable work has been done on water demand projections. Studies of hydro-electric power potential and of irrigation potential on a country wide basis are in process. An investigation of skilled man-power requirements for water development has been initiated and close liaison maintained with the ongoing management study in the Ministry of Water Development. Very considerable work has been done in constitution of a water resources data bank which currently contains the hydrological, geo-hydrological and other related data and data acquired for planning programmes relevant to optimal application of water resources.

9.8. It is envisaged that funds will be made available from SIDA and the Kenya Government for the next stage of the water plan project. This stage of the project will take about 24 months to complete and if it is started in early 1979, a comprehensive plan for an orderly development of the nation's water resources should be available in mid-1981.

9.9. The Ministry of Water Development has the overall responsibility for community water supplies and the development and control of water resources including control of water pollution. It is also technically responsible for the technical aspects of development of sewerage disposal facilities in the country. Water supplies to Nairobi and to the municipalities of Thika, Nakuru, Eldoret, Kitale and Kisumu are excluded from the Ministry's area of operation as are the operation and maintenance of existing sewerage works. In addition the Ministry is also responsible for the Water Apportionment Board, the Mombasa Pipeline Board, and the Tana River Development Authority, which are all statutory bodies.

9.10. Total public expenditure on water development and related services by the Central Government and other public authorities is given in Table 9.1. The importance attached by the Government to water development is clearly shown by the rapid increase in total expenditure. This nearly trebled from 1973/74 to 1976/77, and then shows a remarkable increase from 1976/77 to 1977/78 when it rose from K£17.88 million to K£38.13 million.

substantial amount of the increase in 1977/78 was due to two major Injects, the Tana River and the Sabaki River schemes, on which expenditure amounted to K£8.2 million and K£13.2 million, respectively, in 1977/78 compared with K£1.6 million and K£5.1 million in 1976/77. The total in

78 also includes expenditures of K£4.2 million on rural water supplies of K£2.2 million by local authorities—the latter excluding an expenditure 2.2 million on urban water supplies by Ministry of Water Develop-

Development Expenditures on Water Supplies and Related Services, 1973/74-1977/78

Table 9.1

K£'000

	1973/74	1974/75	1975/76	1976/77	1977/78*
Ministry of Water Development:					
Urban water supplies	180	432	995	668	2,228
Rural water supplies	1,367	2,300	3,459	3,500	4,186
Sabaki River Project	320	474	2,114	5,062	13,225
Miscellaneous programmes	872	2,952	3,982	4,054	5,854
Mombasa Pipeline Board	333	746	958	450	650
Tana River Development Authority	949	473	255	1,605	8,200
Other Ministries	191	155	123	125	130
Local Authorities	2,482	1,831	2,188	2,418	3,652
<b>Total</b>	<b>6,694</b>	<b>9,363</b>	<b>14,074</b>	<b>17,882</b>	<b>38,125</b>

\*Provisional.

9.11. The Tana River Project currently under development covers the upper reservoir scheme which will cost approximately K£52 million. On completion in 1982 the reservoir will be the focal point for future development of the Tana River basin. Benefits will include enhanced irrigation and hydro-electric power potential and better control of the river flow enabling it to help meet the urban and public water supply requirements for a population of 9 million persons.

9.12. The net increase in the potential irrigated area is set at about 45,000 hectares. This figure is over and above the immediately planned increase of 14,500 hectares in two phases of the Bura Irrigation Scheme which can be implemented without the assistance of the upper reservoir. Various irrigation projects have already been identified in outline. These total 31,360 hectares and are basically at the prefeasibility stage of study.

9.13. The Sabaki scheme to supply water to Mombasa has reached advanced stage of construction. Nearly K£13 million had been spent on the project by March, 1978. This amount covers the expenditure for construction of the 30 kilometre main pipe from Baricho Spring, installation of tanks and other related works. The project is expected to be commissioned by the end of next year, although the actual completion of construction is not expected until two years later. The project when completed, is expected to cost K£32 million.

9.14. Table 9.2 details figures on the provincial distribution of rural water supply projects which are operational or are expected to become operational by June 1978. Figures indicate large increases in programmes in Nyanza Central and Eastern provinces. Heavy expenditures were incurred for the provision of water in the districts of South Nyanza and Siaya. The increase in the average cost of these rural water projects from K£38,000 in 1976 to K£ 101,000 in 1978. is also noteworthy.



Rural Water Supply Project Schemes Operational or Expected to be Operational  
at June 1976, 1977 and 1978

Table 9.2

Province	June 1976		June 1977		June 1978*	
	No.	Cost K£'000	No.	Cost K£' 000	No.	Cost K£' 000
Central	7	1,061	10	2,187	12	3,284
Coast	11	345	12	381	13	424
Eastern	15	499	16	856	19	1,350
North-Eastern	12	114	15	163	16	208
Nyanza	12	605	13	1,279	15	4,670
Rift Valley	28	512	29	537	31	816
Western	5	330	6	585	6	585
Total	90	3,466	101	5,988	112	11,337

\*Provisional.

9.15. The Ministry's water conservation measures in 1977 were mainly concentrated in Eastern Province. Three earth dams with a total storage capacity of 133,000 cubic meters were completed in Machakos and Kitui districts. The dam construction team also completed a number of small water conservation structures in Taita/Taveta District, the important ones being rock catchments at Miracago on Sagalla Hills and a 20,000-litre storage tank at Ndome village.

9.16. The Ministry of Health in collaboration with Ministry of Water Development carried out research on Bilharzia in the three dams and 1,654 People were examined for ova and cysts. The tests carried out revealed that schistosoma haematobium most often associated with smaller dams was non-existent. The district concerned had however the highest prevalence of schistosoma mansoni. The investigation team is following-up these studies in other ecological zones where dams are to be constructed.

9.17. The upsurge in Kenya's industrial development and its wider dispersion has strained the water supply capacity and capacity to process effluent disposal of a number of towns. As towns are naturally anxious to attract and retain industries, many authorities are reluctant to impose conditions on the supplies of water to factories or to insist on set standards before a particular factory discharges its waste into the municipal sewer.

As a result, the need for major capital investment in extension of water supplies and in equipment to process effluents is increasing. The costs

Solved are part of the indirect cost of the industrial development programme and are of special importance in relation to the attempts to disperse industry throughout Kenya.

## Forestry

9.18. The Government manages all gazetted natural forests and plantations. Present policy is to promote conservation of natural forests for the express purposes of enhancing water catchment, and protection from soil erosion and as a source of charcoal and fuelwood supply. The Forest Department of the Ministry of Natural Resources is currently compiling an inventory of the standing natural wood crop with a view to assessing the potential and economical use of mature and overmature wood species.

9.19. A further 4,800 hectares were brought under forest plantation in 1977 thereby increasing the total plantation area to 152,600 hectares. The progress during the year was slower than in the preceeding year when 5,300 hectares were planted. This slightly slower progress is attributed to some extent to the wet weather conditions which prevailed. However if the present average annual plantation rate is maintained, the Forest Department is likely to surpass its planned total target of 160,000 hectares by 1980/81. The plan involves extension of the Turbo afforestation scheme for the pulp and papermill at Webuye, and the rural afforestation scheme currently covering 29 districts.

Table 9.3 Forest Plantation Area. 1972-1977 '000 Hectares

	1972	1973	1974	1975	1976	1977*
Indigenous softwoods	4.6	4.7	4.7	4.7	4.7	4.7
Indigenous hardwoods	4.4	4.8	5.0	5.3	5.4	5.4
Exotic Softwoods.						
Cypress	47.4	50.0	53.2	56.7	59.5	62.8
Pines	57.6	58.5	61.4	64.9	67.1	68.4
Exotic hardwoods—						
Timber..	1.6	1.7	1.8	1.8	1.8	1.8
Fuel	7.7	8.3	8.8	9.1	9.3	9.5
Total Area	123.3	128.0	134.9	142.5	147.8	152.6

\*Provisional.

9.20. Forest losses were greatly reduced in 1977 and only 2,688 hectares of both plantation and natural forests were destroyed as compared to 7,754 hectares in 1976. Most of the destroyed area was in the natural forest reserves. Only 248 hectares of plantation forests were lost.

9.21. Table 9.4 gives details of sales of forest products since 1972. There was considerable upsurge in sales notably of sawn timber which increased by 36,000 cubic meters to 440,000 cubic meters in 1977. While sales of softwoods fell from 350,000 to 336,000 cubic meters those of hardwood almost doubled from 54,000 to 104,000 cubic meters. Fuelwood sales doubled while recorded charcoal sales went up from 115,000 to 120,000 stacked cubic meters. Increases in both fuelwood and charcoal sales during the reflect growing domestic use of these products.

Sales of Forest Products, 1972-1977

Table 9.4

	1972	1973	1974	1975	1976	1977*
Timber '000 true cu. metres—						
Softwood	243	254	290	352	350	336
Hardwood	48	54	51	59	54	104
Total	291	308	341	411	404	440
Fuel '000 stacked cu. metres—						
Fuelwood	37	42	73	84	64	128
Charcoal	150	163	139	121	115	120
Power and Telegraph Poles numbers	13,000	13,414	12,000	15,352	15,221	1,016

\*Provisional.

9.22. There was also a substantial increase in the volume of log intake by forest based industries during 1977. The pulp and papermill at Webuye tripled its log intake from 222,000 cubic meters in 1976 to 685,000 cubic meters in 1977, and the mill continues to be the largest consumer of raw forest products in the country. In addition a total of 360 sawmills in the country consumed about 500,000 cubic meters of round logs. About 17,000 cubic meters of timber were exported during the year and the two factories at Eldoret and at Elburgon manufactured 11,800 cubic meters of plywood.

#### Fisheries

9.23. The higher level of Lake Turkana in both 1976 and 1977 encouraged more fishermen to exploit this lake and as a result total fish landings in both years were at record levels. The total catch from all sources was 42,779 tonnes in 1977 compared with 41,021 tonnes in 1976 and 27,341 tonnes in 1975. The value of the catch reached K£3.28 million in 1977—more than 60 per cent higher than in 1975 when it totalled K£2 million. The volume of catch from Lake Turkana was 16,050 tonnes in 1977, 17,044 tonnes in 1976 and 4,236 tonnes in 1975. The low figures in '75 was at the end of three very poor rainfall seasons. Lake Victoria continued to be a major source for fresh water fish with 21,226 tonnes landed in 1977 as against 18,680 tonnes in 1976. In 1977 the Fisheries Department took steps to control the influx of up-country fishermen to Lake Turkana in order to ensure the lake's fishing potential was not harmed by over-fishing. There was an improvement in sea fishing also with 4,336 tonnes being landed in 1977 compared to 4,149 tonnes in 1976. When deep fishing is fully exploited, this source of supply will provide an increasing proportion of the growing domestic consumption. Table 9.5 gives details on quantities and value of fish landed since 1973.

Quantity and Value of Fish Landed, 1973-1977

Table 9.5

	1973	1974	1975	1976	1977*
Quantities Tonnes:—					
Freshwater fish—					
Lake Victoria	16,797	17,175	16,581	18,680	21,226
Lake Turkana	4,927	5,731	4,236	17,044	16,050
Other areas	3,174	2,259	1,993	1,148	1,167
Total	24,898	25,165	22,810	36,872	38,443
Marine fish	3,546	3,116	4,220	3,889	4,046
Crustaceans	210	121	124	159	208
Other marine products	269	179	187	101	82
Grand Total	28,923	28,581	27,341	41,021	42,779
Value K£'000:—					
Freshwater fish	1,167	1,332	1,348	2,200	2,441
Marine fish	366	371	538	541	679
Crustaceans	61	40	50	70	103
Other marine products	19	16	81	89	58
Total	1,613	1,759	2,017	2,900	3,281

\*Provisional.

### Mining

9.24. The value of mineral production as shown in Table 9.6 rose from K£7.7 million in 1976 to K£8.8 million in 1977 despite a decline in the value of soda ash production. This fall in value of soda ash output occurred inspite of a slight increase in the volume of production as a result of the high water flow into the producing lake which reduced the quality of the product. The value of fluorspar output continued to increase rising from K£1.8 million in 1976 to K£2.8 million in 1977 and there were also small increases in the value of other minerals produced. With the large rise in fluorspar output, export earnings from this product increased from K£2.2 million in 1976 to K£2.7 million in 1977. Extraction of salt both at Magadi—produced as a by-product of soda ash, and at Malindi was also adversely affected by higher than average rainfall. On the evidence of the first few months of 1978 a further fall in output seems likely as the rains continue to fall at an above average level.

9.25. Exploitation of gemstones particularly ruby and garnets along the gemstone belt in West Pokot and Taita/Taveta districts progressed satisfactorily yielding earnings of over K£1 million during 1977. These minerals are easy to market and so induce a growing effort by prospectors. Greater attention is also being paid to the exploitation of industrial minerals such as magnetite, vermiculite, glass, sand, etc.

Table 9.6 Value of Mineral Production, 1973-1977 K£'000

	1973	1974	1975	1976	1977*
Soda Ash	2,325	2,243	2,670	3,019	2,643
Fluorspar	307	515	1,569	1,788	2,832
Salt	572	476	170	669	719
Limestone Products	227	295	382	433	532
Other	634	2,032	762	1,807	2,088
Total	4,065	5,561	5,553	7,716	8,814

\*Provisional.

9.26. Gold mining activity which had previously almost died out has now been revived through organized co-operative efforts mainly in western Kenya. As a result, there was an increase in its output in the year, although the total value involved is still very small. Plans are underway to assist the co-operatives both in mining and marketing.

9.27. Exploration for mineral fuels continues, being pursued in some areas although some of the oil companies have withdrawn. Major efforts in oil exploration are centered in North Eastern Province. In addition to this, a major airborne geographical survey has just been completed. The survey covered over 34,000 square kilometers both in the Coast Province and in certain selected parts of western Kenya. Follow-up activities to this survey which aims at locating areas of base metal deposits as well as uranium are already underway and will continue well into the next five year development plan period. A project on regional geological mapping with multipurpose objectives is also being carried out. The project is expected to help identify aquifers and areas of ground water potential for use especially within the drier areas of the country.

9.28. The year 1977 was not particularly favourable for Kenya's mineral exports as far as prices were concerned. The world export price for fluorspar which had weakened in 1976 showed little improvement in 1977 so that export earnings from this mineral increased only because of an increase in the export volume. The unit price for soda ash fell by about 20 per cent reflecting a weak world demand for the mineral. Ruby-corundum on the other hand, continued to attract growing world demand and as a result, the export price rose to K£96 in 1977 from K£ 59.5 during 1976.

Table 9.7 Average Export Prices of Selected Minerals, 1975-1977 K£ per ton

	1975	1976	1977
Fluorspar ..	30.3	24.5	24.8
Soda Ash ..	30.3	30.0	24.2
Corundum-Ruby	58.6	59.5	96.0

## CHAPTER 10—ENERGY

Total consumption of energy in Kenya rose by over a quarter from 1972 to 1977. It increased by nearly 7 per cent between 1972 and 1973, but showed little increase in 1974 and 1975, in the immediate aftermath of the sharp rise in oil prices. It then increased by 10 per cent in 1976 and by a further 4 per cent in 1977. Per capita energy consumption actually fell in 1974 and 1975, and in 1977 was only 3 per cent higher than in 1973.

10.2. The relationship between the rise in consumption of energy and the growth in economy is brought out in the following set of figures which shows, in index form, growth in the monetary economy in real terms and the increase in volume of energy consumed.

	<i>Growth in Monetary Economy</i>	<i>Increase in Energy Consumption</i>
		1972 = 100
1973	107	107
1974	111	108
1975	112	111
1976	121	122
1977	131	127

10.3. In Kenya about 85 per cent of the energy consumed is derived from oil, about 12 per cent from electricity, and the remainder from coal. There are minor fluctuations in these proportions from year to year, as for example, when drought reduces output of hydro-electricity. About 28 per cent of the hydro-electricity and all the coal and oil consumed in Kenya are imported. It should be emphasized, however, that these figures and all the data in the tables of this chapter, ignore local traditional sources of fuels. Firewood is the most common fuel in rural areas; charcoal derived from it is used in both the domestic and industrial sectors and some is exported. The sugar industry also uses bagasse for heating.

### Oil

10.4. Table 10.1 indicates the pattern of imports and exports of oil, which plays a key role as the main source of energy in Kenya. The residual balance between the value of imports and exports of oil is also, because of its size, a major factor in external trade and the balance of payments. Before the oil crisis in late 1973, in terms of values Kenya was virtually in balance in its imports and exports of petroleum products. The receipts earned by Kenya from exports of petroleum products were almost sufficient to pay for the country's own needs of crude petroleum. However, conditions in 1973 were not subsequently repeated.

Quantity and Value of Imports and Exports of Petroleum Products, 1973 -1977

Table 10.1

	1973		1974		1975		1976		1977	
	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	2,695.6	17,557.9	2,902.9	67,027.0	2,824.9	86,822.4	2,496.7	93,469.5	2,551.5	100,158.4
Petroleum Fuels	115.9	2,021.3	129.9	6,279.7	16.7	1,249.1	47.7	3,345.7	104.7	8,269.9
Lubricating oils	69.2	2,450.0	100.5	6,885.4	77.6	6,158.1	53.0	5,678.9	73.9	6,927.7
Lubricating greases	0.2	35.3	0.4	95.9	0.3	73.7	0.1	41.5	0.2	65.1
Total	2,880.9	22,064.0	3,133.7	80,288.0	2,919.5	94,343.3	2,597.5	102,535.6	2,730.0	115,421.1
Exports—										
Petroleum Fuels	1,621.7	16,127.3	1,588.7	37,981.3	1,318.1	45,988.4	1,372.0	57,603.4	1,365.0	72,398.3
Lubricating oils	58.1	4,495.0	60.4	6,728.5	57.3	8,670.7	57.3	10,584.7	50.0	10,253.8
Lubricating greases	1.9	259.3	2.7	469.8	2.2	478.7	1.5	372.2	1.5	350.3
Total	1,681.7	20,881.6	1,651.8	45,178.8	1,377.9	55,137.8	1,430.8	68,560.3	1,416.5	83,002.4

10.5. The external markets for the refined products in 1973 included both Tanzania and Uganda but when subsequently Tanzania's own refinery lost the lucrative Zambian market, its own residual requirements from Kenya were greatly reduced. This had already occurred before the border closure between Kenya and Tanzania and the subsequent break-up of East African Community. By then exports of oil products to Tanzania had declined to relatively small amounts, and these events therefore had little effect on exports of refinery products.

