A STUDY ON THE RELATIONSHIP BETWEEN POPULATION GROWTH AND LAND VALUES: A CASE STUDY OF KISII DISTRICT, KENYA (1967-87).

BY

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DECLARATION

I, ENOSH ONYANGO MOMANYI, hereby declare that this Thesis is my original work and has not been presented for a degree in any other University.

.....

Signed.

DECLARATION OF THE SUPERVISOR

This Thesis has been submitted for examination with my approval as University Supervisor.

.....

DR. S.E. KITUUKA

ABSTRACT

The thesis constitutes a study of land values, population growth and the rural land market in Kisii District. It investigates the nature of the Kisii rural land market, the possible causes of high land values and whether population growth is a significant factor.

It was established that the number of land sales have been on the decline especially as from the 1980s. The main reason for this was the high population density and the overdependence of the Gusii on agriculture which could not warrant many sales. It was also established that the pieces of land disposed of in the market have progressively been diminishing. It was evident that there were no leasehold sales in the market during the study period of 1967-87.

An upward trend in land values was noted although there were fluctuations here and there. In fitting the trend equation for them, the Least Squares Geometric Straight Line Approach was used. A major deduction in the study was that high land values in densely populated Kenya are here to stay and that transactions in the freehold interest are on the decline.

It was evident that population growth in Kisii is a real problem to the community's economy since in other years it was growing at the prohibitive rate of 5.2% per year.

The causes for high land values in the district were identified as good climate, cultural attachment to land, soil fertility, inflation, population growth, location, economic development,

per capita income, speculation, political stability and government intervention.

Results obtained revealed that whereas the land market in Kisii was active in the 1960s and had assumed a descending trend in the 1980s, land values were increasing at the rate of 1.43 per cent per annum at 1977 prices while population was rising at a much faster annual average rate of 3.88 per cent.

The major finding of the study was that the relationship between land values and population growth is not strong.

The main recommendations were that small families be encouraged, freehold sales be banned in favour of leaseholds and that less emphasis be placed on land i.e. people should be made to understand that investment in land is not the only course of action for survival. It was also proposed that in order to curb exorbitant land prices, land should be nationalized.

The study consists of three sections the first of which sets the premise against which the core of the study is examined. The section in addition reviews land values in the light of land as a scarce resource in a dynamic environment.

The second part consists of two chapters. The first one presents the concept of rural development and the land question in Kenya. It shows the place of land in the process of rural development. The other chapter examines the general features of Kisii District. Examination of the study area reveals the possible causes of the prevailing high land values.

The last part of the thesis also consists of two chapters. One is an analysis of population and land market data while the last one is a summary of conclusions and recommendations.

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Although much help was solicited from those mentioned above, the narrative, opinions and conclusions in the study are my own responsibility and must not be attributed to any other party.

DEDICATION

This Thesis is dedicated to my mother,
PATRICIA KEMUNTO, my brothers,
my sisters and all those who love
research work and progress.

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CHAPTER ONE

STATEMENT OF THE PROBLEM

Throughout history, land has been the most sought-after and the most valued resource as can be deduced from the following observation made by President Kenyatta:

> Our greatest asset in Kenya is our land. This is the heritage that we received from our forefathers. In land lies our salvation and survival.[1]

Land has been an invaluable treasure to man throughout human history. Inspite of this however, it is not a commodity which can significantly be increased to offset its ever increasing demand. For instance, there is nothing much that about 80 per cent of Kenyans can do apart from depending on only 18 per cent of the country's total area of 575,000 square kilometres for survival.[2] This is because most of the country is either arid or semi-arid.

The tremendous increase of population in Kenya has appreciably reduced the man to acre ratio and yet it has been observed that among the desires of man is an age-old hunger for land.[3] This desire is in both the rich and the poor. It is the submission of many people that this hunger for land has in a way led to the prevailing high land values in Kenya. This trend seems to tally well with the basic economic theory that whenever a commodity is in fixed supply or is scarce relative to its demand, the result is excess demand. To offset this excess demand, the price of the commodity in question has to be raised to exclude some of the potential purchasers.

Land values in Kenya have been high for a long time. In 1967, Angaine had the following to say,

> Whereas the government of Kenya is determined to equitably resolve the land issue, our efforts have to a certain extent been frustrated by some unscrupulous people who have always been speculating in land. [5]

He warned that steps would be taken against people who charged exorbitant prices for land. Angaine's utterances were an admission by the government of Kenya that land prices in the country were high. The causes of these values were vaguely known at the time although many people seemed to attribute them to population growth.

The general belief that population growth is a major determinant of high land values is not strange since it has always been a complex issue. Several studies have been conducted on it culminating into two schools of thought. The first one sees population growth as a positive factor in development while the second one considers it to be a negative one.

Osborn[6] concedes that these two schools of thought do exist and so does Todaro[7] who notes that scholars in developing countries are not in agreement on the effect of population growth in a developing economy. Some consider it to be a necessary factor in development in terms of aggregate demand while others hold that it is an obstacle to development. In more specific terms, those who see population growth as a real problem assert that it is the root cause of poverty, low levels of living, malnutrition, ill-health, environmental degradation and a wide array of social evils. Those who view it otherwise point fingers to under development, population distribution and excess consumption in developed countries as the

causes of global misery and not population growth.

It is in the light of the former school of thought that in a time of rapid population growth, the law of demand and supply produces a skyrocketing cost inflation when applied to land.[8] The contention here is that population growth significantly influences land values.

Kenya's population growth rate is one of the highest in the world (4.1 per cent per annum).[9] This trend attracted the attention of Kenyan leaders as is evident from the following statements made by President Moi:

> We have no choice, neither do we have the time to make this choice. We must therefore reduce our population growth now.[10]

And again,

> Population in Kenya has become a matter of grave concern but many Kenyans are not taking the issue seriously.[11]

It has also been observed that Kenya's average levels of income have been too low by world standards because her high rate of population growth has been reducing the amount of resources available to every citizen. This has delayed the day when the standard of living of Kenyans would be reasonably high.[12]

The population school of thought which Kenya has adopted is that population growth is a retrogressive factor. This stand has mainly been influenced by the fact that Kenya has a predominantly rural population which depends on arable land for survival. The country's arable land is small such that as population increases, there is disequilibrium in land use especially with respect to food

crops and cash crops. At the same time, as population increases, families multiply and since most of them depend on agriculture, they subdivide their land into small units. This tendency not only reduces the economic benefit for the family but also leads to increased pressure on the land and its use.[13]

Arvil[14] confirms this when he points out that man's activities are increasingly outstripping the capacity of the natural processes to restore the fertility of the land which has taken thousands of years to create. He concludes that the great driving force behind this fierce assult on the land resources is population growth. In addition, it has been observed that in developing countries such as Kenya where the standards of living are low, pressure on the land resources is more intensive relative to their developed counterparts because their populations increase at a break-neck speed.[15]

Land values in Kisii have been high and so has been its rate of population growth. The main causes of high population growth have been high fertility rates, early marriages, illiteracy, cultural inclinations and the low level of outmigration in the district. As has been the case all over, the prevailing high land values in the district have been attributed to population though with imprecision.

This study was undertaken as a contribution to land studies in view of the fact that not many people at the time seemed to be interested in them. Yahya[16] confirmed this when he asserted that one could count on the fingers of one hand the number of journals exclusively devoted to land matters. He pointed out that only a handful of research theses on this subject are completed every year in world universities. The main problem is that land

has always been conceived as part of something else such that research efforts have always been directed towards solving such problems as housing, urban development, environmental management, transportation, and rural development. This trend has diverted attention from land itself as a subject of serious investigation and study. Ominde[17] seemed to be in agreement with Yahya when he concluded that the impact of population change on land is imperfectly known.

Hypothesis

This study was exploratory in nature and therefore had no definite hypothesis. However, with reference to the problem stated above, it aimed at verifying the conviction that high land values were mainly a consequence of high population growth.

Study Objectives

The study had two objectives:

1. To establish the district's rural land market in general and the land value trend equation in particular. It was hoped that this would facilitate the comparison of the annual growth rates of both land values and population.

2. To establish the rating of population growth as a land value determinant vis-a-vis the other factors in the district.

Choice of the Study Area

The study area chosen was Kisii District in the Nyanza Province of the Republic of Kenya. It covers an area of 2196 square kilometres and is bordered by Kericho, Narok and South Nyanza Districts to the east, south and west respectively.[18]

The district's crude densities for 1962 and 1969 were 234 and 304 respectively[19] while in 1979, it was one of the most densely populated districts in Kenya as illustrated in table 1-1.

