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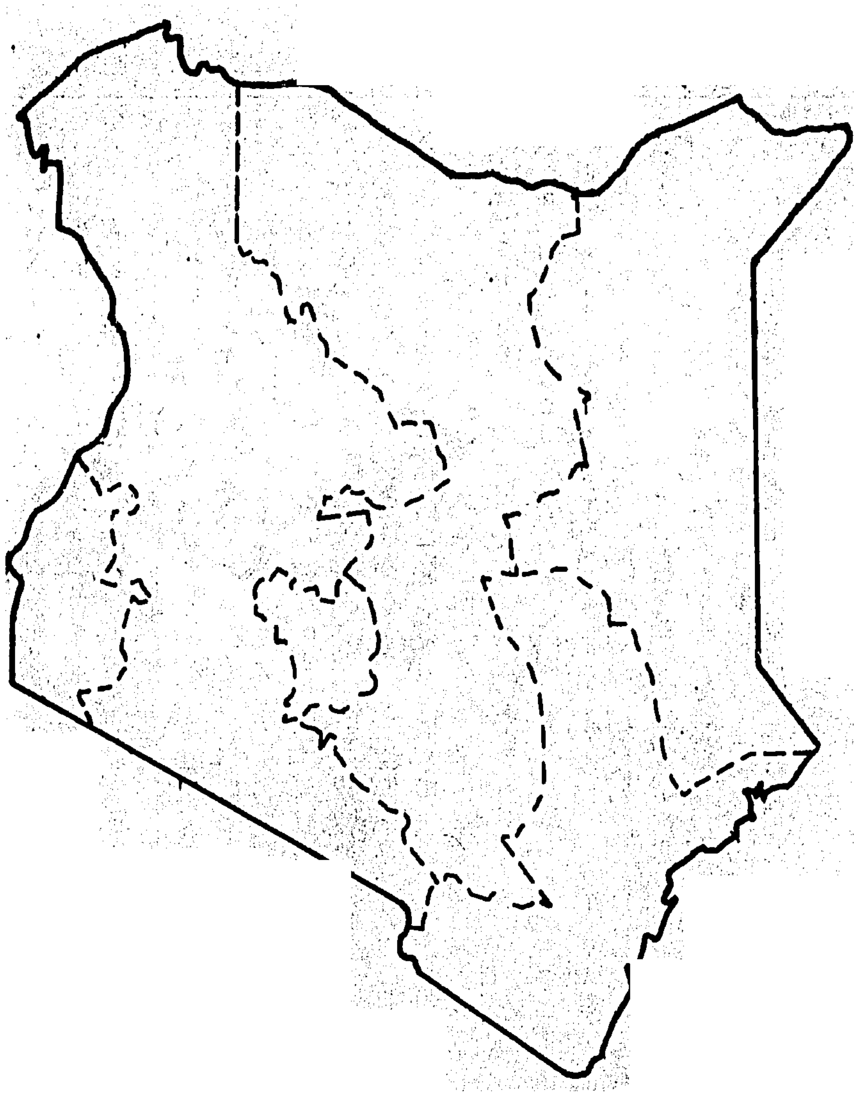
Eastern Africa Country Profiles

KENYA



November, 1980

Program for International Development
Clark University
Worcester, Massachusetts 01610

EASTERN AFRICAN COUNTRY PROFILES

The Republic of Kenya

by

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This is the third profile in a series and is intended to provide information which will be useful to planners, designers, and evaluators of development projects. Thus, each section is designed to stand alone -- hence there is some duplication. Any comments or corrections concerning the approach in general or the document in particular will be greatfully appreciated.

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INTRODUCTION

This country profile is prepared as an introduction to development issues in Kenya for USAID personnel. It offers three different approaches: (1) a general overview of the country, people, economy, and culture; (2) a summary analysis of the current development issues facing the country; and (3) an assessment of the distribution of poverty in Kenya.

Each of the three is worthy of much greater development. A brief bibliography is appended for those who seek information on particular issues. Although selective, the suggested reading list indicates some of the standard introductions to Kenyan affairs. Keeping the reading list short has been no easy task as Kenya is one of the most widely researched and written about countries in all of Africa. Combinations of a marvelous climate, friendly people, and a good local infrastructure have attracted researchers and writers from all parts of the world.

Kenya's strong institutional base also offers good local resources for those who wish either to write or read more about Kenya. The University of Nairobi is a consistently helpful institution, especially its research bureaus such as the Institute for Development Studies and the Population of Research Bureau. Kenya's Central Bureau of Statistics is also an exceptionally good agency with a number of very helpful publications. Those in the United States who wish to examine recent government and scholarly publications on Kenya can contact the Research Librarian, Program for International Development, Clark University.

Kenya offers a number of paradoxes. Some of its land is among the most lush and abundant in all of Africa; yet three quarters of the nation is arid or semi-arid. Nairobi is one of the most modern and beautiful cities in the world; yet unemployment in and around Nairobi is a critical problem. Kenya borders the largest lake in Africa and controls 63,000 Km^2 of surface water; yet significant numbers of rural Kenyans do not have easy access to piped water. Kenya produces some of the finest coffee and tea in the world as well as other agricultural export crops; yet per capita food production for domestic consumption has been declining in recent years. Kenya's health and nutrition campaigns have made a major impact on morbidity and mortality rates with infant mortality (119 per thousand) the lowest in East Africa; yet current population growth is surging at 4 percent per year and population may well double in less than 20 years. These and other questions are analyzed in subsequent siections.

Section 2 offers background on history, culture, and the resource setting. Section 3 identifies 15 development issues which are of especial concern. Section 4 analyzes the nature and distribution of poverty.

2.1 History and People

Modern Kenya is a country of contrasts. Over 1½ million of the 15.3 million Kenyans live in Nairobi and Mombasa which are modern, busy, and thriving; another half million are pastoralists, living in the dry northeast in a life style that differs little from that of a hundred years ago. But most Kenyans live as settled farmers, mostly on small farms, struggling hard to grow enough food to eat and enough other crops to sell.

Kenya's modern population results from three different cultural infusions: a pastoral influence which came with groups who arrived from the north; a settled agricultural, Bantu-speaking influence which came with groups originating to the south; and an Arabic (Swahili) influence which came with groups entering the area along the east coast. These early influences have, of course, been heavily shaped by the strong colonial influence during the British occupation which ended only in 1963 and the independent Kenyan nationalism which has grown steadily both before and since that date.

Kenya's earliest human history began about two million years ago. Proto-human tools and bone fragments suggest the dim outline of a history that may include the origin of humankind itself. The earliest group from which East African survivors or at least distant relatives remain were hunters and gathers whose lifestyle, technology, and language are akin to modern day San (Bushmen) in southern Africa. Although dates are elusive, the archeological records reach back at least 10,000 years. However, the surviving remnant lives in Tanzania rather than Kenya.

Local legend suggests that a hunting people, the Dorobo, were the earliest group to have remained in Kenya proper. Today, no more than 1,000 strong, the Dorobo live among the Nandi and Maasai. Linguistically and culturally, the Dorobo have borrowed much from later arrivals and as a result have lost the ethnic uniqueness which southern Africa's San hunters have maintained.

Evidence of pastoralists in Kenya goes back at least 2,000 years but the major influx of these peoples seems to have been about 1000 AD. Many of the descendants of these groups now practice settled agriculture but it is a good generalization that Kenyans living to the west and north (also the Maasai to the south) think of their origin as pastoral. Today, these groups include pure pastoralists such as the Turkana and Maasai; they also include groups which have become essentially agricultural such as the Luo and Nandi.

Kenya's second major cultural influx came from the south and west. About 1000 years ago, groups of Bantu speakers who practiced agriculture, smelted iron, and maintained centralized political systems settled in the highlands and coastal regions. Because of their agricultural traditions, their lifestyle was largely sendentary.

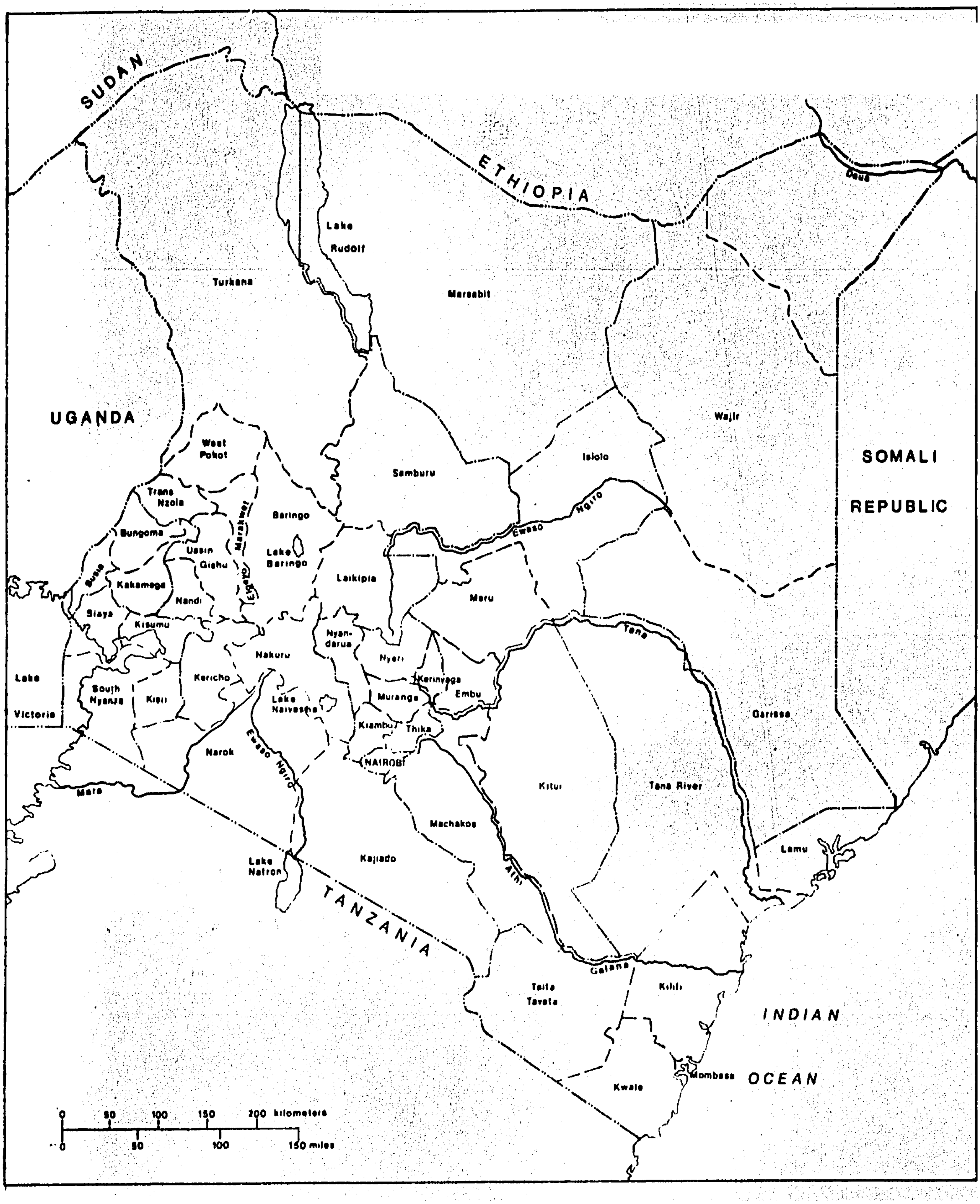
Because of interaction with the region's pastoralists, many acquired livestock, especially the Kikuyu, Kamba, and Luhya.

Kenya's highland environment was bountiful to the agriculturalists. They prospered and expanded. Today those with agricultural origins are by far the most numerous in Kenya. For example, in 1969, of a total of 10.9 million people, 2.2 million were Kikuyu, 1.5 million Luhya, and 1.5 million Kamba. Yet traditionally, the pastoralists have controlled most of Kenya's land, much of it in the semi-arid and marginal north.

For the most part, these two cultural traditions have lived symbiotically. Though each ethnic group tends to retain individual linguistic traits and local customs, many of their means of livelihood have merged. For example, among the agricultural Kikuyu and pastoral Maasai, a tradition of drought response existed whereby Kikuyu would offer grain to Maasai for their drought weakened cattle, thereby relieving food pressures for the Kikuyu and grazing land pressures for the Maasai.

Kenya's third invasion was commercial and came from the sea. In the latter years of the First Christian Millenium, Arab traders ventured south along the Somalian, Kenyan, and Tanzania coast. They founded

FIGURE I



SUDAN
ETHIOPIA
Daua
Lake
Rudolf
Turkana
Marsabit
UGANDA
West
Pokot
Samburu
Wajir
Isiolo
SOMALI
REPUBLIC
Trans
Nzoia
Baringo
Marakwet
Bungoma
Uasin
Gishu
Lake
Baringo
Ewaso Ngiro
Busia
Kakamega
Elgeyo
Laikipia
Meru
Nandi
Siaya
Kisumu
Nyan-
darua
Tana
Nakuru
Nyeri
Lake
Victoria
Kericho
South
Nyanza
Kisii
Lake
Naivasha
Kirinyaga
Embu
Muranga
Garissa
Kiambu
Thika
Narok
Ewaso Ngiro
NAIROBI
Kitui
Tana River
Mara
Machakos
Lamu
Kajiado
Lake
Natron
Athi
TANZANIA
Galana
Taita
Taveta
Kilifi
INDIAN
OCEAN
Mombasa
Kwale
0 50 100 150 200 kilometers
0 50 100 150 miles

a number of trading cities, two of which were in modern Kenya: Malindi and Mombasa. These cities carried on an active trade with Africans in the interior. Gold, ivory, animal products, iron, copper, and later, slaves came from the interior: cloth, jewelery, glassware, tools, swords, and later guns went inland. The cities prospered. They introduced the religion and language of the Arabs, both became mingled with African cultures. Out of this mingling emerged the Swahili language and culture, at first only along the coast but gradually following the trade routes into the interior. By the 19th century when Europeans first penetrated Kenya's interior, Swahili had become the lingua franca for traders throughout the region.

Europe's initial interests in the region were strategic and political. Germany had staked out Tanzania; the French were eying the Upper Nile; Italy aspired to Ethiopia; Great Britain, through a private company, laid claim to Kenya; Uganda floated as bait for several potential European masters.

In the midst of the European scramble, tragedy struck in Kenya in the 1890s. Rinderpest, moving south from Ethiopia; small pox, introduced by European visitors; and famine, precipitated by an extended drought and a mutiny of Sudanese conscripts in the British army -- all combined to devastate African livestock, crops, and people. By the early 1900s, British colonial officials found the highland areas virtually abandoned. Not understanding the impact of the recent disasters nor comprehending the customary land tenure of the Kikuyu, Great Britain expropriated thousands of hectares. Eventually, upwards of one half of Kenya's arable land would be denied to Africans.

European settlement soon followed. In 1920, Kenya formally became a British colony. By the 1950s, the best 35 to 40 percent of Kenya's arable land was owned by 2000 European farmers. Meanwhile, tension over land ownership had been increasing. In 1952, the Mau Mau emergency broke out, primarily over the issue of land alienation. British troops and police ended the emergency in 1956. The toll in civilians alone was roughly 13,000 Kikuyu and 39 Europeans killed.

The period of colonial rule was dominated by the role of the white settlers in the Kenyan economy. For much of the colonial period, African farmers were not allowed to grow coffee for commercial sale, were not allowed to enter the dairy business, and were effectively handicapped in growing maize for commercial purposes. The alienation of land and the reduction of the role of Africans in commercial agriculture had impacts which still continue to affect Kenyan attitudes and policies today.

Independence came in December 1963 and while some settlers left the country, many remained, some as Kenyan citizens. The first president, Jomo Kenyatta, worked hard to produce a working multiracial society which has been maintained by his successor Daniel arap Moi, Kenya's current President.

2.2 The Natural Resource Base

Although many visitors to Kenya see only the rich and fertile land around Nairobi, the situation for the whole nation presents a somewhat different picture. Kenya is fortunate in its belt of "high potential" land with good soils and adequate rainfall, which stretches along the highlands flanking the Rift Valley. The area west of Lake Victoria is similarly well endowed. But these areas of high potential make up only about 17 per cent of the total land area. There are other areas of lower potential where crop agriculture is practiced but where drought is a continuing problem. But over 75 per-cent of the land is classified as arid or semi-arid. This dry region extends from the Ethiopian border deep into the southeastern portion of the country. Much of the arid interior receives less than 250 mm. annual rainfall and is inhabited only by nomadic pastoralists. Even the semi arid grassland plains, which receive between 250 and 500 mm. of rainfall per year, have only a relatively low stock-carrying capacity of more than 4 hectares per stock unit.

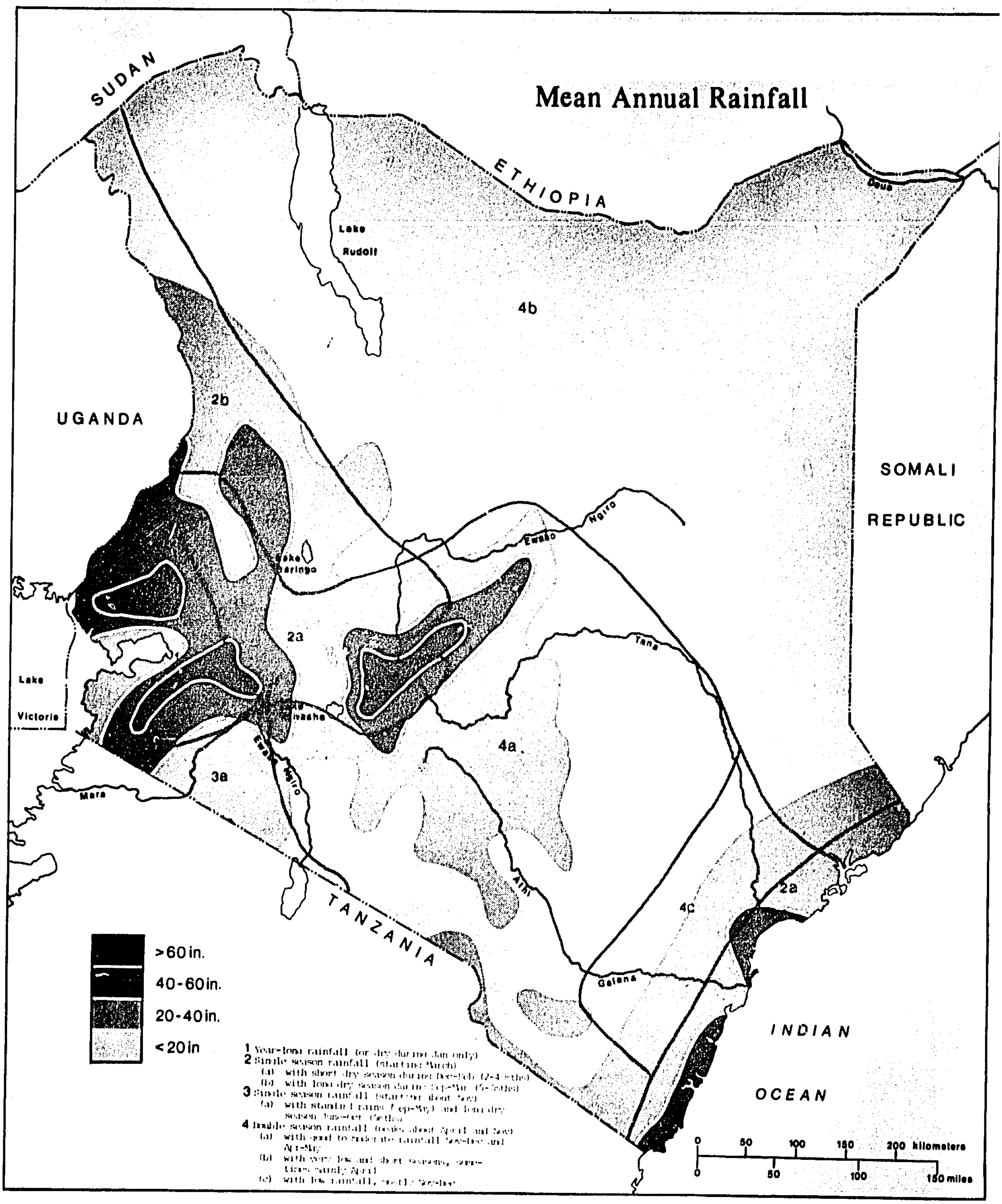
In contrast with the dry expanses of the Norther Zone, the thornscrub Rendille Plains, the grass-covered Kyika plain, the highland Plateau complex, and the Lake Victoria region in the central and western part of the country have cool climatic conditions, adequate and reliab rainfall (a considerable area having over 1000 mm. per year) and some of Africa's most fertile soil. The coastal strip shares high temperatures with the arid northern area but is generally humid and also has adequate rainfall for agricultural production. As a consequence of the great differences in physical environment, about 85 percent of the population and almost all economic activity are concentrated in areas that receive at least 500 mm. annual rainfall.

As a result, cultivable land is scarce. The high potential agricultural land, generally already under intensive cultivation, comprises only 12 percent of the total land surface; medium potential land accounts for an additional 5.5 percent. Only a small portion of the remaining land is suitable for dryland farming or moderately intensive ranching. Inadequate rainfall, surface water, and underground sources restrict upwards of three-quarters of Kenya's land to nomadic land use. The scarcity of agricultural land has important implications, not only for population distribution, but also for the growth of the agricultural sector. The high rate of increase of the agriculture population is quickly decreasing the amount of land available for each farm household. In the last ten years there has been a clearly recognizable movement outwards of people from the higher rainfall areas into more marginal dry areas. Here they seek to continue crop cultivation but under much higher risk conditions. Available statistics suggest that Kenyan farmers have less than half the land available as their counterparts in Uganda. Agricultural resources are not abundant or readily available in Kenya, at least not in terms of the numbers of farmers seeking these resources

The high rainfall areas adjacent to Lake Victoria, in the highlands, and along the coast tend to be intensively cultivated on a small-scale with an emphasis on food crops or farmed as larger commercial ventures exporting cash crops. Food crops are in great variety but the most important and widespread are maize, sorghum, cassava, and bananas. The prinicpal cash crops which provide the majority of Kenya's exports are coffee (arabica), tea, pyrethrum, and sisal. The first three are particularly suited to the highlands and their introduction was associated with the large-scale farming on the alienated former "White Highlands."