10.6. It is probably true that for the situation in 1973, whereby the cost of imported petroleum was virtually covered by export proceeds, to have continued, Kenya would need to have ensured a sale of about 55 per cent of the refined products manufactured at the Mombasa refinery on export markets and that too at the same relative prices for exports vis-a-vis the prices paid by Kenya for its imports in 1973. However, as shown below, domestic demand has continued to grow and by 1977 accounted for 54.1 per cent of sales of the refinery products, while export demand had fallen to 45.9 per cent—compared to 54.3 per cent in 1973.

Soles of Mombasa Oil Refinery Products

	<i>Domestic Demand Per cent</i>	<i>'Export "Per cent</i>	<i>Total</i>
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

10.7. This loss in terms of decline in the relative share of proceeds earned from exports of petroleum products has been further compounded by the relative change between the price of crude petroleum and the prices of the refined products thereby reducing the relative margin of profit on refined petroleum products. In consequence of these two movements—a changed demand pattern and changed relative prices, the net cost of the imported oil and products which had been only K£1.2 million in 1973 had risen to K£32.4 million in 1977.

10.8. Table 10.2 sets out information on wholesale prices of petroleum products by the refinery as at September, 1973, alongside those at two later dates, one in 1976, and the other in 1977. As shown, by September, 1977, the price of gasoline was 135 per cent higher than the price in September, 1973. and similar price rises had also occurred in the case of illuminating kerosene and light diesel fuel. Other products with the exception of liquified petroleum gas had risen even further in price. However, over the same period the price of crude petroleum to the refinery in terms of Kenya currency had risen by 503 per cent.



Wholesale Prices of Petroleum Products at Mombasa, on 30th September 1973  
31st December 1976 and 3rd September, 1977

Table 10.2

KSh. per Unit

	Units	30.9-1973	31-12-1976	39-1977	Ratio 1977/73
L.P.G.*	'000 Kgs.	2,060	2,980	3,100	150.5
Premium Motor Gasoline	'000 Lts.	1,136	2,342	2,615	230.2
Regular Motor Gasoline	"	1,046	2,232	2,505	239.5
Illuminating Kerosene	"	578	1,243	1,326	229.4
Power Kerosene: tractor fuels	"	618	1,540	1,680	271.8
Light diesel oil	"	749	1,573	1,746	233.1
Industrial diesel oil	"	400	1,100	1,185	296.3
Fuel oil	"	315	750	825	261.9

\*Liquified petroleum gas.

10.9. Retail prices of petroleum products rose three times during 1977, by a total of about 13 per cent. However, any negative effect on demand was offset by the buoyancy of the economy. Details on retail prices of petrol and gas oil in Nairobi, from 1974 to date are given below.

Nairobi Retail Prices of Selected Petroleum Fuels, 1974-77

Sh./litre

Date	Premium Motor Spirit	Regular Motor Spirit	Gas Oil
12.4-74 ..	1.62	1.50	1.16
12.5-74 ..	1.72	1.60	1.26
16.6-74 ..	1.92	1.80	1.26
20.2-75 ..	2.03	1.91	1.36
13.6-75 ..	2.27	2.15	1.47
6-12-75 ..	2.47	2.35	1.67
10-3-76 ..	2.57	2.45	1.77
14-4-77 ..	2.64	2.52	1.84
19-6-77 ..	2.84	2.72	1.94
3-9-77 ..	2.89	2.77	2.01

10.10. The total volume of throughput of the refinery in 1977 was almost identical with that in 1976, which by itself was 9.3 per cent below the 1975 figure. Table 10.3 gives details of the throughput and output of the refinery.

1977 the refinery was processing an average of 7,800 tonnes of crude oil per day, utilizing just over 60 per cent of its current capacity. The lack of as in throughput in 1977 was due almost entirely to lower export demand, as in Table 10.1, vis-a-vis trends prevalent prior to 1975.

Oil Refinery: Throughput and Output of Finished Petroleum Products, , 1973-1977

Table 10.3 000 tonnes

	1973	1974	1975	1976	1977
Crude petroleum throughput..	2,661.9	2,840.5	2,837.5	2,574.8	2,570.2
Output—					
L.P.G.**	15.9	17.3	17.7	19.2	19.4
Motor gasoline: Premium ..	170.2	196.9	211.4	228.9	221.3
Motor gasoline:Regular	150.5	160.0	140.0	122.5	144.8
Illuminating Kerosene	72.5	72.4	47.2		
Jet/Turbo fuel	290.1	302.8	424.7	422.0	376.6
Light diesel oil	374.4	406.6	396.1	395.5	446.9
Heavy diesel oil	75.5	56.6	51.2		
Marine diesel oil	86.5	100.2	90.6	104.0	106.2
Fuel oil..	865.0	900.4	896.7	852.9	832.9
Export Residues	425.1	476.6	411.9	283.8	276.4
Bitumen	46.4	36.6	40.7	42.2	34.0
Intermediates			—5.1	—3.3	
Refinery Usage	89.7	114.1	114.3	107.0	111.6
Total Output	2,661.9	2,840.5	2,837.5	2,574.8	2,570.2

\*Excludes lubricants.

\*\*Liquified petroleum gas.

10.11. The Kenya oil pipeline, work on which started five years ago, has now begun to operate. It cost some K£40 million. The pipeline is being used to transport refined oil products and will eventually handle 80 per cent of the total demand in six products, namely: premium and regular motor gasolines, kerosene, aviation gasoline, heavy diesel and industrial diesel. It takes 10 days for a consignment to travel up the 300 mile long pipeline from the first pumping station in Mombasa to the last in Nairobi.

10.12. Domestic sales of petroleum products shown in Table 10.4 rose from 1,456,500 tonnes in 1976 to 1,502,900 tonnes in 1977. This represents a moderate increase of 3.2 per cent compared with a rise of 13.9 per cent in 1976. Among the main types of liquid fuels utilized in the country, fuel oil, jet turbo fuel, motor spirit and light diesel fuel are the most important, in the stated order of ranking. Together they accounted for about 93 per cent of the petroleum fuels sold in 1977.

Petroleum Supply and Demand Balance, 1973-1977

Table 10.4

'000 tonnes

	1973	1974	1975	1976	1977
Demand—					
l.p.g	12.0	12.4	13.7	14.7	16.1
Motor spirit: Premium and Regular	232.7	225.7	234.8	241.0	270.5
Aviation spirit	5.5	5.6	6.0	5.7	6.2
Jet/Turbo fuel*	256.0	238.9	282.4	305.2	290.0
Illuminating Kerosene	51.6	53.1	55.4	53.2	64.3
Power Kerosene	1.0	1.5	0.2	0.2	0.2
Light diesel oil	254.0	250.1	255.0	288.3	305.4
Heavy diesel oil	46.6	40.4	32.8	44.7	32.6
Fuel oil	410.7	412.0	398.2	503.3	517.6
Total	1,270.2	1,238.6	1,278.5	1,456.5	1,502.9
Refinery Usage	89.7	114.1	114.3	107.0	103.0
Total Domestic Demand ..	1,359.9	1,352.7	1,392.8	1,563.5	1,605.9
Exports of Petroleum fuels*	1,622.0	1,588.7	1,318.1	1,372.0	1,171.8
Total Demand	2,981.9	2,941.4	2,710.9	2,935.5	2,777.7
Supply—					
Imports:					
Crude oil	2,695.6	2,902.9	2,824.9	2,496.7	2,551.5
Petroleum fuels ..	115.9	129.9	16.7	47.7	104.7
Total	2,811.4	3,032.8	2,841.6	2,544.4	2,656.2
Adjustment**	170.5	—91.4	—130.7	391.1	121.5
Total Supply	2,981.9	2,941.4	2,710.9	2,935.5	2,777.7

\*Includes sales to foreign airlines at airports in Kenya.

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

1013. The largest increase in sales occurred in lighting kerosene and motor spirit. The volumes of these two products sold increased by 20.9 and 12.2 per cent respectively. The high amount of rainfall during the year which confined charcoal supplies by limiting its output and thereby raising the charcoal price, helped to increase sales of lighting kerosene. Sales of premium motor spirit rose from 142,200 tonnes in 1976 to 163,400 tonnes in 1977, an increase of 14.9 per cent while sales of regular grade increased from 99,500 tonnes to 108,000 tonnes representing an increase of 8.5 percent. The increase sales of motor spirit, as stated above is in line with the general buoyancy vehicle economy and reflects a general rise in usage of motor spirit on a per vehicle basis.

10.14. A moderate increase in sales of light diesel fuel was caused by the extra number of ships that called at Mombasa port, while the small increase in the volume of fuel oil sold in 1977 is explained by the good level of rainfall which enabled hydro-electricity production in 1977 to return to its normal level. In 1976 extra fuel oil had been used for generating electricity following the drop in the level of river flows. The fall in sales of turbo/jet fuel reflects a lower usage by airlines both domestic and foreign, while the increase of 9.5 per cent in gas sales is an indication of a tendency to substitute gas for other fuels, because of relative price advantage. The rise in its consumption could have been even higher had it not been for shortages that occurred towards the end of the year. Shortages due to production difficulties have continued into 1978.

### Electricity

10.15. Although the search for oil is still continuing in North-Eastern Province in the area between Mandera and Wajir, hydro-electricity except for fuelwood continues to be the only local source of primary energy in the country. The installed generating capacity as shown in Table 10.5, which had increased considerably in recent years, declined a little, from 353.1 thousand kilowatts in 1976 to 338.7 thousand kilowatts in 1977. The rapid growth since 1973, however, in the capacity to generate is an indication of the trend towards better utilization of Kenya's natural resources in the production of energy. The annual compound growth rate in hydro capacity was about 23 per cent over the period 1973 to 1976 compared with the rate of 5.9 per cent in the growth of thermal capacity over the same period.

Installed Capacity and Generation of Electricity, 1973-1977

Table 10.5

	Installed Capacity* MW**			Generation* GWH+		
	Hydro	Thermal	Total	Hydro	Thermal	Total
1973	75.0	144.5	219.5	407.7	385.7	793.3
1974	139.1	145.1	284.1	547.1	322.6	869.7
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	168.1	170.7	338.7	797.4	399.9	1,197.3

\*Includes estimates for industrial establishments with generation capacity.

\*\*1 megawatt=1 million watts=1,000 Kilowatts,

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

10.16. The ample amount of rainfall during 1977 coupled with uninterrupted imports of electricity from Uganda eased the position of electric supply in 1977. As a result the amount of electricity generated by thermal static

which had risen from 385.7 million Kwh in 1973 to 574.7 million Kwh in 1976 dropped to 400 million Kwh in 1977. Over the same period hydro power generated rose from 407.7 million Kwh in 1973 to 797.4 million Kwh in 1977 having fallen to 583.2 million Kwh in 1976.

10.17. Taking both hydro and thermal generation together total domestic production increased by 50 per cent over the period 1973 to 1977. The increase occurred mainly in generation of hydro.electricity while there was little change in generation of thermal electricity. The level of imports over this period dropped from 38 per cent of local generation in 1973 to 23 per cent in 1977.

10.18. Total sales of electricity as shown in Table 10.6 continued their upward trend, increasing from 1,152.5 million Kwh in 1976 to 1,273.6 million Kwh in 1977 a rise of 10.5 per cent compared with an increase of 7.6 per cent in 1976. The largest increases in 1977, were recorded in sales to industrial and commercial sectors. The bulk of the increase in sales to the industrial sector was accounted for by new industries which started operating during the year, though, some increase in the consumption of electricity is also the result of firstly expansion which has taken place in the capacity of existing enterprises in food industry, e.g. sugar, vegetable and fruit canning factories, the textile industry, and secondly by installation of large-scale irrigation facilities on some coffee plantations.

#### Electricity Energy Supply and Demand Balance, 1973-77

Table 10.6

GWH

	1973	1974	1975	1976	1977
Demand-					
Residential	195.2	205.6	226.1	300.1	303.5
Commercial and light	290.0	246.6	274.5	272.5	301.2
Industrial	434.0	532.7	560.2	568.9	658.1
Industrial	10.4	10.1	10.7	10.6	10.8
Street Lighting					
Total	929.7	995.0	1,071.5	1,152.5	1,273.6
Transmission losses and unallocated demand	130.5	144.7	139.6	215.3	167.7
TOTAL DEMAND=TOTAL	1,060.2	1,139.7	1,211.1	1,367.8	1,441.3
of which imports ..	302.4	296.0	260.8	241.9	271.8
net generation	757.8	843.8	950.2	1,125	1,169.5

10.19. The planning and expansion of local electricity generating capacity has continued to be based on growth of the economy at a relatively high rate. Currently the East African Power and Lighting Company is trying to meet the needs of new industries in Kisumu and Eldoret by adding to its facilities in those areas. As a result of its rural electrification programme, power supply was extended during the year, to Siakago Township in Embu District and to the first four settlements of Matutu, Mosoch, Biringo and Keroka in the extensive Irianyi Division Scheme. The installation of the new power station at Marsabit was also almost completed by the end of the year, and work on Mandera power station has been started. Plans are being made to invest a further sum of K£4.7 million in rural electrification programme of the East African Power and Lighting Company during the plan period 1978-1983.

Production, Trade and Consumption of Energy Expressed in Terms of the Primary Sources, 1973-1977

Table 10.7

'000 Tonnes Oil Equivalent

	1973	1974	1975	1976	1977
Coal and Coke Imports	50.0	46.6	32.1	44.9	43.8
Oil—					
Imports of crude oil	2,695.6	2,902.9	2,824.9	2,496.7	2,5515.5
Net exports of petroleum fuels*	-1,505.8	-1,458.8	-1,301.4	-1,324.3	-1,260.3
Stock changes and balancing item	170.1	-91.4	-130.7	391.1	314.7
Total Consumption of Liquid Fuels	1,359.9	1,352.7	1,392.8	1,563.5	1,605.9
Hydro Energy—					
Local production of hydro-power	97.9	131.3	155.8	140.0	167.4
Imports of hydro-power ..	72.5	71.0	62.6	58.1	65.2
Total Consumption of Hydro. Energy	170.4	202.3	218.4	198.1	232.6
Total Local Energy Production	97.9	131.3	155.8	140.0	167.4
Total Imports	1,312.3	1,561.7	1,618.2	1,275.5	1,400.2
Use of stock and balancing item	170.1	-91.4	-130.7	391.1	314.7
Total Energy Consumption	1,580.3	1,601.6	1,643.3	1,806.5	1,882.3
Imports as Percentage of Total Energy Consumption	83.0	97.5	98.5	70.6	74.4
Per Capita Consumption in Terms of Kilogram of Oil Equivalent	127	123	125	130	131

\*Net of exports.

### **The Energy Balance**

10.20. Table 10.7 details figures on supplies of energy from local production and imports, except firewood and charcoal, by source converted to a common equivalent in terms of oil. The table shows that the proportion of imports of energy to total consumption has varied substantially from year to year. These changes are to some extent dependent on the annual building up or running down of stocks of oil products. In 1976 and 1977 in particular stocks of oil were run down by about 705,800 tonnes. Over the five years 1973 to 1977 the proportion of imports to total consumption was about 85 per cent. As a result of the growth in local production of hydro-electricity, the share of imported supplies has dropped from 43 per cent of the total in 1973 to 28 per cent in 1977. Imports of coal, are small in quantity and essentially used by railways.

10.21. Oil, however, remains the major primary source of energy. The large amounts of money involved, in paying for crude oil imports both absolutely and relatively, means that a crucial factor in Kenya's economic situation is outside its control. At the time of the oil crisis in 1974 there was little that could be done domestically to counter the adverse impact of the massive rise in price of crude oil on living standards and the Government's economic strategy. The move to make more use of the country's hydro power potential and the investigations of geo-thermal energy sources seem likely to secure some slight alleviation of the dependence on imported oil, though as far as can be seen ahead, the economy will continue to depend heavily on substantial oil imports.

## CHAPTER 11—MANUFACTURING

Output of the manufacturing sector increased in volume by 18 per cent in 1976 and a further 15 per cent in 1977. In this period the number of people in wage employment in this sector rose by about 8 per cent in 1976 and by 8.4 per cent in 1977, from 101,000 in 1975 to 109,000 in 1976 and 118,000 in 1977. The increases in output and employment were made possible by the more intensive use of existing spare capacity, by new capacity introduced in 1976 and 1977 and by increases in productivity. The value of wages paid in the private sector increased by 21.5 per cent from K£46.5 million in 1976 to K£50.6 million in 1977, while the corresponding increase in numbers employed was 7.5 per cent. This buoyancy of the manufacturing sector in 1976 and 1977 follows largely from the strong expansion of domestic demand created by high export incomes. The performance of sales of Kenya's manufactured goods abroad was however, mixed. The closure of the border with Tanzania cut off markets there and made it more difficult to serve what had till then been a growing market in Zambia. The impact of the closure, the stagnation in exports of domestically manufactured goods, and the diversion of these goods to the home market have been discussed in Chapter 7.

11.2. The increase of 15 per cent in the volume of output in 1977 would have been higher but for the fact that many manufacturing firms had difficulties in obtaining import licenses for raw material requirements, and there were also delays in processing export compensation payments and sales tax refunds. Increases in production were registered in output of all manufacturing activities, except that of basic industrial chemicals, and grain mill and meat and dairy products. Notable increases of 20 per cent or more were recorded in the output of clay and glass products, transport equipment, clothing, textiles, canned fruit and vegetables, cooking fats, beverages, plastic products, electrical machinery and paper and paper products and in the output of establishments engaged in printing.

11.3. In terms of value added the contribution of manufacturing sector to GDP at factor cost rose to K£237 million in 1977, from K£192 million in 1976 as shown in Table 11.1. The annual average rate of growth in the value of the output of manufacturing sector at current prices between 1974 and 1977 was 26.7 per cent as compared to an average annual increase of 21.9 per cent in GDP. The share of contribution of manufacturing sector to GDP thus increased from 14.4 per cent in 1974 to 14.7 per cent in 1977 when tea processing is included.

### Output

11.4. Table 11.2 details indices on output of manufacturing sector the period 1974 to 1977. These figures highlight the stagnation in production during 1974 and 1975 and the subsequent strong rise in 1976 and 1977. Five of the 26 groups shown in the table have more than doubled output since 1972 and the overall average growth rate in output between 1972 to 1977 was 10.5 per cent a year.



Table 11.1 Manufacturing Sector: Output and Product\*. 1975-1977 *K£million*

	Value of Output	Intermediate Consumption	Value Added
	<i>At Current Prices</i>		
1975	625.85	488.95	136.90
1976	870.24	678.07	192.17
1977, ,	1,124.30	886.86	237.44

\*Includes tea processing.