Table 1-1 Population Density of Kenya's Districts, 1979.

District	Persons per sq.km	District	Persons per sq.km	District	Persons per sq.km
Mombasa	1,622	Trans-Nzoia	124	Baringo	13
Nairobi	1,210	Nandi	109	Laikipia	13
Kisii	395	Embu	96	Taita Taveta	8
Kakamega	295	Nakuru	90	Kajiado	7
Kiambu	280	Uasin-Gishu	89	Lamu	6
Muranga	261	Meru	83	Samburu	4
Kisumu	230	Machakos	72	Mandera	3
Kirinyaga	202	Nyandarua	66	Garissa	2
Siaya	188	Elgeyo Marakwet	65	Wajir	2
Busia	183	Kilifi	34	Tana River	2
Bungoma	163	Kwale	34	Turkana	2
Kericho	161	Narok	20	Isiolo	1
Nyeri	148	West Pokot	17	Marsabit	1
South Nyanza	143	Kitui	15		

Source: Wanjiku, 1986, p.132.

The necessity to carry out the study on population growth and land values in Kisii district arose from the fact that it is one of the districts in Kenya with the highest population growth rates and with a high density of well over 400 persons per square kilometre.[20] At the same time, it is one of the districts in Kenya where land values have been prohibitively high and where land shortage has been a real crisis even to the casual observer.

As a district with high fertility rates, a high population density and a land shortage crisis it was expected to manifest best the relationship between land values and population growth vis-a-vis the other factors.

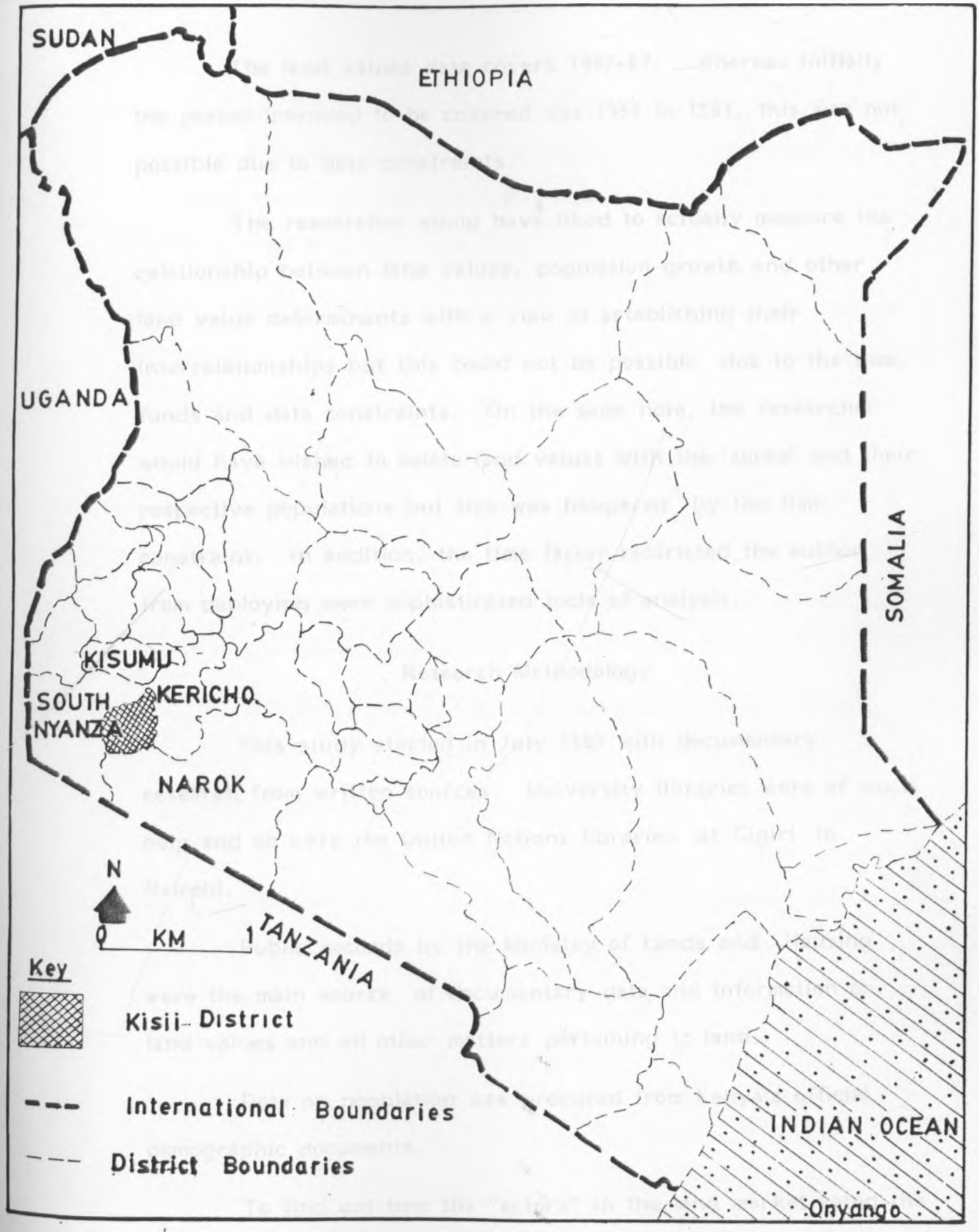
Scope of The Study

This study tackled such issues as population growth, the institution of land and land values. The population question is discussed mainly as it relates to developing countries as opposed to the developed ones. The land question is studied first at a global level and then at the national level. Land values on the other hand are globally discussed and then narrowed to the study area.

The concept of rural development in Kenya was tackled as a "vehicle" of illustrating the place of land in the process.

The study area was studied in its historical, physical, social and economic perspectives to underscore the fact that these perspectives have an influence on land values.

Figure 1-1: Kisii Neighbouring Districts



Source: Republic of Kenya Kisii District Development Plan 1984-88.

The land values data covers 1967-87. Whereas initially the period intended to be covered was 1950 to 1987, this was not possible due to data constraints.

The researcher would have liked to actually measure the relationship between land values, population growth and other land value determinants with a view of establishing their interrelationships but this could not be possible due to the time, funds and data constraints. On the same note, the researcher would have wished to relate land values with the 'zones' and their respective populations but this was hampered by the time constraint. In addition, the time factor restricted the author from deploying more sophisticated tools of analysis.

Research Methodology

This study started in July 1987 with documentary research from written sources. University libraries were of much help and so were the United Nations libraries at Gigiri in Nairobi.

Public records by the Ministry of Lands and Housing were the main source of documentary data and information on land values and all other matters pertaining to land.

Data on population was procured from Kenya's official demographic documents.

To find out how the "actors" in the land market rated the possible determinants of land values, questionnaires to that effect were administered. They were administered to 100 people out of those who had purchased land in the district within the study

period (1967-87).

By virtue of the problems of transportation, location and the untraceability of some of the people in the target group, no sampling procedure was feasible. The author therefore decided to work on the first-come-first-served principle.

The questionnaire used during the field survey was designed in 1987 and the issues raised were on land ownership, particulars of the land transaction, and land value determinants.

The questionnaires were administered between February 15th and 29th, 1988 with the help of one research assistant. A copy of the questionnaires administered is attached (Appendix 1). To achieve some of the objectives of the study, time series was used as the analytical tool.

The data collected for this study was manually analysed in accordance with the objectives set. The data on the nature of the land market was evaluated and analysed in percentages which became apparent from the frequency distributions which were constructed from the raw data. To establish the land value trend equation, the least squares geometric straight line approach was used.

The results of the analysis are presented in written texts with tables, equations and graphs in an ordered chapter format.

Organization of the Thesis

The study is organized into six chapters as follows:

Chapter One being the basis of the thesis covers a general introduction, a statement of the problem, the hypothesis, the study objectives, the choice of the study area, the scope, the research methodology and the organization of the thesis.

Chapter Two is a general view of the study. Three issues are discussed in the chapter. The first one is on the trend and the consequences of rapid population growth in developing countries. The second one is a discussion on the land question at the global level while the third one is an exposition on the causes of high land values.

Chapter Three is on Kenya and the main issues discussed are population, rural development and the land question.