Forests are largely restricted to the wetter upper levels of the highlands where the limited output possible from the natural forests led to the introduction of conifer and wattle plantation. That the land best suited for forests and also in need of protection for water supply is also potentially good agricultural land presents a serious and continuing problem for forest management. As the rural population continues to increase, so do pressures to convert woodlands to farms. The catchment protection role of forest lands has been seriously

<u>FIGURE II</u>



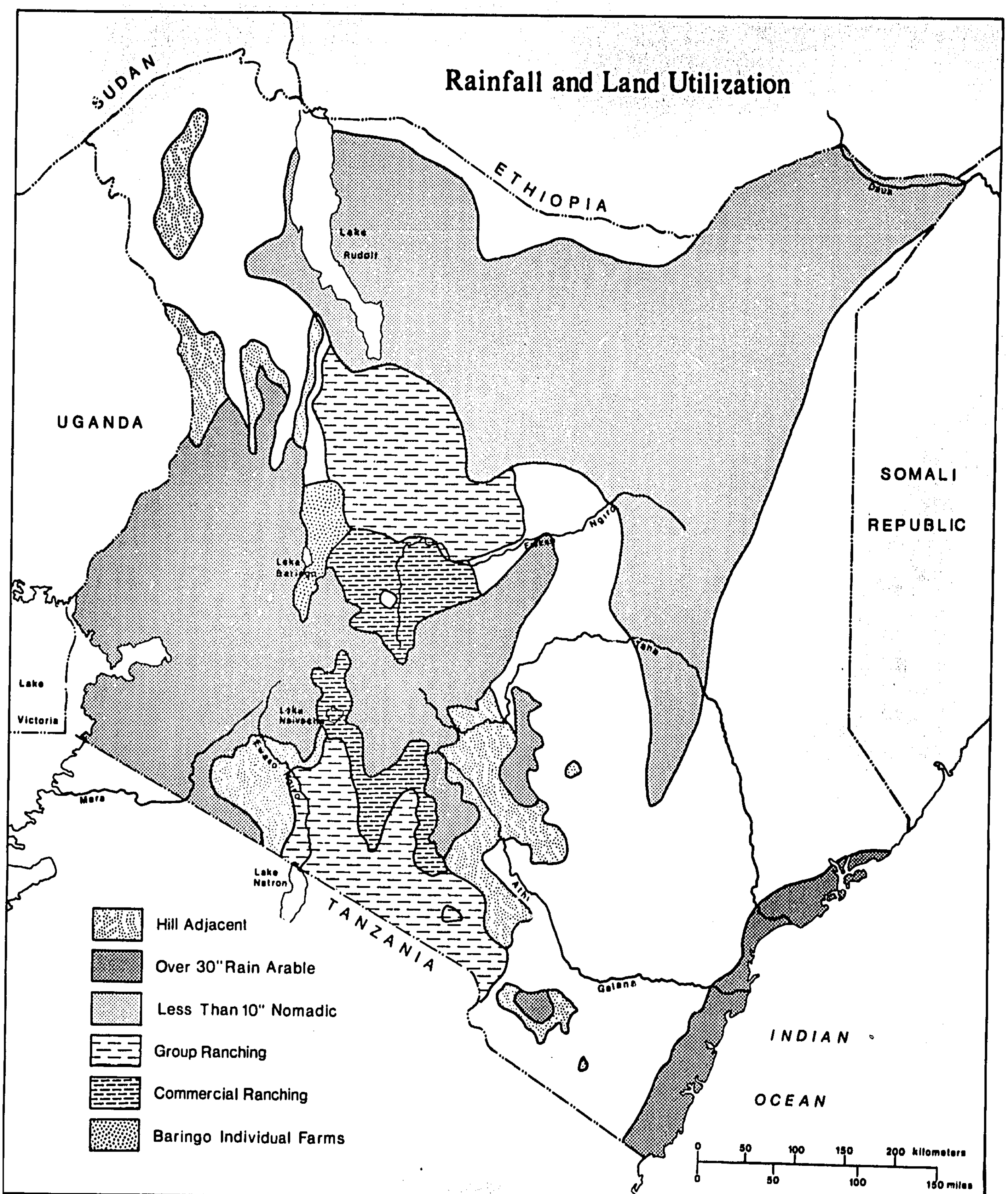
Mean Annual Rainfall
SUDAN
ETHIOPIA
UGANDA
SOMALI REPUBLIC
TANZANIA
INDIAN OCEAN
Lake Rudolf
Lake Baringo
Lake Victoria
Daua
Ewaso Ngiro
Tana
Mara
Athi
Galana
4b
2b
2a
3a
4a
4c
>60 in.
40-60 in.
20-40 in.
<20 in
1 Year-long rainfall (or dry during Jan only)
2 Single season rainfall (starting March)
(a) with short dry season during Dec-Feb (2-4 mths)
0 50 100 150 200 kilometers
0 50 100 150 miles

compromised in recent years. Illegal, spontaneous settlement, with continuous maize cropping, has not only removed the forest cover but led to greatly accelerated run off and soil erosion over large areas. Removal of the natural forest cover has also led to reduced and erratic stream flows in many places. (Development Plan 1974-1979, Part I, p.259, et. seq.).

Kenya has access to considerable surface water. The extent of water surface within the country is about 7,000 km^2. The Kenya share of Lake Victoria adds a massive 63,000 km^2. About 1,000 km of coastline borders the Indian Ocean. Until recently, some of the interior lakes supplied good catches of fish but at present, the fish yields are either static or even declining. Some declines result from selective over fishing, others are caused by ecological problems such as siltation.

Kenya's environment could support larger fishing enterprises. Yet fishing is almost solely carried out by fishermen equipped with small boats and traditional fishing gear. Only a few boats have outboard motors. Some attempts to organize the fishermen into cooperative societies have yielded only marginal results. Fishing in the Indian Ocean has so far been limited to inshore fishing with small dugout canoes. Ocean-going, deep-sea equipment is not in use.

FIGURE III



Rainfall and Land Utilization
SUDAN
ETHIOPIA
UGANDA
SOMALI
REPUBLIC
TANZANIA
INDIAN
OCEAN
Lake
Rudolf
Lake
Baringo
Lake
Naivasha
Lake
Victoria
Lake
Natron
Daua
Ngiro
Ewaso
Tana
Mara
Athi
Galana
Hill Adjacent
Over 30" Rain Arable
Less Than 10" Nomadic
Group Ranching
Commercial Ranching
Baringo Individual Farms
0 50 100 150 200 kilometers
0 50 100 150 miles

Despite its large lake areas, Kenya has very few large rivers which can be used for irrigation and hydropower. The Tana river is the only major river. It drains from Mt. Kenya and the Rift valley highlands and flows through central Kenya to the Indian Ocean, north of Mombasa. The Tana provides good potential for irrigation and for power and a comprehensive plan for the basin is in place. However both power and irrigation potential are seriously jeopardized by the silting problem characteristic of the river. Silt levels in the water appear to have increased considerably in the last decade and greatly shorten the useful life of reservoirs on the river. Hydropower is also currently available to Kenya from the Owen Falls power site, located at the outflow of Lake Victoria in Uganda.

Although numerous minerals have been discovered in Kenya, most deposits are too small to mine on a profitable basis. No coal or oil has been found. Magnetite mining (9,240 tons valued at ₤57,450) began in 1972. Gold mining, which recorded a profit of ₤448,000 in 1968, is no longer significant. The output of fluospar ore (fluorite) in the Kerio valley has shown a considerable increase from 192 tons in 1968 to 10,457 tons in 1972. A new mining development -- for zinc, lead and silver -- is in progress on the coast near Kinangoni. In 1978, only the output of potash, salt, limestone, and fluorite exceeded an annual value of ₤100,000. The largest and economically the most important deposits are found in Lake Magadi, where potash and salt are mined by the Magadi Soda Company Ltd., a subsidiary of Imperial Chemical Industries (I.C.I.). Cement factories in Kenya are situated north of Mombasa where coral limestone yields cement and near Nairobi on the Athi River. More recently, encouraging progress has been made in the search for useable geothermal energy from the rift valley area.

Among the important resources of the Kenyan landscape are the beaches of the Indian Ocean coast and the game parks of various ecological zones including the savanna and the rainforest. Near unique combinations of birds, large mammals, mountains, and shore provide the basis for a flourishing tourist industry. Problems exist in that each of the preferred tourist habitats is also potentially the locale for alternative land use.

2.3 The Cultural Milieu

By any measure, Kenya is a sophisticated society. The urban infrastructure functions effectively. A visitor, arriving in Nairobi or Mombasa, finds the airports well designed and efficiently managed. Customs and immigration procedures move quickly. Foreign currency exchange causes few delays. Bus service to downtown areas is inexpensive and prompt. Kenya is unquestionably a society on the move.

Once in the urban areas, hotels, restaurants, shops, local transport systems, banks, government offices, and recreation facilities are generally well managed and effectively maintained. Conventions, whether large or small, find adequate facilities available. Two United Nations offices, Habitat and the UN Environment Program, maintain their headquarters in Nairobi.

Many regional organizations, in both the public and private sector, also keep offices in Nairobi. Regional manufacturing is also growing with cars and trucks now assembled in Nairobi. Aircraft service facilities are growing in importance. Regional importing and exporting, in spite of the breakdown of the East African Community, are still a significant part of Kenya's economy. Kenya Railways run reasonably well although some passengers complain that service is "not what it used to be." Kenya Airways have filled much of the regional role previously served by East African Airways with regular flights to Mogadishu, Entebbe, Salisbury, Addis Ababa, and Lusaka as well as many European cities.

Some of the efficiency of the urban infrastructure comes from incentives created by the tourist industry. Because tourism is looked upon as an earner of foreign exchange, transport/convention/hotel/restaurant/safari investments are rationalized. Yet Kenya's infrastructure extends far beyond the tourist domain. There is now a deep seated institutional capability in both the private and public sector which demonstrates the success of Kenya's development planning and policy.

The government fosters much of the planning via Kenya's 22 ministries. Finance (locally known as Treasury) and Economic Planning and Development are the most influential in their breadth of financial and development responsibilities. A number of government duties are also housed in the Office of the President including the traditional military, police, and defense agencies as well as the National Youth Service, River and Lake Development Authorities, the National Council for Science and Technology, and the import board for Land Adjudication, Consolidation, and Registration of Groups.

Patterned on its British Colonial predecessor, the Kenya government burearcarcy functions reasonably well. The technical and operational levels of the civil service are generally trained in their basic tasks although there continue to be major needs for specialized and in-service training, particularly in technical areas. Civil servants are aware of the nation's major development issues, especially as they relate to water supply, food production, health, energy, deforestation, population growth, land, and employment. Yet knowing about the problems and having resources and skills to deal with them are two separate though related sets of needs.

Politics in Kenya is a well developed art. Elections are hotly contested, sometimes falling along traditional ethnic lines. The largest ethnic group, the Kikuyu, are prominent in many aspects of the government. The university and related educational institutions find many Luo who come from western Kenya, near Lake Victoria.

Asians and Africans are active in the commercial sector, especially small and medium scale industries such as trade, hotels, shops, transport, and light industry. There continues to be a sizeable European presence, especially in Nairobi, where they work in the larger European corporations, banking, and selected aspects of the tourist industry as well as for the United Nations and other donor agencies.

Though Kenya's basic infrastructure is well developed, there continue to be major areas of urban and rural poverty, landlessness, health and nutrition problems, and unequal distribution of wealth. In sum total, Kenya is a nation that has made enormous strides since independence but recognizes that there continue to be major development issues to be addressed.

A critical need in addressing these problems is finding the necessary funds. For example, at present, Kenya is spending roughly half of its import budget on petroleum along. Foreign currency earnings through agriculture do not offer massive new potentials for increasing earnings of hard currency. Kenya's challenge is to manage an ambitious and rapidly expanding economy in the face of lean expectations of hard currency.

2.4 Economic Characteristics

While Kenya shares many of the characteristics of other low income countries, it has managed to produce a strong economic record in the years since independence. In spite of having one of the world's highest rates of population growth, it still managed to increase per capita income at an average rate of 2.5 percent per year, almost twice the rate of the average of other low income countries.

Agriculture still dominates the economy, both in providing employment and as a source of foreign exchange. The labor force was estimated to be 6.0 million people in 1978. Of these, the largest portion (2.8 million) were small scale farmers and 0.4 million were pastoralists. Rural nonformal employment accounted for another 1.1 million with 0.1 million in the urban informal sector. Only 1.0 million were employed in the modern sector, including large scale farming. The remainder, about 9 percent of the labor force, were classified as unemployed although there is undoubtedly a great deal of underemployment among the other categories.

In terms of monetary GDP, the role of agriculture is somewhat less although still the most important sector. Table 2.1 indicates the changes that have taken place since independence. A major part of these variations result from shifts in the world prices of various commodities, particularly coffee and tea. Between 1975 and 1977 the price of coffee rose by a factor of four, only to fall by one third in 1978. Such erratic price movement distorts the value data on agriculture. In terms of volume of production, the flow has been much steadier.

The price variations in coffee, tea, and other products have a strong impact on export earnings as well. Coffee has long been the major export although tea is now gaining in importance. When coffee prices fall, the effects are felt throughout the economy, both through a drop in income and restrictions on the ability to import. Tourism also provides foreign exchange earnings although recent increases in air fares yield pessimism about continued growth. Moreover critics have questioned the amount of net impact on the balance of payments of tourism after subtracting the required imports to service the tourists.

TABLE 2.1

MONETARY GDP BY INDUSTRIAL ORIGIN
(percentages)

	1964	1975	1977
Agriculture	23.3	17.3	29.5
Manufacturing	14.8	18.1	16.0
Building	4.9	7.1	4.0
Trade, transport etc.	23.8	19.3	21.4
Finance and other private services	15.7	16.1	13.2
Government	17.5	22.1	15.9

Note: Agriculture included forestry and fishing
Manufacturing includes mining and quarrying
Trade and transport includes restaurants, hotels, storage communications, electricity, water.

An additional factor that has hurt Kenya's trade earnings has been the breakup of the East African Community, a customs union of Kenya, Uganda and Tanzania. Kenya benefited greatly form the arrangement, providing a range of manufactured and processed goods as well as services. With the Tanzania border now closed and unrest in Uganda, this regional trade has been greatly reduced.

As a general policy, Kenya has relied more on private ownership and market mechanisms than its neighbors. Foreign capital has been encouraged and large scale nationalization avoided. The major changes in economic structure brought about by independence have been some reforms in the land holding system to encourage more small scale farming and a general policy of gradual replacement of non-Kenyan employees with local personnel at all levels and in all types of enterprise. Overall, and certainly in the context of low income countries, the performance of the economy has been good. Whether the benefits have been widely shared and whether the path of expansion will continue on a high trajectory are issues to be dealt with in subsequent sections.

3. KEY DEVELOPMENT ISSUES IN KENYA

3.1 Introduction

Kenya's critical development issues are rooted in two sets of circumstances: a pattern of land, life and economy greatly influenced by 80 years of colonial rule; and a limited endowment of natural resources. Part of the Kenyan economy consists of export oriented estate and small farm production, part is a relatively modern industrial sector, and a large part is in more traditional agriculture with generally much lower levels of living.

This majority, living in rural areas, confronts severe resource constraints, aggravated by a high population growth rate. As a result, many have migrated to overcrowded urban 'squatter' settlements. This underlying dualism creates critical development dilemmas in the productive sectors: agriculture, irrigation, semi-arid land development, industry, tourism, energy, and transport.

Agriculture in the '80's is expected to continue contributing the largest share of the nation's Gross Domestic Product. Commercial agriculture combined with small scale (semi-monetary) agriculture provides roughly one-third of GDP. Agriculture remains the largest single employer of wage and non-wage labor, although mechanization has begun to reduce the wage labor force (See Table 3.1).

Figure IV

GDP BY INDUSTRIAL ORIGIN, 1976,1978,AND 1983

(At Constant 1976 prices)

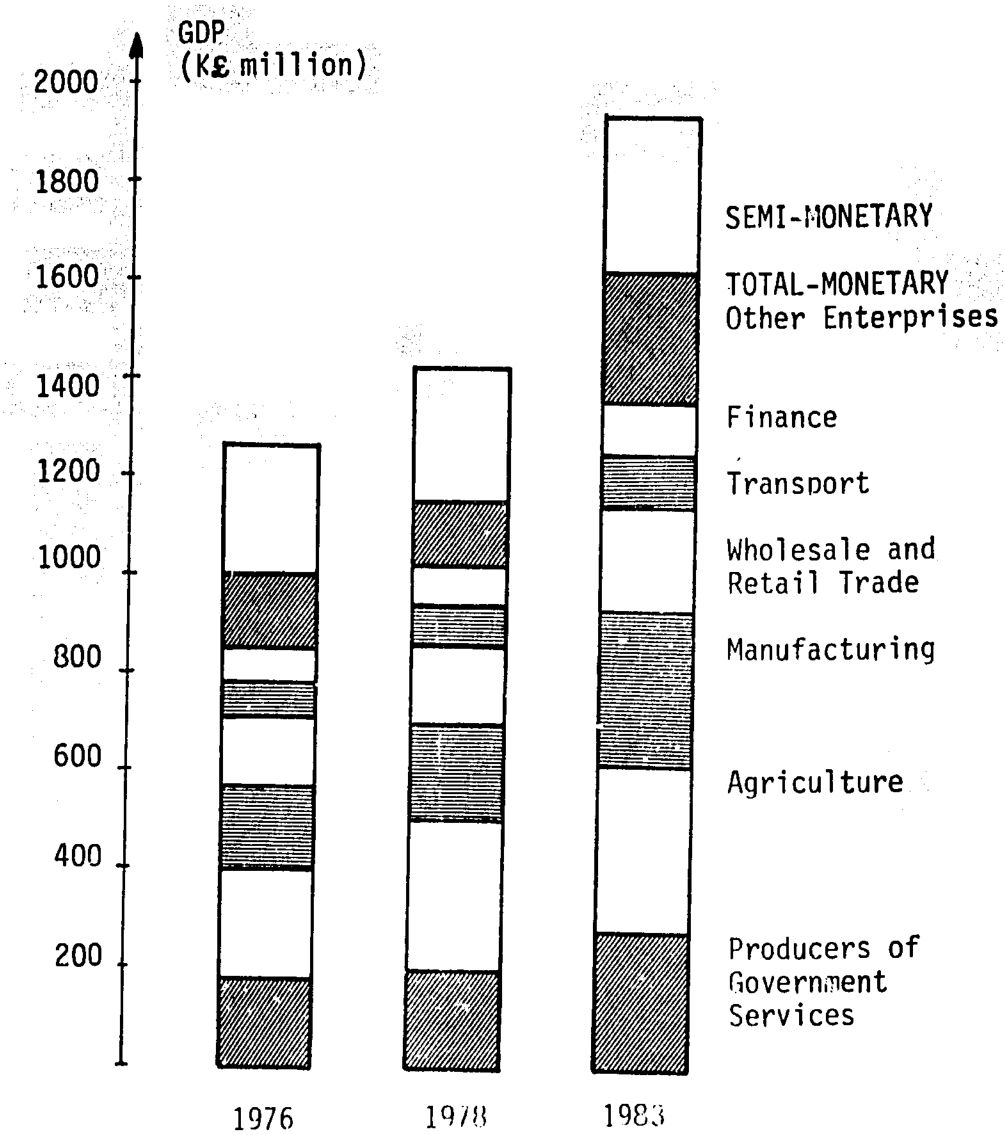


TABLE 3.1

Wage Employment in the Private Sector by Industry, 1975-1978
(000's)

	1975	1976	1977	1978*	Percentage change 1977-78*
Agri. & Forestry	195.8	197.7	206.4	189.0	--8.4
Mining & Quarrying	2.7	3.1	2.4	1.9	20.8
Manufacturing	82.1	88.1	94.7	105.3	11.2
Construction	24.6	30.1	29.6	28.6	--3.4
Trade, Restaurants & Hotels	51.7	57.9	60.3	59.6	--1.2
Transport & Communications	16.5	18.0	19.6	20.6	5.1
Finance, Insurance, Real Estate and Business Services	20.2	20.9	24.2	25.9	7.0
Community, Social & Personal Serivces	82.9	85.4	89.3	90.6	1.5
Total	476.6	501.1	526.5	521.6	--0.9

* Provisional

Source: Kenya Economic Survey, 1978 - Table 5.3, p. 55.

Manufacturing, the second largest sector, is expected to grow more rapidly than the modern agriculture sector. But to date, it has not provided as much wage employment. Energy output, drawing increasingly on renewable domestic sources, must increase to foster these anticipated growth rates. Transportation and wholesale retail trade, also must expand to spread productive employment in the less developed, rural areas.

Kenya, as acknowledged in recent government sessional papers, is at a turning point in its development history. A period of steady growth in export-oriented agriculture, helped by price increases in coffee appears to be over and much more concern is being expressed over improvement of productivity in other parts of the economy and in the less well endowed parts of the country. A population growth rate of about four percent, a shortage of extra good quality land and the prospect of some slow growth in industry and services, all point to difficult times ahead for Kenya. The development issues listed reflect this.

Looking at the list in the context of similar profiles for other Eastern African countries it is clear that several of the issues have close counterparts elsewhere, the environmental concerns, balance of payments, decentralization, arid lands, and employment for example. Others including industry, tourism, energy and high population growth are more sigificant for Kenya than for some other countries.

3.2 Agriculture: Its Growth and Constraints

Issue: The majority of Kenyans live in rural areas and depend on some type of agricultural activity for a living. Unfortunately, approximately 46 million of Kenya's 57 million hectares (80%) are unsuitable for agriculture or intensive animal husbandry use, although much of the 80 percent could be commercially utilized as range lands. Of the 20 percent arable land, much is already under cultivation. The over-riding development issues in agriculture relate to providing adequate arable land, farm inputs, credit, and marketing facilities to increase the productivity, particularly of marketed food crops, of Kenya's small holder farm population.

The official definition of arable land classifies the quality of agricultural potential in terms of rainfall. Only 19 percent of the arable land thus classified falls into the high and medium potential categroies (generally above 612.5 mm. annual rainfall). The remaining low potential land (below 612.5 mm) is only marginally suitable for crop production and amounts to 81 percent of the arable land, distributed unevenly throughout the nation, as noted in Table 3.2.

Most of the large and technologically advanced as well as the medium sized small holder units, located in the high and medium potential areas, produce primarily for export. Large farms, officially defined as exceeding 20 hectares, cover at least a third of the arable land area.

Extensive infrastructure, marketing facilities, credit, and extension agencies, created over the years, support the large farms. They employ most of the re-

TABLE 3.2

Categories of Land by Province
(percentages)

	As proportion of agricultural land		As proportion of all land
Province	High & Medium Potential	Low Potential	High & Medium Potential
Central	96	4	70
Coast	17	83	14
Eastern	19	81	17
Nairobi	30	70	24
North Eastern	-	100	-
Nyanza	100	-	100
Rift Valley	20	80	19
Western	100	-	90
Kenya	19	81	17

Source: Kenya Statistical Abstract, 1977 - Table 81

corded agricultural wage labor. Since independence, market crops, especially export crops, have expanded steadily. Small holders reportedly produced a little over half (See Table 3.3). Preliminary analysis, however, indicates that data collection for only large and small farm units overlooks the possibility that medium sized u units probably produce the major share of small holder ou output. Further study in this area would be highly revealing.

About two-thirds of these small farms are in the former reserve areas. A government program of consolidation and registration of individual titles has

TABLE 3.3

Gross Marketed Production** From Large and Small Farms, 1975-1979

	LARGE FARMS		SMALL FARMS		TOTAL		PERCENTAGE SHARE OF SMALL FARMS
	KĿ million	Annual Percent change	KĿ million	Annual Percent change	KĿ million	Annual Percent change	Percent
1975	71.8	-2.2	90.1	20.1	162.0	9.2	55.6
1976	122.1	70.1	128.0	42.1	250.0	54.3	51.2
1977	206.0	68.7	208.5	62.9	414.6	65.8	50.3
1978	147.2	-28.5	168.2	-10.7	333.4	-19.6	55.8
1979*	143.3	-2.6	177.0	-4.9	320.2	-4.0	55.3

* Provisional.

** Shares of sales through official marketing channels only.

Source: Economic Survey, 1980.

created private land tenure in roughly a fifth of these areas. Increased population growth fosters fragmentation of the resulting units. A large number of the rural dwellers, over 400,000 have become landless.

World market price fluctuations significantly affect the value of Kenya's farm produce. Agriculture's contribution to GNP rose substantially in 1977, but declined by 4.2 percent in 1978 when tea and coffee prices fell.