, \*Provisional.

Table 11.2 Quantity Index of Manufacturing Production, 1974-1977 1972 = 100

	1974	1975	1976	1977*	Percentage Change 1976/1977
Meat and Dairy Products	96	84	99	99	0
Canned Vegetables, Fish and Oils and Fats	126	156	201	248	23
Grain Mill Products	137	131	151	148	—2
Bakery Products	134	126	178	196	10
Sugar and Confectionery	184	184	205	233	14
Miscellaneous Foods	103	106	129	142	10
Food Manufacturing	119	123	151	163	8
Beverages	131	138	150	181	21
Tobacco	133	131	137	145	6
Beverages and Tobacco	131	136	146	170	16
Textiles	129	143	141	184	30
Clothing	84	85	101	150	49
Leather and Footwear	101	184	181	190	5
Wood and Cork Products	117	141	135	153	13
Furniture and Fixtures	110	95	93	105	13
Paper and Paper Products	93	88	141	170	21
Printing and Publishing	128	148	156	238	53
Basic Industrial Chemicals	130	89	84	76	—10
Petroleum and Other Chemicals	122	117	133	151	14
Rubber Products	146	103	146	170	16
Plastic Products	158	244	310	383	24
Clay and Glass Products	95	96	77	170	121
Non-Metallic Minerals	107	114	124	144	16
Metal Products	120	118	178	207	16
Non-Electrical Machinery	121	65	48	50	4
Electrical Machinery	163	139	159	193	21
Transport Equipment	73	102	111	178	60
Miscellaneous Manufactures	115	107	123	137	11
Total Manufacturing	121	121	143	165	15

\*Provisional.

11.5. Manufactured food products have continued to account for about one third of the gross output of the sector although in 1977 only a moderate increase of 8 per cent was recorded. The good weather conditions and the expansion in domestic demand encouraged increases in the output of dairy products, canned fruit and vegetables, cooking fats, bakery products, sugar and confectionery, and miscellaneous foodstuffs. There was an increase of over 10 per cent in the output of all types of processed food products except meat and grain mill products. The production of meat products in fact declined in 1977, causing stagnation in the aggregated output of meat and dairy products. The export of canned beef also declined by about 30 per cent and as a result the volume of exports of meat products fell from 9,768 tonnes in 1976 to 9,344 tonnes in 1977.

11.6. The output of dairy products including that of baby foods increased by nearly 23 per cent in 1977. The rise occurred in increased production of processed liquid milk, dried whole milk powder, dried skimmed milk powder, butter and baby foods, and can be attributed to an increase in deliveries of fresh milk to Kenya Co-operative Creameries. The dairy, pig and beef products industries are likely to benefit from the continuing rains and the ample supplies of animal feed due to the good harvests of maize, resulting in a further increase in their output in 1978.

11.7. The output of canned fruit and vegetables rose a further 16 per cent in 1977. Export demand especially for canned pineapples prompted this increase and the volume of exports rose to 45,000 tonnes in 1977, valued at K£10.5 million—an increase of over 50 per cent over the value of export receipts in 1976. The new air freight service set up by Kenya Airways will add to the existing air cargo capacity and as a result the exports of canned fruit and vegetables are expected to rise further in 1978.

11.8. The production of grain mill products declined by 2 per cent in 1977, after rising in 1976. Output of maize flour which had been rising steeply, declined by about 13 per cent to 190,000 tonnes in 1977, as shown in Table 11.3. Also the low price offered on the international market resulted in a virtual elimination of its exports. The output of wheat flour, however, continued to rise and increased by 8 per cent to reach a record level of 149,400 tonnes in 1977.

Table 11.3 Production of Grain Mill Products, 1973-1977 '000 tonnes

Year	Wheat Flour	Sifted Maize meal	Rice	Broken Rice
1973	133.8	122.0	19.7	4.1
1974	128.1	160.5	20.6	2.7
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

\*Provisional.

11.9. The increase of 10 per cent in the output of bakery products in 1977 was lower than the growth of 41 per cent achieved in 1976, and is the result of a modest increase of only 7 per cent, in the output of bread which by itself accounts for nearly 80 per cent of the production of bakeries. Domestic demand for bread was affected by a 10 per cent increase in prices.

11.10. The output of sugar and confectionery increased by 14 per cent in 1977. Total local production of sugar increased by 8 per cent from 167,000 tonnes in 1976 to 181,000 tonnes in 1977. This increase is lower than the increase in output of cane, due to a decline in its sugar content caused by heavy rains. Local production catered for 83 per cent of domestic demand and 34,000 tonnes of sugar had to be imported. The sugar industry is expanding rapidly and it is hoped that Kenya will be able to produce its entire requirement by 1980. Mumias sugar factory will be doubling in size to a capacity of 160,000 tonnes a year while new factories are to be built in Awendo and Nzoia. The total output of the sugar industry is expected to reach 550,000 tonnes by 1990.

11.11. The increase of 16 per cent in the output of beverages and tobacco in 1977 was due mainly to an increase of 21 per cent in the output of beverages since production of cigarettes rose by only about 6 per cent in this period. As shown in Table 11.4 the production of beer and mineral waters rose by 19 and 25 per cent respectively. Output of beer will increase further when the K£14 million brewery being built in Kisumu starts operating.

Production of Beverages and Tobacco, 1973-1977

Table 11.4

	Spirits	Beer	Mineral waters	Cigarettes
	<i>litres</i>	<i>'000 litres</i>	<i>'000 litres</i>	<i>Million</i>
1973	336,722	139,393	42,816	3,050
1974	355,255	157,633	53,371	3,608
1975	362,297	153,812	66,136	3,562
1976	356,838	164,195	79,684	3,703
1977	420,180	195,160	99,409	3,944

11.12. There was an increase of 30 per cent in output of textiles in 1977. This was due to large increases in the output of cotton, woollen and nylon fabrics which recorded rises of 42, 158 and 43 per cent respectively. Output of rope and twine also registered a marked increase though the value exported declined by 29 per cent. The increase in the output of woollen and nylon fabrics was partly contributed by the new factory which started operating during the year.

11.13. The output of woollen goods and finished textiles rose by 44 per cent in 1977, despite a drop in the output of towelling material and only a modest increase in output of rayon, and polyester/viscose fabrics. Production of pullovers, jumpers, cardigans and knitted fabrics increased moderately. In spite of the substantial inflow of imports, output of clothing registered a record increase of 49 per cent in 1977. The increase was due especially to the rise in the production of shirts, dresses, uniforms, overalls, vest, singlets and other underwear. The expansion is expected to continue in 1978.

11.14. The increase of 5 per cent in the output of leather and leather products in 1977, is attributed to increases in the output of sports goods and unfinished leather. The export value of leather and leather products also went up by 9 per cent. However, the output of footwear declined by nearly 12 per cent as a result of an increase in imports, which went up by 43 per cent in value.

11.15. In 1977 the output of paper and paper products rose by 21 per cent, as a result of an increase of 49 per cent in output of manufactured paper. Further increases are expected in the current year when additional capacity comes on line. The exports from printing establishments also rose substantially from K£7 million in 1976 to K£19 million in 1977.

11.16. The output of basic industrial chemicals declined by a further 10 per cent in 1977, following a fall of 5.6 per cent in 1976. The decline is due to a fall in the output of pyrethrum and wattle extract, coupled with the temporary stoppage of fertilizer production. A new large-scale fertilized plant is now nearing completion in Mombasa and production is expected to increase again in 1978. A plant to manufacture furfural and other products from maize cobs currently under construction in Eldoret, and another plant for turning molasses into power alcohol being set up at Kisumu will enhance the activity in this group of industries.

11.17. The output of petroleum and other chemical products went up by 14 per cent in 1977. Production of petroleum is discussed in detail in Chapter 10. Output of other chemicals which includes production of paints, varnishes and lacquers, drugs, soaps, etc., rose by 20 per cent.

11.18. The increase of 16 per cent in the output of rubber products in 1977, was caused mainly by an expansion in domestic demand for tyre which partly originated from the three new vehicle assembly plants that became operative during the year. While the production of new tyres of all kinds increased there was also a significant increase of 46 per cent in output of retreaded tyres. The only plant producing new tyres is reported as employing almost 500 people and is now running at full capacity. In 1977 over 250,000 new tyres were produced, and the figure is expected to rise to 290,000 in 1978.

11.19. The output of plastic products went up by 24 per cent in 1977, while production of clay and glass products, which had declined in 1974, 1975, and 1976, registered an increase of 121 per cent. This increase was due to the rise in domestic demand particularly for bottles, because of the expanded output of beer and mineral waters.

11.20. The production of non-metallic mineral products went up by 16 per cent in 1977. Cement is the major component in this group of manufactured products and further details on it are given in Table 11.5. Production, local consumption and exports all went up, despite the fall in exports to Tanzania which in 1976 had accounted for about 27.000 tonnes of the total output. The rise in domestic demand reflects the increased activity in building and construction which occurred in late 1977 and early 1978.

Cement Production and Utilization, 1973-1977

Table 11.5

'000 tonnes

	Production	Imports		Export		Consumption and Stocks
		From Uganda and Tanzania	From Overseas	To Uganda and Tanzania	To Overseas	
1973	792.2	0.2	16.8	16.2	432.7	360.3
1974	856.5	—	0.4	39.5	490.7	326.7
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

11.21. The growth of 16 per cent in the output of metal products in 1977 is mainly due to the increases in the production of galvanized corrugated iron sheets. High level farm receipts have caused a substantial rise in demand for this product in the rural areas, for the erection and improvement of dwellings. The growth of 60 per cent in the output of transport equipment is accounted for by the production of the three large vehicle assembly plants. These three plants represent an investment of more than K£6million and have a capacity to assembly over 10,000 vehicle units a year.

The effect of the closure of the Tanzania Border

11.22. The border closure sealed off Tanzania for Kenya industries as a market for exports and as source of supplies of raw materials. As far as the latter are concerned raw material supplies of tobacco and cotton were seriously effected and tobacco manufacturers in particular had difficulty in finding suitable alternative sources. The effect of the loss of export market was more diversified. The paper industry may have lost

a market of about K£1 million worth of exports; but given that Tanzania is developing its own paper industry, the effect of the closure was mainly to bring forward by a year or two an unavoidable loss. It should also be noted that the paper industry had in any case increased the volume of its production in 1977 by 21 per cent, and the printing industry increased the value of its exports from K£7 million in 1976 to K£19 million in 1977, despite the loss of Tanzania market. The same situation of substantial increases in production despite the loss of Tanzania market occurred in a number of other industries too. In the case of some of these industries where the increased domestic demand did not absorb the increased production alternative markets were found. Also in a few cases local industries benefitted from the border closure since competitive imports from Tanzania were cut off: tyre manufacturing being a case in point. The overall effect therefore has been patchy, but it can be concluded that the immediate impact was only to reduce but not prevent the considerable growth that occurred in 1977 in manufacturing sector as a whole.

#### **Developments in Manufacturing Industry**

11.23. The Industrial Development Bank, and the Development Finance Company have continued to be among the major sources of finance for medium and large scale manufacturing industries. Industrial Development Bank advanced over K£5 million for 22 investment projects in 1977. The most important among these are the plants for manufacture of furfural, glass, oxygen, sugar, thread and certain food stuffs. The Development Finance Company approved commitments amounting to nearly K£2 million for 11 new and existing projects. These included a bottling plant and a knitwear factory each entailing an investment of K£300,000, a salt-works K£250,000 and a cushion factory— K£200,000.

11.24. Additional projects which have either been announced or completed during the course of 1977 include

- (i) the recently completed K£500,000 chemical plant at Thika to manufacture sulphuric acid;
- (ii) expansion of tyre retreading plants both in Nairobi and Mombasa at a cost of K£500,000;
- (iii) expansion of tyre factory at Nairobi costing K£800,000;
- (iv) a new soft drinks factory at Eldoret at a cost of K£700,000;
- (v) a fisheries plant at Kalakol, Turkana to be built at a cost of K£ 100,000;
- (v) negotiation of a K£6 million multipurpose loan agreement to assist in the modernization of the Kenya Meat Commission and East African Portland Cement factories;

- (vii) a plan to set up a K£1 million tractor assembly plant at Nakuru;
- (viii) a cotton ginnery at Machakos costing k£400,000;
- (ix) expansion of a factory in Mombasa manufacturing aluminium and enamelware at a cost K£700,000;
- (x) plans to construct a factory to manufacture animal feeds at a cost of K£ 300,000.

11.25. It is hoped that it may be possible to export more manufactured products, which are currently being produced mainly for the home market as a result of the more intensive use of existing equipment. The Export Compensation Scheme provides some encouragement for such industries.

## CHAPTER 12—BUILDING AND CONSTRUCTION

Output in real terms and employment in the building and construction industry rose moderately in 1977. As last year's survey suggested, the buoyancy of the economy in 1977 prevented the fall in the construction industry as was then being indicated by the static level of figures on building plans approved in 1976. Nevertheless the general improvement in the economy in 1977 was so strong that the small size of the growth in the activity in this sector last year is a disappointment, particularly after its depressed state in 1974, 1975, and, to a lesser extent, in 1976. It is suggested later in this chapter that immediate purchases of property with funds generated by the commodity boom were partly responsible for the delayed interest in new construction activity in 1977 itself. However, the figures on building plans approved by Nairobi City Council in 1977 indicate that the secondary stage in spending these funds will have an impact on the level of activity in 1978. The total value of building plans approved by Nairobi City Council rose from K£19.8 million in 1976 to K£42.5 million in 1977 and in other municipalities from K£13.9 million to K£14.9 million. Institutions in the financial sector are also looking forward to a further large upsurge in construction activity in 1978.

12.2 The number of workers employed by the Government and local authorities who are engaged in construction activity rose in 1977, while employment in this activity in the private sector changed only slightly. The phasing of a few large-scale projects does have a significant impact on the level of employment at any given time. A maximum of 3,000 persons were engaged in the construction of the new Nairobi Airport at the peak level of activity in 1974 and 1975 accounting for 6 per cent of total employed in this sector in these years. Since then numbers employed in this project have tapered off to nil by early 1978, when the airport was commissioned for service. The redeployment problems involved in situations like this are difficult to smooth out.

12.3. Table 12.1 shows that construction costs rose by 7.4 per cent in 1977 as compared with a rise of 5.5 per cent in 1976. The rise in 1977 was due more to an increase in costs of material inputs than labour costs. The former rose in price by 8.8 per cent while the latter went up by 4.5 per cent. Prices of almost all input materials went up except for the price of structural steel. The more notable increases occurred in costs of cement, concrete blocks, roofing materials and aggregate and sands. Increases in prices of stone blocks and electric and sanitary materials on the other hand were more modest. As a result of the different weights given to different items in the compilation of three main components of the index, residential building costs rose by 9.9 per cent, non-residential building costs by 6.9 per cent and "other" construction costs by 6.6 per cent.



PERCENTAGE INCREASE IN BUILDING AND CONSTRUCTION COST INDICES, 1975-1977

Table 12.1

	MATERIALS			LABOUR			TOTAL		
	1975	1976	1977	1975	1976	1977	1975	1976	1977
Residential building	17.8	3.7	11.2	11.6	10.2	4.5	15.9	4.9	9.9
Non-Residential	19.3	-1.2	7.7	11.6	10.2	4.5	16.6	1.4	6.9
All Buildings	18.6	1.4	9.6	11.6	10.2	4.5	16.2	3.2	8.4
"Other" Construction	11.7	6.5	7.9	11.6	10.2	4.5	11.6	7.9	6.6
TOTAL COST INDEX	15.1	3.0	8.8	11.6	10.2	4.5	13.8	5.5	7.4

### Buildings

12.4. Tables 12.2 and 12.3 detail the value and number of all reported private building work completed, including extensions to buildings, in the main towns. It must be emphasized that the figures for 1977 are not final as these exclude completions which it is anticipated will be notified later in the year. So far as can be estimated, however, there was a rise in the total value of privately owned buildings which were completed in 1977 as compared to 1976. Particularly large increases in the number and value of buildings completed in 1977 have, however, been reported from Eldoret and Mombasa, an indication of the expansion of activity in these centres.

THE VALUE OF ALL REPORTED PRIVATE BUILDING, "WORK COMPLETED IN MAIN TOWNS  
1973-1977

Table 12.2

K£million

	Nairobi	Mombasa	Nakuru	Kisumu	Kitale	Eldoret	Thika	Others	Total
Total for Year									
1973	5.86	1.76	0.38	0.02	0.03	0.90	0.26	0.06	9.27
1974	7.64	2.84	0.24	0.01	..	0.16	0.21	0.27	11.37
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
Returns received to date*									
1976	7.04	1.24	0.35	0.08	..	0.08	0.80	0.14	9.73
1977	6.55	2.43	0.09	0.02	..	1.55	0.25	0.15	11.04

\*Provisional and incomplete. The late receipt of returns adds significantly to the years total.  
1976 figures for comparison only.

\*\*Including the value of extensions.

REPORTED COMPLETIONS OF NEW PRIVATE BUILDINGS IN MAIN TOWNS, 1973-1977

Table 12.3

	NUMBER		ESTIMATED COST <i>K£million</i>		
	Residential	Non-Residential	Residential	Non-Residential	Total
TOTAL FOR YEAR					
1973	1,478	98	4.93	2.46	7.39
1974	1,433	109	6.79	3.43	10.22
1975	1,691	98	8.98	3.17	12.15
1976	791	114	4.88	6.25	11.13
RETURNS RECEIVED TO DATE*					
1976	674	84	4.33	4.29	8.62
1977 ..	742	58	4.62	3.51	8.13

\*Provisional and incomplete. The late receipt of returns adds significantly to the year's total. 1976 figures for comparison only.

12.5. As shown in Table 12.4 the provisional figures for 1977 indicate the highest annual increase in total value of completions of publicly owned buildings although the number of units completed was much lower than in previous years. This increase in value is accounted for by the very large increase in the value of publicly owned non-residential buildings which were completed during 1977. These include Kencom House owned by the Kenya Commercial Bank and the headquarters building for the National Bank of Kenya. Since the construction of large buildings frequently extends over two or even three calendar years, the changes in the value of completions from one year to another are only a rough guide to the actual level of activity in the building industry.