Chapter Four is exclusively devoted to the study area - Kisii District. Its emphasis is on the district's historical, physical, social and economic perspectives.

Chapter Five is data evaluation and analysis while chapter Six contains the summary of conclusions and recommendations.

Footnotes

1. J.W. Harbeson, Nation Building in Kenya, Evanston: North Western University Press, 1973, p.xvii.

2. Republic of Kenya, Human Settlements in Kenya, Nairobi: Government Printer, 1978, p.16.

3. Land Economics Institute, Modern Land Policy, Urbana: University of Illinois Press, 1925, pp.4-5.

4. Angaine, Kenyan Minister for Lands and Settlement in 1967.

5. Daily Nation, Saturday, July 19, 1967, p.14.

6. S. Osborn (ed.), Our Crowded Planet, London: Allen and Unwin, 1963, p.67.

7. M.P. Todaro, Economics for a Developing World, Essex: Longman, 1982, pp.172-174.

8. O.H. Koenigsberger (ed.), A Review of Land Policies, Oxford: Pergamon Press, 1981, p.694.

9. Daily Nation, Monday, July 13, 1987, p.11.

10. Ibid., p.11.

11. Ibid., p.11.

12. Daily Nation, Thursday, June 13, 1974, p.5.

13. Daily Nation, Monday, July 13, 1987, p.11.

14. R. Arvil, Man and Environment, Baltimore: Penguin Books Ltd., 1967, p.13.

15. Ibid., p.17.

16. Report of the United Nations Seminar of Experts on Land for Housing the Poor, Tallberg and Stockholm, March 1983, pp.84-85.

17. Kenya National Academy for Advancement of Arts and Sciences, Population Growth and its Relevance to Socio-economic Development, Nairobi, KNAAAS, 1980, p.19.

18. Republic of Kenya, Kisii District Development Plan 1984-88, Nairobi: Government Printer, 1984, p.1.

19. C.N. Omare, Effects of Population Change on Land-use in Kisii District, Kenya. Nairobi: M.A. Thesis, 1981, p.4.

20. Republic of Kenya, Human Settlements in Kenya, Nairobi: Government Printer, 1978, p.7.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The literature reviewed is on population growth in developing countries, land as an institution and land values.

Population Growth in Developing Countries

The Trend:

The birth rates in underdeveloped countries today are considerably higher than they were in pre-industrial western Europe. From 1750 to 1850 their population grew at an annual rate of 0.4 per cent; from 1850 to 1950 the rate was 0.9 per cent while from 1950 to 1975, it had risen to 2.3 per cent.[1] In 1960, about two thirds of the World's over 3 billion people lived in the developing countries.[2] In the 1970s, the annual growth rate of population in these countries was even higher; in Latin America and Africa it was at 2.7 and 2.6 per cent respectively while for Asia it stood at 2.4 per cent.[3] In the 1980s, the growth rate was higher still because by January 1982, the World population had passed the 4.5 billion mark[4] while by July 1987 it had hit the 5 billion mark.[5]

As for the future population trend, Todaro,[6] Perez de Cuellar[7] and Hauser[8] observe that in the year 2000, the World's population would consist of over 6 billion people. Todaro adds that the most unfortunate thing about it all is that the developing countries would have over 80 per cent of the projected total.

Hauser seems to be in agreement with Todaro when he points out that in the year 2000, about 77 per cent of the projected population would be living in the developing world.

The Consequences

The trend outlined above undoubtedly portrays a world of rapid population growth. The consequences of this trend are many and do have a bearing on politics, economics and society. Jacoby[9] seems to be in agreement with this sentiment when he asserts that the manifold effects of population growth penetrate into all spheres of a nation's economic and social life; and that they are instrumental in shaping such things as the man to land relationship and the structure of the community.

Malthus[10] (1766-1834) was one of the early proponents of the population question. His contention was that while a new pair of hands accompanies every new mouth that comes into the world, it is only under certain circumstances that the new pair of hands would produce as much food as is produced on average by those pairs of hands already in existence and at work. He in other words predicted a low level of income equilibrium as the result of population growth.[11] It is the opinion of this study that whereas there have been improvements in technology which in a way invalidate Malthus' predictions, most of what he said is still valid in most of the countries in Africa, Asia and Latin America.

It is the submission of Frankel[12] that although the human population is growing fast, the round earth on which we live is fixed in size, and that as more and more people crowd together on

it, it seems to grow smaller all the time. Her conclusion is that population growth is a threat to the availability of food, land and water.

Populations are growing so fast in the Third World countries that they are finding it difficult in providing enough food, houses, schools and jobs. The governments of these nations spend so much money just trying to feed, house and educate their fast-growing populations that they have little money left over for building new roads or for venturing into income generating investments. It is in this light that population growth has been seen as an impeder of economic development besides being a strainer of the natural resources.[13]

Osborn[14] points out that population growth is currently one of the most serious threats to human happiness and progress and that it is a threat to all our efforts to raise our living standards. His conclusion is that, "unless population growth is restrained, we may have to abandon for this generation our hopes of economic progress."[15] His argument is that progress may not be feasible with the current rate of population increase. This study is in agreement with this sentiment.

Rapid population growth slows down the growth of per capita incomes in less developed countries and tends to perpetuate inequalities of income distribution. It holds down the level of savings and capital investment in the means of production thereby limiting the rate of growth of gross national product.[16]

In total agreement with the foregoing, Gray[17] observes that in the countries which are now in the developed category,

population growth and economic growth usually went together but that the opposite is true in developing countries. In these countries, rapid population growth increases the dependency burden thereby reducing the ability of the working population to save. This in turn makes it difficult to create the necessary capital to productively employ the growing population. The picture which emerges here is that population growth perpetuates the vicious cycle of poverty.

It is for this reason that Leibenstein[18] concedes that in the long-run, the course of economic development is inextricably bound up with changes in the size and composition of the population.

In addition to the foregoing, many statements have been made by leading personalities on the population question. One reason for this is their realization that population growth is one factor which is capable of thwarting development. For instance, Ojiambo[19] had the following to say:

> I believe that one of the main objectives of a nation is to improve the well-being of its people and specifically the welfare of every individual. The achievement of this goal is an enormous task. It depends, among other things, upon the adequacy and effective utilization of available resources. The task becomes even more enormous when confronted with rapid population growth.[20]

And again,

> Economic studies have revealed that the population factor is of special relevance in the third world where the total population is growing at the fastest rate compared to other parts of the world.[21]

Accordingly, Salas[22] notes that mankind's history points to the fact that the depressive economic and human miseries resulting from too many people and too little food and economic opportunity in one part of the world undoubtedly imperils the security and well-being of another. It is against this background that it has been said that wide spread poverty, low productivity of labour, the growing demands for food, and slow industrialization distort and degrade the international trade mechanism. He in other words sees population growth as a global crisis which calls for international co-operation in seeking for a solution.

It is in addition observed that large scale internal migration and rapid urbanization are among the most important social effects of rapid population growth. Further more, the growing number of children who survive their parents place new strains on intergenerational relationships.[23]

It has been pointed out that population pressure results when humans and their activities exceed the carrying capacity of a finite region to feed, clothe and otherwise sustain them.[24] It is in this light that Steele[25] affirms that in some parts of tropical Africa, there is already real population pressure on land.

The fact that many of the Third World countries have not yet "settled" substantially in the industrial sector further negates their prospects of quick economic progress. Most of their people having been born have little choice to make as to what their source of livelihood would be. They turn to land and take agriculture as their occupation. The problem with this as the following section would show is that land is an exhaustible commodity which

cannot perpetually bear the pressure created on it.