The volume of marketed coffee fell from the peak level of 97,000 tons in 1977 to 84,000 tons in 1978, but its value fell much more, from KĿ 193 million to

K£ 115 million. The marketed production of tea rose from 86,000 tons in 1977 to 93,000 tons in 1978, but tea receipts, too, fell from K£ 93 million in 1977 to K£ 71 million in 1978.

Food crop production and sales have not kept pace with the output of export and industrial crops which, at least when world prices are favorable, tend to be more profitable.

Several factors hinder the expansion of agricultural production, particularly among small farmers. These include: lack of arable lands, irrigation facilities, extension services, and marketing. As landless people move into lower potential land in remote areas, new challenges appear:

... how to accommodate increased use of lower quality land while avoiding environmental damage through erosion and depletion of the soil;

... how to reclaim land now lying unused in swamps and valley bottoms;

... how best to develop the nation's limited water resources in light of the competing demands for human consumption, animal consumption, and irrigation.

Small farmers have found it more difficult than large ones to obtain credit. Even after the withdrawal of the Guaranteed Minimum Return Credit facilities, which favored larger farmers, in 1979, small farmers received little more than half as much credit as larger ones (See Table 3.4).

Furthermore, over three fourths of the large-scale farmers' credit was long term, enabling them to invest in machinery and equipment; short term credit accounted for 89 percent of new credit to small farmers and 5 percent to cooperatives. Women farmers find it even more difficult to obtain credit.

TABLE 3.4

New Agricultural Credit Issued by Type of Farmers, 1974/5 and 1977/8; in K£ Millions and as Percent of all Credit

	1974/5		1977/8		1978/9	
	K£m.	%	K£m.	%	K£m.	%
Small scale farmers	2,531	14.5	3,119	11.4	2,675	14.1
Large scale farmers	3,918	22.4	13,690	49.8	4,567	24.1
Cooperative Societies	9,651	55.2	10,583	38.5	10,602	56.0
Other farmers	1,377	7.9	75	-	1,084	5.7
Total	17,477	100.0	27,467	100.0	18,928	100.0

Source: Economic Survey, 1979, 1980; Table 8.9

A 1978 Ministry of Agriculture survey revealed acute shortages of skilled personnel at all levels in agriculture. The fact that most extension workers are male, moreover, tends to limit their effectiveness in helping female farmers.

The government has embarked on plans to improve the quality and the volume of training facilities. It aims to construct a new agricultural institute, capable of taking 600 students at the coast, and expand existing agricultural institutes including Egerton College and the two faculties at the University of Nairobi. These latter intend to offer degree courses in agricultural education and range management

3.3 Arid and Semi-Arid Lands: The New Development Focus in Kenya

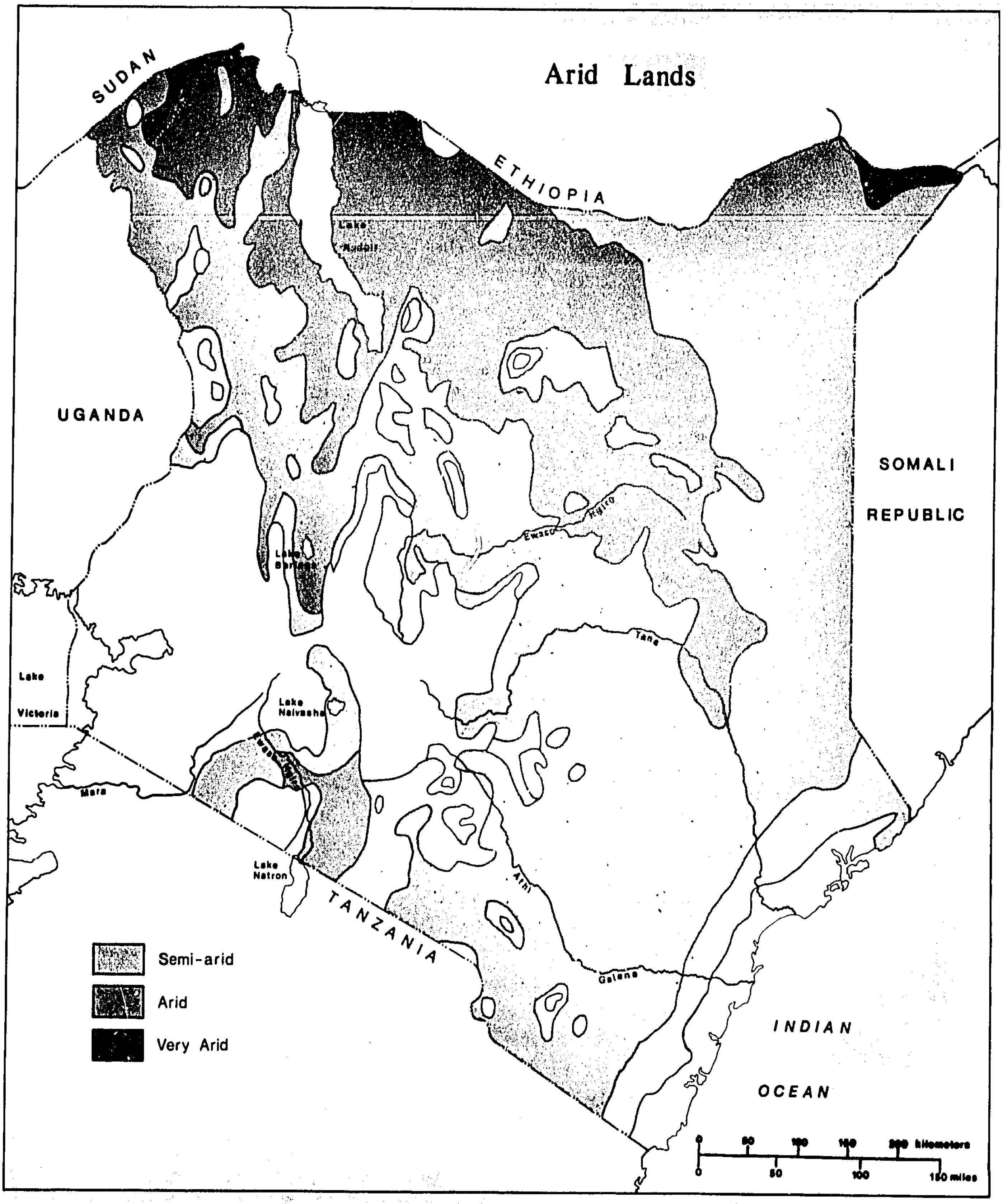
Issue: Arid and Semi-arid lands (ASAL) make up 80 percent of Kenya's territory but until recently have received relatively little development investment. Now, as opportunities are declining for continued agricultural growth in the high potential areas, the government interest in ASAL is increasing. However, development programs there confront many problems.

Outside a comparatively small zone west of the Rift Valley and the area northwest of Nairobi, Kenya is a semi-arid country. Over 60 percent of the country is favored with some rain, but in most years not enough to promote reliable crop growth. Crop agriculture is generally practiced in the areas marked 'semi-arid' on Figure V . The very arid areas support crops only in a few localities in some years. In the areas between, a few crops can be grown in some places at considerable risk.

In the past, most agricultural development occurred in the high potential areas. He e, farmers steadily expanded coffee, tea, vegetables, wheat, maize and other commercial crops. Now, land shortages hinder possibilities for further expansion in these areas and more farmers are migrating to the (often adjacent) drier areas. Population in some dry areas has grown at 7-9 percent a year.

As these pressures have mounted, government has turned its attention to solving the following problems characteristic of the ASAL:

FIGURE V


Arid Lands
SUDAN
ETHIOPIA
UGANDA
SOMALI
REPUBLIC
Lake Rudolf
Lake Baringo
Ewaso Ngiro
Tana
Lake Victoria
Lake Naivasha
Mara
Lake Natron
TANZANIA
Athi
Galana
INDIAN
OCEAN
Semi-arid
Arid
Very Arid
0 50 100 150 200 kilometers
0 50 100 150 miles

... a large part of the ASAL is near the equator. The 30 inches of rain comes in two rainy seasons split by dry periods. This all too frequently renders the total precipitation in each season marginal for crop production.

... many ASAL soils are of but moderate fertility. Not much research has been directly applied to appropriate farming patterns, especially the combination of animals and crops which might be most effective in this ecosystem.

... the ASAL generally suffer from rapid population growth and inadequate communication and marketing. Energy costs are particularly high and traditional forms of energy hard to obtain.

The arid and semi-arid lands of Kenya do, however, present some opportunities for improved grazing resources and expanding agriculture through irrigation and better inputs. Provision of better marketing and distribution could help. But most observers agree that these areas especially will need integrated approaches to change.

Past ASAL efforts centered on irrigation to open new land to agriculture, but the cost has been high and the numbers of farmers assisted relatively small. After independence, the Kenyan government introduced two types of irrigation schemes for smaller farmers: large schemes planned, developed, and managed by the National Irrigation Board; and small scale schemes managed by the Land and Farm Management Division of the Ministry of Agriculture. Table 3.5 indicates the performance and benefits to small farm families of large irrigation schemes. Mwea, the largest, covers over half the total large scheme area, and produces paddy rice. In 1978/9, a litt'e over 3000 plot holders cultivated an average of 1.83 hectares, a slight decline in size from the 1974/75. They earned an average of about KĿ 527, an increase from 1974/5 which barely covered rising living costs. Yields have also performed irregularly, with pests and plant diseases being particular problems.

TABLE 3.5

Progress and Production at Mwea and Totals for Six Large Irrigation Schemes

		1974/5	1978/9
Mwea Irrigation Schemes			
Area Cropped - hectares		5,379	5,767
Plot holders - number		2,917	3,149
Average hectares/holding		1.84	1.83
Gross value of output - KĿ '000		1,349	1,926
Payments to plotholders - KĿ '000		1,180	1,659
Average payment/holding - KĿ		405	527
All (six) scheme areas			
Area cropped - hectares		8,471	9,296
Plotholders - number		4,405	5,283
Hectares/holding		1.92	1.75
Gross value of output - KĿ '000		1,874	2,779
Payments to plotholders - KĿ '000		1,180	1,659
Average payment/holding		268	314
Crops produced - tonnes			
Mwea	- Paddy	28,423	29,046
Ahero	- Paddy	2,467	3,539
West Kano	- Paddy	--	2,146
Bunyala	- Paddy	674	681
Tana River	- Cotton	2,288	1,382
Parkerra	- Onions	1,267	577
	- Chillies	188	165

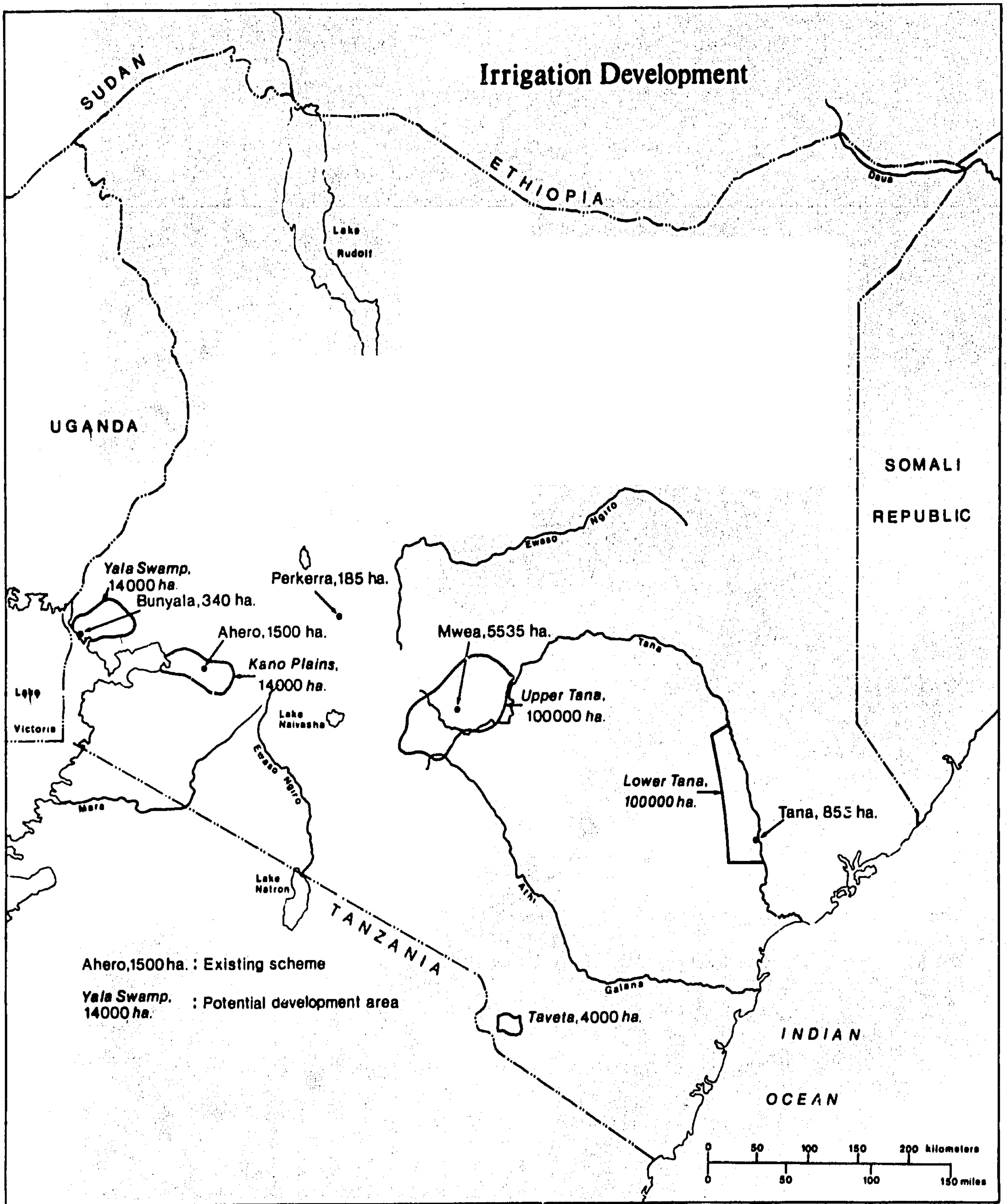
Source: Calculated from Economic Survey, 1980.

In the present plan period, small scale irrigation schemes are receiving major emphasis. Two small scale schemes were completed in 1978 at Kirbirigwi and Tshiara, covering 100 and 32 hectares respectively. Together, they are expected to accommodate 300 families. A feasibility study of a scheme in Muka Mukuu, designed to raise rural incomes in Machakos, is nearing completion.

Feasibility studies have been initiated to expand the first phase of the Bura scheme to nearly 900 hectares Expected to become the largest in the country, the Bura scheme covers nearly 20,000 hectares out of 40,000 hectares in the lower Tana River region. Plans are also under consideration to drain the Vale Swamp, building the multipurpose Masinga Dam project to irrigate some 40,000 more hectares in the Upper Tana River area. Projects in Eastern and Central Provinces, primarily for horticultural crops, cotton, and tobacco, will add 45,000 irrigated hectares by 1983. In western Kenya, long term programs may make available up to 800,000 hectares of land now characterized by impeded drainage and seasonal floods. Completion of these projects should augment available arable land by ten to twenty percent.

In the current development plan, the Kenyan government has adopted a multi-pronged approach to increasing investment and productivity in the ASAL. The Ministry of Agriculture is stepping up research on appropriate crops. The govern-

FIGURE VI


Irrigation Development
SUDAN
ETHIOPIA
Daua
Lake
Rudolf
UGANDA
SOMALI
REPUBLIC
Ewaso Ngiro
Yala Swamp,
14000 ha.
Bunyala, 340 ha.
Perkerra, 185 ha.
Ahero, 1500 ha.
Kano Plains,
14000 ha.
Mwea, 5535 ha.
Tana
Upper Tana,
100000 ha.
Lake
Victoria
Lake
Naivasha
Ewaso Ngiro
Mara
Lower Tana,
100000 ha.
Tana, 853 ha.
Lake
Natron
Athi
TANZANIA
Ahero, 1500 ha. : Existing scheme
Yala Swamp,
14000 ha.
: Potential development area
Galana
Taveta, 4000 ha.
INDIAN
OCEAN
0 50 100 150 200 kilometers
0 50 100 150 miles

ment seeks to involve local people in the decision-making processes by encouraging them to participate more actively in the ASAL District Development Committees. Foreign donors are urged to help overcome ASAL problems by providing assistance at the district level. The U.S. has assisted with a general background study of semi-arid lands which has identified important possibilities. The EEC supports a project utilizing an integrated 'input package' approach to agriculture in Machakos. The World Bank at Baringo and USAID at Kitui are considering other district level initiatives. To succeed in this district level program, donors will need a long range varied approach. Most gains in the ASAL will not come easily or quickly.

3.4 Industry

Issue: A relatively high income/settler market and a relatively developed urban infrastructure attracted substantial amounts of foreign investment to the manufacturing sector. Kenya'a early pivotal role in the East African Community strengthened these investments. Industry in Kenya tends to be located in a few areas thereby spreading the benefits of industry unevenly.

Earlier progress in industry has encouraged Kenya to set a target of 15.8 percent of GDP for industry by 1983 (compared to 13.3 percent in 1976). At present, industrial activity is chiefly in processing, assembly work, and import reduction. Table 3.6 shows recent and projected changes.

The relative importance of the food and beverage industries is increasing, reflecting increased domestic processing of food and beverages for the relatively high, urban income market, and for export. Chemicals, plastics, and nonmetalic mineral production is expanding, based largely on the assembly and processing of imported parts and materials for the tariff protected markets. The relative importance of processing local raw materials such as textiles and wood and paper products is declining. These trends are expected to persist during the current development plan.

Kenya's manufacturing sector has contributed little to a balanced, integrated national economy. First, the

TABLE 3.6

Manufacturing Sector Structure of Production

Industry	Percentage share in Total 1968	1978	1983
Manufacture of food, beverages and tobacco	29.6	34.5	37.1
Manufacture of textiles, wearing apparel and leather industries ..	12.4	10.4	10.2
Manufacture of wood and wood products, including furniture ..	6.1	5.7	5.0
Manufacture of paper and paper products printing and publishing	7.6	4.6	4.6
Manufacture of chemicals and chemical products, petroleum, coal, rubber and plastic products	15.4	18.0	17.6
Manufacture of non-metallic mineral products, except products of petroleum and coal ..	5.9	7.0	6.2
Manufacture of basic metal industries, fabricated metal products, machinery and equipment	22.7	18.8	18.4
Other manufacturing industries ..	0.2	1.0	0.9
	100.0	100.0	100.0

Source: Kenya Development Plan, 1979-83, Pt. 1, Table 7.1

sector has tended to become increasingly capital intensive, providing relatively few jobs per unit of investment. Actual wage employment has lagged behind need. For example, in 1978-79, while 260,000 sought jobs, only 60,000 new wage employment positions were created (Economic Survey, 1980,p54)

Second, manufacturing has become increasingly dependent on imported parts and materials. Local value added dropped from 22 percent to 19 percent of output from 1976 to 1978/9.

Third, Kenya's new manufacturing industries have, for the most part, been located in Nairobi and Mombasa, further aggravating the gap between these modern urban centers and the neglected rural hinterlands.

The collapse of the East African Common Market in 1977 impacted the Kenyan industrial scene both negatively and positively. Overall,exports to neighboring countries dropped significantly. However, sales to countries other than Uganda and Tanzania gradually expanded, so that by the end of 1979, Kenya's total African exports in money terms remained only 10 percent below the pre-breakup peak. The break-up also aided local production. For example, production of tires, previously imported from Tanzania, increased by 50 percent from 1976 to 1978.

In the current plan, the Kenyan government seeks to shift manufacturing away from import substitution and toward export oriented industries, particularly those using domestic raw materials. It also hopes to correct present imbalances through stimulating relatively small, labor intensive industrial growth in rural areas. Kenya Industrial Estates, a state corporation, provides loan capital for machinery and equipment to small entrepreneurs to set up small industries. In 1978/9, it invested about K£ 8.5 million in 400 small and medium scale projects. Its 1979 investments averaged about K£ 1700 per job.

Three other parastatal organizations continue to finance medium and large scale industries. The Industrial and Commercial Development Corporation participated with private firms to invest K£ 15 million in three major projects in 1979 and the Industrial Development Bank and the Development Finance Company, together, invested K£ 11 million more in 49 medium-sized projects.

3.5 Energy

Issue: Kenya's modern commercial sectors depend for over 80 percent of their energy requirements on imported petroleum. Small rural industries, small farmers, pastoralists, and the landless poor rely on traditional fuels, mostly wood and charcoal. Rapid population growth and increased migration of the poor to urban areas in placing heavy pressure on woodlands and threatens to deforest semi-arid lands. Hydroelectric power is available in only limited supply.

Kenya's energy consumption had, by 1979, risen almost 40 percent above 1972 levels. Petroleum use (See Table 3.7), mostly because of rapid price increases, grew at a slower rate than other energy sources. The cost of crude petroleum imports rose from K£ 116 million in 1978 to K£ 145 million in 1979, although the quantity of oil imports rose only five percent. The net cost of oil imports, after sales to neighboring countries and to ships and aircraft, rose from K£ 10 million in 1973 to K£ 47 million in 1978, and K£ 69 million in 1979, placing a heavy burden on the balance of payments.

In recent years, rising prices and unreliable supplies of oil have adversely affected the modern sector. Shortages of aviation fuel early in 1979 effectively grounded hundreds of light aircraft, adversely affecting the tourist industry. The government has introduced measures to control and rationalize petroleum consumption Although no indigenous fossil fuel resources have been discovered in Kenya, exploration for oil and natural gas is being intensified.

TABLE 3.7

Production, Trade and Consumption of Energy Expressed in Terms of Primary Sources, 1974 and 1979 in Tons of Oil Equivalent and as Percent of Total

	1974		1979	
	'000 tons oil equivalent	% of Total	'000 tons oil equivalent	% of Total
Coal and coke imports	46.6	2.9	11.3	0.5
Oil				
Imports of crude oil	2,902		2,471.5	
Net exports of pertoleum fuels	1,458.8		713.4	
Stock changes and balancing item	91.4		80.6	
Total consumption of liquid fuel	1,352.1	84.5	1,677.5	79.7
Hydro energy				
Local poroduction of hydropower	131.3		314.0	
Imports of hydropower	71.0		38.4	
Total consumption of Hydro energy	202.3	12.6	352.4	17.3
Total local energy produced	131.3		314.0	
Total Imports	1,561.7	97.5	1,807.8	88.5
Use of stock and balancing item	91.4		80.6	
Total Energy consumption	1,601.6	100.0	2,041.2	100.0
Local energy production as percent of Total	8.2		15.4	
Per capita consumption in terms of kilogram oil equivalent	123		133	

Source: Economic Surveys, 1979/80, Table 10.7

Hydro power accounted for 17.3 percent of total 1979 consumption, a substantial increase over the 12.6 percent of 1974. However, close to one-third of the nation's total hydro-electric potential of 700 MW has already been developed thereby limiting the long run growth potential for HEP. Even so, as Kenya's output rose, purchases of hydro power from Uganda dropped from over a third to barely a sixth of Kenya's hydro power consumption. This represents less than three percent of Kenya's total energy consumption.

The proportion of energy generated from domestic resources is expected to rise substantially in future years as both hydro and geothermal energy sources are tapped. Further development involving an investment of K£ 65 million will produce 510 MW in 1983. Geothermal potential is estimated to be about 500 MW. The first geothermal station, producing 15 MW, is to start production in 1981.