REPORTED COMPLETIONS OF NEW PUBLIC BUILDINGS, 1973-1977

Table 12.4

	NUMBER		COST <i>K£'000</i>			
	Residential	Non-Residential	Residential	Non-Residential	Total	Total**
TOTAL FOR YEAR						
1973	722	101	1,834.5	1,964.5	3,798.9	3,898.2
1974	1,419	200	3,253.2	3,898.1	7,151.3	7,700.1
1975	1,017	171	2,917.5	4,099.7	7,016.6	7,385.9
1976	1,068	149	4,004.1	2,166.9	6,171.0	6,308.5
RETURNS RECEIVED TO DATE*						
1976	935	107	3,512.4	1,326.9	4,839.4	4,934.3
1977	193	43	976.5	6,749.0	7,725.5	1,751.9

\*Provisional and complete. The late receipt of returns adds significantly to the year's total. 1976 figure for comparison only

\*\*Including the value of extensions.

12.6. There has been hectic activity in the real estate market in 1977 particularly in Nairobi, as the owners of liquid funds created by the modify boom sought assets with assured earnings. New building is apparently seldom considered by certain type of investors as an alternative to purchasing

existing properties. In any case, for this type of investor, building involves delays caused by the need to secure planning approvals, and the availability of land. This has resulted in an increase in the real estate values. It appears that this increase has already led to more building activity and even greater activity would be generated provided funds could be put at the disposal of individuals desiring ownership of the first home. This implies lowering of the level of initial deposit payments, increasing the value of loans being made available, and reducing the interest rates.

12.7 The figures on plans approved in 1977 depict an encouraging future for the industry, and indicate that property developers are regaining confidence. Table 12.5 shows that the value of proposed building projects for which plans were approved by Nairobi City Council rose by 115 per cent in 1977 to K£42.5 million as compared to K£19.7 million in 1976, which in itself reflected a decline of 19 per cent over 1975. Although a number of plans are never executed an increase of this magnitude in plan approvals indicates a substantial increase in subsequent activity in this case in 1978. Values of residential and non-residential building projects, submitted by the private sector for plan approval of the Nairobi City Council went up by 119 and 77 per cent to K£15.2 million and K£15.6 million respectively, in 1977. At K£30.8 million these accounted for 72.5 per cent of the total value of projects for which plans were approved by the council, and was virtually twice as high as in 1976. The value of residential building projects submitted for plan approval to the Nairobi City Council by the public sector went up from K£0.6 million in 1976 to K£3 million in 1977, and that of non-residential building projects increased from K£3.4 million to K£8.7 million over the same period.

PRIVATE AND PUBLIC BUILDING PLANS APPROVED BY THE NAIROBI CITY COUNCIL, 1973-1977

Vcdng'3407

Estimated Cost K£'000

		PRIVATE			PUBLIC		
	Residential	Non-Residential	Total	Residential	Non-Residential	Total	All Buildings
1973	9,376	5,361	14,737	1,947	2,815	4,761	19,498
1974	11,204	5,547	16,751	1,325	2,333	3,658	20,410
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	15,608	30,786	2,964	8,705	11,668	42,454
1975—							
1st Qr. . .	3,307	2,723	6,031	353	1,699	2,052	8,083
2nd Qr. . .	1,524	1,328	2,852	43	1,397	1,438	4,290
3rd Qr. . .	1,591	4,422	6,013	31	683	714	6,727
4th Qr. . .	1,537	1,990	3,527	988	981	1,969	5,496
1st Qr. . .	1,748	1,012	2,760	205	2,045	2,250	5,010
2nd Qr. . .	2,120	2,215	4,335	354	443	797	5,132
3rd Qr. . .	1,742	4,297	6,039	24	149	173	6,212
4th Qr. . .	1,317	1,307	2,624	16	760	776	3,400
1st Qr. . .	3,089	2,717	5,805	134	151	285	6,090
2nd Qr. . .	4,010	3,761	7,771	1,704	2,879	4,582	12,353
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

12.8. Since the figures on building plans approved by other municipalities given in Table 12.6 for 1977 are still provisional, the relatively small rise there does not necessarily indicate that there will not also be a significant increase in building activity outside Nairobi. The private sector makes a relatively more significant contribution to building activity in these other municipalities than in Nairobi.

PRIVATE AND PUBLIC BUILDING PLANS APPROVED BY OTHER MUNICIPALITIES, 1973-1977

Table 12.6

Estimated Cost M£,000

	PRIVATE			PUBLIC			All Buildings
	Residential	Non-Residential	Total	Residential	Non-Residential	Total	
1973	2,576	4,433	7,009	196	2,005	2,201	9,210
1974	5,164	4,373	9,537	3,094	217	3,311	12,848
1975	2,870	5,195	8,065	46	1,218	1,264	9,329
1976	4,440	7,709	12,148	1,364	430	1,794	13,941
1977	4,072	8,432	12,503	125	2,058	2,183	14,687
1975—							
1st Qr	851	1,451	2,302	11	1,019	1,030	3,332
2nd Qr	740	2,585	3,325	35	17	52	3,377
3rd Qr	793	834	1,627	—	58	58	1,685
4th Qr.	486	325	811	—	124	124	935
1976—							
1st Qr	1,074	932	2,006	1,192	254	1,446	3,452
2nd Qr	952	2,344	3,296	11	76	87	3,383
3rd Qr.	1,510	3,414	4,924	158	—	158	5,082
4th Qr.	904	1,019	1,922	3	100	103	2,025
1977*—							
1st Qr	981	3,246	4,227	—	658	658	4,884
2nd Qr	1,083	2,636	3,719	50	242	292	4,011
3rd Qr	1,488	1,596	3,081	75	1,159	1,234	4,318
4th Qr	520	954	1,474	—	—	—	1,474

\*Provisional.

12.9. Table 12.7 indicates the significant increase in the number of housing units completed by the National Housing Corporation. The number of units completed rose from a record low of 326 units in 1976 to 901 units in 1977. This figure is, however, still well below the figures of earlier years. Almost all the units completed were either in Nairobi—586 units worth K£1.4 million—or in Mombasa—300 units worth about K£0.48 million. Although Government policy is directed towards promotion of site and service schemes, the number of site and service plots completed declined from 1,128 in 1976 to only 426 in 1977. These schemes in 1977 were concentrated in Kisumu—126 units, and in Webuye—300 units. The position is likely to improve in 1978 as government policy to spread such schemes throughout other towns takes effect.

Housing Units Completed by the National Housing Corporation, 1973-1977

Table 12.7

	1973	1974	1975	1976	1977
Units Completed					
Province—					
Central	12	168	232	49	—
Coast	267	300	20	216	300
Eastern	34	71	79	—	—
Nairobi	477	432	166	1	586
North Eastern	6	—	—	—	—
Nyanza	68	25	107	35	—
Western	226	32	350	25	—
Rift Valley	153	413	697	—	15
Total Number	1,243	1,441	1,651	326	901
Value of Units Completed K.£'000					
Central	37	184	651	76	—
Coast	486	290	36	272	479
Eastern	44	88	118	—	—
Nairobi	899	1,396	582	3	1,405
North Eastern	13	—	—	—	—
Nyanza	77	41	273	49	—
Western	89	408	812	30	—
Rift Valley ..	500	47	410	—	23
Total Value	2,145	2,454	2,882	430	1,907
Site and Service Plots Completed*	96	—	363	1,128	426

\*Mainly in Central Province, Nairobi, Kisumu and Webuye.

12.10. Kenya is facing the usual problems arising from the rapid urbanization that is a common feature of many developing countries. These largely resolve into an inability to cater for the provision of houses and services for the lower income groups. The World Bank is continuing its support by a new loan of US \$50 million which will provide housing for more than 30,000 low income households in Nairobi, Mombasa and Kisumu. The National Housing Corporation has also obtained a loan of K.Sh. 40 million to construct about 400 low-cost houses in 12 major urban centres excluding Nairobi while a plan for development of housing in Eldoret makes provision for 3,250 low-cost, 1,130 medium-cost, and 260 high-cost dwelling units. Rehousing slum dwellers does not by itself solve the urban problems as the emptied slum areas fill up again unless the rural/urban balance of advantage changes. The government's stress on development of the rural areas in order to retain people in these areas is therefore a crucial factor.

12.11. Table 12.8 shows that Government expenditure on housing is expected to double from K£3.4 million in 1976/77, to K£7.7 million in 1977/78. The number and cost of institutional and pool housing units built by the Central Government for housing its own employees, as shown in Table 12.9 increased by about 10 per cent in 1976/77. The small rise in average costs per housing unit in 1977 can be attributed mainly to increases in construction costs.

Approved and Actual Government Expenditure on Housing, 1972/73-1977/78

Table 12.8

K£'000

Year	Approved	Actual	Approved Expenditure as percentage of Development Expenditure
1972/73	4,765.7	4,168.4	6.53
1973/74	5,550.7	4,308.7	7.81
1974/75	5,571.2	4,862.4	5.74
1975/76*	4,721.5	4,439.9	4.31
1976/77	3,451.0	3,416.6	..
1977/78	7,686.1	..	..

\*Revised.

Ministry of Works Housing Construction, 1972/73-1976/77

Table 12.9

	Institutional Housing**			Pool Housing+		
	Units Built	Cost K£' 000	Cost per Unit K£	Units Built	Cost K£'000	Cost per Unit K£
1972/73 ..	861	1,493.7	1,735	185	574.2	3,104
1973/74	353	769.1	2,179	212	386.2	1,822
1974/75 ..	574	2,106.9	3,670	54	287.2	5,318
1975/76 ..	199	747.2	3,755	31	164.8	5,316
1976/77,	230	889.8	3,869	24	145.3	6,054

\*Provisional.

\*\*For specific ministries.

+For general civil service use.

12.12. There is also evidence of substantial increase in building activity in rural areas, with new buildings being erected and improvements effect to existing structures. Such activity has been particularly significant in coffee and tea producing areas. These individual, mainly small, improvements although difficult to quantify in value terms have a high return in welfare.

### Roads and Other Construction

12.13. It is expected that at K£29.7 million, the total expenditure by Ministry of Works on road construction will be about 3 per cent higher in 1977/78 than the expenditure of K£28.7 million incurred in 1976/77. As shown in Table 12.10, expenditure on trunk roads is expected to rise slightly, while that on primary and secondary roads will decline. Some of the major road construction projects in which the Government is presently involved include construction of the Nyali Bridge at an estimated cost of K£3 million, Lake Turkana road—K£1.7 million, Nyeri/Nyahururu road—K£1.1 million, and Kangondi/Garissa road—K£500.000. In addition, the Government is currently undertaking other construction works on the Gitaru power project costing some K£2 million.

Total Expenditure on Roads, 1975/76-1977/78

Table 12.10

k£'000

	1975/76	1976/77	1977/78*
Development			
Trunk Roads	5,906.0	8,410.0	8,940.0
Primary Roads	4,009.0	4,530.0	2,835.0
Secondary	1,499.0	990.0	600.0
Minor Roads	30.0		
Unclassified Roads	1,433.0	1,240.0	895.0
Miscellaneous Roads	4,024.0**	4,169.0	6,575.0
Implementation of road maintenance organization	500.0	340.0	200.0
Total	17,401.0	19,679.0	20,045.0
Recurrent (maintenance and repair)	8,955.0	9,020.9	9,695.9
Total	26,356.0	28,699.9	29,740.9

\*Provisional.

\*\*Includes expenditure on rural access roads and the fees paid to private consultants.

12.14. Two very large construction projects in which the Government has been involved, costing K£65 million, were completed and brought into operation in early 1978. These were the Mombasa/Nairobi Oil Pipeline and the

Nairobi Airport. The airport can now handle 3 million passengers a year, and is expected to meet Kenya's needs into the 1990's.

12.15 Chapter 9 provides data on the construction activity generated by water development projects. Very large sums are being spent to improve River supplies in both urban and rural areas and the recently launched Tana er Project is designed to control the river flow, to produce hydro-power to supply various irrigation and other water schemes in the whole of the

river basin area. The Sabaki River project to supply water to Mombasa and the adjoining coastal areas, will also make a significant contribution to the level of construction activity in 1978.

12.16. As noted in Chapter 11, domestic consumption of cement including production for stock rose sharply from 358,500 tonnes in 1976 to 482,500 tonnes in 1977. This reflects the increase in the level of activity in the construction industry which became apparent towards the end of 1977 and will show up in output figures for 1978.



## CHAPTER 13—TOURISM

General uncertainty generated by political developments in the eastern region of Africa, the breakup of the East African Community, the subsequent closure of the border by Tanzania, weak world economic growth and confusion in IATA fare structure were all factors which had an unfavourable bearing on prospects for tourism in Kenya in 1977. After the remarkable recovery in 1976, tourism in 1977 had a mixed record. Visitor numbers went down, visitor days stayed nearly the same, but tourist receipts increased.

13.2. It is now obvious that the performance of the sector will not meet the targets set in the Development Plan, 1974-78. With only the current year to go before the completion of the plan, the number of visitors in 1977 was still 26 per cent below target, and receipts were 14 per cent less. Table 13.1 details planned and actual bed-occupancy figures for 1972 and 1977. While there has been the remarkable growth of 60 per cent in five years in the number of bed-nights spent by foreign tourists, the rate actually planned was 145 per cent.

Bed Occupancy Planned and Achieved, 1972 and 1977

Table 13.1

'000 Bed-Nights

	Development Plan Projections		Actual Beds Occupied	
	1972	1977	1972	1977
E.A. Residents	958	1,360	757	1,097
Foreign Residents	1,557	3,810	1,718	2,741
Total	2,515	5,170	2,475	3,838

13.3. Table 13.2 details statistics on arrivals and departures of visitors, by purpose of visit. The number of total arrivals into Kenya in 1977 declined by 22.3 per cent. Of these, the number of people on holiday decreased by 19.6 per cent; the number of visitors on business went down by 39 per cent; and that of persons in transit by 18.7 per cent. Departure statistics show a somewhat different pattern, partly because of differing declarations on arrival and departure. The number of departing visitors declined by 18.8 per cent. From amongst these the number of holiday makers declined by 14.7 per cent; and the corresponding decline in the number of persons on business was 60 Per cent.

# Arriving and Departing Visitors by Purpose of Visit, 1976-1978

Table 13.2

'000

Quarter/Purpose		Arrivals			Departures		
		1976	1977	1978*	1976	1977	1978*
1st Qr.	Holiday	94.1	82.4	83.2	103.9	98.8	89.1
	Business	18.1	10.1	10.2	12.4	4.8	4.4
	Transit	13.5	12.5	12.6	8.1	9.1	8.1
	Total	125.7	105.0	106.0	124.4	112.7	101.6
2nd Qr.	Holiday	59.8	44.9		63.7	51.1	
	Business	18.5	8.8		15.1	4.4	
	Transit	12.6	12.1		9.0	9.2	
	Total	90.9	65.8		87.8	64.7	
3rd Qr.	Holiday	84.1	63.1		86.8	68.8	
	Business	13.3	7.4		10.0	5.1	
	Transit	15.4	9.7		10.0	9.8	
	Total	112.9	80.1		106.8	83.6	
4th Qr.	Holiday	86.8	70.7		83.0	69.2	
	Business	15.1	13.5		11.8	5.3	
	Transit	14.7	11.4		10.5	8.7	
	Total	116.5	95.6		105.3	83.3	
Year	Holiday	324.8	261.1		337.4	288.0	
	Business	65.0	39.7		49.3	19.7	
	Transit	56.2	45.7		37.6	36.8	
	Total	446.0	346.5		424.2	344.4	

\*Provisional.

13.4. Preliminary figures for the first quarter of 1978 indicate that activity in tourism should at least be at the same level as in 1977. The number of arrivals during the quarter were slightly higher and departures lower, than the corresponding period in 1977. During the quarter however, the number of bed-nights spent in hotels increased by 6.6 per cent, while the figure for nights spent by non-East African residents rose by 7.5 per cent—compared to first quarter 1977.

13.5. Receipts from tourism rose by 17.5 per cent, from K£41.1 million in 1976 to K48.3 million in 1977. Estimated tourist receipts include an element of pre-payments but exclude air fares. A precise allowance for price increase is difficult to make, but growth in real terms is possibly over 5 per cent.

### Visitors and Visitor Days

13.6. Statistics on departures of visitors by country of residence are detailed in Table 13.3. The total number of departing visitors as mentioned above declined by 18.8 per cent, from 424,200 in 1976 to 344,400 in 1977. Three quarters of this decline is accounted for by a fall of 58,000 in number of visitors from Tanzania and Uganda. The number of visitors from these two countries fell by 61.3 per cent. The decline in number of visitors from countries other than Uganda and Tanzania was a relatively modest one of 21,500 amounting to 6.5 per cent below the total in the previous year.

Visitor Departures by Country of Residence, 1975-1977

Table 13.3

'000

	Holiday Visitors			All Visitors*		
	1975	1976	1977	1975	1976	1977
United Kingdom	39.3	41.2	36.0	49.6	51.7	43.0
West Germany	36.8	43.3	48.9	40.4	47.4	51.0
Italy	16.2	18.0	20.7	18.1	20.5	22.3
France	9.6	15.8	13.8	11.2	18.5	15.1
Switzerland	19.1	20.5	24.1	20.8	22.4	25.0
Other Europe	27.7	34.7	35.1	32.6	41.2	39.0
Total Europe	148.7	173.4	178.7	172.6	201.6	195.4
United States	39.0	38.8	29.1	44.1	44.5	33.0
Canada ..	6.1	5.4	4.4	7.2	6.5	5.2
Total N. America ..	45.1	44.2	33.5	51.3	51.0	38.1
Total Asia	16.8	17.9	16.2	23.2	26.5	24.3
Uganda	18.2	15.2	6.7	27.5	23.9	9.5
Tanzania	47.5	56.3	22.7	60.6	71.2	27.3
Zambia	6.8	5.2	5.7	11.2	9.2	10.2
Other Africa	20.8	18.3	19.6	31.8	32.3	33.5
Total Africa	93.2	95.0	54.6	131.1	136.6	80.6
Total Other	6.5	6.9	4.9	7.9	8.6	6.0
Grand Total	310.2	337.4	288.0	386.1	424.2	344.4

\*Includes business visitors and persons in transit.

13.7. The decrease in tourism from overseas occurred chiefly in the number business visitors since the number of non-East African holiday makers declined by a mere 2.8 per cent. The decline in business visitors can be explained partly by the break up of the East African Community, and partly by the decline in conference tourism in Kenya.

13.8. The decline in the number of holiday makers is the net result of an increase of 3 per cent in the number of visitors from Europe—excluding UK, and a fall of 18 per cent in number of holiday makers from the UK and North America. The decline in the number of visitors from UK has been caused by the relatively poor performance of the UK economy in 1977 and by the fact that charter fares from the UK are higher than those from departure points in continental Europe. This is due to the fact that the UK charter organizations operate under IATA regulations, with attendant stifling effects.