The Institution of Land

Land, like any other resource is characterized by a number of factors. Economists have traditionally argued that the total supply of land is fixed. If one type of use is increased in one area (for example farm land), it will be at the expense of another (for example forests). When compared with capital, labour or entrepreneurship, land is the least flexible of the factors of production. Its supply is comparatively fixed and it cannot be created by man. Also, land is heterogeneous and hardly homogeneous. As no two persons are exactly the same, likewise, no two parcels of land are identical. Each parcel has an orientation different from any other parcel and may have physical differences in subsoil conditions, drainage, and other features. In the market place, the uniqueness of land parcels requires that each parcel be judged individually. Differences find expression in the variety of bids and offers.[26]

Furthermore, land as a factor of production is subject to the law of diminishing returns. Lastly, whilst in market economies other factors of production can be bought or sold in their own right, in most, if not all countries, land deals are transactions not in land itself but in interests or rights in, on, under and over land.[27]

Karl Polanyi has the following to say about land:

> What we call land is an element of nature inextricably interwoven with man's institutions. It is thus tied up with the

> organization of Kinship, neigbourhood, craft and creed - with tribe and temple, village, guild and church....the economic function is but one of the many vital functions of land. It invests man's life with stability; it is the site of his habitation, it is a condition of his physical safety; it is the landscape and the seasons.[28]

Land cannot be treated as an ordinary asset controlled by individuals and subject to the pressures and inefficiencies of the market [29]- Since it is the most finite of all finite resources of a finite planet besides being the most endangered of these finite resources.[30]

Historically, man has been endeavouring over the years to meet his basic needs by utilizing land which has always been plentiful. The picture is however now changing in that we are running out of the land resources. We know now that desertification, which is the process of environmental degradation of our natural resources with associated reduction or loss of land productivity has been threatening many countries of the World.[31] This then calls for a serious re-examination of our understanding of the land resources especially when it is evident that nearly three quarters of the world's population depend on land as tenant farmers, share croppers and landless labourers for survival.[32]

On the basis of FAO data, the World's arable land area (including land in permanent crops) is estimated at about 1430 million hectares as of 1970.[33] It is this land which has to support the ever increasing population.

In his studies about the land situation in Third World countries, Whittemore[34] observes that Latin America is the most

striking case of marked inequalities in the distribution of power and wealth. Tenants and share croppers survive on small plots of their landlord's land while landless labourers are dependent on finding seasonal work from the big land owners. A small number of landlords and employers own the majority of the agricultural land. As a result of the inequaitable distribution of land in Latin America, the vast majority of the population is poor and malnourished.

Whittemore expounds further that in Latin America, those peasants with some access to land as tenants or even as small owners are today incorporated into new power structures because land owning elites have tended to move towards urban areas in recent years and have diversified their economic interests into commerce and industry. In the past, peasant families subsisted on the land they leased but that now most of them have been drawn into the market economy in one way or another. For instance, they are more likely to be required to pay rent in cash than through labour or a percentage of their crops - they must market part of their crop to earn cash. A serious difficulty faced by many tenant farmers is the lack of security of tenure. This acts as a major disincentive to improving land.[35] Against this background, the following quotation is noteworthy.

> The magic of property turns sand into gold. Give a man a barren piece of land and private ownership, and he will convert it into a garden. But give him nine year's lease of a garden and he will convert it into a desert.[36]

Land tenure in Asia has developed in very diverse ways. There is, however, one common feature which is a hierarchy of landlords with each dominating the next level of sub-tenant. This system ensures that the poor remain poor. Security of tenure is a major problem in this part of the World. For instance, in India, the land of the forty million Adivasi (the original inhabitants of India) is safeguarded by law against expropriation by outsiders. What is evident is that with the introduction of some modernisation and mechanization of agriculture in Asia, land owners are buying up more land and using less labour and so the number of landless peasants is increasing.[37]

As for Africa, in the traditional setting, land was held in common. Communities were self reliant and developed a high level of social solidarity and egalitarianism. Land was abundant such that the system governing tenure and control was based on the need for labour to clear the land in order to bring it under cultivation. The person who cleared the land became the owner and the heirs continued to own the land as a group; each family having the inalienable right to enough land to maintain itself. Thus, group ownership and individual usage of land became the norm.

There were however certain disruptions to this system e.g. attack and conquest by migratory tribal groups. But one can say that no major changes took place until the European colonial administration altered the whole set up by creating commercial plantations. For the Europeans, the developing countries represented a vast source of agricultural raw materials. They destroyed much of the traditional system and introduced the concept of the market

economy in which land and labour were commodities to be bought and sold. Over the years, European domination also had the effect of creating indigeneous elites who for the most part have continued to promote this type of agricultural development within general development programmes after the western model.

The main trend in African agriculture has been towards the individualisation of tenure and the erosion of traditional group holdings. There are however exceptions in such countries as Tanzania where land has been nationalized by the government.[38]

Unlike most factors, land is a unique resource in that its supply is fixed, while its uses are endless. Its capacity to grow food and all other essential commodities is circumscribed by natural conditions and man's stewardship. It is the basis for all development.[39]

Given the fixity in supply of land and the World's high population growth rate, the truth is that pressure has been created on land. This pressure is reflected in such things as the upsurge in land values. As the following section would show, attempts have over the years been made by scholars to identify the causes of these high land values although none of them claims to have exhausted the area.

Land Values

The concern of the economists with rent and therefore with land values dates back at least to the physiocrats of the eighteenth century.[40] However, to understand the value of land, one must know more than a little about value itself. The essential worth of a thing, the value of a piece of land, lies in its power to serve the needs of men living in a community. In essence, the value of land is its power to serve men's needs or desires and the measure of it must be expressed in money terms.[41]

At the beginning of the nineteenth century, Ricardo[42] presented a treatment of agricultural rent which is still the foundation of most present-day theory. He pointed out that the most fertile lands are the first to be put to use followed by less fertile ones. His emphasis was on fertility as the major factor in land value determination. Other scholars however differ from him.

For instance, Hutton[43] points out that land values are dependent on position, amenities, topography, present (and future) use and historical characteristics. He further observes that value is not a characteristic inherent in real property itself but depends on the desires of man. It varies from person to person and from time to time, as individual desires vary.

An object cannot have value unless it has utility. Utility arouses desire for possession and has the power to give satisfaction. However, utility alone does not give an object value. It must also be relatively scarce. So, utility plus scarcity are

two of the elements creating value. The two however do not confer value unless they arouse the desire of a purchaser who has the purchasing power to buy.

In the light of the foregoing, it is the submission of Hutton that a direct relationship exists between the value of real property and population growth. Although he did not measure the relationship, his reasoning was sound. According to him, since land is fixed and its amount cannot be increased in response to a change in demand, it is only fair to conclude that it derives its value from the effective demand for it. The scarcity of land of a particular type which is in high demand results in a high value for it. The demand for such land is in direct proportion to the number of people able and willing to buy, sell, or use it. Consequently, increasing land values generally reflect an upsurge in population.[44]

In his contribution to the theory of land values, Von Thunen[45] attributed much of it to the location factor. Bastiat[46] on the other hand asserted that it is improvements which have a leading role on land value determination. His contention was that land has no value other than the effort expended in clearing it, building on it and the general improvements on or in its vicinity. This sentiment is shared by both Carey[47] and Karl Marx.[48]

The American Institute of Real Estate Appraisers on the other hand has the following to say on real property values:

> The market value of real property is created, maintained, modified, or destroyed by the interplay of four of the great forces which motivate the activities of human beings,

> These are social ideals and standards, economic adjustments and changes, political, or governmental regulations, and physical or natural forces. These four set the pattern for the variables in real estate market values. Each force is dynamic. Combined, they are the essence of cause and effect, interweaving to become one vast and ever-changing fabric surrounding and influencing every parcel of real estate on earth.[49]

The social forces include population growth, shifts in population density, changes in the size of families, the geographical distribution of comparative groups, attitudes toward education, social attitudes and other factors emerging from man's social instincts, ideals and yearnings.

As for the economic factors, they include natural resources, commercial and industrial trends, employment trends, wage levels, credit availability, price levels, interest rates, tax burdens, and all other factors which have direct or indirect effects upon purchasing power.

Government regulations created by political forces include zoning laws and all the monetary and fiscal policies which affect the use of real estate.

The physical factors on the other hand include climate, topography, soil fertility, mineral resources, community factors, soil characteristics and the technological advances which affect land use.[50]

Real property has significance only as it satisfies men's needs and desires. It is when men utilize it that it gets character such that their collective desire for it gives it value. Consequently, land which is so remote from human activity that it cannot be utilized by man has no value. The soil of such land may be rich,

it may abound in precious minerals, it may be located in a most agreeable climate and have scenic beauty; but in so far as it is not economically feasible, it will remain valueless. Since land acquires value when it is desired and has a feasible use, the value imputed to a particular parcel of real property is a collective one and is not limited solely to the individual whose desires created it.[51]

Hoyt[52] viewed in a broad way the relationship between population shifts and land values. He asserted that the effects of population on land depends on the distribution of purchasing power. In general, he felt that there exists a relationship between population growth and land values as can be inferred from the following quotation.