Table 3.7 excludes non-commercial sources of energy, i.e. fuelwood, and charcoal which serve 90 percent of the total population. Wood and charcoal are the main sources of energy in the rural areas and their consumption increases at about 2.5 percent annually, leading to potentially disastrous deforestation. Arresting this trend will require a combination of reforestation, introduction of renewable energy sources, and improved management of the available wood supplies.

The Rural Electrification Program is planned to expand, adding 48 projects throughout the country at a cost of KL 4.3 million. Implementation of experimental projects for solar, wind, and biogas energy aims to develop non-conventional power sources.

3.6 Transportation

Issue: Although transportation networks (road, air, rail, and ports) and marketing facilities are well developed in the modern, commercial agriculture, urban, and industrial areas, they have been seriously neglected in more remote rural areas where more than half of Kenya's population lives.

Kenya's primary road network is well developed and serves most urban centers quite adequately (Figure VII). Two lane, paved highways link most major centers. The trucking industry, largely operated by private operators, serves primarily the profitable trade in industry and commercial agriculture.

Government expenditures on the construction and maintenance of roads have consistently increased, reflecting higher costs as well as efforts to spread economic development. During the current plan period, the government aims to expand rural roads substantially to provide bus access to within two km. of about half the rural small-holder population. (Table 3.8).

To prevent deterioration of the existing road system, government plans to create incentives for the movement of heavy and bulky long haul shipments, especially agricultural goods and petroleum, by rail. The railroad has always been government operated, but its stock has been declining in recent years, especially since the breakup of the East African Community. (See Table 3.9). Kenya Railways is presently acquiring new rolling stock from the United States, Britain, and Sweden.

FIGURE VII

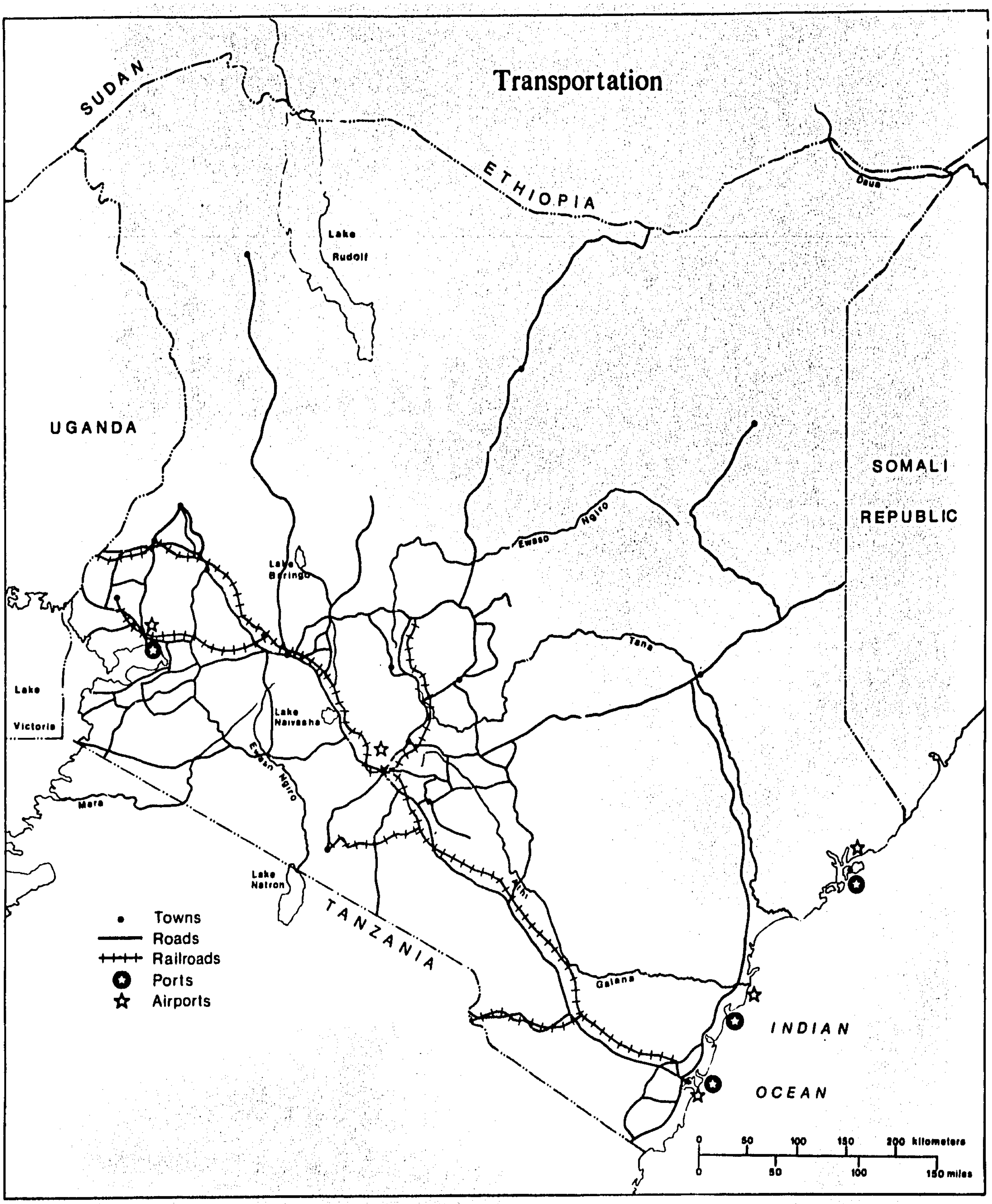

Transportation
SUDAN
ETHIOPIA
UGANDA
SOMALI
REPUBLIC
TANZANIA
INDIAN
OCEAN
Lake
Rudolf
Lake
Baringo
Lake
Naivasha
Lake
Natron
Lake
Victoria
Ewaso Ngiro
Tana
Galana
Mara
Daua
Towns
Roads
Railroads
Ports
Airports
0 50 100 150 200 kilometers
0 50 100 150 miles

TABLE 3.8

Total Expenditure on Roads
1976-1980

KЬ'000

	1976/77	1978/79	1979/80*
Development			
Trunk Roads	8,410.0	11,490.0	11,300.0
Primary Roads	4,530.0	4,950.0	7,339.9
Secondary	900.0	1,610.0	3,525.1
Unclassified Roads.. ..	1,240.0	1,320.0	65.0
Miscellaneous Roads. ..	4,169.0	10,789.0	9,207.6
Implementation of road maintenance organization	340.0	600.0	100.0
Total.	19,679.0	30,759.0	31,537.6
Recurrent (maintenance and repair)	9,020.9	10,564.3	13,430.8
Total.	28,699.9	41,323.3	44,968.4

* Provisional

Source: Kenya Economic Survey, 1979, 1980, Table 12.9.

Kenya Airways, after two years of operation, now covers virtually all destinations previously served by the defunct East African Airways except for routes to Uganda and Tanzania. It handles somewhat less than half its freight and two-thirds of its passenger capacity. It handles about a fourth of the international passengers originating or terminating in Kenya.

Mombasa, Kenya's major seaport, is being expanded to accommodate increased international freight trade, not only for Kenya, but also for Uganda, Rwanda, eastern Zaire

TABLE 3.9

Kenya Railways Corporation: Stocks of Transport Equipment 1969-1977*

	1969	1970	1971	1972	1973	1974	1975	1976	1977
Railways									
Locomotives	455	447	465	499	433	428	422	418	221
Coaching stock vehicles	895	871	854	836	824	824	819	816	515
Goods stock units** ..	18,625	18,164	17,722	17,514	18,006	17,962	18,098	18,032	11,179
Road vehicles	170	158	160	162	167	180	—	56Ɨ	59
Lake Transport									
Lighters	29	27	27	27	25	26	24	6Ɨ	9
Other craft	25	24	24	24	25	25	24	6Ɨ	18

Source: Kenya Railways Corporation

* End of Year

** Each bogie counted as equivalent to two units

*** Provisional

Ɨ For Kenya Region only

NOTE: Figures for years before 1977 refer to stocks of transport equipment in East Africa.

and southern Sudan. Most of Kenya's exports and imports are carried by foreign carriers. The East African National Shipping Line, handling barely one percent of the total cargo entering and leaving Kenyan ports, faced financial difficulties and ceased operations in 1980. The Kenyan government planned to establish a National Shipping Line. It proposed, too, to develop a second major port at Manda Bay, expanding infrastructure in the coastal area to service it.

A major problem facing Kenya's transportation system is the greatly increased cost of fuel. Efforts are being made, and need to be intensified, to explore alternative methods of transportation for some products. Can railways be used more effectively? Can the pipeline network be expanded economically? How can the cost of communication be held down. These difficult questions and any answers will have important impacts on almost all parts of the Kenyan economy.

3.7 Toursim

Issue: Tourism is viewed as an important earner of foreign exchange and creator of employemnt. Critics question whether its supporters have not overstated potential benefits while inadequately assessing its impact on scarce resources and aggravation of economic and social dualism.

Estimated tourist receipts quadrupled from K£ 15 million in 1967 to K£ 62 million in 1979, in current prices. In spite of increased revenue, tourism also incurs costs. Tourists consume high-cost imported commodities and, since the industry is largely foreign-owned, much of its profit leaves the country. It has been estimated that the actual direct value of foreign tourism to Kenya may not exceed 10 percent of gross receipts, although increased taxes have certainly augmented the government's share. Indirect benefits in include the sale of locally produced consumer goods.

Government has spent heavily to stimulate tourism. The Kenya Tourist Development Authority (KTDC) had, by the end of 1979, directly invested K£ 4.4 million and loaned K£ 2.8 million to stimulate tourism. Soft loans (K£ 1.3 million) facilitated Kenyanization. Government expenditures on the infrastructure, partly to stimulate tourism, included K£ 39 million to upgrade Mombasa and Nairobi airports, and provision of training programs for tourist workers. The expenditures on airports alone exceeded the total cost of new road construction in 1978/9, although airport investment extends well beyond tourism incentives.

Employment generated by tourism is difficult to measure. It was estimated by 1967 that tourism directly generated some 11,000 jobs. Ten years later, assuming employment had expanded at the same pace as real receipts, total employment might have reached approximately 22,000 or roughly 5 percent of total wage employment.

The opportunity costs of tourism are also hard to calculate. Lands reserved for game and wildlife are denied to the rural population. Game sometimes destroys the crops of neighboring small farmers who cannot afford fences. Tourist facilities draw heavily on scarce resources like water supplies and electricity. Government expenditures on infrastructure aggravate uneven national development. Some Kenyans object to the cultural impact of tourism, including the growth of gambling and prostitution. Yet tourism brings wage income to many rural parts of the country which otherwise would have few or no jobs.

Tourism is significantly dependent on external factors over which Kenya has little control. Worsened economic conditions in the leading industrial nations, rising gasoline costs and the collapse of the East African Common Market have hindered its anticipated expansion. The increase of European-organized packaged tours has reduced the returns to Kenya. All these considerations suggest the need to weigh the benefits and costs of tourism carefully in the context of potentials of investment in other sectors.

3.8 Foreign Trade

Issue: Although great efforts have been made to increase the role of manufactured and other processed products in international trade, Kenya still depends very heavily on sales of coffee and tea for its export earnings. Both are subject to wide international price swings which in turn create a volatile source of foreign exchange.

International trade plays an unusually important role in Kenya's economy. Exports average over one-third of GDP. The main source of export earnings is agricultural products. Coffee is the most important export crop, followed by tea. Other exports include a wide variety of other agricultural products and a few locally produced mineral products like cement, soda ash, and fluorspar. Although not an oil producer, Kenya refines and exports a considerable share of its imported crude oil to other African countries (See Table 3.10).

TABLE 3.10

Total Exports Percentage Shares

	1974	1975	1976	1977	1978	1979
1. Food & Beverages	36.3	35.8	47.6	65.6	58.8	56.2
2. Industrial Supplies (non-Food)	30.3	28.3	23.4	18.5	17.9	19.1
3. Fuel & Lubricants	20.1	25.6	20.8	17.3	18.6	20.0
4. Machinery & other Capital Equipment	2.4	3.4	2.0	0.3	0.4	0.4
5. Transport Equipment	1.8	1.8	1.1	0.2	0.2	0.3
6. Consumer Goods not elsewhere specified	6.3	6.1	5.0	3.0	4.0	3.9
7. Goods not elsewhere specified	0.1	0.1	0.1	0.1	0.1	0.1

Source: Economy Survey, 1979, Table 7.7.

Over the past few years, the value of Kenyan exports has varied substantially. They increased from about K£ 230 million in 1974 to K£ 490 million in 1977 after which they fell to K£ 370 million in 1978, rising only slowly to K£ 390 in 1979. While there were minor changes in the quantity of exports, virtually all of the variation is due to price changes. The price of coffee increased more than four-fold between 1975 and 1977 while tea prices more then doubled during the same period. Accordingly, earnings from coffee and tea alone were greater in 1977 than all exports combined in 1975. However, in 1978, both tea and coffee prices fell, causing most of the decline in export earnings (See Table 3.11).

Kenya's planners hoped to generate an increased share of its earnings from manufactured products which are less subject to wide price swings. Unfortunately, however, earnings from processed products have remained essentially constant since 1974. One reason has been the disruption of trade with the other members of the former East African Community, a high proportion of which consisted of Kenyan exports of manufactured products. Since Kenya ran a very strong trade surplus with the East African Community, the sharp reduction of that trade also hurt its overall balance of payments (See Table 3.12).

As has been true for most countries since the oil crisis began, Kenya has had a chronic international trade deficit. In Kenya's case, not all of it can be attributed to oil imports. Net fuel and lubricants, taking into consideration the reexport

TABLE 3.11

Exports Changes in Value, Quantity and Price, 1978-1979*

	Value KL'000			Percentage Change		
	1978	1979	Change	Value	Quantity	Price
Coffee, unroasted	124,669.3	110,573.2	-14,096.1	-11.3	-9.6	-2.0
Tea	63,187.1	62,845.0	-342.1	-0.5	10.7	-10.1
Petroleum products	60,316.2	68,044.8	7,828.6	13.0	-16.0	34.7
Meat and products	2,721.3	2,689.4	-31.9	-1.2	-12.8	-13.3
Pyrethrum	4,082.7	5,502.7	1,420.0	34.8	49.6	-9.9
	4,075.3	4,839.7	764.4	18.8	-3.4	22.9
Hides and skins, undressed	9,825.	13,770.4	3,945.5	40.2	20.1	16.7
Wattle extract	1,486.7	1,965.6	478.9	32.2	19.2	10.8
Soda Ash	3,684.3	5,556.5	1,872.2	50.8	34.4	12.3
Fluorspar	2,556.8	1,983.8	-583.0	-22.7	-42.3	34.0
Cement	9,008.2	8,346.7	-661.5	-7.3	-16.4	10.8
Beans, peas, etc.	2,141.6	1,491.7	-649.9	-30.3	34.1	5.5
Cashew nuts, raw	-	56.6	56.6	-	-	-
Wool	698.0	697.3	-0.7	-0.1	-7.3	7.8
Animal feed	1,017.5	1,004.5	-13.0	-1.3	-4.8	3.7
Cotton, raw	1,389.0	924.7	-464.3	-33.4	-10.6	-25.5
Pineapples, canned	9,583.1	9,316.0	-267.1	-2.8	-2.5	-0.2
Butter and ghee	950.7	846.6	-104.1	-10.9	-23.7	16.7
Wood Carvings	638.7	689.8	51.1	8.0	-2.8	11.1
Metal scrap	274.1	495.2	221.1	80.7	109.3	-13.6
Wattle bark	17.3	-	-17.3	-	-	-
All other items	67,731.6	83,888.0	16,156.4	23.9	-	-
Total	369,964.5	385,588.2	15,563.7	4.2	—	—

* Excluding Re-Exports

SOURCE: Kenya Economic Survey, 1980, p. 91.

TABLE 3.12

Kenya's Trade With African Countries, 1977 and 1979

	EXPORTS				IMPORTS			
	1977		1979		1977		1979	
	K£'000	%	K£'000	%	K£'000	%	K£'000	%
Uganda	51,000	46.2	37,797	38.1	581	7.1	804	6.7
Tanzania	9,822	8.9	4,075	4.1	1,622	19.9	102	0.8
Zambia	6,897	6.2	5,847	5.9	1,030	12.6	1,243	10.4
Sudan	5,035	4.5	7,663	7.7	1,161	14.2	210	1.8
Rwanda	6,241	5.7	8,549	8.6	1,259	15.4	3,295	27.5
Zaire	3,445	3.1	3,142	3.2	606	7.4	540	45.1
Egypt	7,309	6.6	6,061	6.1	58	0.7	39	0.3
Mauritius	3,286	3.0	4,832	4.9	10	0.1	9	0.1
All others	17,221	15.6	21,038	21.3	1,829	22.4	5,729	44.1
Total	110,261	100.0	98,953	100.0	8,156	100.0	11,966	100.0
African trade so % of all trade	22.0		24.0		1.5		1.9	

Source: Calculated from Economic Survey, 1980, Chapter 7.

of refined products, accounted for 11.2 percent of imports in 1979, only a slight increase over the 10.2 percent in 1975. Overall imports almost doubled in value from 1974 to 1978, though they fell somewhat in 1979. Industrial supplies, machinery, and transport equipment comprise the bulk of imports, accounting, with oil, for 85 percent of the value. The rest are food and consumer goods(See Table 3.13).

TABLE 3.13

Imports

	1974 Value (£000)	1974 %	1979 Value (£000)	1979 %
Food & Beverages	25,395	6.6	32,900	4.9
Industrial Supplies (non food)	153,094	39.9	179,849	27.2
Fuels & Lubricants	81,565	31.2 1/	146,798	22.2
Machinery & other Capital Equipment	43,028	11.2	125,030	18.9
Transport Equipment	44,373	11.6	95,688	14.5
Consumer goods not elsewhere	35,304	9.2	38,786	5.8
Goods not elsewhere sepecified	1,116	0.3	647	0.1
Total	383,875	100.0	661,156	100.0

1/ This includes imported fuel later re-exported after refining.

Source: Kenya Economic Survey, 1979, 1980.

3.9 Balance of Payments

Issue: Kenya has, in recent years, increasingly more serious balance of payments difficulties. This trend seems inlikely to be reversed in the foreseeable future.

Kenya's balance of payments has been primarily influenced by the changes in the world market for coffee and tea and rapid increases in the prices of oil. Unable to directly influence either of these events, the government has concentrated on efforts to reduce imports. In general, these policies have been in the right direction, but the cure for the individual crisis in the past has largely come from external events, particularly more favorable terms of trade.

A fall in the price of coffee and tea on the world market coupled with a loosening of import controls in the wake of the previous year's record level of exports led to a serious deficit in 1978. With the imposition of more restrictive controls and the increased value of export crops other than tea or coffee, the external trade position improved moderately (See Table 3.14).

Looking toward the future, agricultural production for export seems unlikely to grow at the same rate as in the past, particularly in light of the population growth rate and the greater difficulty in bringing additional land into production. Nor is it clear that coffee and tea prices will keep up with the oil-fueled rate of international inflation. Increased transportation costs make substantial increases in

TABLE 3.14

Kenya Balance of Payments, 1976-1978

	1977			1978‡‡			1979*		
	Debits/ Assets	Credits Liabil-ities	Net Credits	Debits/ Assets	Credits Liabil-ities	Net Credits	Debits/ Assets	Credits Liabil-ities	Net Credits
A. Current Account									
1. Merchandise transaction: Imports (c.i.f) Exports (f.o.b)	529.3	468.0	Dr.61.3	723.3	366.5	Dr.356.8	665.0	380.3	Dr.284.[illegible]
2. Freight and Insurance	0.9	27.9	27.0	2.2	28.8	26.6	2.7	30.5	27.[illegible]
3. Other trans-portation	24.6	73.9	49.3	21.7	78.8	57.1	24.2	76.5	52.[illegible]
4. Foreign Tra-vel	10.3	53.5	43.2	15.0	63.5	48.5	15.5	66.1	50.[illegible]
5. International Investment Income	82.4	16.9	Dr.65.5	74.3	19.3	Dr. 55.0	70.0	20.8	Dr. 49.[illegible]
6. Government Transactions n.e.s.	17.4	8.2	Dr. 9.2	20.1	12.5	Dr. 7.6	20.4	12.7	Dr. 7.[illegible]
7. Other Services	21.4	21.8	0.41	24.6	19.5	Dr. 5.1	27.0	22.2	Dr. 4.[illegible]
8. Private Trans-fers	11.6	13.0	1.4	11.5	19.0	7.5	10.4	19.5	9.[illegible]
9. Government Transfers	1.9	28.0	26.1	1.5	33.8	32.3	2.3	30.6	28.3
	699.8	711.2	11.4	894.2	641.7	Dr.252.5	837.5	654.8	Dr.178.3
of which; Visible balance ..	529.3	468.0	Dr.61.3	723.3	366.5	Dr.356.8	665.0	380.3	Dr.284.7
Invisible balance	170.5	243.2	27.7	170.9	275.2	104.3	172.5	278.9	106.4

Source: Economic Survey, 1979. * Provisional. **Former E.A. Community Corporations only.
‡ Includes capital grants. ‡‡ Revised

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tourism seem unlikely and even if they occur, their net impact on the balance of payments after deducting the induced increased in imports may not be large.

Normalization of relationships in Africa would help. If the Tanzania border were to be reopened and the problems in Uganda resolved, the resulting expanded trade could improve Kenya's balance of payments.

Over the longer run, expatriation of earnings may create problems although there are no indications of this now. The current climate of economic growth and lack of restrictions has encouraged foreign owners to reinvest a large portion of their earnings. If the economy falters, this might change rapidly,causing a rapid deterioration of what would be an already unsatisfactory situation, and would provide policymakers with some difficult choices.

3.10 Public Finance

Issue: The high rate of population growth places a severe strain on government finance. On the one hand, heavy investment is required to provide economic opportunities for the expanding population. On the other hand, it is increasingly difficult to divert resources from the current consumption of the added numbers to finance expanded production.

Taxes constitute the major source of government revenue. Income tax, a set of sales taxes and excise duties each provide about 25 percent of revenue or the equivalent of 75 percent of total revenues. Import duties contribute another 15 percent and the rest comes from external borrowing and other sources (See Table 3.15).

Until two years ago, revenues were expected to be more than enough to cover recurrent government expenditures and the anticipated surplus was to be an important source of funding for the K₤ 1,371 million of development expenditures (in 1978/79 prices), initially planned over the five year period 1979-83. Both current and development expenditures were expected to double compared to the previous plan period. The largest current expenditures were proposed for education (25.6 percent) and defense (16.9 percent).

The development plan called for some shift in the relative importance of revenue sources. The anticipated real increase in external financing was expected to represent a smaller fraction of total revenues. The plan called for a 7.2 percent real rate of growth in income tax revenues while the sales tax and other duties

TABLE 3.15

Central Government
Gross Receipts on Recurrent Account**,
1976/77 - 1979/80
K£ Million

	1976/77	1977/78	1978/79*	1979/80*
Direct Taxation -				
Income Tax	107.47	142.34	155.07	165.00
Other	0.56	0.68	0.66	0.50
Total	108.03	143.01	151.73	165.50
Indirect Taxation				
Sales Tax	65.42	92.76	99.77	145.00
Import Duties	52.68	104.20	101.37)	165.10
Excise Duties	28.22	38.47	49.02)	
Export Duties	-	8.27	2.80	5.00
Licences and Fees Under Tariff Act	3.32	3.64	3.80	6.16
Other	8.04	9.42	11.31	9.41
Total	157.87	256.76	267.97	330.67
Compulsory Fees, Fines and Penalties	5.20	4.77	7.05	7.38
Income From Property	15.28	26.25	30.36	35.48
Current Transfers	1.78	0.55	1.16	1.32
Charges for Goods and Services	19.39	23.57	39.89	44.56
Internal Borrowing	29.73	-29.34	56.43	8.82
Loan Repayments	3.49	2.95	4.66	3.38
Other	2.09	13.52	7.21	2.22
Grand Total	343.30	442.05	566.48	599.33

*Provisional

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

Source: Economic Survey, 1980.

were to grow at half the rate. Further balance of payments problems could lead to import restriction policies which directly, through reduced import duty collections or indirectly, through a reduced rate of growth of the economy, might make planned goals quite difficult to attain.