13.9. The flow of tourists from North America has been on the decline since 1972. However, the decline since mid-1976 is explained firstly by the uncertain political situation in some countries in this region of Africa—accentuated locally by the Tanzania border closure, and secondly, by the collapse of the IATA fare structure with no adaption of fares on America-Europe-Kenya services. This has made Kenya expensive as a proposition for tourists from North America compared to European destinations. The situation at the end of the year was aggravated further by the depreciation of the US dollar, which continued into 1978.

13.10. Table 13.4 gives figures on visitor departures by method of travel. As expected, with the loss of local East African traffic, the number of departures by air rose to over 90 per cent of the total in 1977, compared to about 80 per cent in 1976. Road, lake and rail traffic declined correspondingly. The decline in sea traffic continues to reflect a general decline in passenger ship services the world over.

Visitor Departures by Method of Travel, 1973-1977

*Table 13.4* '000

	1973	1974	1975	1976	1977
Air	297.6	301.5	311.6	337.7	315.8
Sea	4.2	2.6	2.0	1.6	0.8
Road	84.0	72.7	71.8	84.9	27.8
Lake	1.8	1.8	0.6	—	—
Rail	0.6	1.0	0.1	0.1	—
Total	388.1	379.6	386.1	424.2	344.4

13.11. Details on visitor days and average length of stay are given in Table 13.5. Even though there were fewer visitors in 1977 than in 1976, they stayed longer; 14.8 days in 1977 compared to 12.5 days in 1976. Among them, residents of UK and West Germany stayed the longest, 19 and 16.6 days, respectively. On the whole holiday makers as a category stayed an average of 2.8 days longer in 1977 than in 1976. As a result of the longer stay, total visitor days declined only slightly, from 5.3 million in 1976 to 5.1 million in 1977. This decline in total visitor days was due to the fall in the number of days business visitors spent here as there was an increase of 2.4

per cent in days stayed by holiday makers. The border closure by Tanzania, is likely to have contributed to this increased average length of stay by overseas holiday makers.

Total Stay of Departing Visitors and Average Length of Visit, 1973-1977

Table 13.5

Length of Stay	1973	1974	1975	1976	1977
Total Stay—'000 Days					
0-14 Days	1,763	1,966	1,864	1,942	1,569
15-28 Days	1,033	1,057	1,229	1,458	1,459
Over 28 days	1,639	1,383	1,871	1,908	2,072
Total	4,435	4,406	4,963	5,308	5,101
Average Length of Stay—Days					
0-14 Days	5.6	6.5	6.3	6.0	6.5
15-28 Days	19.9	19.9	20.2	20.3	20.2
Over 28 Days	64.2	61.7	68.2	61.2	65.4
Total	11.4	11.6	12.9	12.5	14.8
Total Stay by Originating Areas—'000 Days					
East Africa	991	961	893	944	541
Other Africa	411	411	425	421	469
United Kingdom	762	679	850	860	819
West Germany	442	444	585	700	846
Other Europe	803	975	1,081	1,284	1,417
North America	690	594	702	640	591
Asia	262	256	328	335	323
All Other	74	86	99	123	94
Total	4,435	4,406	4,963	5,308	5,101
Total Stay by Purpose of Visit—'000 Days					
Holiday	3,951	3,918	4,383	4,688	4,800
Business	423	440	530	561	243
Transit	61	48	48	59	58

### Hotel Occupancy

13.12. Table 13.6 details hotel occupancy statistics for the last five years. Hotel bed capacity was little changed in 1977 compared to the previous year, but hotel bed-nights occupied increased by 7.4 per cent. As a result the overall occupancy rate rose from 51.2 per cent in 1976 to 54.6 per cent in 1977. The number of bed-nights occupied by non-East African visitors went up by 9.3 Per cent to raise their share of the total from 70 per cent in 1976 to 71.4 Per cent in 1977. Bed-nights occupied by residents of Uganda and Tanzania as is to be expected declined by more than a quarter to a mere 2.5 per cent of the total.

Hotel Bed Occupancy, 1973-1977

Table 13.6

'000 Bed-Nights

	1973	1974	1975	1976	1977
Permanent occupants*	347	333	339	364	356
Kenya Residents	505	553	579	577	642
Residents of					
Uganda and Tanzania	136	141	142	127	98
Foreign Residents	1,795	1,952	2,149	2,506	2,741
Total Beds Occupied	2,784	2,979	3,209	3,574	3,838
Total Beds Available	5,854	6,414	6,584	6,983	7,028
Bed Occupancy Rate per cent	47.6	46.5	48.8	51.2	54.6

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

13.13. Tables 13.7 and 13.8 detail the distribution of hotel bed-night occupancy by tourist zones and hotel category. All tourist zones except Nairobi high class hotels recorded increases. The highest increase of 15.9 per cent was recorded by hotels in coast hinterland zone; followed by those in central zone—14.9 per cent; and beach hotels—14 per cent. In absolute terms the bed-nights stayed at beach hotels rose from 1.35 million in 1976 to 1.54 million in 1977 and all coast hotels accounted for 46.3 per cent of total bed-nights while the share of hotels in Nairobi dropped from 40 per cent in 1976 to 36.6 per cent in 1977.

Hotel Beds Occupied by Area, 1973-1977

Table 13.7

'000 Bed-Nights

	1973	1974	1975	1976	1977
Nairobi—High Class	543.2	557.4	572.1	586.2	552.7
Other	759.7	746.7	753.9	847.2	854.7
Coastal—Beach	812.5	950.9	1,149.4	1,354.4	1,543.9
Other	195.9	222.7	222.2	220.7	234.6
Coast Hinterland	100.6	102.6	104.8	118.8	137.7
Masailand	116.9	123.6	130.0	151.6	156.4
Central	191.1	210.8	207.4	217.7	250.2
Other	64.0	64.4	69.1	77.2	107.7
Total	2,783.8	2,979.0	3,208.8	3,573.7	3,837.9
Of which:—					
Foreigners	1,795.5	1,952.0	2,148.9	2,505.5	2,740.8
E.A. Residents*	988.4	1,027.1	1,060.0	1,068.2	1,097.1
Total Beds Available ..	5,853.6	6,414.2	6,584.3	6,983.1	7,028.3
Occupancy rate per cent	47.6	46.5	48.8	51.2	54.6

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

Table 13.8 Hotel Room and Bed Availability and Occupancy Rates, by Area, 1973-1977

	Nairobi		Coastal		Other						All Hotels
	High Class	Other	Beach	Mombasa Island	Coast Hinter- land	Masai land	Nyanza Basin	Western	Central	Northern	
1973—											
Rooms available—'000 nights	569	794	849	236	127	123	62	36	302	24	3,123
Occupancy rate—per cent	72	66	53	61	43	54	51	38	40	19	58
Beds available—'000 nights	1,063	1,381	1,677	443	280	252	115	58	544	41	5,854
Occupancy rate—per cent	51	55	48	44	36	46	34	29	35	18	48
1974—											
Rooms available—'000 nights	581	861	1,008	270	129	137	68	43	317	16	3,430
Occupancy rate—per cent	71	81	53	61	43	51	51	33	43	21	57
Beds available—'000 nights	1,093	1,488	1,995	498	279	280	119	61	570	31	6,414
Occupancy rate—per cent	51	50	48	45	37	44	36	27	37	19	46
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	49
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	63	67	63	67	61	47	60	55	25	43	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	53	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

13.14. The decline in the bed-nights spent in Nairobi high class hotels was not surprising. Nairobi usually caters for business tourists whose numbers as mentioned above declined in 1977, and the number of conferences convened in Kenyatta Conference Centre fell to just 13 with a total attendance of 8,000 participants. On the other hand, the increase in the case of hotels in the coast hinterland zone was due to widening of the interests of the "classical" beach visitors to include "sight seeing" at game lodges. However, in absolute terms the total bed-nights occupied at such coast hinterland hotels was still only 137,700 in 1977.

13.15 It is worth noting that the overall improvement in bed-occupancy rate has been accompanied by continued unsatisfactory developments with regard to seasonality and zonal distributions. In the last four years coastal tourism has been growing at an annual rate of 13 per cent while the other zones combined have managed an annual rate of less than 5 per cent. Further, despite efforts to reduce seasonality, this phenomenon still continues to persist. Thus, for example, in 1977 the occupancy rates for hotels in the coast zone were 75.6 per cent in the high season and 36.8 per cent in the low season. Were this pattern to continue for a long period, it would lead to both over-use and underutilization of tourist facilities; the former in the coastal zone during the high season, and the latter during the off season at the coast and continuously for up-country zones. Hotels in these up-country zones have a consistently lower occupancy rate as compared to hotels in the coastal zones.

13.16. Table 13.9 details figures on hotel bed-nights by country of residence of the occupant. Of a total of 5.1 million days spent by non-residents in the country, 62.6 per cent were spent in hotels. Residents from "Other Europe" which includes Switzerland and Italy, occupied the largest number of bed-

Hotel Guest-Nights by Country of Residence, 1977

Table 13.9

'000 Bed-Nights

Country of Residence	Nairobi	Coast	Game Lodges	Other	Total
Kenya	213.1	252.5	47.4	129.2	642.0
Uganda	56.0	9.9	0.1	3.0	69.0
Tanzania	22.8	5.5	0.1	1.0	29.4
Other Africa	88.1	18.4	2.7	2.4	111.6
United Kingdom	162.9	145.9	33.3	21.7	363.8
West Germany	85.8	556.3	58.1	14.5	714.8
Scandinavia	41.0	57.1	17.6	7.1	122.8
Other Europe	182.5	518.3	109.2	38.5	848.5
North America	149.2	44.9	80.9	36.9	312.0
Asia	61.9	10.8	6.2	2.7	81.6
All Other	65.1	103.4	8.1	9.3	185.9
Permanent Occupants	279.1	55.5	2.5	19.5	356.5
Total	1,407.4	1,778.5	366.3	285.7	3,837.9



nights, followed by residents of West Germany. Figures in Table 13.10 indicate a welcome increase of 27.8 per cent in the total number of bed-nights occupied in game lodges. The increase in visits to game lodges by persons from West Germany, Scandinavia and "Other Europe" contributed to this overall increase and was entirely due to non-East African visitors. Bed-occupancy rate as a result in these lodges went up appreciably, from 51.8 per cent in 1976 to 56.1 per cent in 1977.

Table 13.10 GAME LODGE\* OCCUPANCY, 1975—1977

LODGE LOCATION' TYPE	BEDS OCCUPIED '000 Nights						BED OCCUPANCY RATE Percentage		
	E.A. Residents			Foreign Residents					
	1975	1976	1977	1975	1976	1977	1975	1976	1977
National Parks ..	37.3	32.6	33.1	72.8	87.6	157.4	41.0	43.3	51.6
Game Reserves..	22.8	19.3	17.1	1200	147.3	158.7	53.9	60.4	64.1
<b>TOTAL</b>	60.1	51.9	50.2	192.8	234.8	316.1	47.4	51.8	56.1
Full Catering	44.1	37.9	38.1	190.4	232.7	313.0	47.6	52.7	57.8
Self-service	15.9	14.0	12.0	2.4	2.1	3.1	44.9	40.9	42.0

\*Lodges in National Parks and Game Reserves only.

13.17. Tables 13.11 and 13.12 detail figures on numbers of visitors to national parks and museums, respectively. The numbers of visitors to national parks increased by 2.2 per cent in 1977. Nairobi National Park is still the most popular choice, but its pre-eminence has declined significantly since 1973. The numbers of visitors to museums and historic sites increased by 8.8 per cent in 1977 over 1976.

TOTAL NUMBER OF VISITORS TO NATIONAL PARKS, 3; 95/3; 99

Table 13.11

Numbers

	1973	1974	1975	1976	1977
Aberdare	42,222	39,973	43,798	44,90	46,050
Amboseli	—	—	82,641	100,3	82,233
Kisite Mpunguti	—	—	596	1,46	851
Lake Nakuru	98,447	95,067	78,470	68,09	80,635
Marine	30,160	35,777	34,609	37,76	37,245
Marsabit	—	—	4,413	3,23	3,781
Meru ..	15,671	21,418	22,826	25,82	36,945
Mt. Elgon	4,216	3,989	2,414	2,455	2,782
Mt. Kenya	6,924	8,151	8,600	9,790	9,484
Nairobi	277,359	159,263	132,387	134,79	141,861
Saiwa Swamp	—	—	—	830	1,853
Shimba Hills	10,018	11,119	9,999	9,882	12,112
Tsavo (East)	64,280	64,758	68,133	61,5	65,530
Tsavo (West)	92,018	91,627	79,567	89,882	82,537
<b>TOTAL</b>	641,315	531,142	568,020	590,849	603,899

Visitors to Museums, Snake Park and Sites, 1973-1977

Table 13.12

Numbers

	1973	1974	1975	1976	1977
National Museum	151,819	140,670	124,545	154,053	182,293
Lamu Museum	5,502	5,545	6,066	6,169	8,216
Snake Park	89,991	89,681	93,168	131,500	135,139
Fort Jesus	71,306	77,759	93,186	100,160	107,107
Gedi	24,570	28,444	30,876	29,396	25,801
Olorgesailie	3,597	2,593	4,487	3,465	3,991
Kariandusi	1,967	2,554	3,240	2,959	4,539
Hyrax Hill	1,640	2,022	1,284	1,020	1,413
Jumba la Mtwana	79	1,588	2,339	4,412	3,009
Total	350,471	347,856	359,	433,134	471,508

**The Closure of the Tanzania Border**

13.18. There has in 1977 been considerable speculation and discussion about the effect of the closure by Tanzania of the Kenya/Tanzania border on Kenya's tourist trade. Since there are a number of factors that cannot be adequately quantified there is scope for varying opinions. However, the action it could be summed up, has had the following three effects:

- (i) The number of visitors from Tanzania as was to be expected decreased sharply in 1977.
- (ii) The border closure occurring at the same time as the events in other neighbouring countries in this region of Africa, further compounded the uncertainty created in tourism generating countries particularly in North America.
- (iii) Those tourists who did come stayed longer in Kenya, perhaps partly because they could not go on to Tanzania. This may have been particularly so, in the case of tourists who prefer to be based initially in Nairobi and previously would have taken tours which included Tanzania. Tourism at the coast was not effected.

**Development of Tourism**

13.19. The Government continued, through the Kenya Tourist Development Corporation to inject financial investment into the tourist industry. During the year ending June, 1977, the Corporation invested a total of K£1.77 million, made up of K£0.91 million in equity capital; K£0.56 million in commercial loans; and K£0.3 million to support the Kenyanization programme. By the end of 1977 the corporation held equity investment in 24 projects, 10 of which its participation was over 50 per cent. The Sunset Hotel in Kisumu was completed while Mt. Elgon Lodge was still being extended.

13.20. The Government's programme to improve the transport infrastructure is continuing. The new Nairobi Airport commenced operating in March, 1978. Improvements to and the maintenance of tourist roads are both well underway. A feasibility study is being planned to consider a road connecting Amboseli and Masai Mara areas and new roads for the tourist circuit in the Tana River area.

13.21. Last year, the Government placed a ban on game hunting. This was followed in 1978 by a ban on sale of animal trophies. These measures are intended to conserve the wildlife resources which are so critical to the maximization of tourist revenues. Consultants have been commissioned to conduct a tourism price study, and its results will be used by Government in the formulation of policies and regulations for the industry.

13.22. The Ministry of Tourism and Wildlife has continued to pursue its endeavour in developing all-year round traffic and tapping new markets. Some success seems to have been achieved in marketing the new circuits of northern and western Kenya. Sales promotion campaigns in western Europe have been intensified and the indications are that the newly tapped markets in Europe have generated additional traffic. However, since Quantas, the Australian national airline has discontinued its service to Mauritius as of April, 1977, the expected increase in traffic from Australasia, did not materialise.

13.23. The experience of the years since 1974 has been disappointing, when measured against growth in the industry between 1963 and 1973. The increase in tourist revenues earned by Kenya has been below the targets that had been set in the Development Plan, 1974-1978. If these recent trends continue, only a very moderate growth in tourist industry can be anticipated in the next plan period.

13.24. Action would appear to be called for to design promotional and marketing programmes to achieve optimal results. This entails directing promotional efforts to the faster growing and higher spending segments of the total market. Similarly new investment in tourism needs to be effected to make it possible for a more optimal use of the existing infrastructure in the country to be secured. New hotels and lodges need to be built, to fill the obvious gaps in existing tourist circuits, and where necessary to provide better facilities in Nairobi for business visitors.

13.25. Continued development of the wildlife industry is also linked to the best possible use being made of existing and new tourist facilities. The Government has already taken steps to safeguard wildlife by the ban it imposed on hunting in 1977 and subsequent prohibition of trade in wildlife trophies. There is, however, further need for some improvement and extension of certain key game areas to promote better utilization of Kenya's wildlife heritage. Greater effort also needs to be made to demonstrate the benefits of wildlife in local areas and to justify the continued use of land for game conservation.

## CHAPTER 14—TRANSPORT AND COMMUNICATIONS

The value of output of transport and communications sector, as a whole, at current prices, declined by 2.3 per cent in 1977 over 1976. Table 14.1 details the value of output of this sector for the last five years.

Transport and Communications—Value of Output, 1973-1977

Table 14.1

K£'000

	1973	1974	1975	1976	1977*
Railway Transport	21,240	23,805	25,385	26,700	27,300
Road Transport	29,660	30,611	35,953	52,593	48,122
Water Transport	20,912	32,196	38,553	40,537	43,104
Air Transport	26,765	35,065	39,852	41,416	26,473
Services Incidental to Transport	5,674	8,278	8,168	22,877	28,068
Total Transport	104,251	129,955	147,911	184,123	173,067
Communications	13,651	14,110	22,478	24,187	30,440
Grand Total	117,902	144,065	170,389	208,310	203,507

\*Provisional.

14.2. The decline was mainly due to a large fall in the output of air transport activity of K£14.9 million an equivalent of 36 per cent, following the collapse of the East African Airways Corporation in January, 1977. It was not immediately possible for Kenya Airways Limited, which was then set up as the country's international carrier, to take over the full range of services. Output of road transport activity also declined in 1977. The total impact of the decline in the output of both these activities more than off-set the increases registered in the output of all the other activities in this sector including a significant increase of 25.8 per cent in the output of communications activity.