> The rapid rise in land values in the decade from 1880 and 1890 in the territory just beyond the old limits of 1888 was accompanied and to a large extent caused by an extra-ordinary population growth of the new areas annexed to the city in this same decade. The demand for vacant land on the fringe of settlement for the actual use of this rapidly growing population had caused the first steady rise in land values which developed into a wide speculative boom in 1889 and 1890.[53]

The size and distribution of population play radical roles in the demand for land and so are urbanization, transport development, industrialization and agricultural revolution. Although urbanization is a new phenomenon in many developing countries, it has introduced new uses. This has evoked great competition among the uses. It has also introduced new or increased demand for rural land. In the same way, although the development of transport is a creature of the twentieth century, it has had a marked

influence on land values. The Physical immobility of land makes it imperative that if it is to have an economic value, it must be able to produce income at the point of its creation. Transport carries demand to land even at remote places and by breaking down the parochialism of demand, it increases its quantum and consequently, ceteris paribus, its value.[54]

In addition, government industrialization and agricultural revolution policies increase the demand for land both directly and indirectly. Furthermore, the establishment of a government institution like a college, a university or a dispensary leads to a sudden rise in land values.[55]

According to Chisholm,[56] the value of a site reflects an estimation of the benefits accruing by using that site. It is the use to which the land can be put at present or sometime in the future that conditions the market prices users have to pay. He observes that there are no rigid laws for the determination of land values and that they are not so much a tangible reality in themselves but a sympton and reflection of uses in land, of what is happening, has happened and is tending to happen to land use. He however concedes that land values vary with such factors as inflation and population growth although it is difficult to establish the nature of relationship.[57]

Most studies have agreed that accessibility is the most important factor determining land values. Other micro variables which are also significant in land value determination include plot size and local amenities. Naturally, a site with a higher amenity level is more desirable and more valuable than one with

fewer amenities. Amenities in this case are highly subjective factors affecting the overall desirability of an area.[58]

In a free market, the law of demand and supply determines price. In such a market, the value of land is determined by these forces.[59] It has however been proved that demand is stronger than supply in the determination of land values.

In his contribution to the theory of land values, Keriasek[60] asserts that the high land prices (values) in Kenya are a consequence of colonization, population growth, politics and the western concept of ownership.

Inspite of the foregoing, Arlo[61] admits that it is not easy to completely identify all the reasons behind increases in land values. He however points out that the best that can be done is to generally trace the major changes in land values to some actions of society as a whole.

In conclusion, it is thus far clear that most of the studies undertaken on land values have been of a general stance. The picture which is portrayed by the literature reviewed is that no one single factor can be singled out as the sole determinant of land values.[62] In addition, not much research has been done on land values at a district level in a developing country. It is true that some studies have been done on matters related to land and population in Kisii District - the case study of this research - but nothing has been done on land values.

For instance, Omare[63] has done some work on the effect of population growth on land use but his emphasis is clearly not on land values. Bernard and Anzagi[64] have also undertaken

some study on population pressure in rural Kenya and taken Kisii as one of their case studies. Their emphasis is on how population growth creates stress on land and not on land values. It is in recognition of this apparent gap that this study was undertaken.

Summary

This chapter has revealed that population growth is a real problem in much of the Third World because of its negative influence on their economies. It has also been shown that whereas land is fixed in supply, these countries overdepend on it for their survival. An illustration of this overdependency on land is the Kenyan experience where land has been stressed as the main base of the economy. This is discussed in the succedding chapter. It has also been pointed out in this chapter that land values are caused by a multiplicity of factors and never by any one single factor.

FOOTNOTES

1. Dennis, Flanagan, et al; The Human Population, San Francisco: W.H. Freeman and Company, 1974, pp.105-113.

2. National Academy of Sciences, Rapid Population Growth, Baltimore: The Johns Hopkins Press, 1971, p.111.

3. Dennis, Flanagan, et al; The Human Population, San Francisco: W.H. Freeman and Company, 1974, p.106.

4. M.P. Todaro, Economics for a Developing World. Burnt Mill, Harlow, Essex: Longman, 1982, pp.162-179.

5. Daily Nation, Friday, July 10, 1987, p.32.

6. M.P. Todaro, Economics for a Developing World, Burnt Mill, Harlow, Essex: Longman, 1982, p.162.

7. R.M. Salas, Reflections on Population, New York: Pergamon Press, 1984, p.xi.

8. National Academy of Sciences, Rapid Population Growth, Baltimore: The Johns Hopkins Press, 1971, p.111.

9. E.H. Jacoby, Man and Land, London: Andre Deutsch, 1971, p.29.

10. T.R. Malthus, On Population. A Summary of Population, New York: New American Library, 1969, p.25.

11. Food and Agricultural Organization, Food and Agricultural Development, FAO, 1977, p.39.

12. L.B. Frankel, This Crowded World, Washington D.C.: Columbia Books, Inc., Publishers, 1970, pp.10-17.

13. Arab Republic of Egypt, Population and Development, Cairo: Central Agency for Public Mobilization and Statistics, 1978, p.3.

14. S. Osborn, (ed.) Our Crowded Planet, London: Allen and Unwin, 1963, p.70.

15. Ibid., pp.181-188.

16. National Agency of Sciences, Rapid Population Growth: Consequences and Policy Implications, Baltimore: The John Hopkins Press, 1971, p.2.

17. H.P. Gray, Economic Development and Population Growth, Massachusetts, D.C.: Heath and Company, 1970, pp.154-155.

18. H. Leibenstein, A Theory of Economic-Demographic Development, Princeton: Princeton University Press, 1954, p.1.

19. A former Kenyan Assistant Minister.

20. Kenya National Academic for Advancement of Arts and Sciences, Population Growth and Its Relevance to Socio-economic Development, Nairobi: KNAAAS, 1980, p.3.

21. Ibid., p.4.

22. R.M. Salas, International Population Assistance, New York: Pergamon Press, 1979, p.213.

23. National Academy of Sciences, Rapid Population Growth: Consequences and Policy Implications, Baltimore: The Johns Hopkins Press, 1971, p.3.

24. E.F. Bernard & K.S. Anzagi; Population Pressure in Rural Kenya, Athens: Ohio University Press, 1979, p.1.

25. Robert W. Steele, Problems of Population Pressure in Tropical Africa, Institute of British Geographers, 1970, p.4.

26. Michael Goldberg, Urban Land Economics, New York: John Wiley and Sons, 1984, p.xii.

27. Paul N. Balchin, Urban Land Economics, London: Macmillan Publishers Ltd. 1985, pp.3-5.

28. Karl Polanyi, The Great Transportation: The Political and Economic Origins of Our Time, Boston: Beacon Press, 1957, pp.35-36.

29. United Nations, Report of Habitat: United Nations Conference on Human Settlements, A/CONF. 70/15, 1976, p.61.

30. Mathew Cullen, World Congress on Land Policy, Boston: Oelgeschlager, Gunn and Hain, 1985, pp.10-11.

31. Ibid., p.4.

32. Claire Whittemore, Land for People: Land Tenure and the very Poor, Oxford: Oxfam, 1981, pp.1-5.

33. World Bank, Agricultural Land Settlement, Washington, D.C; World Bank, 1978.

34. Claire Whittemore, Land for People: Land Tenure and the very Poor, Oxford: Oxfam, 1981, pp.5-6.

35. Ibid., pp. 7-8.

36. Mathew Cullen, World Congress on Land Policy, Boston: Oelgeschlager, Gunn and Hain, 1985, pp.22-23.

37. Claire Whittemore, Land for People: Land Tenure and the very Poor, Oxford: Oxfam, 1981, pp.11-12.

38. Ibid., p.15.

39. Peter H. Oberlander, Land: The Central Human Settlement Issue, Vancouver: University of British Columbia Press, 1985, p.ix.

40. W. Alonso, Location and Land Use, Cambridge, Massachusetts, Institute of Technology, 1968, pp.3-4.

41. Bryan Anstey, an article entitled, "An Introduction to the Theory of Value: Land and Property Valuation." in 16th January, 1970 Building Journal.