Unfortunately, poor economic conditions in 1978 and 1979 (relative to predictions) resulted in a reduction of anticipated revenue collections which together with rising costs, caused deficits of K£ 106 million and K£ 94 million, respectively. This led to proposals for a 17.6 percent curtailment of further development spending for the remaining 4 years, although the level of development expenditures was still higher than previously.

The series of deficits experienced from 1975/6 to 1979/80 were covered by external loans (47.5%), and ong term domestic loans (47 %). Domestic short term borrowing covered the remainder. The rising costs of external borrowing caused concern about future balance of payments problems although debt service changes in 1979 were only 4.4 percent of export earnings. Increased domestic borrowing could aggravate inflationary pressures. (Table 3.16).

Even if Kenya is able to generate the revenue planned for the coming years, strong pressures may emerge

TABLE 3.16

Central Government Public Debt 1974-1979

KL Millions

As at 30th June	PUBLIC DEBT*								
	FUNDED			UNFUNDED			TOTAL		
	External	Internal	Total	External	Internal	Total	External	Internal	Total
1974	21.21	118.52	139.73	115.13	10.61	125.74	136.34	129.13	256.46
1975	21.21	133.60	154.81	146.30	10.50	156.80	176.51	144.10	311.61
1976	21.21	108.44	201.64	188.66	10.43	199.09	209.87	190.87	400.73
1977	19.64	203.29	222.93	209.30	10.17	219.47	228.94	213.46	442.40
1978	3.08	273.46	276.54	239.54	10.11	249.86	242.62	283.57	526.20
1979	3.08	308.86	311.94	255.88	10.08	265.96	258.96	213.94	577.90

* Excluding Short-Term Borrowings.

Source: Kenya Economic Survey, 1980.

to use a larger than planned fraction for recurrent expenditures. The high rate of population growth may call for increased expenditures on social services, as well as to directly create new employment opportunities.

3.11 Population Growth

Issue: The population of Kenya has grown from 10.9 million in 1969 to 15.3 million in 1979 at a rate of 4 percent per annum, and is expected to reach 30 million by 1997. High growth rates place fundamental stress on virtually every aspect of development policy and programs.

TABLE 3.17

Kenya Population Growth

	1948	1962	1969	1979
Nos. of People	5,408,000	8,636,000	10,943,000	15,320,000

The current population of Kenya is over three times that of 1948. Remarkable in itself, when viewed in the light of limited high potential land and other parameters of economic growth, this fact becomes a central issue in Kenya's development prospects. Table 3.18 presents figures for 1969 and 1979. All provinces except Nyanza experienced at least 38 percent growth over the decade. More than one million people have been added to the population of Rift Valley and 800,000 to Eastern Province. Maps VIII and IX indicate that whilst the highest densities occur in the traditionally heavily populated areas around Nairobi and in Western Province, greatest increases in density have occurred in more marginal areas, including the north-east and the south-central parts of the country.

TABLE 3.18

Kenya Population Change
1969-1979

Major Cities and Towns

	1969	1979	% Increase
Kenya	10,943,000	15,320,000	44%
Nairobi	509,000	835,000	64
Mombassa	247,000	342,000	38
Kisumu	32,000	150,000	369
Nakuru	47,000	93,000	98
Eldoret	18,000	50,000	178
Thika	18,000	41,000	128
Nyeri	10,000	36,000	260
Kericho	10,000	30,000	300
Kitale	12,000	28,000	133
Provinces			
Central Province	1,676,000	2,348,000	40
Coast Province	944,000	1,339,000	42
Eastern Province	1,907,000	2,717,000	43
North Eastern Province	246,000	373,000	52
Nyanza Province	2,122,000	2,634,000	24
Rift Valley Province	2,210,000	3,240,000	47
Western Province	1,328,000	1,836,000	38

Source: Adopted from Kenya Statistical Abstract, 1978 and recent reports on 1979 census.

FIGURE VIII

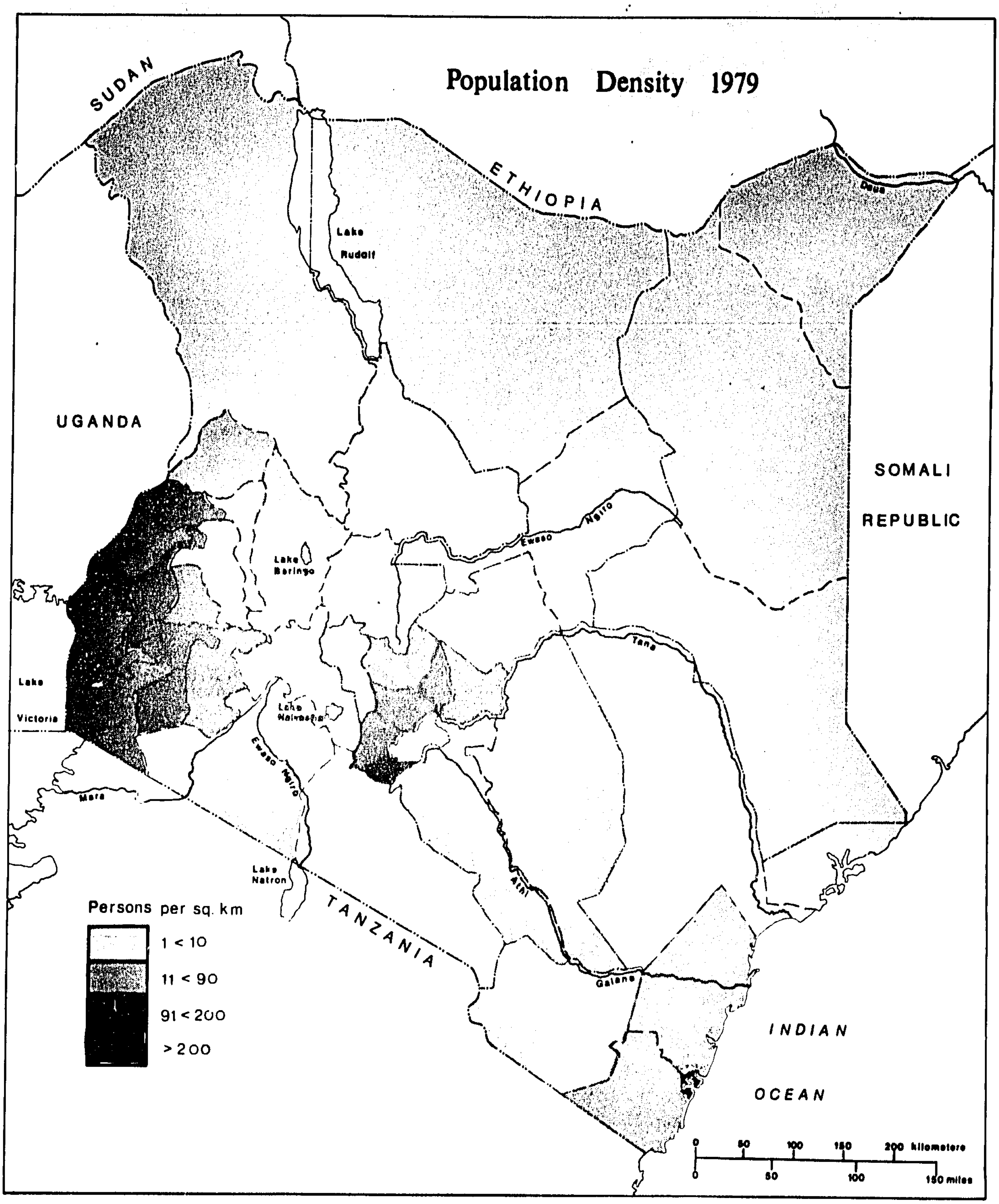
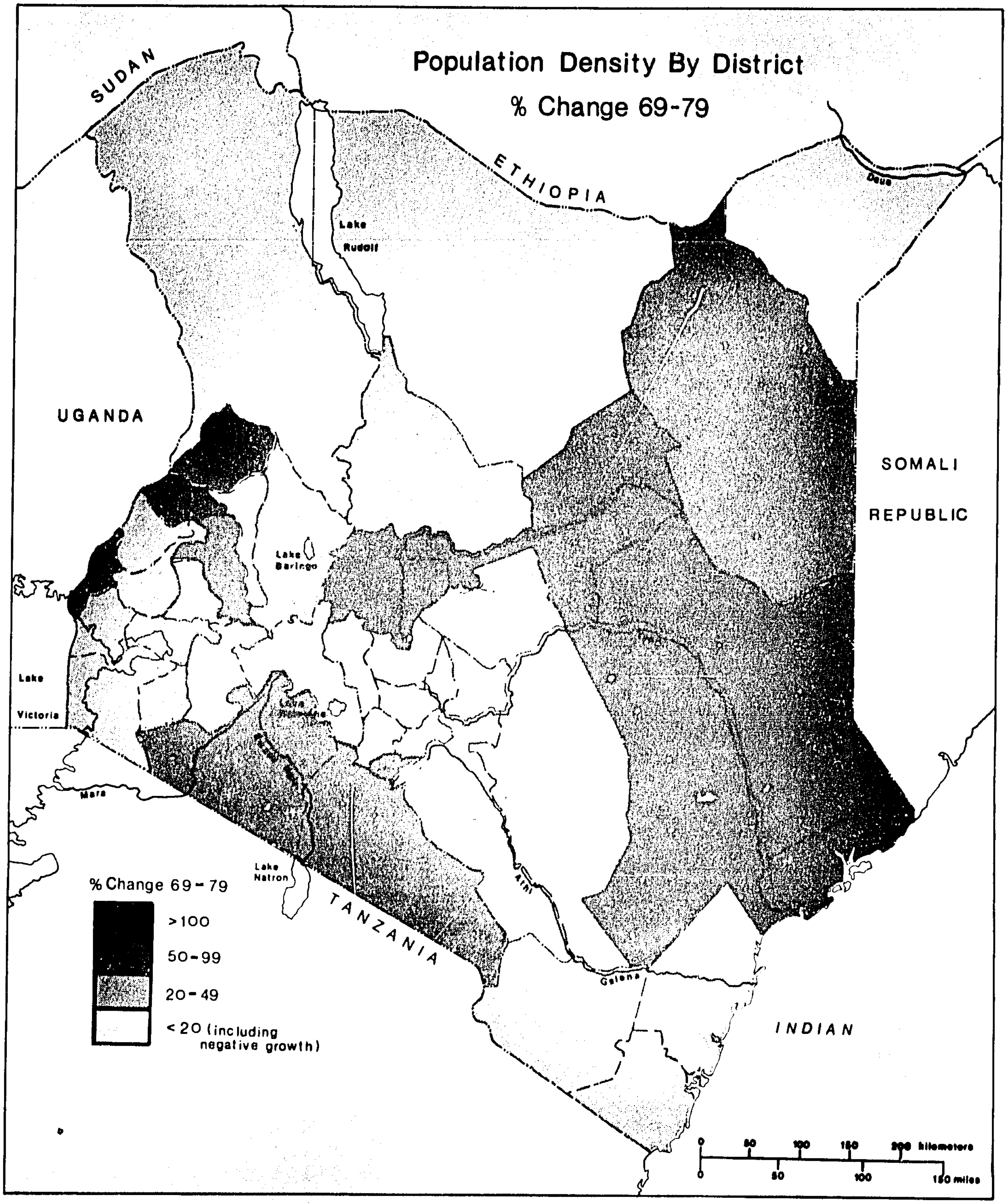

Population Density 1979
SUDAN
ETHIOPIA
UGANDA
SOMALI
REPUBLIC
Lake
Rudolf
Daua
Lake
Baringo
Ewaso Ngiro
Tana
Lake
Victoria
Mara
Lake
Natron
Athi
Galana
TANZANIA
INDIAN
OCEAN
Persons per sq. km
1 < 10
11 < 90
91 < 200
> 200
0 50 100 150 200 kilometers
0 50 100 150 miles

FIGURE IX


Population Density By District
% Change 69-79
SUDAN
ETHIOPIA
Lake
Rudolf
Daua
UGANDA
SOMALI
REPUBLIC
Lake
Baringo
Lake
Victoria
Mara
Lake
Natron
TANZANIA
Athi
Tana
Galana
INDIAN
% Change 69 - 79
>100
50-99
20-49
< 20 (including
negative growth)
0 50 100 150 200 kilometers
0 50 100 150 miles

Forty-nine percent of Kenya's population is under 15 years of age. As shown in Table 3.19, Kenya's population is becoming progressively younger. This has major implications for planning to meet the population's basic needs.

TABLE 3.19

Proportion of Population Under 15 Years 1962, 1969, 1980 and 1990

Age Group	1962 Census	1969 Census	Revised Projections	
			1980	1990
0 - 4	17.1	19.4	20.3	21.6
5 - 9	15.7	16.3	15.6	17.2
10 - 14	12.7	12.5	12.8	12.8
0 - 14	46.1	48.2	48.7	51.6

Source: Kenya Economic Survey, 1979, Table 3.2

Women with a few years of primary education report higher total fertility rates than those with no education. The number of births to women with secondary education tends to be substantially lower. Exposure to primary education apparently makes women more conscious of hygiene and better nutrition, helping to prevent miscarriages and infant deaths, while exposure to secondary education apparently changes attitudes towards family size. Table 3.20 shows that few women attain a secondary school education. Less than half as many women as men attend secondary schools.

TABLE 3.20

Percentage Distribution of Women By Level of Education, 1977

Age Group	Total	No Schooling	Primary Education	Secondary Education	University
15 - 19	100	24.5	64.9	10.6	-
20 - 24	100	40.2	44.6	15.1	0.1
25 - 29	100	53.7	39.4	6.7	0.2
30 - 34	100	66.9	29.6	3.2	0.3
35 - 39	100	76.7	21.4	1.7	0.2
40 - 44	100	83.7	14.9	1.3	0.1
45 - 49	100	89.0	9.6	1.3	0.1

In 1962, fertility stood at 6.8 children per woman aged 12-49. In 1977, it was 8.1, and the present figure is higher. The large numbers of children leaving school at the primary level, the dearth of employment opportunities, and the lack of land for farming confront Kenya with real and continuing problems.

Fertility rates differ considerably between urban and rural sectors and between different provinces. Urban women report a consistently lower fertility rate than do women in rural areas where 85 percent of the population live. Western Province has the highest fertility rate and Eastern Province the lowest. These differentials in fertility may be attributed to variations in attitudes to fertility and to the impact of socio-economic development.

TABLE 3.21

Mean Number of Live Births per Woman by Province, Urban-Rural Residence and Age Group of Mother, 1977

Age Group	Central	Rift	Western	Nyanza	Eastern	Coast	Nairobi
				Rural Areas			
15 - 19	0.29	0.33	0.30	0.47	0.26	0.43	—
20 - 24	1.77	1.81	1.84	2.10	1.62	2.01	—
25 - 29	3.63	3.97	3.79	4.07	3.52	3.80	—
30 - 34	5.55	5.90	6.01	5.77	5.17	5.56	—
35 - 39	6.79	6.97	7.20	6.90	6.51	6.36	—
40 - 44	7.18	7.60	8.40	7.59	6.63	7.14	—
45 - 49	7.70	7.73	8.93	7.46	6.77	7.13	—
				Urban Areas			
15 - 19	0.29	0.34	0.43	0.40	0.22	0.32	0.34
20 - 24	1.40	1.75	1.86	1.96	1.35	1.88	1.74
25 - 29	3.02	3.47	3.18	3.79	2.81	3.18	3.10
30 - 34	4.48	5.10	4.88	5.80	4.77	4.19	4.51
35 - 39	4.76	6.22	7.75	6.14	..	4.24	5.28
40 - 44	4.62	6.97	7.00	6.32	..	5.05	5.61
45 - 49	5.77	6.48	6.92	6.65	..	4.40	6.15

Source: Kenya Economic Survey, 1979, Table 3.4

TABLE 3.22

Population Data -- 1980
East Africa

Country	Estimate (millions)	Birth Rate (per 1000)	Death Rate (per 1000)	Annual Increase %	Infant Mortality Rate (per 1000)
Kenya	15.9	53	14	4	80
Ethiopia	32.6	50	25	4.5	162
Tanzamia	18.6	46	16	3.0	125
Uganda	13.7	45	16	2.9	146

Source: New Scientist, 18 September 1980, p. 848.

The Government has begun to take action on population policy. Kenya has a small family planning program which has been largely ineffective. Two major steps may have to be taken to increase the effectiveness of family planning. First, the Government may have to reorient many aspects of its development policies, given new information on population growth. Second, urgent reconsideration of policies and programs designed to slow the rates of population increase may be necessary. Even so, curbing population growth will be a long and a highly sensitive process and will require concentrated action from all elements in the nation.

3.12 Employment and Unemployment

Issue: The surge in population growth rates, coupled with the greatly increased numbers of young Kenyans graduating from primary schools, necessitates expanded job creation in all sectors. At present and for the foreseeable future, a large gap is likely to remain between the available work force and employment oppotunities.

The current five year plan suggests that there are about 5.5 million jobs available in Kenya (pop. 15.3 million) and projects that one million more jobs could be added by 1983. At present, only about 10 percent work in the modern wage sector. The great bulk (80%) remain in small scale, subsistence farming. In recent years the numbers of Kenyans in paid employment have risen only slowly: 5.3 percent in 1977 and one percent in 1978, though a presidential directive called for a 10 percent increase by 1979.

The workforce is estimated to be growing at about 270,000 each year. Even optimistic projections suggest the modern sector can create no more than 50,000 new jobs a year. Small scale agriculture, the rural non-farming sector, and the urban informal sector presumably must provide the remaining 220,000 jobs. The shortage of suitable arable land severely constrains the number and range of opportunities in small scale agriculture. Much pressure will inevitably fall on the rural non-farm and urban informal sector. The strong likelihood appears that the number of Kenyan's unemployed will grow steadily over the next five years, thereby creating internal political and economic tensions.

Several factors complicate efforts to solve this problem. First, access to education at primary and secondary school levels has grown rapidly through the state and Harambee school systems. Few graduates of the school system have placed agriculture high on their job preferences. Many migrate in search of paid employment although paid jobs are increasingly difficult to obtain. This group is particularly significant from a political and economic viewpoint.

Second, the existence of 30,000 vacancies in private companies in 1978-79 and about the same numbers in central government suggests a severe shortage of skilled personnel. Yet school leavers are not adequately qualified to fill many of these skilled positions. Third, despite significant advances in the number of women attending school, only 17 percent of wage employees are women, mostly in lower paid jobs. Women constitute a disproportionate number of the unemployed.

Persistent unemployment has been accompanied by declining real wages in recent years. Average wages rose by 10.9 percent in 1978, but the cost of living rose 12.5 percent. Thus average real earnings declined with the drop more severe for employees in the public sector than for those in the private sector. In 1979, consumer price increases slowed somewhat, and average real wages rose 0.9 percent. From March, 1979 to March, 1980, however, inflationary pressures once again pushed prices upward at a rate of 14 percent.

In 1979, 260,000 -- some 22 percent of the modern sector labor force -- registered as unemployed. Large numbers of additional workers remained under-employed, including the working poor with incomes under Sh 3000 per year: These numbered some 1,404,000 households in 1978, involving some 6,703,000 people or well over a third of Kenya's population. Among these poor are small farmers, landless squatters, pastoralists, handicapped adults, and the urban poor. (See also Part 4 of this profile).

3.13 Rural-Urban Disparities

Issue: Most visitors to Nairobi are immediately struck by this vital modern city, an international tourist, communication, and business center as well as the capital of Kenya. Mombasa, Thika and other cities also have modern urban districts that resemble modern towns anywhere in the world. However, in many smaller towns, in the margins of the large cities, and in most of rural Kenya, services, housing, and income differ markedly from urban Kenya. These contrasts pose problems, especially when considered with the high rates of population increase and only modest levels of growth in the national economy.

Urban centers have experienced much higher population growth rate than the country as a whole (See Table 3.18). Population in the nine main urban centers grew from 903,000 to 1,605,000, a 77 percent increase from 1969 to 1979. Some smaller urban centers grew faster than the large cities of Nairobi and Mombasa, partly a result of strong central government efforts to reduce squatter settlements in those cities. Several factors may have caused Kisumu's very high growth rate, including a sizable influx of refugees from Uganda.

Rural areas are closely linked to urban centers. The rural areas require farm inputs, consumer goods, and markets for their farm products. Urban areas depend on surrounding rural areas for food, raw materials and supplies.

Kenya's Designated Services Center programme seeks to ensure the orderly development of links between urban sites with surrounding rural areas throughout the country. The current plan emphasizes development of infrastructure and services in smaller urban centers. Since the planners did not anticipate the population explosion, however, these centers appear unlikely to be able to cope with the problems.

Several factors aggravate the rural-urban problems in Kenya. First, the shortage of high potential land is central. In 1965, Kenya had over 0.75 hectares of high potential land equivalent per person. By the year 2000 it will be less than 0.2 hectares per person. Policies and programs dealing with access to land and its use are therefore critically important in determining employment, welfare, and income distribution in rural areas. At Independence, the basic question was the transfer of land from foreign to Kenyan hands. Now the basic question is the best use of the land for production and to assure equity of access among the citizens.

Second, prices are higher and incomes lower in rural areas. The prices paid to small farmers for their agricultural produce remains, in many cases, very low. At least half of the rural population has earnings below the poverty line while the richest 20 percent of the population living outside the rural traditional areas gets about 70 percent of the national income. Earnings in Nairobi and Mombasa account for 80 percent of the total urban wage bill. As a result, a large percentage of small farmers flock to urban centers in off-farm seasons to gain vital wage employment.

Since two-thirds of male immigrants leave their wives in the country, about one-quarter of all urban wages are remitted to the rural areas. As increasing numbers of landless families join these migrants to take up urban residence, they impose a severe stress on the facilities for health, water, and housing in these centers.

A third factor is availability of services. City dwellers have far better health and educational opportunities than do rural residents. Because good health and education are vital to a successful career in the modern sector, urban migration is viewed as a bridge to cross into wage, government, business, or professional employment.

All these factors, aggravated by rapid population growth, urge the focusing of greater attention on the elimination of rural-urban disparities.

3.14 Environment and Development

Issue: The Kenyan economy depends on the sustained productivity of renewable natural resources, rangeland, woodland, game reserves, and water resources as well as productive soil. But a series of pressures are endangering the long run viability of the national resource base. Actions taken in the next decade will be critical.

Major environment and development issues in Kenya include:

(i) soil erosion from high potential and semi-arid lands;

(ii) loss of woodland for woodfuel and charcoal;

(iii) siltation and pollution of rivers;

(iv) environmental health;

(v) deterioration of pasture lands;

(vi) urban and coastal pollution.