14.3. Table 14.2 details the breakdown of receipts from road and rail transport. The decline in the output of road transport is accounted for by the drop in receipts from freight haulage activity, which fell from K£38.1 million in 1976, to K£31.1 million in 1977. This drop more than off-set the increase in receipts from passenger transport which rose from K£14.5 million in 1976 to K£17.1 million in 1977. The decline in road freight transport activity followed the breakup of the East African Community and the border closure by Tanzania, which particularly affected long distance hauliers. As a whole, however, road transport activity continued to dominate, accounting for 27 per cent of the sector's total output. The small rise in total receipts from rail transport in 1977 is due mainly to the tariff revision in July, 1976.

Table 14.2 Earnings from Road and Rail Traffic, 1973-1977 K£'000

	1973	1974	1975	1976	1977*
Passenger Traffic—					
Rail	1,487	911	455	1,100	1,200
Road	10,752	9,336	13,653	14,491	17,066
Total	12,239	10,247	14,108	15,591	18,266
Freight Traffic—					
Rail	19,753	22,894	24,930	25,600	26,100
Road	18,908	21,275	22,300	38,102	31,056
Total	38,661	44,169	47,230	63,702	57,156
Total Rail Traffic	21,240	23,805	25,385	26,700	27,300
Total Road Traffic	29,660	30,611	35,953	52,593	48,122

\*Provisional.

#### Road Transport

14.4. The number of new road vehicles registered as shown in Table 14.3, rose by 37 per cent in 1977 over 1976 raising the total in use by approximately 10 per cent. The largest increase was recorded in registration of vans and pick-ups of 63.8 per cent: followed by saloon cars—36.7 per cent, and station wagons—18.7 per cent. Fewer new buses and mini-buses were registered in 1977 compared to 1976. The dramatic rise in new registrations in 1977 is accounted for by a rise in real incomes from coffee and tea during the year. Further, the increased popularity in vans and pick-ups is a reflection of the growth of matatu operations.

Table 14.3 New Registrations of Road Vehicles, 1973-1977

Body Type	1973	1974	1975	1976	1977*
Saloon Cars	5,778	6,469	5,575	4,981	6,812
Station Wagons	2,058	2,112	2,047	1,942	2,305
Panel Vans, Pick-ups, etc.	3,067	3,528	3,878	4,156	6,807
Lorries/Trucks	1,953	1,402	1,262	1,417	1,712
Buses and Coaches	328	263	186	215	142
Mini Buses	251	322	218	202	196
Special Purposes Vehicles	93	104	79	120	92
Trailers	589	670	587	669	727
Rollers, Graders, Cranes	56	232	108	89	70
Wheeled Tractors	1,096	957	1,042	1,129	1,760
Crawler Tractors	12	13	7	3	41
Motor and Auto Cycles	1,182	1,137	986	1,316	1,589
Three Wheelers	11	16	13	7	25
All Vehicles	16,474	17,225	15,988	16,246	22,278

\*Provisional.

14.5. Table 14.4 details the number of licences issued for vehicles on hire for passenger and freight transport. The number of licences issued in 1977 declined by 9.2 per cent for passenger vehicles and 31.2 per cent for freight vehicles, over 1976. The decline in freight licences has some connection with the loss of freight traffic on international operations, while the decline in licences issued for passenger service vehicles by itself does not indicate reduced road activity but rather is a result of the increased competition from matatu operations; matatus—or vehicles under three tons tare weight are exempt from road transport licensing regulations.

Licences Issued for Vehicles on Hire. 1973-1977

*Table 14.4* *Numbers*

	1973	1974	1975	1976	1977
Passenger Service Vehicles	3,380	3,583	2,711	2,996	2,720
Freight Transport Vehicles	3,767	4,096	3,641	4,388	3,020
Total	7,147	7,679	6,352	7,384	5,740

14.6. The closure of Kenya/Tanzania border by Tanzania severely affected Kenatco's performance in 1977. Freight to and from Zambia which had contributed substantially to the success of the company ceased completely in January, 1977. In order to keep its fleet of vehicles occupied, the company moved sizeable tonnages of Uganda and Rwanda exports and imports during the year. It continued to transport from Kasese in Uganda coffee from Zaire for export through Mombasa and traffic to and from Southern Sudan also improved.

#### **Railways**

14.7. The Kenya Railways Corporation, still hit by the effects of the too rapid closure of the East African Railways Corporation, continued to suffer from reduced carrying capacity due to poor availability of traction power in 1977. A serious shortage of vital spare parts over a period of three years had led to a backlog in the maintenance of locomotives. Some progress, however, was made in effecting locomotive repairs in 1977 and this improved the availability of locomotives during the second half of the year. Poor wagon turn round in Uganda also affected the carrying capacity of the system during the year.

14.8. Although the total tonnage of freight carried showed only a slight rise over that of 1976, the increase of 2 per cent in rail revenues was the result of the higher tariffs introduced in middle of 1976. Freight operations earned K£24.4 million while passenger traffic earned K£1.2 million. The rest of the revenue amounting to K£1.7 million was derived from livestock traffic, catering, road services and miscellaneous receipts.

14.9 During the year, Kenya Railways Corporation embarked on a programme of heavy capital investment in order to expand the size of its locomotive and wagon fleets. A total of K£43.2 million was as a result committed for purchase of both diesel locomotives and wagons. The locomotive contract covered a total of 26 units for main line operations, 26 units for branch line and secondary working, and 35 shunting units. These 87 new locomotives are due for delivery during 1978/79, and together with the 20 already delivered in 1977, will enable steam-power to be replaced completely by diesel. The corporation has also made efforts to enhance the capacity for third class travel by acquiring a further 25 coaches in 1977 while another 12 new coaches are on order.

14.10. Line improvement works were in progress during the year between Mazaras and Mariakani and between Nairobi and Embakasi. Work was also started on the construction of siding facilities for Government's use in the industrial areas in Nairobi, Kitale, Thika and Changanwe and for use of private enterprises at these sites and also in Nakuru, Kisumu, Nyahururu and Dandora. The work on the K£1.5 million Changanwe marshalling yard expected to be in use towards the end of 1977 was delayed and is now expected to become operational during 1978. Conversion of the corporation's various workshops in Nairobi for the maintenance of diesel locomotives was completed during the year. Similar works were also completed at Gilgil, started at Nakuru and planned for Eldoret.

#### Harbours and Shipping

14.11. As shown in Table 14.5, provisional figures for 1977 indicate a recovery of activity at Mombasa port. There was a rise in volume of imports handled chiefly due to increased importation of fertilizers, vehicles and parts, and iron and steel. The decline in volume of exports is accounted for by the drop in volume of maize, soda ash, cotton and sisal exports.

Freight Handled at Mombasa Harbour, 1973-1977					000Tons
Table 14.5	1973	1974	1975	1976	1977*
Landed:					
Dry Cargo	1,175	1,292	856	1,355	1,615
Bulk Liquids	2,998	2,762	3,303	2,618	2,567
Total	4,173	4,054	4,159	3,973	4,182
Loaded:					
Dry Cargo	1,820	1,724	1,366	1,565	1,352
Bulk Liquids	731	744	423	375	438
Total	2,551	2,468	1,789	1,940	1,790
Total Freight Handled	6,724	6,522	5,948	5,913	5,972

\*Provisional.

14.12. A total of 1,525 ships docked at the port in 1977 compared with 1,380 in 1976. While port operations were generally fluid some congestion was experienced towards the end of the year. A major factor contributing to the congestion was the build up of import traffic and a bunching of ship arrivals. The port authorities have instituted measures to ensure that port operations remain fluid, by keeping the port operational during the weekends, hiring more labour, and by quicker processing of import documents. Some further improvement is expected when berth 18 is made operational later in 1978.

#### **Pipeline Transportation**

14.13. The Government-owned Kenya Pipeline Company was formed in 1974 to construct and manage the Mombasa-Nairobi petroleum products pipeline. Excellent progress was made in 1977 which saw the completion of pipe-laying between Mombasa and Nairobi and the commissioning of the Mombasa end of the system.

14.14. In early 1978 the first batch of products was pumped by the pipeline and reached Nairobi in mid-February. Mombasa, Mtito Andei and Nairobi pumping stations are now fully operational while Maungu and Sultan Hamud stations are due to come on stream in the near future. The present estimated off-take requirements of six petroleum products carried by the pipeline to Nairobi are 1.33 million cubic meters a year.

14.15. During the later part of 1977, Phase 1 of the new Nairobi Airport fuelling depot was commissioned and jet fuel brought in by road bridgers. The fuelling system was put into operation in March, 1978, and fuelling of aircraft at the new airport commenced.

#### **Air Transport**

14.16. Kenya Airways Limited was established as a wholly Government-owned company in January, 1977, when it became clear that the East African Airways Corporation was on the verge of total collapse. Initially, the airline operated leased aircraft. However, by the end of 1977 the airline had purchased three Boeing 707 aircrafts which went into service on international routes. In addition, two other Boeings are also currently on lease. Domestic flights are operated with a DC 9 and two Fokker Friendship aircrafts. The current route net-work includes several European and Asian cities as well as certain Indian Ocean islands. In addition, air services are provided to Cairo, Lusaka, Mogadishu and Addis Ababa in Africa. Services to Jeddah and Khartoum are planned to commence during 1978. During its first year of operation, Kenya Airways Limited is estimated to have attained a turnover of about K£20 million. Already the airline has taken over a sizeable portion of the business which was formerly handled by the East African Airways Corporation. Its operations are expected to be extended in 1978.



14.17. The expansion of the Nairobi Airport was substantially completed by the end of 1977 and the new facilities commissioned in March, 1978, when all operations were transferred to the new complex. The dual-carriage road linking the new airport terminal to Nairobi is only partially in use and will not be fully completed until later in 1978. The overall cost of the project is estimated at K£28 million.

14.18. The major development works at Mombasa Airport are now nearing completion. The runway which was completed in October, 1976, has been operational for high-capacity aircraft since March, 1977, and the new terminal building was partially opened for use in December, 1977. The remaining works will be completed later in 1978. It is estimated that the overall cost of this development will be K£11 million.

14.19. Work on other developments including the extension of the runway and other improvements at Kisumu Airport to enable medium-range aircraft such as DC 9 to use the airport has been planned and is anticipated to commence during 1978. Also work on the airstrip at Manda Island, being upgraded to take the F 27 Friendship aircraft, is scheduled for completion in early 1978. and the reconstruction of the airstrip at Kisii to allow the operation of twin-engined aircraft which was commenced in 1977 finished early in 1978.

Commercial Traffic at Nairobi Airport, 1973-1977

Table 14.6

	1973	1974	1975	1976	1977*
Passengers—000's					
Landed	418.4	430.3	463.4	459.4	402.3
Embarked	415.3	437.0	479.1	469.1	415.3
In Transit.	315.2	352.0	448.0	493.4	512.4
Total	1,148.9	1,219.3	1,390.5	1,421.9	1,330.0
Freight—tonnes					
Cargo: Landed	8,459.7	9,455.0	8,662.2	7,837.2	8,498.6
Loaded	17,890.2	19,382.0	22,537.6	23,843.1	24,278.6
Mail: Landed	917.0	1,026.3	1,197.6	976.9	800.7
Loaded	1,035.4	1,077.8	1,200.9	1,035.1	799.9
Total	28,302.3	30,941.1	33,598.3	33,692.3	34,377.8

\*Provisional.

14.20. Details on passenger and freight traffic handled at Nairobi Airport are given in Table 14.6. Passenger traffic declined by 6.5 per cent in 1977. This reflects a decrease in the number of visitors noted in Chapter 13 while the volume of cargo landed and cargo loaded rose by 8.4 and 1.8 per cent, respectively. The latter consists chiefly of exports of Kenya horticultural

produce. Total tonnage of mail handled fell by 20 per cent. Table 14.7 details passenger and freight traffic handled at Mombasa Airport. While there was a decline in number of passengers, volume of freight traffic increased tremendously, from 639.3 tons in 1976 to 6,187 tons in 1977. The dramatic increase in cargo is associated with the increase of charter operations into Mombasa since March 1977, when the airport was opened for wide-bodied aircraft and is accounted for by the air haulage of coffee from Kigali which the high prices made a practical proposition in 1977.

Commercial Traffic at Mombasa Airport, 1973-1977

Table 14.7

	1973	1974	1975	1976	1977*
Passengers—000's					
Landed	87.4	115.9	130.5	140.9	131.7
Embarked	87.3	117.3	133.9	138.5	136.2
In Transit	41.2	57.1	20.9	75.0	20.4
Total	215.9	290.3	285.3	354.4	288.3
Freight—tonnes					
Cargo: Landed	254.9	309.0	237.1	227.4	4,912.1
Loaded	349.6	437.1	309.6	316.8	1,161.6
Mail: Landed	64.5	69.8	55.5	55.0	77.4
Loaded	47.0	48.2	44.7	40.1	36.1
Total ..	716.0	864*1	646.9	639.3	6,187.2

•Provisional.

#### Posts and Telecommunications

14.21. The substantial growth in output value of the communications activity from K£24.2 million to K£30.4 million between 1976 and 1977 reflects the increased operations of Kenya Posts and Telecommunications Corporation and its subsidiary, Kenya External Telecommunications Company Limited, as shown in Tables 14.8 and 14.9. The number of post offices in operations rose by 50 to 600 in 1977, while the number of private letter boxes went up by 23 per cent mainly due to the opening of the large post office in the City Square in Nairobi. However, the number of registered and insured items and ordinary letters transmitted was little changed in 1977. The Corporation's operations reflect to some extent a reduced level of business communications within East Africa after the collapse of the East African Community. None-the-less, in general, the growth of all postal and telecommunications services since 1973 has been almost continuous and in line with the growth of the economy.

Postal and Telecommunication Services, 1973-1977

Table 14.8

Numbers

	1973	1974	1975	1976	1977*
Post Offices	460	506	535	550	600
Post Office Private Boxes	64,960	72,141	80,831	91,321	112,254
Telephone Subscribers' Lines	46,903	49,654	53,028	57,050	62,408
Public Call Offices	315	335	354	396	439
Telegrams Handled—000's ..	528	532	541	609	718
Parcels Handled—000's	661	657	608	543	548
Manual Telephone Calls Made —'000's	8,215	8,576	8,982	9,223	9,777
Registered and Insured Items —000's	4,047	4,304	4,498	4,535	4,530
Telex Subscribers	451	556	516	757	848
Ordinary letters handled Million	116	96	117	139	140

\*Provisional.

External Telecommunications Traffic, 1973-1977

Table 14.9

	1973	1974	1975	1976	1977*
Telegraph Service 000 cables	487.0	306.5	403.1	259.8	253.5
Telephone Service '000 paid minutes	1,712.5	1,963.0	2,497.8	2,560.6	2,674.5
Telex Service '000 paid minutes	560.0	874.1	1,511.2	1,319.0	1,625.0

•Provisional

14.22. In the field of telecommunications 21 new exchanges were commissioned, raising the total effective line capacity to 87,623. Of this capacity, 71 per cent was taken up by subscriber lines which increased by 9.3 per cent over 1976. During the year, 43 additional public call boxes were installed and another 91 telex subscriber lines were also made operational. International communications had a mixed record. While telephone and telex services expanded, telegraph and leased circuit use declined, the latter because of reduced use of Nairobi for conference services in 1977.

**Information and Mass Communications**

14.23. The Department of Information opened a new office in West Pokot in 1977, thereby reaching the stage of having an office in each of the 41 districts. Further, efforts are being made to open new sub.offices at Thika, Vihiga, Mwingi and Makueni as funds become available. Installation of SSB/VHF facilities continued in 1977 at Isiolo, Marsabit, Moyale and Lodwar. During the year, the department also launched a fortnightly newspaper Sauti ya Meru and plans are underway to launch a monthly newspaper Habari for distribution in North-Eastern Province.

14.24. Radio and television services continued to be provided by the Voice of Kenya. As shown in Table 14.10, the number of radio and television receiving sets bought and licensed increased by 49 per cent and 41.7 per cent respectively in 1977. Like the increase in car registrations, the rise in new registrations of these consumer durables is one indicator of the buoyancy of the economy arising from the commodity boom in 1977.

New Radios and T.V. Sets Sold and Licensed, 1973-1977

Table 14.10

Numbers

	1973	1974	1975	1976	1977
Radios	85,243	77,869	87,997	97,971	145,959
Television Sets	2,575	2,647	2,847	3,458	4,901

14.25. The Institute of Mass Communication continued to offer training facilities to cater for the requirements of the departments of information and broadcasting. During the year a total of 47 trainees—ranging from senior technicians to information and radio assistants graduated from the institute. Further 62 trainees were recruited and started their training in 1978.

14.26. Newspapers.—Table 14.11 details daily/weekly average circulation of the main newspapers in the country. English dailies recorded an increase of 14.1 per cent in 1977 over 1976. Weekly newspapers were less popular than in previous years, with Swahili weeklies registering a decline, as sales to Tanzania ceased. Effective readership is estimated at about four times the figures given in the table.

Daily/Weekly Average Newspaper Circulation, 1975-1977

Table 14.11

Numbers

	1975	1976	1977
Morning Newspapers			
English	97,883	103,771	118,494
Swahili	31,625	32,208	32,334
Other Newspapers			
English Weeklies	63,947	81,837	81,123
Swahili Weeklies	114,831	128,169	87,651

## CHAPTER 15—THE SOCIAL SCENE

The central Government has always allocated a very substantial part of its expenditure to the social services, and in 1977/78 its expenditure in this area as shown in Table 15.1 is estimated at about K£146 million equal to about 22 per cent of total central Government spending. An additional K£14 million as shown in Table 15.2 was spent by the local authorities on social services in this period. Also very large sums were expended by the private sector on education, health, housing and other social services.

Central Government Expenditure on Social Services  
1974/75-1977/78

Table 15.1

K£000

	1974/75	1975/76	1976/77	1977/78*
<b>Recurrent Expenditure—</b>				
Ministry of Education	55,283.2	66,586.7	73,478.9	88,425.2
Ministry of Health	16,903.0	19,522.4	21,259.7	26,874.4
Ministry of Labour	2,562.7	2,812.7	3,163.1	3,991.5
Ministry of Housing and Social Services	874.1	1,655.9	2,003.2	2,252.9
<b>Development Expenditure—</b>				
Ministry of Education	4,392.2	2,402.8	3,975.3	5,100.6
Ministry of Health	3,499.1	4,455.2	8,092.9	10,740.2
Ministry of Labour	107.7	424.7	267.9	1,030.3
Ministry of Housing and Social Services	5,529.1	5,212.4	4,385.9	9,171.9
<b>Total Expenditure</b>	<b>89,151.1</b>	<b>103,072.8</b>	<b>116,627.0</b>	<b>145,877.0</b>

\*Estimates

Local Government Expenditure on Social Services. 1973-1977

Table 15.2

K£'000

	1973	1974	1975	1976	1977
Education	4,131	4,503	4,702	4,883	5,212
Health	1,864	2,207	2,641	2,093	2,131
Housing	3,325	5,374	5,797	2,995	3,270
Other Social Service	1,789	2,849	3,074	2,774	3,110
<b>Total</b>	<b>11,108</b>	<b>14,933</b>	<b>16,214</b>	<b>12,745</b>	<b>13,723</b>

\*Provisional.