42. W. Alonso, Location and Land Use, Cambridge: Massachusetts Institute of Technology, 1968, p.15.

43. G.H. Hutton, Value in Building, London: Applied Science Publishers Ltd, 1973, p.26.

44. Ibid., p.22.

45. American Institute of Real Estate Appraisers, The Appraisal of Real Estate, Chicago: AIREA, 1973, p.20.

46. Ibid., p.20.

47. Ibid., p.20.

48. Karl Marx, Capital, A critical Analysis of Capitalist Production, Volume one, New York: International Publishers Company, Inc; 1967, p.63.

49. American Institute of Real Estate Appraisers, The Appraisal of REal Estate, Chicago: AIREA, 1973, p.1.

50. Ibid., p.2.

51. Ibid., p.8.

52. Homer Hoyt, One Hundred Years of Land Values in Chicago, Chicago: University of Chicago Press, 1933, p.196.

53. Ibid., p.195.

54. Chartered Surveyor, May, 1969, pp.582-583.

55. Ibid., pp.583-587.

56. M. Chisholm, et al, Regional Forecasting, London: Butterworths, 1971, pp.335-336.

57. Ibid., p.339.

58. Ibid., p.341.

59. The Valuer, Vol. 25, Nos.1-6, 1980-81, p.535.

60. Clement S. Keriasek, Trends in Agricultural Land Values and Land Administration in Nakuru, Uasin Gishu and Trans-Nzoia Districts, Nairobi: Unpublished MA Thesis, 1977, p.2.

61. Woolery Arlo, Recapturing Society's share of Increased Land Values, Lincoln Institute of Land Policy, Cambridge Massachusetts, U.S.A. 1978, p.1.

62. The Valuer, Vol. 27, Nos.1-4, 1982, p.16.

63. C.N. Omare, Effects of Population Change on Land Use in Kisii District, Kenya , Nairobi: Unpublished MA Thesis, 1981.

64. F.E. Bernard & S.K. Anzagi; Population Pressure in Rural Kenya, Ohio: Ohio University, 1979.

CHAPTER THREE

KENYA'S RURAL DEVELOPMENT AND LAND PERSPECTIVES.

Introduction

The chapter begins with a brief account of Kenya's physical features and its population phenomenon. It next tackles the concept of rural development in Kenya. This is done in recognition of the fact that the monetary value of land proportionately varies with the level of development. It ends with a brief chronological account of the land question in Kenya. The point sought here is that land has always been a vital resource among the Kenyans and that it was not just empty as was claimed by the imperialists who colonized Kenya at the end of the nineteenth century.[1]

The point emphasized is that land has always been critically important for the well-being of Kenyans. They have always maintained a great emotional and psychological investment in it since it represents their principal link with revered ancestors.[2] The depth of this attachment caused land to rival political independence as the prime focus of African Nationalism in Kenya.

Land is the country's principal economic asset and a very large proportion of her people derive their livelihood directly from agriculture.

Kenya's Physical Perspective

Kenya is the second largest country in East Africa. It is bisected by the Equator and extends from approximately $4^{o}N$ to $4^{o}S$ and $34^{o}E$ to $41^{o}E$. Its total area is 580367 square kilometres excluding the inland waters.[3]

The country can roughly be sub-divided into four physical geographical regions namely; the coastal plains, the arid and semi-arid plateaus, the highlands and the lake region.[4] See figure 3-1.

Figure 3-1: Kenyas Physical Geographical Regions

Source: Pritchard 1971, p.76.

Key :

1 - Coastal Plains
2 - The Arid and Semi-arid Plateaus
3 - The Highlands
4 - The Lake Region.

The coastal plain is relatively narrow and its climate is hot and wet with the highest rainfall being recorded near Mombasa. The arid and semi-arid plateaus cover most of the country. Most of this area is desert or half desert and is fit for nothing else other than pastoral agriculture. The highlands on the other hand have a reliable rainfall and a pleasant climate. The soils of the Kenya highlands are among the most fertile in Africa. The lake region on the whole is a warm, wet and densely populated agricultural region.

These wide ecological and climatic differences have had a profound influence on the distribution of people within the country. People are concentrated to the south-west quarter of the country and to the area around Mombasa whereas the rest of the country is sparsely populated. See figure 3-2.

Kenya's Demographic Perspective

Population growth in Kenya began to be a threat to development with the encroachment of imperialism. Before that period, there were several social and natural constraints which militated against population growth. Birth control in the form of abstinence, particularly during the period after birth when a child was feeding from its mother's breast appears to have been widespread. Secondly, giving birth before marriage seems to have been severely frowned upon and led to social ostracism. The natural checks on the rate of increase included disease, dysentery, malaria and famine.[5]

In 1948, the first important and reasonably accurate census was taken throughout East Africa and it was discovered that the number of people in this region had drastically increased.[6] The total population of Kenya revealed by the 1948 census was 5,507,599 of whom 5,252,753 were classified as Africans and 154,846 as non-Africans. The second major census in Kenya was conducted in 1962 where it was revealed that the total African population in the country had risen to 8,636,263 which implied an annual population growth rate of 3.2 per cent between 1948 and 1962[7]

The total area of Kenya at the time of the 1962 census was given as 575,898 square kilometres of which about 562,660 were classified as land area and 13,238 as water area.[8] This clearly shows that the country was beginning to experience demographic land pressure.

During the third census which was conducted in 1969, the Kenyan population had shot up to 10,942,705. This means that between 1962 and 1969, the annual population growth rate was in the region of 3 per cent.[9] The 1979 census indicated that Kenya's population had reached 15.3 million.[10] In the 1980s, it was evident that the country's population was increasing at the break neck speed of over 4 per cent per annum.[11]

The above population trend would not have been problematic had it not been for the fact that over four-fifths of the land in Kenya is not well suited for economic exploitation. Indeed, the Kenyan population today is more densely concentrated in a few areas and is growing more rapidly than is generally

believed or acknowledged.[12] As the following section would reveal, inspite of this high population, Kenya's rural development strategies have inextricably been interwoven with land.

Rural Development in Kenya

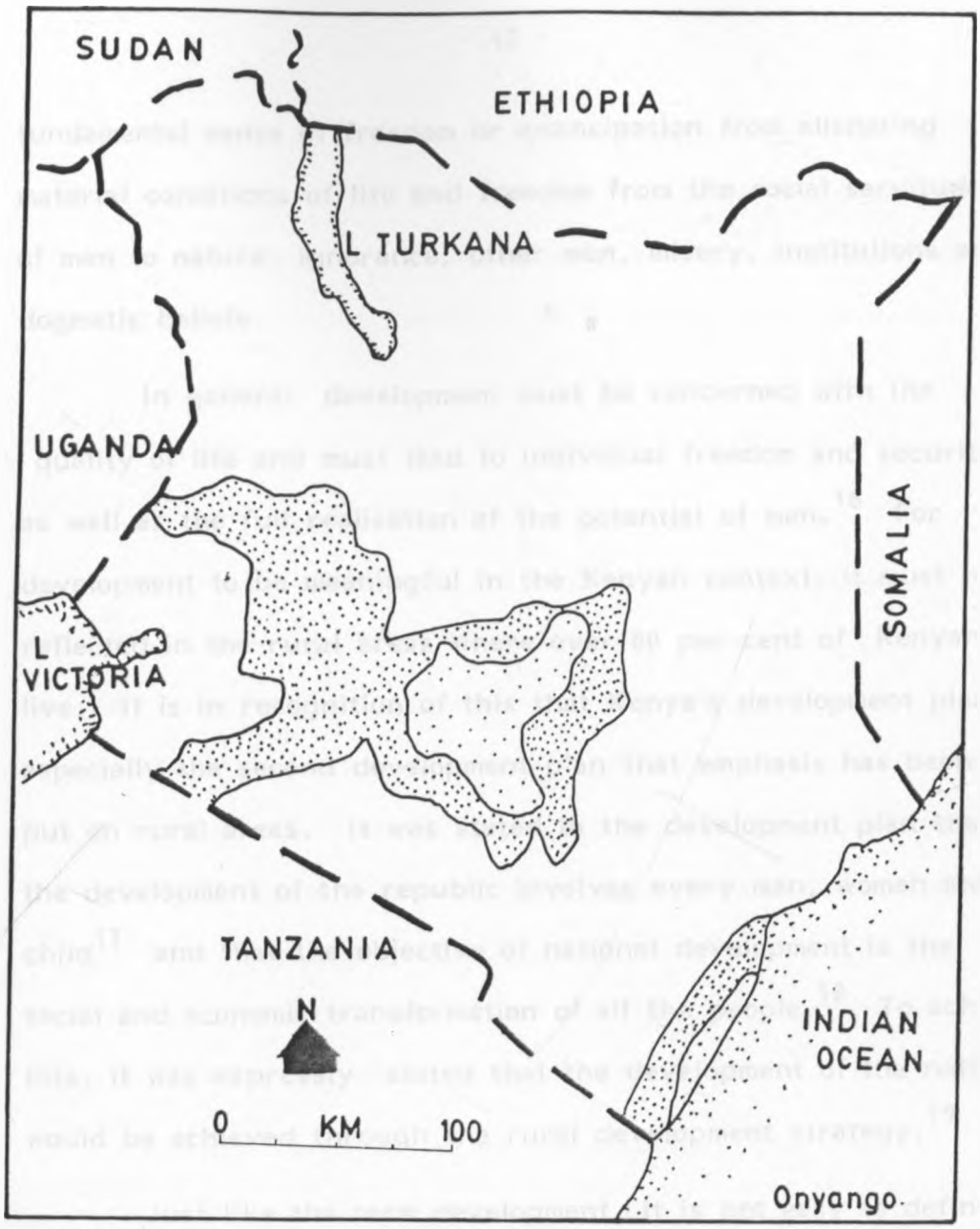
Development is not the easiest term to define as it has many facets. According to Kindleberger,[13] the terms growth and development are often used synonymously in economic discussion. The two terms can however be distinguished in that whereas economic growth connotes more output, economic development implies both more output and changes in the technical and institutional arrangements by which it is produced.