Soil erosion may be Kenya's greatest long run environmental problem. Soil loss rates are high on the rich, mostly volcanic soils of the high potential areas as well as the sandy soils of semi-arid areas. In the past, most attention has been focussed on semi-arid areas where soil loss in the form of gullies and badly damaged areas has been more visible. Recently, the intensely cultivated, high potential lands are

beginning to experience erosion. The impact of this problem in the high potential areas is still unclear but at a minimum, it adversely affects agricultural productivity and the resultant silting threatens to undermine hydro-power output and the efficiency of irrigation systems.

Much of rural Kenya uses wood for house building and wood or charcoal for fuel. Lower population levels and land tenure practices a few decades ago permitted free and communal access to woodlands for these purposes. Current trends are creating new conditions. More people impose higher demands. Land has been demarcated and removed from public access. For a period, charcoal was exported to Saudi Arabia. Some areas have been denuded of vegetation. As little re-planting has taken place, traditional fuels have come into short supply. Devegetation also increases soil erosion.

High levels of sediment have been reaching major rivers, especially the Tana River where a series of hydro, irrigation, and flood control projects are planned. (See Section 3.3).The Tana provides Kenya's only major irrigation potential and national hydro power site. Siltation may endanger those developments as projected silt rates would severely reduce reservoir life. Other environmental problems also may need consideration, but silting threatens the viability of the entire basin.

Semi-arid areas are mostly utilized for grazing or game reserves, although arable agriculture is practiced in the moister parts. The increased number of animals per unit of grazing land has created real concern. A more pressing environmental danger, however, is probably the change in agricultural practices due to rapidly increasing human population pressures. In Baringo, Machakos, Kitui and elsewhere, relatively poor soils are being farmed intensively under conditions which greatly reduce their productivity. Kenyan and donor development plans are focused on restoring the resource base productivity in these areas.

Environmental health is an additional issue. The opening of water and irrigation projects may provide breeding sites for disease vectors. Malnutrition persists. Inadequate sanitation has aggravated health problems among the poor, especially in peri-urban areas.

Finally, rapidly growing urban populations and associated industry are introducing a new set of environment and development concerns. Although Kenya's Government is much more environmentally aware than most countries, the disposal of industrial waste has, until recently, been haphazard and uncontrolled. Coastal pollution has mounted around Mombasa, both from land based enterprises and from discharges by ships offshore. These practices pollute the beaches which are important for tourism and endanger coral growth.

The core of the environment and development issue in Kenya remains the productivity of land and water and the need to maintain and increase agricultural production. Only close integration of solutions into ongoing development programs will begin to deal with them adequately.

3.15 Decentralization

Issue: Government in Kenya, as in much of Africa, has organized on ministerial lines with much responsibility and control remaining in central ministerial headquarters. There is now an effort to place decision making responsibility for development in the districts and provinces. It is proving to be a slow process but some progress is being made.

The centrally organized structure of government, partly inherited from colonial times, achieved strong fiscal control and may have facilitated allocation of scarce, skilled manpower. Centralization has been less effective in integrating development activities at the local level. Interministerial decisions have typically been made in the capital city. Nor has centralization involved local people in the planning, decision, or implementation of development activities.

The current five year plan sets decentralization as a major strategy. It identifies three target groups for special attention in rural areas: small farmers with inadequate incomes, landless rural workers, and pastoralists. Many planned policies therefore have direct or indirect relevance for rural development. The planned rural development program proposes increased rural production and income; increased equity in the distribution of this income; increased access to services; and increased participation and decision making at the district level.

To involve people in decision making at the district level, the government is introducing an evaluation system for small projects involving simplified, unified guidelines to speed up project selection and implementation. It has established a small special fund to support district level projects. Utilization of the fund has lagged, however, and efforts are being made to improve its effectiveness.

District Development Committees, composed of a wide range of local technical, political, and other people, play a leading role in this type of local planning effort. They perform monitoring and coordinating functions. Other district level committees have become sub-committees of the District Development Committees. These are proving a valuable source of ideas and coordination. The plan provides instructors and helps coordinate data on district level development activities.

To encourage district level participation, ministries, when appropriate:

(i) provide district level disaggregated information on planned and actual expenditures to permit analysis of rural development activities in relation to Plan objectives and allow more effective evaluation of program results. In some cases, this requires revision of present budgeting and financial reporting systems;

(ii) identify district output targets and their effects on the planned national targets;

(iii) analyze all relevant district programs in terms of their impact on employment opportunities;

(iv) further develop guidelines for the geographic distribution of services and infrastructure.

To make a financial success of this strategy, the planners proposed tripling the annual allocations to the Rural Development Fund. With the leadership of the Provincial Administration and the coordinated support of the district development officers, the planners anticipate the districts will have increased influence in future planning and implementation of development activities.

As part of the decentralization effort, donor countries are now being asked to focus attention on a limited number of districts. The decentralized program is becoming a working part of Kenya's approach to development.

3.16 Regional Issues

Issue: Kenya plays an important role in relation to most of her neighbors. For Uganda, Rwanda, and Burundi, Kenya provides the major access to the sea. Previously exports from Kenya to Tanzania and Uganda were important regional trade links. Relations to the north have included problems over the frontiers in Somalia and Ethiopia as well as trade. How do these issues fit into Kenya development plans?

After independence, Kenya remained linked with Tanzania and Uganda in the East African Community which provided several common services including airlines, post, telecommunication, education, taxes, railways, and agricultural research. The community sought to maintain a common market and introduce complementary rather than competitive industrial development. Kenya, with its inherited head start, retained a lead position in industry, especially in relation to Tanzania. It exported a variety of foodstuffs and locally produced consumer products to Tanzania, (See 3.4), and dominated the regional tourist industry, at least in the Kilimanjaro-Aursha - Serengeti - Ambosseli area.

Political and economic pressures led to the breakup of the community in the late 70's. Relations between the three former member countries have been strained. The Kenya-Tanzania border has been closed for the last two years.

Tanzanian forces overthrew the Amin regime in Uganda and remain in that country.

In the longer run, Kenya has a mutually beneficial role to play, especially with its landlocked neighbors. Regional transportation links, mostly developed in colonial times,tend to move outward in each country from producing areas to the ports. The regional network is still only slightly developed, though some links have been improved. Kenya provides a new supply route to Rwanda and Burundi and, as southern Sudan develops, the ground links to that region will need to improve.

Many issues in East Africa can only be dealt with in a regional (international) context. The pattern of road communication is one; development of water resources is another. The WMO/UNDP prepared a regional study of the Lake Victoria basin as a prelude to coordinated development of this valuable international resource, along with the Nile and the Kagera river. These plans are especially important for Kenya's own limited water supplies

Although not a resource rich country, Kenya does have a central position with regard to regional communication and trade. Trade and service links to the region may play an important part in Kenya's economic future if the political economic, and physical framework is laid in the coming years.

4. THE NATURE AND DISTRIBUTION OF POVERTY IN KENYA

4.1 Introduction

Kenya is often represented, perhaps correctly, as one of the success stories of Africa. Nairobi as a capital city is a modern busy metropolis with high rise buildings and a wealth of stores. It is the commercial and travel center not only of Kenya, but of East Africa. Outside Nairobi, Kenya has also seen prosperity. The economy has grown remarkably during the past two decades since independence. Export crops, particularly tea and coffee, have increased steadily in volume and value and the national industries including the all important tourist industry have also shown steady growth.

But the current economic documents of the GOK emphasize another side of the picture. They point out that while growth has been considerable and commendable, the prospects for the coming years are much less bright. They also emphasize that the pattern of growth has resulted in strong gains for some groups, particularly wage earners and farmers in the high potential areas, but a large number of people have benefited less from Kenya's relative prosperity. These latter include most of the inhabitants of the arid and semi-arid areas, (roughly eighty percent of the country), the urban poor, farmers, and landless at the lower end of the income scale in high potential areas. The GOK and others have emphasized that poverty, both relative and absolute, still persists for many Kenyans. Government officials wish to reorient some development programs to meet needs of the poor.

This growing awareness of the problem of maldistribution of wealth comes unfortunately at a time of decreasing growth potential for much of the economy. It will be a particularly difficult task for Kenya to meet this growing challenge of the eighties in the general national and world economic climate of this decade.

4.2 Kenya in an East African Setting

Table 4.1 sets out some basic economic and other indicators for Kenya and the other East African nations. The data are somewhat dated in some categories but are presented to provide the best comparable data across national lines.

The recent census of Kenya has updated the population total to 15.3 million (1979) and established a growth rate approaching 4 percent. This makes Kenya the fastest growing East African nation and among the fastest growing in the world. It also moves Kenya almost on a par with Tanzania and Sudan in total population, establishing an essentially three tier population ranking of East African countries:

Ethiopia

Kenya, Sudan, Tanzania, Uganda

Burundi, Rwanda, Somalia

General notions of the comparative richness of Kenya are somewhat moderated by the comparative GNP data. Kenya ranks roughly on a par with Sudan and Uganda in per capita GNP though significantly ahead of Tanzania and in a different category from the four other countries. These general impressions of Kenya as among the moderately prosperous of East African nations are upheld by the POLI data. Though Kenya and Uganda ranked almost equal in 1976, the period of chaos in Uganda since then has greatly reduced

TABLE 4.1

Basic Economic and Other Indicators for Kenya and Other East African Nations

	(1) Population Mid 1978 (million)	(2) Per Cap. GNP 1976 ($)	(3) PQLI	(4) Per Cap. Growth Rate (%) 1970-75	(5) Birth Rate Per 1000	(6) Death Rate 1000	(7) Life expec- tancy at birth rate	(8) Infant Mortality per 1000 live births
Ethiopia	30.2	100	22	0.4	49	25	43	162
Kenya	14.8	240	39	2.4	48	15	50	119
Somalia	3.4	110	19	-0.2	48	21	41	177
Sudan	17.1	290	34	3.8	48	16	49	141
Tanzania	16.5	180	30	2.9	47	22	44	167
Uganda	12.7	240	40	4.5	45	15	50	160
Burundi	4.0	120	25	-1.1	48	22	42	150
Rwanda	4.5	110	27	0.2	51	22	41	133

	(9) Literacy (%)	(10) Per Cap. Public Ed. Expen. 1974 ($)	(11) Per Cap. Military Expen. 1974 ($)	(12) Total Exports f.o.b 1976 ($ mill)	Total Imports c.i.e. 1976 ($ mill)	(14) International Reserves DES 1977 ($ mill)
Ethiopia	6%	2	2	278	353	255
Kenya	20-25%	10	3	656	941	524
Somalia	5%	2	7	89	162	94
Sudan	15%	11	6	554	980	23
Tanzania	28%	5	5	459	566	282
Uganda	35%	8	6	360	80	n.a
Burundi	14%	2	2	55	58	94
Rwanda	16%	3	2	81	103	80

Source: Extracted from the U.S. and World Development Agenda, 1979. O.D.C., 1979.

* (See Table 3.22 for more recent data for Kenya, Ethiopia, Tanzania, and Uganda.)

the quality of life there, regardless of the index ranking. Sudan and Tanzania fall into a middle category of PQLI and the remainder form a lower group.

Kenya again rates at the upper level in the next four indices of social well-being (columns 5-8)*. While birth rates in East Africa are quite uniform, death rates per 1000 vary significantly: 15-16 in Kenya, Sudan and Uganda; 21-25 in Ethiopia, Somalia, Tanzania, Rwanda and Burundi. Life expectancy follows a similar pattern of 49-50 in the first 3; 41-44 in the rest. Infant mortality shows an even greater differentiation 119/1000 in Kenya; 133 in Rwanda; 141 in Sudan; and 150-177 in the rest. Kenya's performance here is outstanding in an East African context.

Precise comparisons of literacy are particularly difficult to make across international and inter-language lines. The countries split into approximate groups, although there have been many changes in recent years, especially in Somalia. (See Table 4.2).

TABLE 4.2

Percentage Literacy in Selected East African Countries,

Uganda	35%
Tanzania	28%
Kenya	20-25%
Sudan, Burundi, Rwanda	14-16%
Ethiopia, Somalia	5-6%

Source: US and World Development Agenda, ODC, 1979

The record revealed in expenditures on education and the military also shows Kenya in good light. Its per capita education outlays were matched only by Sudan and

* See Table 3.22 for more recent data in 4 of the countries.

the ratio of spending on education to military was 10:3, by far the best in East Africa. Unfortunately, in the last few years, Kenya has found it necessary to increase its military expenditures and the ratio is not now nearly so impressive.

The final three columns relate to trade and resource data. They reflect conditions which have been especially subject to change. Kenya's balance of payment problems are dealt with elsewhere in this paper and the comparatively favorable picture has deteriorated considerably in the last two years.

4.3 Poverty and the Nature of the Resource Base

Kenya is a large country (583,000 sq. km.) and includes almost the whole range of conditions to be found in tropical areas: a warm humid coastal zone, wet cool upland areas, hot dry deserts, and most of the varieties in between. Soils are also varied, including some of the richest tropical soils derived from volcanic nutrients, large areas of rather infertile tropical red and yellow soils, and some unproductive soils.

Vegetation, a measure of natural productivity, varies equally widely from thick upland forests to almost barren desert plains. This variability is naturally reflected in the actual and potential agricultural landscape. The map (Figure X) provides a measure of the distribution of areas with adequate and inadequate moisture. It is clear that only small areas have a surplus of moisture over evaporation and that most of the country has a large moisture deficit.

Kenyan authorities have long recognized this basic limitation to Kenyan agriculture and areas of high, medium and low potential are clearly demonstrated in many official publications. Table 4.3 and Figure XI are derived from these publications. They indicate that only 17.6 percent of the land area has medium or high potential for agriculture; 82.4 percent has low or no potential.

FIGURE X

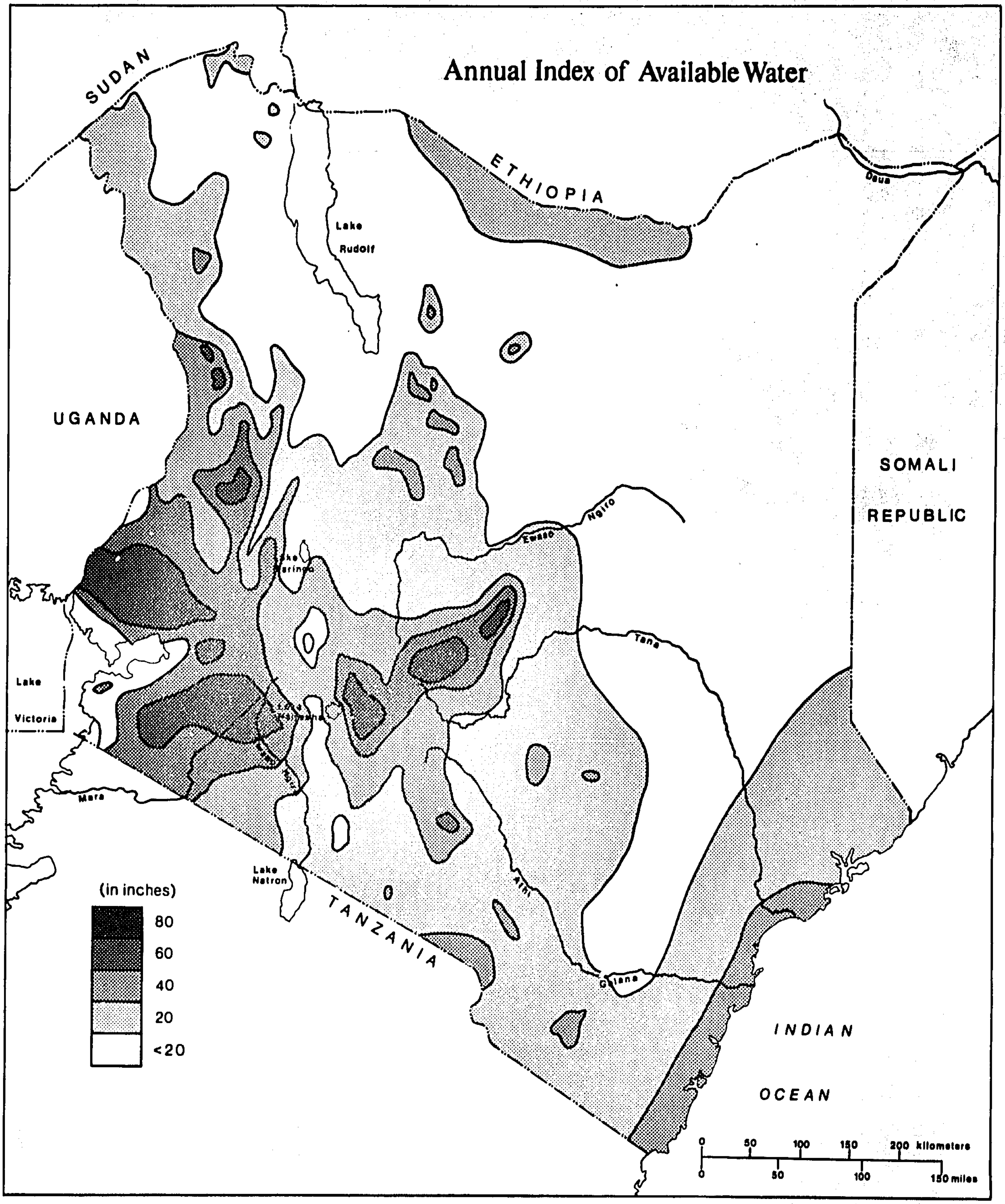

Annual Index of Available Water
SUDAN
ETHIOPIA
UGANDA
SOMALI
REPUBLIC
TANZANIA
INDIAN
OCEAN
Lake
Rudolf
Lake
Victoria
Lake
Natron
Daua
Ewaso Ngiro
Tana
Athi
Galana
Mara
(in inches)
80
60
40
20
<20
0 50 100 150 200 kilometers
0 50 100 150 miles

FIGURE XI

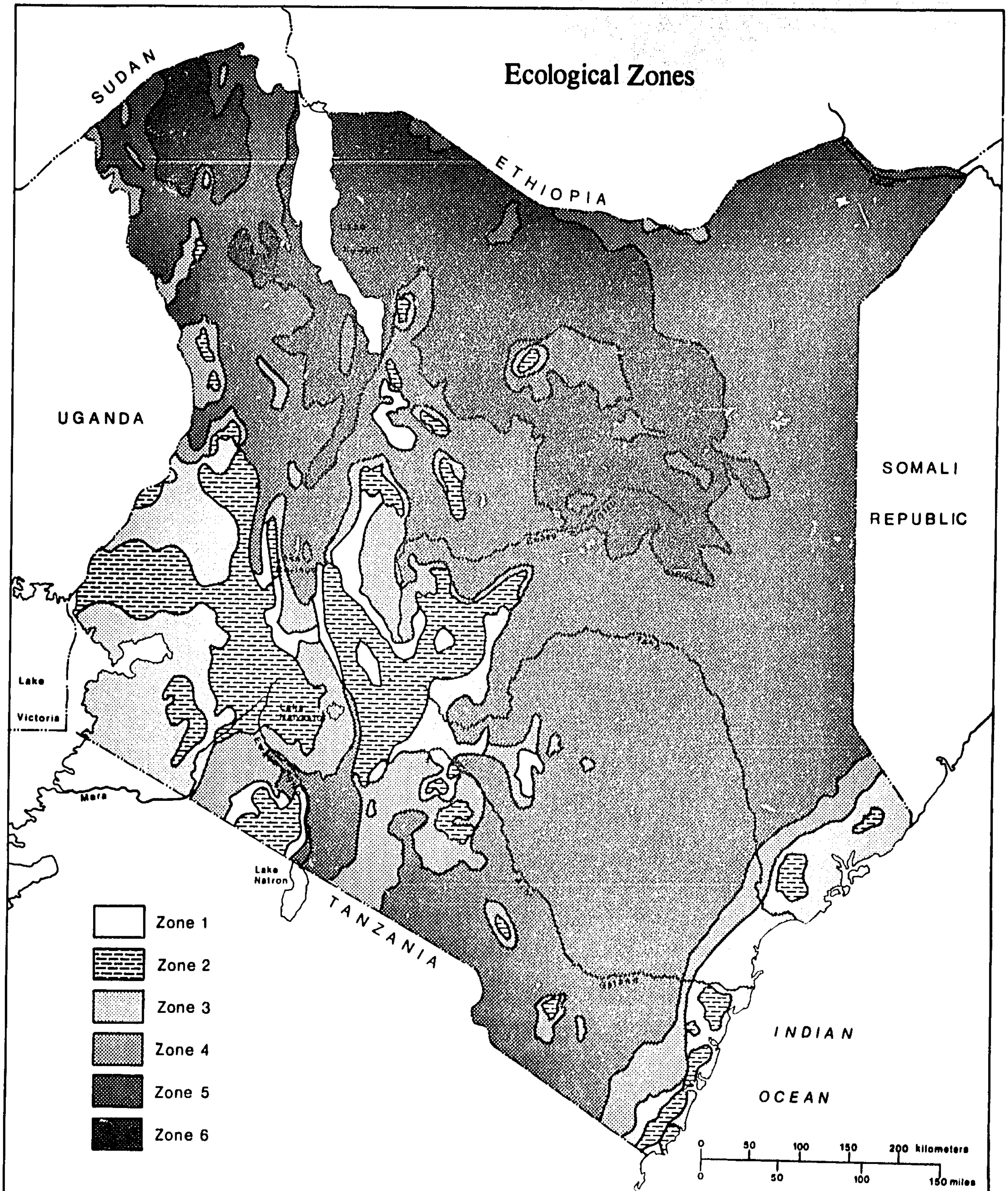

Ecological Zones
SUDAN
ETHIOPIA
UGANDA
SOMALI
REPUBLIC
Lake
Victoria
Mara
Lake
Natron
TANZANIA
INDIAN
OCEAN
Zone 1
Zone 2
Zone 3
Zone 4
Zone 5
Zone 6
0 50 100 150 200 kilometers
0 50 100 150 miles

TABLE 4.3

Distribution of Agricultural Potential in Kenya

High Potential	6,785	11.9
Medium Potential	3,157	5.5
Low Potential	42,105	74.0
Non-agricultural	4,867	8.6
	56,914	100.0

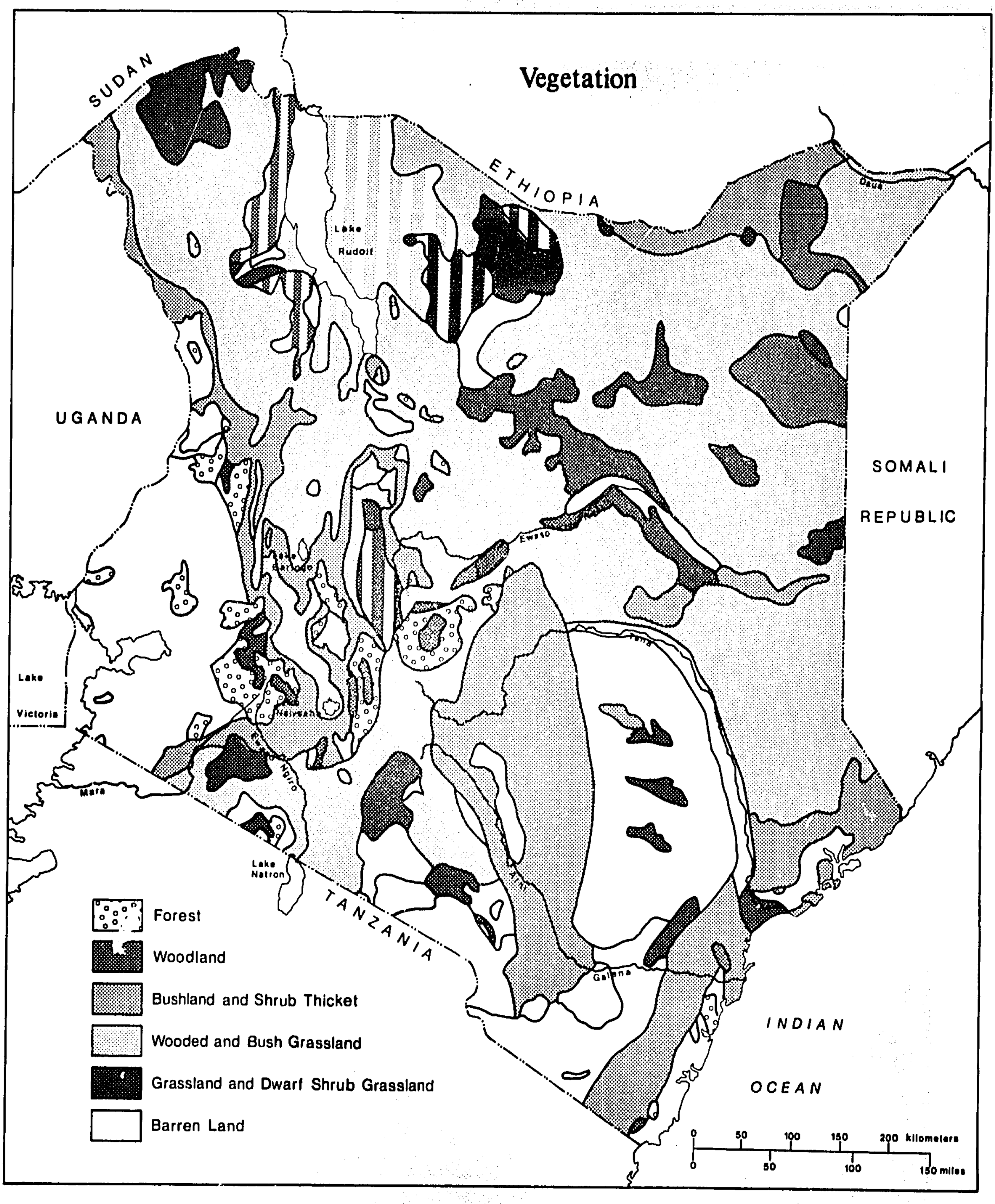
Source: Kenya Statistical Abstract, 1978, Table 81.