15.2. This chapter seeks to highlight the main social services except housing and employment. Other parts of this survey provide some data on housing and employment.

## Education

15.3. Education expenditure in 1977/78 represents more than 66 per cent of the expenditure on social services by the central Government with the total rising to an estimated K£92 million. If private expenditure on education is also taken into account total expenditure on education amounted to more than K£130 million, roughly equal to 8 per cent of total GDP. Most expenditure on education is for wages and salaries, and it is not surprising that education provides the largest number of jobs after agriculture with about one employee in eight working in the education services.

15.4. The expansion of educational opportunities continues to be a major policy objective of the Government. The elimination of tuition fees for Standards 1 to 4 in 1974 was extended to Standard 5 in 1978. Further extensions are planned to Standard 6 in 1979 and to Standard 7 in 1980. Recurrent and development expenditure by the Ministry of Education is shown in Table 15.3. Total expenditure has doubled from K£45 million in 1973/74 to an estimated K£92 million in 1977/78.

### Ministry of Education Expenditure, 1974/75-1977/78

Table 15.3

K£'000

	1974/75	1975/76	1976/77	1977/78*
Recurrent Expenditure				
General Administration and Planning	1,942.8	2,373.5	3,303.4	3,977.8
Primary Education	33,911.8	43,526.2	46,595.1	55,421.6
Secondary Education	8,296.2	9,523.3	9,934.3	11,455.0
Technical Education	900.7	793.1	845.7	1,036.6
Teachers' Training	1,717.1	2,214.7	2,557.4	3,027.7
Special Schools	211.2	249.8	295.9	358.9
Polytechnic Education	752.4	842.6	974.5	1,285.8
Higher Education**	7,041.9	6,491.0	8,285.3	8,929.4
Miscellaneous	509.2	572.4	687.2	932.4
Total	55,283.2	66,586.7	73,478.9	86,425.2
Development Expenditure				
General Administration and Planning..	18.6	8.6	44.4	152.2
Primary Education	34.3	82.5	106.3	308.2
Secondary Education	2,776.9	1,016.0	1,101.2	916.1
Technical Education	112.4	682.6	777.5	639.5
Teachers' Training	233.6	137.1	1,359.7	2,002.9
Special Education	441.7	48.9	60.0	55.0
Polytechnic Education	212.9	167.6	156.9	728.5
Higher Education**	395.9	194.2	305.5	251.1
Miscellaneous	165.8	65.4	63.7	47.1
Total	4,392.2	2,402.8	3,975.3	5,100.6

\*Estimates.

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

15.5. In addition to Government expenditure, education is financed through fees and levies and through community contributions. At the primary school level the local community raises finance to construct school buildings and teachers' houses, while the Government provides recurrent costs for teachers' salaries and school equipment. Primary schools also collect a Sh. 10 equipment levy from each child in standards 1 through 7 which is forwarded to the district education boards to supplement the equipment grant from the Government. Many primary schools impose additional supplemental fees for such items as building funds, activity costs, uniforms, feeding schemes, etc., that are estimated to raise over K£12 million from the public yearly. Secondary school tuition fees are levied in both Government and Harambee secondary schools. Table 15.4 outlines details on the annual estimated expenditure of K£38 million in 1976 on education from sources other than Government. It reflects a major private contribution, and demonstrates forcefully the widespread desire of parents to obtain education above the basic level for their children.

Estimated Direct Private Expenditure on Education, 1976

<i>Table 15.4</i>	<i>K£million</i>
Pre-Primary Education	2.6
Primary Education	12.9
Secondary/Technical Education	2.5
Teacher Training	0.2
Harambee Education	15.0
Private Schools Education	3.2
Overseas Donations	1.5
Total	37.9

15.6. The increase in the primary school enrolment in 1977 was slightly larger than in 1976. As shown in Table 15.5 total enrolment in primary schools in 1977 was just under three million, about 47 per cent of whom were female. The 6 to 12 age group made up 83 per cent of the total enrolment in primary schools, with a total of nearly 2.5 million. This represents nearly 86 per cent of the number of children in this age group. Pupils over 12 made up the balance of the total enrolment, with about 15 per cent of the 13 to 16 year old age cohort attending primary school in 1977. The enrolments as a percentage of the estimated population by province in the 6 to 12 age group in the table provides a fair indication of the relative spread of education. The North Eastern Province and to a lesser extent Coast Province both lag behind the remainder of the country.

Table 15.5		Primary School Enrolment by Province and Sex, 1976 and 1977 Numbers								000
Central Coast Eastern Nairobi North Eastern Nyanza Rift Valley Western  Total  No. of Schools	1976				1977					
	Male	Female	%Cohort Aged 6-12	%Pupils Aged 13+	Male	Female	%Cohort Aged 6-12	%Pupils Aged 13+		
	288.8	282.8	103.1	20.6	294.9	289.8	101.6	20.3		
	98.9	61.3	59.6	20.0	99.7	63.5	57.0	21.6		
	283.8	259.4	97.7	14.2	297.3	275.3	99.0	13.8		
	43.9	40.8	73.4	14.2	44.6	41.7	72.5	13.4		
	5.8	1.7	8.3	24.0	6.9	2.3	11.2	29.1		
	304.8	245.8	83.4	11.5	305.5	248.9	80.4	11.5		
	289.6	241.0	76.8	14.7	299.0	254.3	77.2	14.2		
	238.4	207.8	105.8	13.4	236.7	210.6	102.3	12.8		
1,554.1	1,340.5	86.7	15.3	1,584.8	1,386.4	85.6	15.0			
8,544				8,873						



15.7. Distribution of enrolment in primary schools by standard, detailed in Table 15.6 reflects the initial influx of students into standard 1 in 1974 when primary school fees at that level were eliminated. The large number of children enrolling for the first time in 1974 distorted the pattern of growth and the subsequent increases in the totals from 1974 to 1977 are somewhat misleading as are the apparent rates of wastage.

Enrolment in Primary Schools by Standard, 1974-1977				
Table 15.6				Number
	1974	1975	1976	1977
Standard 1	958,940	668,166	571,872	602,076
Standard 2	437,375	722,333	545,406	489,222
Standard 3	360,386	419,638	597,690	512,296
Standard 4	301,884	341,927	382,735	510,825
Standard 5	233,003	264,690	300,670	338,509
Standard 6	223,260	237,002	253,030	281,386
Standard 7	219,550	227,439	243,214	236,925
Total	2,734,398	2,881,195	2,894,617	2,971,239

15.8. Details on total enrolment in secondary schools are noted in Tables 15.7 and 15.8. Enrolment in secondary schools has risen rapidly since 1975 with particularly sharp rises in unaided schools. As shown in Table 15.8 there were 226,835 secondary school students in 1975 of which 49 per cent were in unaided schools. By 1977 the total had risen to 319,982 with as many as 60 per cent in unaided school. Girls constituted 38 per cent of total secondary level enrolment, the proportion being higher in unaided schools at 43 per cent compared with 32 per cent in aided schools. Some 44 per cent of students in standard 7 in 1976 found places in Form 1 in 1977, 29 per cent of them in aided schools and 71 per cent in unaided institutions.

Secondary School Enrolment in Aided Schools by Province and Sex, 1975-1977						
Table 15.7	Numbers					
	1975		1976		1977	
	Boys	Girls	Boys	Girls	Boys	Girls
Coast	6,063	2,554	6,262	2,804	6,456	3,000
Central	17,779	8,962	17,691	8,892	18,865	9,218
Eastern	12,013	5,154	12,495	5,443	12,286	5,684
Nairobi	9,596	4,985	10,098	5,363	10,567	5,619
North-Eastern	450	74	531	107	590	146
Nyanza	12,291	4,435	13,347	4,703	15,743	5,921
Rift Valley	11,010	5,312	11,568	5,521	11,512	5,812
Western	11,387	3,683	10,297	3,513	11,792	4,785
Total	80,589	35,159	82,289	36,346	87,811	40,185

Enrolment in Secondary Schools by Form, 1975-77

Table 15.8

Numbers

	1975		1976		1977	
	Aided	Un-aided	Aided	Un-aided	Aided	Un-aided
Form I	28,673	45,017	27,715	67,119	30,587	75,826
Form II	28,205	34,380	27,849	47,469	30,144	59,748
Form III	26,950	18,702	28,279	26,509	29,583	31,112
Form IV	23,453	12,517	25,908	19,709	28,355	24,213
Form V	4,508	284	4,659	549	4,656	584
Form VI	3,959	187	4,225	398	4,671	503
Total	115,748	111,087	118,635	161,753	127,996	191,986
Boys	80,589	64,717	82,289	94,434	87,811	109,415
Girls	35,159	46,370	36,346	67,319	40,185	82,571

15.9. The extent of the movement into unaided secondary schools is particularly evident when enrolment by forms is considered. In 1976 while 71 per cent of all Form 1 students were in unaided schools, they constituted only 43 percent of the total number of students in Form IV. In 1977 the corresponding percentages were 71 per cent and 46 per cent respectively. The growth of enrolment in unaided schools will undoubtedly cause problems for the education authorities in future years. The expenses which will need to be incurred to raise the standard of facilities in unaided schools to those of the aided schools are likely to be extremely heavy.

15.10. The expansion and diversification of technical and vocational education continued in 1977. Technical subjects are taught in four technical schools for males, which in 1976 had a combined enrolment of 5,821. The Kenya and Mombasa polytechnics, which in 1976 had an enrolment of 2,527, also play an important role in this field of education. Institutions of technology, which are Harambee institutions, provide courses in such fields as plumbing, masonry, carpentry, electricity, secretarial work, and automotive repairs. They include the Kiambu Institute of Technology, which passed out its first graduates in 1976, Murang'a and Kirinyaga institutes, which admitted their first intakes of students during 1976, and Kimathi Institute at Nyeri which opened in 1977.

15.11. In addition to the training offered in technical institutions various bodies also undertake specialized training for their own needs. Training is offered among others at the Railway Training School, the Posts and Telecommunications Regional Training School, the Kenya Institute of Mass Communication, the East African Power and Lighting Training School, and the Utalii College for hotel management and catering. The intake of Form IV school leavers into various Government sponsored careers training programmes in 1977 was nearly 2,000. These programmes offered courses on agriculture and water development, health, technical work, craft work, tourism, travel and other services, and secretarial work.

15.12. As outlined in Table 15.9, the teaching force was composed of 102,337 teachers in 1977, of whom 87 per cent were teaching in primary schools and 13 per cent in secondary schools. This represents a virtual doubling of the size of the teaching cadre since 1972. Of the primary school teachers, 66 per cent were trained and 99 per cent were Kenya citizens. The majority of trained primary school teachers have completed some secondary schooling with an additional two years of further training at a training college. Most of the untrained primary school teachers also have finished at least two years of secondary schooling. Nearly all secondary school teachers in aided schools have had four or six years of secondary schooling and an additional two or three years of teachers training or they are university graduates who have specialized in education. These qualifications are considerably better than those of teachers in unaided secondary schools, most of whom are untrained and few of whom have more than four years of secondary education. Kenyanization of the secondary school teaching staff continued and in 1977, 76 per cent of all secondary school teachers were citizens as compared with only 58 per cent in 1973.

Qualifications of Teachers in Educational Institutions, 1976-1977  
*Table 15.9* *Numbers*

	Primary		Secondary Aided		Secondary Unaided	
	1976	1977	1976	1977	1976	1977
Trained						
Graduate	50	47	1,696	2,120	433	514
Approved*	—	—	354	364	274	262
SI	1,456	2,163	2,193	1,880	517	591
PI	13,649	16,466	23	38	199	188
P2	21,764	22,572	—	—	—	—
P3	16,869	16,200	—	—	—	—
P4	1,871	1,687	—	—	—	—
Other	486	424	398	416	373	341
Total	56,145	59,559	4,664	4,818	1,796	1,896
Untrained						
Graduate	32	10	195	197	336	362
E.A.A.C.E	607	541	109	307	2,429	3,082
E.A.C.E	19,621	18,706	49	84	1,525	1,563
K.J.S.E	9,755	8,337	—	—	—	—
C.P.E	2,706	2,352	—	—	—	—
Other	208	151	68	52	267	320
Total	32,929	30,097	421	640	4,557	5,327
Citizens	88,079	88,766	3,638	4,170	4,707	5,516
Non-Citizens	995	890	1,447	1,288	1,646	1,707
Total	89,074	89,656	5,085	5,458	6,353	7,223

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

15.13. In 1977 enrolment in training colleges for primary school teachers stood at 8,407 which represents a slight decline from the 8,562 registered in 1976. The decrease in enrolments in these teacher training colleges in recent years results from the effort made to eliminate congestion in teacher training classes pending expansion in facilities during the fourth development plan period. In 1977, of the students in these teacher training colleges, 37 per cent—3,068—were female. The training policy was revised in 1977 and all candidates will from now onwards follow a common course without being graded initially. The determining factor for classification will be the final performance at the end of the two year course, with those achieving the highest performance being accorded P1 status, the middle range performers P2 status and the lowest group the P3 grade. Candidates with a certificate of primary education will be eligible only for P4 grade. In addition to the 4,678 candidates who successfully passed the final examination in June 1977 to complete the training programme for primary school teachers in teacher training colleges, 5,211 candidates from the four year in-service course for P1 and P2 training which started in 1974 also finished the course in 1977, and sat for their final examinations.

15.14. In addition to the enrolment at Kenyatta University College and in the Faculty of Education of the University of Nairobi, there were 1,142 candidates at other institutions in 1977, being trained to teach in secondary schools. The largest number—486—were taking the three year training programme of the Kenya Science Teachers College. There were also 63 students enrolled at Kenya Technical Teachers College to join courses in business education and industrial education, 73 at Egerton College to be trained to teach agriculture and home science, and 34 at Kenya Polytechnic to teach various technical subjects.

15.15. Total enrolment at the University of Nairobi increased from 5,083 in 1976/77 to 5,283 in 1977/78. Distribution of students at the university into undergraduates, diplomates, and postgraduates is shown in Table 15.10. At the undergraduate level the faculties of Agriculture, Arts, and Medicine—including the courses in dental surgery and pharmacy, had the largest increases in enrolments in 1977/78. For the first time since 1972/73 there was an expansion in the number of students in the faculty of Arts. Postgraduate enrolment continued to grow, particularly in the faculties of Agriculture, Arts, Education and Science. In 1977/78 women accounted for less than one fifth of the total enrolment while nine out of ten students were citizens.

## University of Nairobi—Students by Faculty and Sex, 1976/77-1977/78

Table 15.10

	1976/77			1977/78		
	Males	Females	Total	Males	Females	Total
Undergraduate Courses						
Agricultural*	182	37	219	206	53	259
Architecture and Design	194	35	229	175	37	212
Building Economics and Land Economics	169	11	180	125	9	134
Arts	344	133	477	373	198	571
Commerce	412	79	491	400	100	500
Education	462	206	668	357	125	482
Engineering	503	4	507	466	8	474
Law	141	45	186	132	56	188
Medicine	402	71	473	431	55	486
Science	411	71	482	454	53	507
Veterinary Medicine	288	25	313	295	25	320
Dental Surgery	56	12	68	76	12	88
Pharmacy	59	25	84	93	30	123
Total	3,623	754	4,377	3,583	761	4,344
of which Kenya Students	3,297	702	3,999	3,375	729	4,104
Diploma Courses **Total ..	58	47	105	50	64	119
of which Kenya Students	44	39	83	28	52	80
Postgraduate Courses						
Agriculture	94	7	101	143	22	165
Architecture and Design	44	3	47	39	2	41
Arts	81	41	122	105	56	161
Commerce	24	1	25	35	3	38
Education	60	21	81	84	37	121
Engineering	23	—	23	35	—	35
Law	7	2	9	12	3	15
Medicine	45	6	51	56	11	67
Science	112	9	121	148	15	163
Veterinary Medicine	17	4	21	15	4	19
Total	507	94	601	672	153	825
of which Kenya Students	369	69	438	496	116	612
Total Enrolments						
All Kenya Students	3,710	810	4,520	3,899	897	4,796
Students from other countries	478	85	563	406	81	487
Total	4,188	895	5,083	4,305	978	5,283

\*Includes courses on Food Science and Technology and Forestry.

\*\*Diploma courses are offered in Journalism, Advanced Nursing and Adult Studies.

15.16. Enrolment at Kenyatta University College, shown in Table 15.11 continued to decrease, falling from 1,222 in 1975/76 to 1,124 in 1976/77. The number of students enrolled in the diploma course in Education declined while those registered for the degree course rose. This change reflects the policy objective of upgrading the qualifications of secondary school teachers and providing more graduate teachers.

Kenyatta University College—Students by Courses and Sex, 1975/76-1976/77

Table 15.11

	1975/76			1976/77		
	Males	Females	Total	Males	Females	Total
Diploma in Education	202	97	299	186	112	298
Bachelor of Education	620	299	919	536	281	817
Postgraduate	3	1	4	8	1	9
Total	825	397	1,222	730	394	1,124

15.17. The annual cost of schooling per student has been rising steeply with ascending levels of education. Table 15.12 shows that the recurrent cost per pupil of a year of secondary schooling at an aided boarding institution amounts to about seven times the expense of educating a primary school pupil, whilst the average cost of one student at the University of Nairobi is more than 100 times the cost of a student at a primary school. An examination of these figures indicates the increasing burden of education and that increasing level of enrolments in secondary schools and institutions of higher training will undoubtedly raise average student costs. Extensive research into the structure and future financing of the education system will need to continue. In particular, the matching of qualifications to potential job opportunities needs to be monitored continuously so that education expenditure yields its optimum results.