On the topic of development, Todaro has the following to say:

> Development for the past two decades has meant the capacity of a national economy, whose initial economic condition has been more or less static for along time to generate and sustain an annual increase in its gross national product at rates of perhaps five to seven per cent or more.[14]

Goulet[15] holds that at least three basic components or core values should serve as a conceptual basis and practical guidance for understanding the inner meaning of development. These core values are life sustenance, self-esteem and freedom. Life sustenance is the ability to provide basic human needs like food, shelter, health and protection. Self-esteem is a sense of worth and self respect i.e. a state of not being used by others as a tool for their own satisfaction. Freedom here is not to be understood in the political or ideological sense but in the more

Figure. 3-2: Kenya Population Distribution.



Key

Source: Mwagiru, 1986, p.44.

Densely Populated.

Moderately Populated.

Sparsely Populated.

fundamental sense of freedom or emancipation from alienating material conditions of life and freedom from the social servitudes of men to nature, ignorance, other men, misery, institutions and dogmatic beliefs.

In general, development must be concerned with the quality of life and must lead to individual freedom and security, as well as the full realization of the potential of man.[16] For development to be meaningful in the Kenyan context, it must be reflected in the rural areas where over 80 per cent of Kenyans live. It is in recognition of this that Kenya's development plans, especially the second development plan that emphasis has been put on rural areas. It was stated in the development plan that the development of the republic involves every man, woman and child[17] and that the objective of national development is the social and economic transformation of all the people.[18] To achieve this, it was expressly stated that the development of the nation would be achieved through the rural development strategy.[19]

Just like the term development, it is not easy to define the term rural development. It has no exact meaning and does not restrict itself to agriculture. In the words of one veteran, "rural development has been the subject of much international debate and little agreement."[20] The problem appears to arise from the fact that while rural development has been accepted as an approach of improving the living conditions of the rural populations, there has never been any clarity about the kind of rural society, culturally and economically desired as the goal of rural development.[21]

The conclusion drawn by several scholars is that rural development is an overall strategy for the development of rural areas and not a single programme or a combination of programmes. The components of this strategy are 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 local level.[22]

Rural development is not clearly defined in Kenya's development plans although it is generally accepted to be a holistic concept which recognizes the complexity and inter-relatedness of the many variables which influence the quality of life in rural areas. This is in conformity with the observation that rural development is a series of quantitative and qualitative changes occuring among a given rural population and whose converging effects indicate in time a rise in the standard of living and favourable changes in the way of life.[23]

During the period of colonial administration, the government in Nairobi concerned itself almost entirely with the needs of European settlers. Those British officers who opposed the exploitation of the Africans and their land were ignored or posted to remote stations. No real encouragement was given to rural development.[24]

Zwanenberg had the following to say about Kenya in the 1920s.

> Many areas in Kenya began to experience to a greater or lesser extent population pressure against resources ....for instance land erosion became common among many of the predominantly pastoral peoples, among the Kamba and Elgeyo peoples. Among the agricultural peoples like

> the Kikuyu and Abaluhya, commercial agricultural production combined with population increases led to accute land shortages.[25]

In view of the racial policies of the colonial government, not much development occured in the African areas. Indeed, by independence in 1963, the condition of the African areas was not only getting worse but also needed a complete overhaul of the existing system to foster rural development. This however does not mean that the colonial government never did anything good for the African areas. The contention is that in the formative years of colonialism and at the time when the Europeans were consolidating their hold of Kenya, the development of the African areas was not a priority. However in the 1950s, the Europeans had now realized that they could not do anything without African participation. It is then that they began to institute positive policies in rural Kenya. A case at hand is the swynnerton plan.[26] The swynnerton plan was the first attempt to transform rural Kenya. Its aim was, "to raise the productivity of the African lands, their human and stock carrying capacity, the increased standards of living of the people, while at the same time effecting a substantial increase in the resources and economy of the colony."[27]

The swynnerton plan focused on several factors which if implemented could have improved the standard of living of the rural folk. The main issues were: the consolidation of fragments; security of land tenure; the introduction of cash crops; technical assistance to develop the land on sound lines; ready access to water; introduction of marketing facilities; access to sources of

agricultural credit; and an agricultural bias to education.[28]

The basis of the swynnerton plan was land consolidation. Its implementation, especially in Kikuyu land meant that land ownership would fall into the hands of fewer people than was the case before. The plan aimed essentially at increasing agricultural production, especially of cash crops and this aim was largely met. Inspite of this apparent success, there was a distinct lack of integrated rural development with little attention being paid to the quality of rural life. Not all of the major tenets of the plan were emphasized. Such things as rural education and social services were expanded very slowly while other things were altogether ignored.[29] It is nevertheless the contention of this study that the emphasis on land in Kenya's rural development has resulted into the prevailing high land values.

The fact that most of rural Kenya was underdeveloped during the colonial rule meant that the African government had a great task in improving the standard of living of the rural folk in the face of scarce resources. The years of 1954 to 1964 were marked by political unrest, famines, floods, political transition and the establishment of a Republic. During the first plan period Kenya's economy grew from the base which was established between 1954 and 1964. The population of Kenya during that decade grew at the rate of 3% per annum.[30]

During the decade 1954 to 1964 the domestic income per head in Kenya increased only very slowly in the region of 0.5 to 1.5% per annum for the economy as a whole and in the region of 1 to 2% for the monetary economy.[31] Some of the problems at

that time included the rate of growth per capita income which was inadequate to provide for the basic services and infrastructure, too much of the subsistence sector and the income inequalities of races.[32]

The first development plan was presented on June 10, 1964 but was replaced by a revised version in mid-1966. These plans together with Sessional Paper No. 10 of 1965[33] formed the basis for development in Kenya during the first decade of independence. Between 1964 and 1970 the average economic growth rate was 6.6 per cent per annum and although this was offset by a population growth rate of 3.3 per cent per year, per capita income rose from £39.5 to over £50. This was quite impressive given the prevailing circumstances.[34] It is in the light of this the contention of the study that per capita income has an influence on high land values.

To foster the process of rural transformation, a conference was held in Kenya in Kericho in 1966 to discuss the related issues of education, employment and rural development, conclusions from the conference were presented to the Government of Kenya and were condensed into a conference report.[35] Although the conference touched on many issues, its major recommendation was that the Kenya government should develop a comprehensive approach to rural transformation. It was emphasized that any such policy should aim at promoting agricultural productivity, strengthening the rural education system and promoting investments in both the public and private sectors.[36]

A consequence of the Kericho conference was the Special Rural Development Programme (SRDP). It consisted of the launching of a series of small pilot projects in rural Kenya where the concept of integrated rural development could be tested.[37]

When the 1970/74 plan[38] was drafted and formally promulgated, its key strategy was to direct an increasing share of the available resources to the rural areas.[39] It was recognised that the completion of a new road, the building of a new factory or the provision of potable water in rural areas was apart of rural development since these physical projects enhanced the health and productivity of the rural people.[40]

The Special Rural Development Programme began in January 1971 and was mainly out to handle projects on agricultural development, credit, extension services, roads, water supplies, health and education.[41]

Over the years, there has been alot of progress in many spheres of the Kenyan economy inspite of the obvious problems of overpopulation, falling export prices, unfavourable terms of trade and the foreign debt burden. For instance, in the field of agriculture, various strides have been made as is evident from table 3-1.