The official figures for high potential land have been questioned by Smith (1976) who suggests that more detailed analysis would allocate 7 percent of the national area as good agricultural land, taking soil fertility, slope, and rainfall into account, while a further 4½ percent is available for crop failure in one or two of every five years. The spatial situation finds high potential land predominantly west of Nairobi while the north and east are mostly low potential land.

The uneven distribution of the natural resources of land, water, and soul, set out in the maps in Figures II, XI, and XII, is not counterbalanced by other resources. Kenya has few known mineral deposits. The commercial and industrial activities have grown up around the Nairobi-Thika axis, also part of the higher potential agricultural zone.

Two countervailing forces have some influence on the distribution of economic activity. The first

FIGURE XII



Vegetation
SUDAN
ETHIOPIA
UGANDA
SOMALI
REPUBLIC
TANZANIA
INDIAN
OCEAN
Lake
Rudolf
Lake
Victoria
Lake
Natron
Lake
Baringo
Naivasha
Ewaso
Tana
Athi
Galana
Mara
Daua
Forest
Woodland
Bushland and Shrub Thicket
Wooded and Bush Grassland
Grassland and Dwarf Shrub Grassland
Barren Land
0 50 100 150 200 kilometers
0 50 100 150 miles

is that the port of Mombasa, the nation's second largest city and industrial area, is located in the generally low potential east. The other offsetting force is the tourist industry. It includes Nairobi but also extends to the coast and to the game parks, most of which are in semi-arid regions and low potential areas. Unfortunately, the spatial distribution of the tourist industry is different from its zone of economic impact. Most benefits that accrue inside the country come to Mombasa and Nairobi; few trickle down to the actual tourist areas.

In summary the natural resource distribution in Kenya is remarkably skewed and the economic strength of the high potential areas has served to further distort the spatial distribution of economic wealth.

This pattern is reflected in the distribution of the population (refer back to Figure VIII). Fifteen to twenty percent of the population live in urban areas and most of the rest live in the high and medium potential rural areas. In these areas, very high densities of 300-400 persons per km^2 occur, so much so that in recent years there has been a growing outflow from high to medium and even low potential zones.

There is not a direct correlation between the productivity of the natural resource base and personal or group wealth and poverty. The integrated rural surveys show that there is a wide range of wealth and poverty in each part of the country. But the characteristics of the resource base have helped in creating a potential for much higher levels of economic activity in a small part of the country.

4.4 Economic Well-Being

There are a number of different classifications of Kenyan society on which an analysis of economic well-being can be based. A common basis for Kenyan statistics is a division into:

Urban	(employed formal sector (employed informal sector (unemployed
Rural	(smallholders (large land owners (landless (pastoralists/nomads (those employed in formal and informal rural sectors

Another breakdown for which statistics are available is for provinces, and to a lesser degree by districts. Both of these data sets can be aggregated to focus on conditions in the major agro-ecological zones.

However, regionally specific data is not widely available in Kenya and each of these breakdowns needs to be used to get the best possible distributive picture.

Economic Differentiation in Kenya

About 80 percent of the population of Kenya live in rural areas, and 83 percent of the total population is rural. There are several surveys of the distribution of income between rural and urban areas and within rural areas, the most recent of which are based on the 1974-5 Integrated Rural Survey and followup work conducted by the Central Bureau of Statistics.

Such studies show that the modern sector makes up perhaps 17 percent of the total national population but the following abstraction shows that this group has nearly half of the total national income:

TABLE 4.4

Rural/Urban Income Distribution

	(%) Population	(%) National Income	Household Income Av.
Modern Sector Urban & Rural	17	48	K£459
Traditional Agriculture	80	47	K£189

SOURCE: House, William J. and Tony Killick. Rural Employment Policy Research Programme. Social Justice and Development Policy for Kenya's Rural Economy,,p.6-7.

Of the modern sector, urban areas are the most affluent, though there is of course a large and growing urban poor. The UN report on employment in Kenya (1972) showed that nearly 50 percent of modern sector employment was in the large towns which contained only about one-eighth of the labor force. Wages in towns average 2 to 3 times those in the countryside and household incomes in rural areas are three times those of the countryside. However the validity of some of these averages is lowered by the wide range of incomes found in urban areas.

Outside urban areas there is some difference of opinion on the regional distribution of wealth and poverty, partly based on different intrepretation of the data. One analysis of the I.R.S. suggests that there is a relative uniformity in farm increases at the small-holder levels throughout the country, and that the greatest inequalities occur within the agro-ecological system. A more recent analysis suggests, more convincingly that there are significant provinces and agricultural system differences.

For example at the regional level, access to modern sector activities varies widely. Bigsten (1971) estimated regional value added per employee as Ƚ918 for Nairobi; Ƚ551 for Coast Province; Ƚ236 for Central; and Ƚ102 for Western Province. Per capita income varied from KȽ338 in Nairobi to KȽ16 in Western Province.

Rural Differentiation

The IRS survey estimated that in 1974/5 there were 2.1 million houshholds in rural Kenya. Of this total, nearly 50 percent have incomes KȽ100 or less. About two-thirds of rural households are smallholders and this group shows 44 percent with incomes below Ƚ100. Most rural small holders have incomes of less than KȽ291 for the country as a whole. At the other end of the scale 5 percent of smallholders average over KȽ600 a year. Large farmers incomes average KȽ2,500 but these are only a few thousand.

It is hard, from the IRS data, to draw many firm conclusions about the sources of relative smallholder income. One factor is farm size, though there is great variability in the optimum size from one climatic/soil/ water zone to another. In general, larger smallholder farms have higher incomes and the poor are those left with miniscule land areas. Averages which hide a wealth of variation show that the income from a 3-4 ha. farm is

TABLE 4.5

Distribution of Public Services by Province

Various Years

Province	A	B	C	D	E	F	G	H	I	J	K	L
Nairobi	4.4	61	46	98	31	21	39	n.a.	6.59	4.4	70.8	338
Central	15.3	46	18	82	53	15	18	.97	0.50	9.7	9.7	42
Coast	8.6	32	11	53	25	6	19	.90	0.97	6.3	13.1	76
Eastern	17.4	47	7	59	20	9	14	.53	0.64	4.9	6.4	24
N. Eastern	2.2	4	1	61	20	0	11	.71	0.04	3.8	3.5	n.a.
Nyanza	19.4	31	7	55	15	10	10	.33	0.58	1.9	3.3	25
Rift Valley	20.4	29	6	59	19	23	19	n.a.	0.34	5.5	8.8	40
Western	12.3	40	8	57	23	19	11	.51	0.18	4.7	4.1	16
Kenya	100.0	39	13	-	-	14	16	-	-	5.2		

Key: A: % of Kenyan population (1969)
B: % of Enrollment of 5-14 year age group in Primary School (1969).
C: % of Enrollment of 15-19 year age group in Secondary School (1979).
D: % of teachers who are qualified (1976).
E: Per capita development expenditures on Secondary Education (KŁ) (1974-78).
F: and G: Health Centres and hospitals respectively, per million people (1975).
H: Per capita recurrent Helath expenditures (KŁ) (1973-78)
I: Per capita Development expenditures on curative health (KŁ_ (1974-78).
J: Per capita development expenditures on roads (KŁ) (1974-78)
K: Per capita Recurrent expenditures (KŁ) (1974-78).
L: Per capita incoem (KŁ) (1971)

Source: Bigsten (1978).

25 percent higher than that from a 0.5 to 1 ha. farm.

An analysis by Smith (Table 4.6) attempts to relate income to agro-ecological zone.

TABLE 4.6

Proportion of Adult Equivalents by Agro-Ecological Zone and by Per-Adult Equivalent Income Group, 1974-75

Per Adult Equivalent Income Group in Shs:

Tea, West of Rift	847	.08	9.8	36.8	33.5	7.8	7.2	4.9	100	750.2
Coffee, West of Rift	732	.15	25.0	26.0	22.9	12.5	10.9	2.6	100	1511.5
Upper Cotton, West of Rift	597	.10	20.1	33.9	31.8	11.9	1.9	0.3	100	1503.1
Tea, East of Rift	848	.18	9.1	20.9	45.6	10.9	9.2	4.4	100	931.1
Coffee, East of Rift	883	.11	8.9	24.7	35.6	15.9	12.0	2.8	100	1680.7
Lower Cotton, East of Rift	602	.16	15.2	38.4	31.7	10.8	3.0	1.0	100	612.3
High Altitude Grass	n.a.	n.a.	0.0	4.5	14.4	38.8	37.5	4.6	100	62.4
Coast Composite	598	.12	18.8	33.2	34.7	8.4	4.0	1.0	100	422.3
Percent Total Adults Equivalent	-	-	15.54	29.0	32.76	12.32	7.95	2.43	100	-
Total Kshs.	747		141	379	716	1204	1943	3417	-	-

Source: Smith in Integrated Rural Survey.

The average incomes by zone do not vary extraordinarily widely (597 K.Shs - 883 K.Shs) but the group of poor farmers in each zone does show considerable variation. The proportion with incomes less than 500 K.Shs is:

46.8	Tea	West of Rift Valley
52	Coffee	West of Rift Valley
54	Cotton	West of Rift Valley
30	Tea	East of Rift Valley
33.6	Coffee	East of Rift Valley
53.6	Cotton	East of Rift Valley
4.5	Grass	High Altitude
52	Coast	Composite

SOURCE: Derived from Table 4.6

The proportion and number of poor farmers is thus very much related to the type of production system involved, though as pointed out elsewhere, each system has a significant poor sector.

Smith also points out a trend that is clear from other countries. That is the tendency for higher household increases to be associated with non-farm income combined with farm income. This makes the difference between barely surviving and achieving a modest level of rural prosperity.

As a basis for the current Five Year Plan, 1979-83, a number of analyses were carried out to assist government planners in identifying the nature of poverty in Kenya especially in rural areas.

A different approach by Crawford and Thorbecke used a poverty level of 2,250 calories per day per adult (in a basically beans and maize diet). Translating this into food and other purchase costs, Smith suggests that the 'poverty' diet costs 309/- per adult per year. Based on this analysis, 15 percent of smallholders come below the poverty line and may be another 10 to 15 percent are around or just above that line.

Table 4.7 sets out the regional distribution of households with various levels of food consumption. Using slightly different assumptions 38.5 or 35.8 percent of all households fall below the poverty level. Nyanza and Western Provinces account for 60.5 percent of the total poor. A later section will take up the issue of distribution of poverty in a little more detail, but from an economic perspective we have established that while there is a wide distribution of poverty in Kenya in every livelihood system, urban - rural, the greatest incidence of poverty is in three provinces: Coast, Nyanza and Western and probably in the peri-urban zone of Nairobi.

TABLE 4.7

Distribution of Smallholder Households Falling Below Poverty Line, by Province

	Central	Coast	Eastern	Nyanza	Rift Valley	Western	Total
% of Household with Food consumption shs. 1,700/-	17.8	37.7	27.1	50.7	36.5	47.7	35.8
No. of households (000s)	58.5	26.3	95.8	195.8	32.8	121.6	530.9
% of Total shs. 1,700/-	11.0	5.0	18.0	36.9	6.2	22.9	100.0
% of households with Total consumption shs. 2,200/-	18.2	43.5	28.5	55.5	38.8	51.6	38.5
No. of Households	60.1	30.4	100.6	214.2	34.9	131.3	571.5
% of Total shs. 2,200/-	10.5	5.3	17.6	37.5	6.1	23.0	100.0

Source: Adapted from Crawford and Thorbecke (1978) Table 3, p.II-9.

4.5 Social Well-Being

Over a third of the population might be characterized as poor in terms of their inadequately fulfilled basic needs: food, housing, water supplies, health services, education.

Measurement of social well-being in Kenya, as elsewhere, is difficult. Comparative statistics between provinces do not adequately capture the problem, for the differences within provinces are often as great or greater than between them. Nevertheless, the government gathers statistics primarily on a provincial level. Data relating to income distribution are hard to evaluate, for estimates of subsistence and semi-subsistence incomes are often under stated. The tentative distributive pattern of social well-being summarized below must be considered in light of these difficulties. Regardless of how measured, however, the disparities are a major factor influencing the tendency for rural families to migrate to urban centers, aggravating social problems of unemployment, overcrowding, slum housing, and crime.

4.5.1 Income Distribution

Cash incomes in Kenya are concentrated in urban areas in the modern sector, where they must be used to purchase most of every family's requirements. In rural areas and semi-urban areas, poor families often produce a significant share of their own food, housing, and some clothing. The International Labor Organization attempted to estimate the overall distribution of national income by household. More significant than its suggested categories (which appear extremely low for the lowest incomes, probably due to an inadequate estimate of subsistence production), the ILO's analysis shows the distribution to be sharply skewed:

TABLE 4.8

Household Income Distribution, 1968-70

Income (KL p.a.)	Number of Households (thousands)	Percent
0- 20	330	14%
21- 60	1,140	48%
61- 120	330	14%
121- 200	240	10%
201- 600	220	9%
601-1,000	50	2%
1,000- over	30	1%
Total	2,340	98%

Source: ILO, Employment, Incomes and Equality, 1972

TABLE 4.9

Distribution of Wage Employment by Sex and Income Groups 1977

Income	Male		Female		Total	
Sh. p.a.	No.	%	No.	%	No.	%
Under 150	19,954	3.2	3,667	3.2	23,621	3.2
150- 199	72,619	11.6	17,021	15.1	89,640	12.1
200- 399	141,170	22.6	18,158	16.1	159,328	21.6
400- 500	132,591	21.2	21,114	18.7	153,705	20.8
600- 799	84,216	13.5	13,059	11.5	97,275	13.2
800- 999	49,379	7.9	12,446	11.0	61,825	8.3
1,000-1,499	55,557	8.9	13,900	12.3	69,457	9.4
1,500-1,999	22,112	3.5	5,935	5.2	28,047	3.8
2,000-2,999	20,710	3 2	4,797	4.2	25,161	3.4
3,000 and over	25,710	4.1	2,507	2.2	28,217	3.8
Total	623,672	100.0	112,604	100.0	736,276	100.0

Source: Central Bureau of Statistics, Statistical Abstract, 1978, Table 275.

Over half of all the wage earners receive less than 600 shillings (KŁ30) a year, while less than four percent earn over 3000 shillings (KŁ150). The lack of modern sector employment available to women is reflected in the fact that they constitute only 15 percent of the paid labor force.

Analysis of wage incomes earned, by major town and province, showed employees in Nairobi received two thirds of the cash earnings throughout the nation in 1977. Wages earned throughout the rest of the Central province made up only 3.5 percent of the nation's earnings. Earnings in only one other province, the Coast, which includes the port city of Mombasa, exceeded a tenth of the nation's, (17.9 percent). Wages in the Eastern, Nyanza, and Western Provinces constituted less than 3 percent of the nation's total earnings

TABLE 4.10

Percent Distribution of Earnings by Province, 1977

Province	% of Earnings
Nairobi	66
Central	3.5
Coast	17.9
Eastern	1.9
Nyanza	3.0
Rift Valley	6.5
Western	0.8

Source: Central Bureau of Statistics.

A rural household survey, taken in the mid-1970s, showed that rural incomes, too, are highly skewed. This appears especially true in the provinces characgerized by significant cash crop production (although large farm areas were explicitly excluded from the survey). The largest proportion of households receiving below 2999 shillings is Western province. Central, Nyanza, and Rift Valley, the provinces with the highest proportions (17.40, 16.63, and 16.97 respectively) of those receiving more than 8000 shillings (See Table 4.11).

TABLE 4.11

Percentage Distribution of Rural Households by Income Group and Province,* 1974/75

	Central Province	Coast Province	Eastern Province	Nyanza Province	Rift Valley Province	Western Province	Total
Below 2,999 Shs.	46.09	52.74	52.78	54.84	49.68	70.73	54.73
3,000-3,999 Shs.	10.14	15.30	15.27	10.70	10.18	10.02	11.73
4,000-5,999 Shs.	15.10	19.88	12.70	14.23	14.79	9.33	13.52
6,000-7,999 Shs.	11.26	4.08	11.34	3.61	8.37	6.46	7.95
8,000 Shs. and Over	17.40	8.01	7.90	16.63	16.97	3.47	10.08
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Central Bureau of Statistics

*Excludes pastoral and large farms areas

4.5.2 Nutrition

The government estimates about a third of the population consumes insufficient quantities and qualities of food, creating serious nutritional problems. Those affected and the reasons given are listed in Table 4.12 below.

TABLE 4.12

Nutrition Problems in Kenya, 1978[1]

Nutritionally Deficient Group	Nutrition Problem	Cause of Problem	Estimated Numbers in group
1. Smallholders:			
(a) Food crop producers average household income K£50 (1975) virtually no sales.	Protein nergy malnutrition (PEM).	Insufficient food production.	2,200,000
(b) Landless poor	PEM	Low income, consumer prices	410,000
(c) Cash crop producers household income K£125 (1975)	Periodic PEM	Low earnings with poor distribution throughout the year.	1,090,000
2. Urban Groups:			
Unemployed, underemployed	PEM	Low income, consumer prices	250,000
3. Pastoralists	Periodic PEM	Vulnerability to weather, lack of food security.	670,000
4. Special Groups[2]			3
(a) Pre-school children	30% mild PEM, 5% severe PEM.	Inadequate household purchasing power, poor feeding practices, infection.	
(b) Pregnant and lactating mothers	Anaemia	Poor diet, malabsorption infection, hookworms.	
(c) Xerophthalmia bitot spots	Vitamin A deficiency	Poor diet. malabsorption	
(d) Goitre	Iodine deficiency	Endemic particularly in Western Nyanza and Rift Valley.	

[1] This is not a comprehensive analysis but is indicative of the situation.

[2] There are many other nutrition and nutritionally related problems which tend to be either more local or not as pervasive as thos listed but would be included in a more comprehensive study.

[3] Estimates are not given as many overlap those in groups given above.

Source: Statistical Abstract, 1978, and Kenya Fourth Development Plan 1979-83, Table 5.6

4.5.3 Housing

Lack of adequate housing for low income groups, especially in urban areas, remains a major problem. Surveys show that about 35 percent of all urban households exist in squatter settlements and slums characterized by: overcrowding; unauthorized construction of unplanned dwellings built of sub-standard materials; and lack of suitable water facilities and sewerage, engendering the danger of epidemic disease and fire outbreaks.

The government has identified lack of suitable land for housing and slowness in land acquisition, lack of physical development planning, lack of adequate water supply, and cumbersome approving procedures in Local Authorities as major hindrances to solving this problem. It plans to spend about 40 percent of the K£53 million it has allocated for housing to providing housing for the urban poor in the current Plan. The private sector is expected to pend some K£58 million, primarily to finance more profitable high and middle income housing.

4.5.4 Water Supply

Water problems are of two kinds. In the urban areas, about a third of the population lacks adequate piped water and sewerage disposal, contributing to serious health problems. In rural areas, about a fourth of the population lives more than two miles from the nearest dry season water source. This imposes a heavy burden on women and children who daily must spend hours carrying water. In the Coast Province, almost five percent of the population lives beyond eight miles from the nearest dry season water supplies, suggesting the necessity of devoting resources to solving that problem before increasing the supplies available, for example, to augment tourism. (See Table 4.13).

TABLE 4.13

Percentage Distribution of Holdings by Distance to Water Supplies by Province, 1974-5

	Central Province	Coast Province	Eastern Province	Nyanza Province	Rift Valley Province	Western Province	Total
Wet Season Drinking Water							
Under 1.0 Mile	88.47	66.84	85.26	83.53	90.05	91.07	85.94
1-1.9 Miles	10.98	23.35	10.80	14.89	9.90	8.70	12.08
2-3.9 Miles	0.55	9.36	2.62	1.58	0.05	0.00	1.60
4-7.9 Miles	0.00	0.44	1.18	0.00	0.00	0.23	0.34
Over 8 Miles	0.00	0.00	0.14	0.00	0.00	0.00	0.03
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Dry Season Drinking Water							
Under 1.0 Mile	83.06	43.33	60.80	69.48	69.86	86.52	72.15
1-1.9 Miles	14.96	22.36	18.83	26.00	25.44	13.00	19.41
2-3.9 Miles	1.98	19.06	9.32	4.52	4.28	0.25	5.03
4-7.9 Miles	0.00	10.89	9.36	0.00	0.42	0.23	2.81
Over 8 Miles	0.00	4.36	1.69	0.00	0.00	0.00	0.61
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Rural Survey Statistics and Kenya Statistical Abstract, 1978 Table 110.

4.5.5 Health

The distribution of health facilities reflects the national pattern of production and income. The number of hospital beds per 100,000 population in Nairobi is more than four times that available in the semi-arid North-eastern province (See Table 4.14).

TABLE 4.14

Health Institutions and Hospitals Beds and Cots by Province (1978)

	HEALTH INSTITUTIONS				HOSPITAL BEDS AND COTS	
	Hospitals	Health Centres	Health Sub-Centres and Dispen-saries	Total	No. of Beds & Cots	No. per 100,000 Popu-lation
Nairobi	26	2	113	141	3,919	479
Central	45	31	158	234	3,758	168
Coast	23	18	129	170	2,420	188
Eastern	27	20	201	248	3,177	127
North-Eastern	3	3	16	22	313	115
Nyanza	33	30	144	207	4,065	137
Rift Valley	50	66	311	427	4,679	160
Western	18	31	31	80	2,377	127
Total	225	201	1,103	1,529	24,708	106

SOURCE: Kenya Economic Survey, 1979, Table 15.13

In rural areas, about 21 percent of the population lives over 8 miles from the nearest health center, with the proportion rising to 35 percent in the Coast and 39 percent in the Eastern Provinces (See Table 4.15).