Estimated Recurrent Cost per Student by Type of Institution, 1976/77

Table 15.12

	K£
Primary	16
Secondary (day, aided)	70
Secondary (boarding, aided)	110
Secondary Technical (boarding)	150
Primary teacher Training Centre	230
Kenya Science Teachers College	890
Kenya Technical Teachers College	750
Kenyatta University College	1,200
University of Nairobi	1,700

15.18. The extent of illiteracy among Kenyans continues to diminish every year. In 1976, based on a limited sample, it is estimated that 65 per cent of Kenyan males, and 31 per cent of Kenyan females possessed reading ability in one language. Details of the distribution of persons by province are set out in Table 15.13. There were 1,693 literacy training centres operating in Kenya in 1977, with a total enrolment of 36,000 adults more than two-thirds of whom were female. Of these centres 959 were Government aided and 645 other centres were being run on a self-help basis. The remaining 89 centres were being run by voluntary agencies. There were also 248 centres offering formal education in 1977, with a total enrolment of nearly 5,000. Of the numbers attending formal education classes in that year, 664 sat for the Certificate of Primary Education examination, and about three quarters of them passed.

Percentage Distribution of Population by Reading Ability in any Language, Sex and Province, 1976

Table 15.13

	Male		Female		Total	
	Yes	No	Yes	No	Yes	No
Central	75.1	24.9	46.4	53.6	60.1	39.9
Coast	48.0	52.0	10.3	89.7	25.0	75.0
Eastern	67.6	32.4	31.5	68.5	47.7	52.3
Nyanza	65.3	34.7	25.3	74.7	43.5	56.5
Rift Valley	56.9	43.1	27.8	72.2	41.2	58.8
Western	65.0	35.0	33.3	66.7	47.4	52.6
Total	65.1	34.9	30.7	69.3	46.2	53.8

Note:—Data in this table are derived from the Literacy Survey conducted in 1976/77. The sample excluded urbanized areas, including Nairobi Province and also did not cover North.Eastern Province and the pastoral districts of Eastern and Rift Valley Provinces.

15.19. The Educational Media Service mounted programmes to be broadcast during the first school term of 1978 from 9.25 a.m. until 12.30 p.m. and 2.10 p.m. to 4.30 p.m. five days a week. Seven 20 minute programmes dealing with music, geography, English, history, health, Kiswahili, home science, and science were beamed to primary schools each day. The secondary school programme consisted of four 20 minute programmes covering science, English, literature, christian religious education, agriculture, Kiswahili, careers options and geography. The remainder of the broadcast time was utilized for the three or four daily 20 minute programmes designed to improve the facility of teachers in primary schools in presentation of courses in modern mathematics, English and Kiswahili.

## Health

15.20. Table 15.14 provides new information on health institutions and hospital beds and cots in 1977. The number of institutions shown includes Government, missionary and other private health institutions. The figures on beds and cots include those in all institutions except for a "small" number in some health centres in certain provinces. The column of the ratio of beds per one hundred thousand population shows a range from 99 beds in the Western Province to 447 beds in Nairobi and a national average of 159 beds.

Health Institutions and Hospitals Beds and Cots by Province, 1977

Table 15.14

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	114	142	3,469	447
Central	43	31	158	232	3,680	170
Coast	23	17	117	157	2,146	173
Eastern	26	21	179	226	2,826	117
North-Eastern	3	3	16	22	347	129
Nyanza	27	41	108	176	4,005	141
Rift Valley	46	100	299	445	4,599	162
Western	16	44	42	102	1,776	99
Total	210	259	1,033	1,502	22,848	159

15.21. The extension of Kenyatta National Hospital continued during 1977 and when these extensions are completed a total of 1,200 beds will be available. Six new rural health training centres and 13 rural health centres were also completed during 1977. Work to raise the number of hospital beds in another 15 hospitals in the rural areas is under way or will commence shortly. These increases in the numbers of health centres will greatly reduce the distances which some of the rural population have to travel to get medical treatment. Besides the rise in hospital beds will also reduce the congestion in many district hospitals. Length of distance from a health centre is still one of the major obstacles in the provision of social amenities.

15.22. Table 15.15 shows the number of doctors, dentists, pharmacists, clinical officers and nurses registered to practice in Kenya. The number of doctors and dentists includes both the registered and licenced doctors and the interns. The total of doctors and dentists rose slightly from 1,567 in 1976 to 1,591 in 1977. Over one third of these were deployed in the public



sector. The number of clinical officers—previously known as medical assistants working in the public sector numbered 1,002 in 1977. As this figure does not include those working in the private sector, it is an understatement of the number in the country. Such clinical officers play an important part in the provision of health services, particularly in the rural areas.

#### REGISTERED MEDICAL PERSONNEL 1974-1977

Table 15.15

Numbers

	1974	1975	1976	1977	
				Number	No. per 100,000 Popu- lation
Doctors				1,479*	10.3
Dentists	1,242	..	1,567	112	0.8
Clinical Officers	..	..	..	1,002	7.0
Pharmacists	202	..	208	197	1.4
Registered Nurses	4,876	5,911	6,237	6,173	43.0
Enrolled Nurses	..	6,421	7,199	7,426	51.8

\*Figures are based on the new register of doctors and dentists which is still provisional. It included 104 doctors whose registration was still under consideration.

15.23. The figure of registered and enrolled nurses is cumulative from the time registration started and therefore overstates the numbers working, probably by about 2,000 in total. Of the 6,173 on the register in 1977, a total of 2,782 are qualified as midwives, 196 as public health nurses, 107 as nurses for mental patients and 102 as nurses of sick children; of the 7,426 enrolled nurses, 3,518 are qualified as midwives 650 as community nurses, 299 as nurses for mental patients and 498 as health visitors. Enrolled nurses have a lower basic level of schooling and go through a shorter period of training. About 20 per cent and 54 per cent respectively of the registered and enrolled nurses are working in the public sector. The last column of the table shows the number of the various categories of medical personnel per one hundred thousand population. There were on average about 95 registered and enrolled nurses per 100,000 population in 1977 but only eight dentists for each one million persons.

15.24. The outbreak of cholera which started in 1974 and showed increasing level of incidence in 1975 and 1976 had been completely eradicated by 1977. Unfortunately a new outbreak occurred in 1978. Substantial numbers of cases were reported in 1977 of the following diseases—dysentery, schistosomiasis, infectious hepatitis and meningitis. The particularly large increase in the cases of dysentery reported—from 14,532 in 1976 to 23,342 in 1977 was mainly due to the outbreak of the disease in the Coast Province.

15.25. The Health Information System Project of the Ministry of Health now covers Eastern and Central provinces in addition to Coast Province. It is hoped the whole country will be covered by 1979. The centralization of such health and epidemiological information will facilitate the planning of health services and help speed up the control of outbreaks of particular diseases.

15.26. Table 15.16 shows that total receipts by the National Hospital Insurance Fund dropped from K£1.74 million in 1975/76 to K£1.63 million in 1976/77 while benefits paid out rose by 17 per cent from K£1.65 million to K£1.98 million resulting in a deficit of K£355,387. It is not yet known whether the drop in receipts was due to a decrease in the number of contributors, but the increase in benefits is due to the increase in hospital charges which have been rising since 1972/73. While the data are at present only provisional they do suggest that the fund is now running at a loss and steps will need to be taken to remedy this situation.

National Hospital Insurance Fund, 1967/68-1976/77

Table 15.16

	Receipts*	Benefits**	Contribution Net of Benefits
1967/72 Annual Average	917,521	644,593	272,929
1972/73	1,189,255	883,152	306,103
1973/74	1,166,705	1,072,758	93,947
1974/75	1,420,338	1,311,911	108,427
1975/76	1,741,671	1,649,669	92,002
1976/77	1,629,411	1,984,798	-355,387

\*Includes both compulsory and voluntary contributions and other receipts.

\*\*Benefits exclude other payments e.g. management expenses.

#### Other Social Services

15.27. Youth Development.—The total number of village polytechnics rose from 167 in 1976/77 to 194 in 1977/78. These figures do not include the 19 village polytechnics which are being run by the National Christian Council of Kenya. The increase in number of village polytechnics was reflected in an increase in total enrolment from 9,000 to 12,000. Polytechnic graduates are also helped to set up their own enterprises.

15.28. Social Welfare—In 1977 about 169,000 children were enrolled in 4,712 day care centres mainly in the Eastern, Rift Valley and Central provinces. These centres were run by 5,099 teachers.

15.29. National Social Security Fund.—The number of employees registered with the fund increased by 52,947 in 1977 raising the total number of net registrations to 1,027,524. The number of employers registered rose by 1,227

in 1977 to 27,413. Contributions amounted to K£16.55 million in 1977 compared to K£12.05 million in 1976, and to date total contributions have reached a figure of K£98.03 million. The total investments of the fund rose by K£23.40 million in 1977 to K£112.10 million. These details are set out in Table 15.17. The fund is still at the stage of building up its assets to meet future demands. Outgoings from the fund will rise rapidly as the age of the contributors increases and a reasonable proportion reach pensionable age.

National Social Security Fund Contributions and Benefits, 1966-1977

Table 15.17

K£million

	Contributions Received	Benefits Paid	Contributions Net of Benefits	Investments* during the year
1966	1.17		1.17	1.16
1967	4.46	0.02	4.44	3.67
1968	5.45	0.15	5.30	7.47
1969	5.82	0.22	5.60	6.80
1970	6.37	0.56	5.81	5.90
1971	7.32	0.63	6.69	7.82
1972	7.85	0.64	7.21	8.96
1973	8.73	0.96	7.77	9.09
1974	9.83	1.10	8.73	7.75
1975	12.43	1.16	11.27	11.33
1976	12.05	1.01	11.05	18.75
1977	16.55	1.79	14.76	23.40
Total	98.03	8.24	89.80	112.10

\*Annual investments are made up of net contributions plus investment income and bank interest.

15.30. Community Development.—The total number of self-help projects undertaken in 1976, excluding institutes of technology numbered 8,797 for which K.Sh. 6.5 million was contributed. The Eastern and Central provinces accounted for the majority of the projects initiated. Rift Valley, Nyanza and Central provinces reported average contributions per project of K.Sh. 1,602 and 986 and 912 respectively compared to the national average of K.Sh. 739. Education projects continued to predominate.

15.31. Vocational Rehabilitation.—In 1977 there were 18 vocational rehabilitation centres in Kenya which enrolled 249 trainees to be trained in various skills including tailoring, carpentry, leather craft, printing, etc. This intake is only a small fraction of the total number of physically disabled persons in Kenya. A survey of handicapped persons undertaken in late 1977 revealed an average of about one physically handicapped person in every eight households which would amount to an equivalent of 280,000 physically handicapped persons in Kenya. This estimate is in fact on the low side, since it excludes those suffering from mental handicaps and other such handicaps which could only be identified through clinical investigation.

15.32. National Youth Service.—The total enrolment since the inception of the service in 1964 has risen to 24,584 consisting of 22,545 males and 2,039 females. Of the total, 4,375, i.e. 4,004 males and 371 females are currently in service. A total of 667 men and 62 women were placed in direct employment in 1977 through this service. Through its training programmes in masonry, plumbing, engineering, agriculture, driving etc., the service also undertakes development projects. These include the first phase of bitumenizing of the Machakos/Kitui road; the gravelling of 74 kilometres of Kitui/Garissa Road; construction of all-weather roads for the Bura Irrigation Scheme; and construction of three dams in Kitui District. Sales of products such as milk, eggs, clothing, livestock and other farm products from its own projects also realized a total of K.Sh. 450,000 for the service.

#### **Social Survey**

15.33. The social indicators shown in Table 15.18 were obtained from the Integrated Rural Survey conducted by the Central Bureau of Statistics in 1976/77. The indicators detail average distances to a selected number of social amenities—source of supply of drinking water during the dry season, primary school, health centre, market and bus route. Although there is a wide range shown in the table, the rural households in Coast, Eastern and Rift Valley provinces are generally the worse served. On the other hand, the Western Province followed by the Central Province have a higher proportion of their population served by these social amenities nearer to their homes.

15.34. About 29 per cent and 20 per cent respectively of the rural population in the Coast and Eastern provinces have to walk more than two kilometres to obtain water during the dry season. Similarly about 49 per cent and 41 per cent of the primary school pupils in the Coast and Rift Valley provinces have to walk more than two kilometres to school. For health care the Coast and Eastern provinces are also not as well endowed as the other provinces, since 95 per cent and 88 per cent of their population respectively have to walk more than two kilometres to a health centre. There is a similar disparity in access to other amenities listed in Table 15.18 in these two provinces. It is clear from the table that much has still to be done before these amenities can be said to be readily accessible to the majority of the rural population. It is also necessary to note the heterogeneity of some of the provinces and therefore the data shown would only be representative as an average. Clearly population densities at a local area level need to be taken into account to assess the impact of variations.

#### **Role of Women**

15.35. Nearly 90 per cent of women live in rural areas where they make a major contribution to the economy. Almost all these women engage in farming activities on their own smallholdings, and produce much of the food that their families consume. They are also responsible for fetching

Percentage and Ranking of Households in Rural Areas\* Within Specified Distances of Social Amenities by Province, 1977  
 Table 15.18

	Province						Kenya
	Central	Coast	Eastern	Nyanza	Rift Valley	Western	
Source of Supply for Drinking Water:							
Percentage of Households:							
Within 1 kilometre	88	41	65	68	77	88	70
Within 2 kilometres	98	71	80	88	87	98	85
Provincial Ranking	1	5	4	2	3	1	—
Primary Schools:							
Percentage of Households:							
Within 1 Kilometre	33	28	42	33	30	40	35
Within 2 Kilometres	82	51	78	76	59	83	73
Provincial Ranking	2	6	3	4	5	1	—
Health Centres:							
Percentage of Households:							
Within 1 kilometre	1	2	5	9	4	7	5
Within 2 kilometres	14	5	12	18	16	21	15
Provincial Ranking	4	6	5	2	3	1	—
Market:							
Percentage of Households:							
Within 1 kilometre	7	6	11	17	9	29	13
Within 2 kilometres	32	18	29	54	24	67	39
Provincial Ranking	3	6	4	2	5	1	—
Bus Route:							
Percentage of Households:							
Within 1 kilometre	33	20	26	25	22	33	27
Within 2 kilometres	50	32	43	45	45	52	46
Provincial Ranking	2	6	5	3	3	1	—

\*The North-Eastern Province and the nomadic districts in the Eastern and Rift Valley Province are not included.

water and firewood—often at some distance from their homes and for generally looking after their families. In slightly less than one quarter of all rural households the husband is either absent for long periods or deceased, and the women then assume much of the work usually undertaken by men. A small minority of rural women, a much lower proportion than in the corresponding male group, are employed in permanent non-agricultural rural activities.

15.36. About 70 per cent of women cannot read or write, and this is twice the national male rate. In each age cohort a higher proportion of females than males have not attended school. This sex difference in educational attainment has diminished as the educational system has expanded since independence and the trend has been for girls to move gradually toward parity with boys in primary school enrolment. However, despite a considerable increase in the number of women attending secondary school the relative representation of females in secondary schools has improved only slightly and in 1977 stood at 38 per cent of the total. Female enrolment at the University of Nairobi has ranged between 10 per cent to 21 per cent of citizens in undergraduate programmes. There are also consistent and considerable sex differences in academic performances, wastage, and subject specialization all of which work to the disadvantage of females.

15.37. As in many non-industrialized societies, women participate in the modern sector on only a limited scale. In 1977 they constituted 17 per cent of the wage labour force. Most of them are concentrated in a few occupational groupings; unskilled work, teaching, and secretarial work.

15.38. By the age of 25 the majority of women are married and have borne at least one child. The large size of families, averaging between six and seven children for females in the age group which has completed reproduction, means that women spend much of their lives in a continuing cycle of pregnancy, birth, and child dependency combined with the heavy involvement in rural activities mentioned above. In Kenya, as elsewhere educational attainment tends to correlate with smaller family size, reduced child mortality rates and greater inclination to practice family planning.

#### **Nutrition**

15.39. One of the most significant ways of assessing basic needs is to study incidence of malnutrition, and in early 1977 the Central Bureau of Statistics collected information on the nutrition profile of 1,400 randomly sampled rural children aged between 1 and 4, as part of its National Integrated Sample Survey Programme. The population from which the sample was taken excludes the North Eastern Province and pastoral areas elsewhere.

15.40. Data was collected on the children's ages, heights and weights. The ratios of height/age, weight/age, and weight/height calculated from these measurements can be used to estimate malnutrition by a comparison

with some standard of normality. There is as yet no generally accepted African standard, but the measures known as the Harvard Standards are used throughout the world, and there is some evidence that they are not inappropriate for Africa. These standards are used to identify children who are "stunted", i.e. their height/age ratio is less than 90 per cent, or wasted, i.e. their weight/height ratio is less than 60 per cent, of the relevant Harvard standard.

15.41. The most common form of malnutrition in young Kenyan children is protein energy malnutrition (PEM). Severe PEM is low in Kenya. Mild and moderate PEM however are fairly widespread. One third of all the children surveyed had a weight/age index more than 20 per cent below standard. This proportion would, according to the Harvard Standard, be about 2 per cent in a community without any PEM. As was expected, children in the age range 20 to 24 months were the most malnourished. Males had a consistently better profile in this context. In the province with largest sex difference 39 per cent of females as compared with 28 per cent of males had a weight/height index of less than 90 per cent of the standard.

15.42. About 7 per cent of the children had been weaned before the age of 6 months; about 40 per cent of mothers had stopped nursing their children by their first birthday; and 80 per cent before the child was eighteen months old. The mean age of weaning was 14.4 months. Children weaned between 6 and 12 months of age had the most satisfactory growth at the time of the survey. Wasting was observed in children who were weaned early, i.e. before 6 months of age, and stunting in children who were still being breastfed after 18 months. Longer periods of breast feeding were clearly correlated with an increasing rate of malnutrition.

15.43. The frequent consumption of milk after weaning had a more consistently favourable association with nutritional status than any other type of food consumed. In every province the mean weight for age index of children receiving milk at least once a day was higher than for those consuming milk less frequently.

#### **Population Policy Including Family Planning**

15.44. The issues of population and the ability of the Government to frame a population policy suited to Kenya's long-term requirements are extremely complex. At present Kenya has a high population growth rate which could lead in the long term to the malthusian checks. However, many demographers also now accept that the desire of groups of people for large families is not irrational in certain circumstances.

15.45. Kenya was the first African country south of the Sahara to adopt an active population policy. It forms part of the Government's social policy as administered through its health programme aimed largely at expanding

facilities in rural areas and is based on the voluntary principle. The policy stresses aspects of family planning and the importance of proper spacing of births for the health of both mother and child.

15.46. A National Family Welfare Centre has been established in the Ministry of Health to administer the programme adopted. This centre has established over 250 service delivery points and has trained a number of family health field officers and educators. The target is to reduce the rate of population growth to 3 per cent a year. Analysis of demographic surveys being currently undertaken together with the results of the 1979 population census will serve to indicate whether this target has been reached or is attainable in the near future.