TABLE 4.15

Percentage Distance From Health Centers, by Province

Health Centre	Central Province	Coast Province	Eastern Province	Nyanza Province	Rift Valley Province	Western Province	Total
Under 1.0 Miles	3.97	4.36	3.30	2.14	8.52	6.68	4.10
1-1.9 Miles	13.87	16.13	11.03	13.76	9.63	7.00	11.83
2-3.9 Miles	43.47	23.31	16.20	42.25	23.73	37.32	33.46
4-7.9 Miles	30.04	20.28	30.06	30.37	39.47	23.69	29.15
Over 8 Miles	8.65	35.92	39.41	11.48	18.66	25.31	21.46
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Kenya lacks adequate medical personnel in all fields, which renders it difficult to overcome this disparity: (See Table 4.16 below).

TABLE 4.16

Registered Medical Personnel, 1976-1978

	No. per 100,000 Population
Doctors	9.50
Dentists	0.84
Clinical Officers*	9.46
Pharmacists	1.59
Registered Nurses	41.14
Enrolled Nurses	51.26

* Data refer to registered clinical officers in Government Services.

Source: Economic Survey, 1979, Table 15.14

The government plans to spend about 53 percent of the total recurrent health budget of K£181 million allotted in the current plan for rural health facilities and supportive services to meet the needs of the 85 percent of the population living in rural areas.

4.5.6 Education

Table 4.17 shows secondary school enrollment, by sex. The discrepancy between boys' and girls' attendance is especially pronounced in secondary school because the expense to the family increases in the higher grades. Girls' enrollments in secondary schools are less than half those of boys everywhere, except in Nairobi

TABLE 4.17

Secondary Schools Enrollment In Aided Schools by Provinces and Sex, 1976-1978

	1976		1977		1978*	
	Boys	Girls	Boys	Girls	Boys	Girls
Coast	6,262	2,804	6,456	3,000	4,973	2,321
Central	17,691	8,892	18,865	9,218	19,364	9,458
Eastern	12,495	5,443	12,286	5,684	12,893	6,636
Nairobi	10,098	5,363	10,567	5,619	9,135	5,009
North-Eastern	531	107	590	146	327	158
Nyanza	13,347	4,703	15,743	5,921	13,918	5,421
Rift Valley	11,568	5,521	11,512	5,812	12,092	6,079
Western	10,297	3,513	11,792	4,785	9,719	3,907
Total	81,289	36,346	87,811	40,185	82,421	38,989

* Provisional

SOURCE: Kenya Economic Survey, 1979, Table 15.6

A smaller proportion of girls than boys attends primary school. Especially in rural areas, lack of school facilities combined with family preferences to keep girls at home stifles girls' education. In the Coast, the religious influences may also tend to reduce girls' attendance in school.

TABLE 4.18

Primary School Enrollment by Province and Sex, 1977 & 1978

	1977				1978*			#'s 000's
	Male	Female	% Cohort Aged 6-12	% Pupils Aged 13+	Male	Female	% Cohort Aged 6-12	% Pupils Aged 13+
Central	294.9	289.8	101.6	20.3	310.8	305.1	102.5	21.5
Coast	99.7	63.5	57.0	21.6	103.2	67.4	57.0	22.7
Eastern	297.3	257.3	57.0	13.8	313.1	288.7	101.0	14.5
Nairobi	44.6	41.7	72.5	13.4	45.9	45.8	75.5	13.0
N. Eastern	6.9	2.3	11.2	29.1	7.1	2.4	11.7	28.1
Nyanza	305.5	248.9	80.4	11.5	278.0	224.9	71.0	14.0
Rift Valley	299.0	254.3	77.2	14.2	308.4	262.1	78.4	15.6
Western	236.7	210.6	102.3	12.8	217.8	197.3	93.0	14.0
Total	1,584.8	1,386.4	85.6	15.0	1,584.1	1,393.6	83.2	16.5
No. of Schools	8,873				9,237			

Provisional

SOURCE: Kenya Economic Survey, 1979, Table 15.4

Enrollments in secondary schools have increased from 195,574 in 1974 to 319,982 in 1977 and 362,025 in 1978. This yields an increase of 85 percent in enrollments between 1974 and 1978. Enrollments have shifted increasingly to schools unaided by government as secondary school attendance has expanded, indicating the widespread desire to obtain advanced education, despite the cost to the family.

4.6 The Overall Picture: The Distribution and Nature of Poverty in Kenya

4.6.1 Differentiation Between Regions and Livelihood Systems

Figure XIII provides a convenient starting point for the analysis of spatial differences between regions and systems. It depicts the distribution of seven major agricultural systems and the presence or absence of cattle in them. To complete the picture we need to add urban areas as another category. The previous discussion outlined some of the differences in income levels within the smallholder system; we can now attempt to enlarge this to the whole economy.

The IRS 1974-1975 did not deal with the question of incomes among the pastoralists and there is a lack of reliable data on this sector. Information which is available suggests that average income levels are low and that services and access to health and education are also difficult. As in the other systems, there is however a wide range of levels of well-being; some people owning large numbers of animals and others very few.

Our conclusion for the livelihood systems of Kenya is set out in Table 4.19.

FIGURE XIII

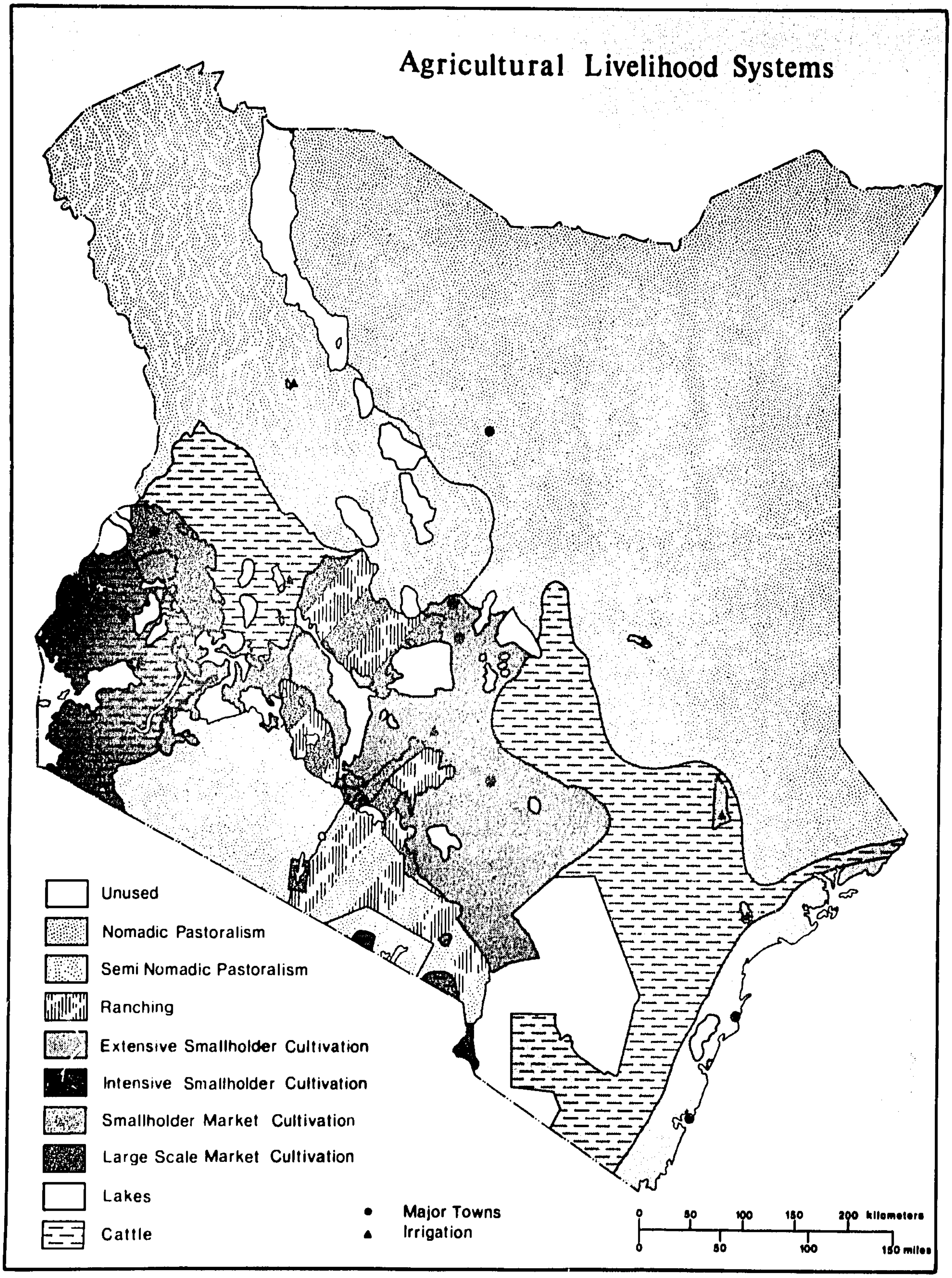

Agricultural Livelihood Systems
Unused
Nomadic Pastoralism
Semi Nomadic Pastoralism
Ranching
Extensive Smallholder Cultivation
Intensive Smallholder Cultivation
Smallholder Market Cultivation
Large Scale Market Cultivation
Lakes
Cattle
Major Towns
Irrigation
0 50 100 150 200 kilometers
0 50 100 150 miles

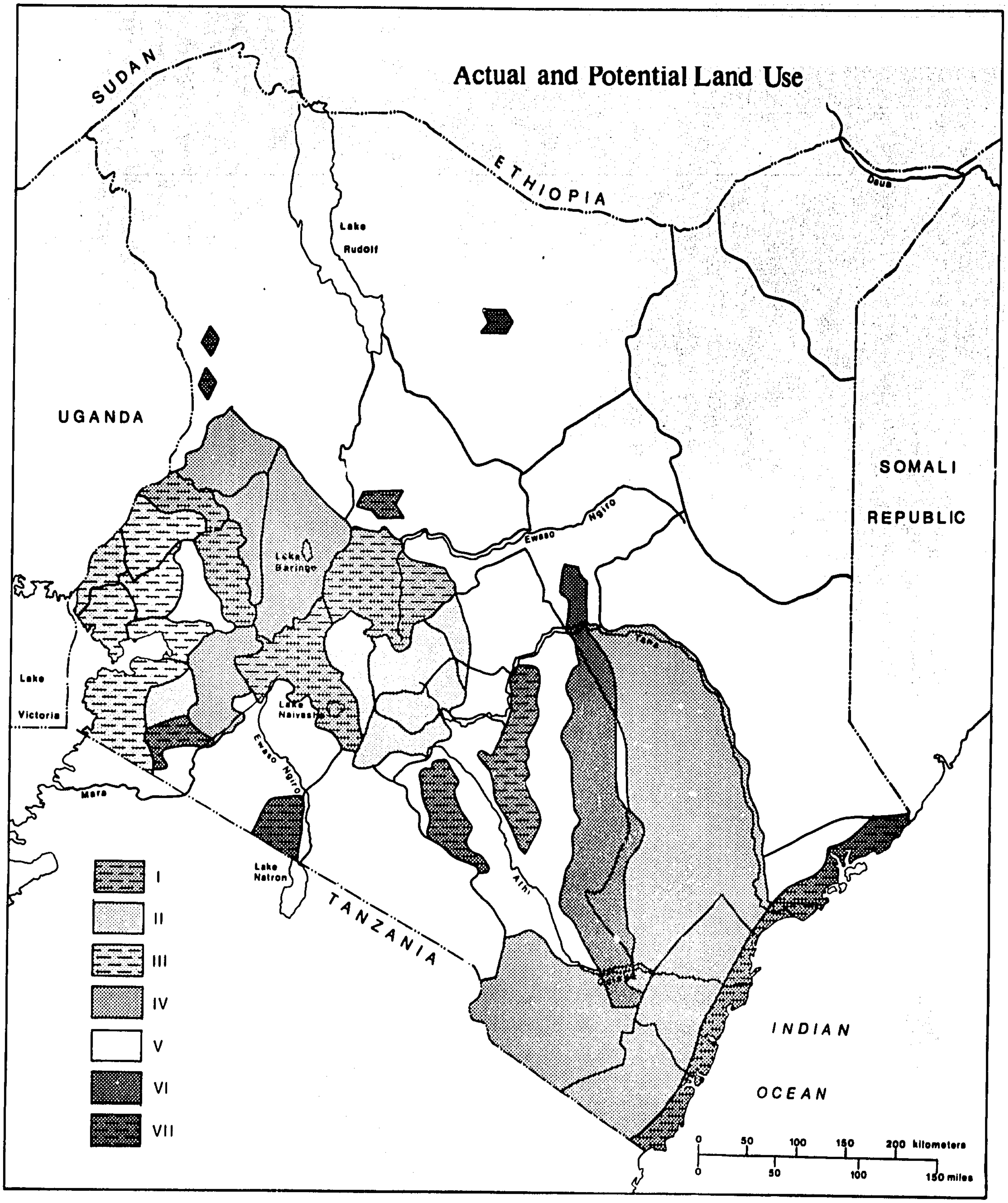
TABLE 4.19

POVERTY LEVEL BY LIVELIHOOD SYSTEM

Nomadic pastoralism	Poverty widespread
Semi-nomadic pastoralism	Considerable poverty
Smallholder - tea, coffee & cotton west of Rift	Large percentage of poor smallholders
Smallholders on Coast	High percentage of poor smallholders
Smallholders - cotton East of Rift	Moderate percentage poor smallholders
Smallholders - tea, coffee East of Rift	Relatively low percentage poor smallholders
Large ranches and farms	Few/none poor
Urban areas	On average higher income and service levels
Peri-urban areas of large cities	Many poor

Poverty is concentrated in N.E. Province, Coast, Western and Nyanza province in Kenya and is also a feature of many peri-urban areas. It is salutary to examine Figure XIV and appreciate that nearly all of these areas of poverty are areas of medium or low potential, even more so to note from Figure IX that population has increased most rapidly in some of those zones. It appears likely that the marginal lands of Kenya and the arid and semi-arid areas are not only poor areas, but areas of increasing poverty. The challenge inherent in the current farms on the improvement of life in these areas is formidable and programs cannot be expected to generate economy or quick

FIGURE XIV


Actual and Potential Land Use
SUDAN
ETHIOPIA
UGANDA
SOMALI
REPUBLIC
TANZANIA
INDIAN
OCEAN
Lake
Rudolf
Lake
Baringo
Lake
Naivasha
Lake
Victoria
Lake
Natron
Mara
Ewaso Ngiro
Athi
Tana
Daua
I
II
III
IV
V
VI
VII
0
50
100
150
200 kilometers
0
50
100
150 miles

ACTUAL LAND USE IN DISTRICT		LAND POTENTIAL IN DISTRICT
I Large farms, estates, or ranches II Improved smallholder farming, cash crops III Dense poverty-level smallholdings	}	Ecoclimatic zones II and III (high to medium potential for crops, ranching, andforestry) (Embu and Meru have portions of rangeland)
IV Sparser subsistence smallholdings on the good cropland, marginal smallholdings on the poor cropland	—	Districts having large portions of zone II and III cropland but other large portions of rangeland risky for crops
V Districts in trust for pastoral groups	—	Predominantly in ecoclimatic zones IV through VI (rangeland of low to moderate potential; high risk of crop failure)
VI Marginal smallholders on high-risk cropland		
VII Zone II or III cropland currently underutilized, in trust for ethnic groups	—	Isolated areas of high to medium potential (zone II or III) land

Note--Ecoclimatic zone I (barren land) occupies less than one percent of total land area.

visible reutrns.

4.6.2 Differentiation Within Regions and Livelihood Systems

Some of the data presented earlier in this chapter emphasized the point that within each livelihood system in Kenya there is a wide range of income levels and considerable poverty. The analysis also showed that there was a higher percentage of poor in the poorer agricultural systems. Four groups of poor and disadvantaged are especially important when considering differentiation within systems. They are:

(a) landless;

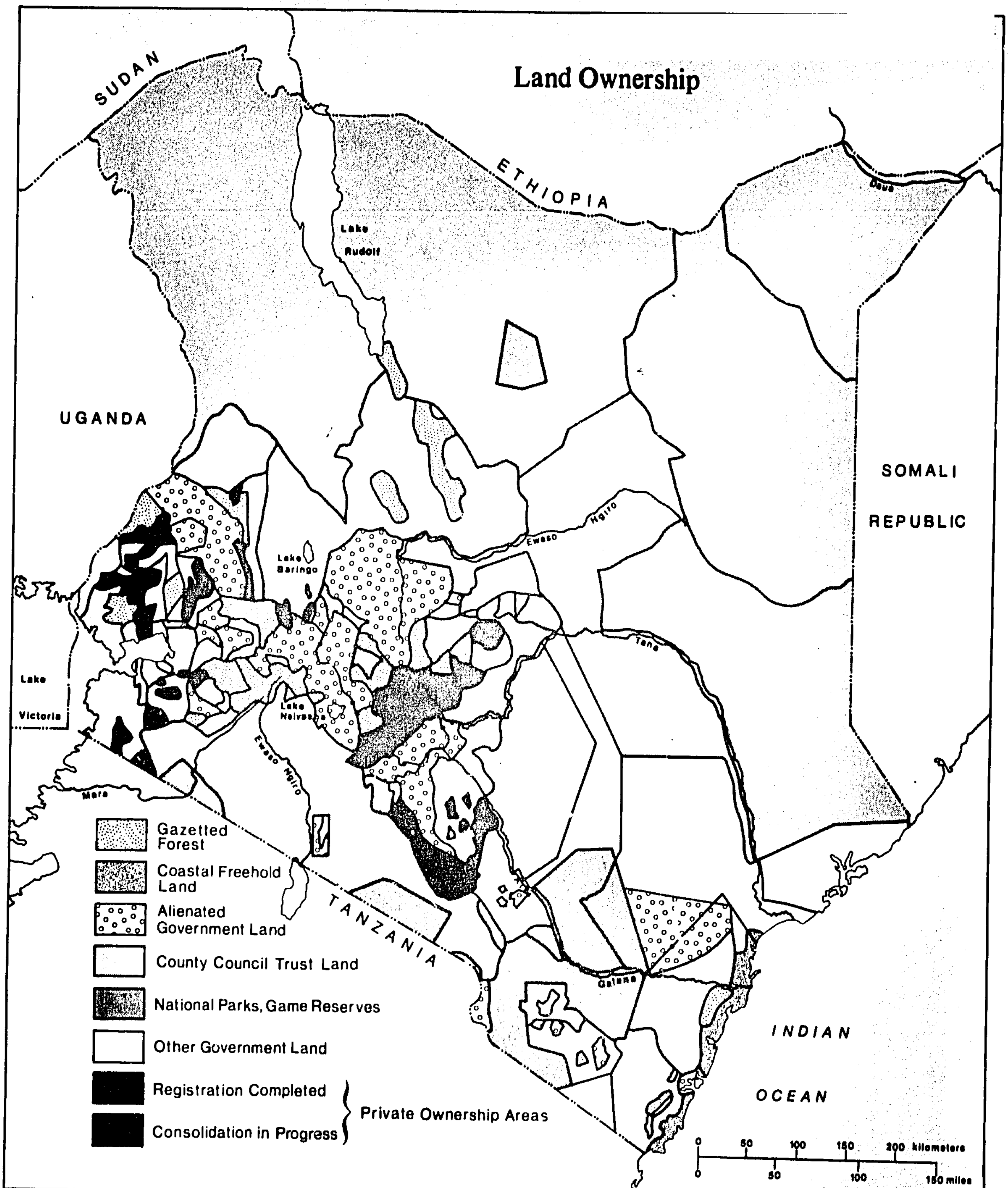
(b) women;

(c) poor in the nomadic/semi-nomadic sectors;

and (d) poor in the poverty prone zones west of the Rift;

Landless people are growing in numbers in Kenya for a variety of reasons. The policy of land registration carried out for over 25 years in the richer districts has ironically appreared to result in greater sales of land and subsequent emergence of a landless group (Figure XV) The rapid growth of population and greater freedom of exchange of title has enhanced this trend in recent years. Many of the landless occupy government land without title, work as hand labourers or migrate to the towns. Generally, their income levels are low and this is even

FIGURE XV


Land Ownership
SUDAN
ETHIOPIA
UGANDA
SOMALI
REPUBLIC
Lake
Rudolf
Lake
Baringo
Lake
Victoria
Lake
Naivasha
Ewaso Ngiro
Tana
Galana
Mara
TANZANIA
INDIAN
OCEAN
Gazetted Forest
Coastal Freehold Land
Alienated Government Land
County Council Trust Land
National Parks, Game Reserves
Other Government Land
Registration Completed
Consolidation in Progress
Private Ownership Areas
0 50 100 150 200 kilometers
0 50 100 150 miles

more important when they are not bolstered by subsistence food production.

<u>Women</u>: are a vital part of Kenya's rural economy, in many areas contributing a major part of the farm labor as well as getting firewood and water and managing the household affairs. Most women are not adequately rewarded for these tasks and in addition are less encouraged to embark on training and education which would provide better return for their efforts. Despite some advances, women remain a disadvantaged and poverty prone group in Kenya.

<u>Pastoralists</u>: are a particularly vulnerable group of poor. They are vulnerable to climatic hazards which can reduce their animal capital; they are vulnerable to patterns of change which reduce their flexibility and viability; and they are also vulnerable to plans for 'progress' by Government or donors. The available data suggest that in times of drought, in times of growing vulnerability through land alienation, and in areas where new ranching or other projects are initiated in all these, the pastoralist household with few animals suffers.
The pastoralist areas of Kenya are those areas which have shown the greatest percentage increase in population in the last 10 years. They are vulnerable areas but the poor pastoralist in them is particularly vulnerable.

Similarly, the smallholders in the disadvantaged areas: Nyanza, Western and Coast Province have particular sets of problems. As Smith points out, the better-off smallholders are those which have an element of off-farm income in the household budget. The provinces just named, because they have a lower level of services and government investment also have lower levels of opportunity for off-farm employment. There seems generajly to be less "economic energy" in these areas. The poor smallholders again have an especially hard road to take towards even modest levels of prosperity

4.7 Conclusion

As the different documents reviewed suggest, there is still much left to understand about the nature and distribution of poverty in Kenya. The current analysis has, for example, not focussed sufficiently on the problems of the urban poor.

But general conclusions do emerge. There are wide differences in income levels and wealth in Kenya, within and between systems. The GOK has begun to address the needs of the poor in its current Five Year Plan. The correspondence between resource availability and degrees of poverty suggests that solutions to the problem of poverty in Kenya may only come in the long haul. A better understanding of the nature of that poverty is still clearly needed.

Further Reading:

There is a large body of literature on various aspects of Kenyan development. The following is presented as a selection of sources that we have found to be particularly useful.

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In addition to these documents there are other sources that are useful in gaining insight into current affairs and developmental issues in Kenya. For example; various journals such as African Business, New African and Eastern African Journal of Rural Development.

The publications of Nairobi university's Institute for Development Studies are also valuable. The GOK/UNEP/UNDP Project on Environment and Development has produced a substantial number of papers addressing different sectoral issues affecting environment and development.