Table 3-1: Kenya's Gross Marketed Production at Constant (1982) Prices, 1979-85, K£'000.

Cereals:	1979	1980	1981	1982	1983	1984	1985
Wheat	19483	20273	20157	22017	22779	12729	18186
Maize	12932	11657	25301	30777	34028	29990	31187
Barley	3827	4140	3094	3920	2792	1190	3321
Rice (paddy)	2810	2828	2901	2899	2520	2726	2959
Others	91	70	75	86	100	100	142
Total	39143	38968	51528	59699	62219	46735	55795
Permanent Crops:							
Coffee	104364	126954	126137	122866	132502	164658	134303
Sisal	9196	11798	10397	12589	12506	12937	11296
Tea	96346	87241	88258	93190	115808	112745	142754
Coconut and Products	484	530	530	596	482	493	842
Wattle	624	684	718	390	421	256	327
Cashew nuts	5020	8085	3824	1742	4757	8440	4404
Fruits & Other Permanent Crops	1301	1397	1308	1525	1366	1640	2019
Total	217308	236689	231168	232898	267842	301169	295945

Source: CBS: Kenya, Statistical Abstract, 1986, p.93.

It is the submission of the study that the somewhat good performance of Kenya's agricultural sector over the years is a partial explanation to the country's high land values. Not many Kenyans have been irrational enough to sell their land at throw away prices since they have always known the potentiality of land.

Another facet of rural development in Kenya has been that of the communication network. Roads in Kenya are classified into A, B, C, D, E and F categories by the Ministry of Transport and Communications. Category A consists of international trunk roads which link centres of international importance. They either cross international boundaries or terminate at international ports. B roads are national trunk roads which link nationally important centres while C roads consist of primary roads which interlink important provincial centres to each other or to higher class roads. D roads on the other hand consist of secondary roads which interlink important local centres. In the same way, roads classified under the E category are minor roads which have links to minor centres. Finally, F roads are essentially special purpose roads which for example provide access to special areas such as tourist attractions and townships.[42] See table 3-2.

Table 3-2: Kilometres of Roads as at 1st July, 1980-81

Category	1981		1982		1983		1984		1985	
	Bitumen	Earth Gravel	Bitumen	Earth Gravel	Bitumen	Earth Gravel	Bitumen	Earth Gravel	Bitumen	Earth Gravel
A	2337.8	1256.4	2338.8	1256.4	2338.8	1256.4	2338.8	1266.4	2328.5	1241.8
B	1146.2	1639.9	1149.6	1636.5	1153.6	1632.6	1153.6	1632.5	121.7	1490.2
C	1795.5	5955.3	1823.9	5993.2	2013.9	5883.2	2013.9	5883.2	1931.7	5852.1
D	715.4	10350.6	689.7	10369.0	714.9	10245.2	714.9	10245.2	713.9	10211.8
E	234.1	20634.3	272.6	25503.0	363.1	26213.3	363.1	26213.3	278.1	25848.7
F	187.8	7323.7	135.3	2620.7	137.4	2632.9	137.4	2632.9	161.0	2787.9
Totals	6416.8	47160.2	6409.9	47378.8	6720.7	47863.0	6720.7	47863.5	6730.7	47432.5

Source: CBS: Kenya, Statistical Abstract, 1986, p.175.

It is clear that roads have been expanded throughout rural Kenya and hence one of the contentions of this study is that improved communication especially in rural Kenya has had an influence on the country's prevailing high land values.

In so far as education is concerned there has been alot of progress in terms of such things as classroom construction, teacher training and student enrolment. See the table below.

Table 3-3: Schools by type, 1977-1985

	1977	1978	1979	1980	1981	1982	1983	1984	1985
Primary	8896	9349	9622	10255	10817	11497	11966	12539	12936
Secondary	1473	1773	1721	1785	1904	2131	2230	2396	2413
Teacher training	19	20	20	20	20	21	22	22	22
Technical schools	13	15	16	18	18	19	19	18	22
Totals	10401	11157	11379	12078	12759	13667	14236	14976	15393

Source: CBS: Kenya, Statistical Abstract, 1986, p.184.

Table 3-4: Pupil Enrolment by Type of School, 1977-85

	1977	1978	1979	1980	1981	1982	1983	1984	1985
Primary Schools	2,971,239	2,994,991	3,698,246	3,926,629	3,981,162	4,120,145	4,323,822	4,380,232	4,702,414
Secondary Schools	313,977	354,452	376,782	419,201	409,850	438,424	493,710	510,943	437,207
Teacher Training	8,924	9,011	9,906	12,126	12,596	11,405	11,296	15,413	15,766
Technical	6,333	7,170	7,607	8,575	9,123	9,199	9,258	9,571	7,840
Total	3,300,473	3,365,624	4,092,541	4,366,531	4,412,731	4,579,173	4,838,086	4,916,159	5,163,227

Source: CBS: Kenya, Statistical Abstract, 1986, p.184.

As for teacher's enrolment in training colleges there has been some improvement. The following for instance has been the level of enrolment for the three consecutive years of 1983, 1984 and 1985 respectively: 13,657, 15,413, and 15,588. The teachers categorized in this case are both for Secondary and Primary schools.[43] The apparent improvement in the literacy of Kenyans may not be underestimated as an explanation to the prevailing high land values.

In the realm of public health, much has also been done in terms of the number of health centres, dispensaries, clinics and hospitals which are being run. Improved health has in many ways led to many strains on land due to high population growth and hence high land values.

The process of rural development got another boost in Kenya following the launching of the District Focus for Rural Development strategy. The policy became officially operational on 1st July 1983. It has shifted the responsibility of planning and implementing projects from the headquarters of the ministries to the districts. The strategy is based on the principle of a complimentary relationship where all ministries are required to address themselves to local needs.[44]

Whereas at the moment one cannot say with precision how effective the District Focus for Rural Development strategy will be, it is good to note that its long term performance would require dedication, unity of purpose and the participation of the local population.[45]

This should be seen in the light of the fact that to

provide rising incomes for a population of 35 million in the year 2,000, it is necessary to expand our productive capacity faster than our population growth rate. This economic growth rate must be in the region of over 5.6% per annum.[46] This development must be reflected in both the urban and the rural areas i.e. there has to be a balanced development in comformity with the tenets of the KANU government. It is hoped that the District Focus strategy will help in converting the expectations of the government into reality.[47]

Inspite of the foregoing, it has been recognised that Kenya's farmers must continue to lead the country in economic development for the rest of the century. In other words, if Kenya is to reach the year 2000 with a healthy balance between rural and urban economic activities, agricultural expansion is essential.[48] This expansion has to take place within the country's scarce productive land of 8.6 million hectares.[49]

This underscores the primacy of land in much of the third world for survival. Stressing the importance of land in the African context, Harris had the following to say:

> The supreme issue of life to the African is his land. Take from the African his political freedom, or even his cattle, and he will tolerate the injustice, but touch his land and he will stake all in battle, no matter what forces are arrayed against him. Take the land, back the robbery with rifles, machine guns and "heavies", and the African will still face the "bloody music" with spear, bow and arrow.....take his land and you have taken his life.[50]

The present section has shown that high land values in Kenya may be attributed to the country's rural development

programmes in such fields as agriculture, communication, health and education. It can also be inferred from the section that the people's attachment to land influences values and as the following section would show, land has been an invaluable treasure to many Kenyans.

The Land Question in Kenya.

While the historians are not certain on the exact period of the arrival of the first people in Kenya, recent archaeological and anthropological findings have confirmed beyond doubt that black Africans inhabited East Africa many centuries before the arrival of Arabs, Asians and Europeans.[51] The Kenyan experience confirms the fact that man and land have been so closely interrelated that it is almost impossible to separate them. This was especially the case in pre-colonial Kenya when the African family was held together by a strong traditional and emotional attachment to its land.[52] A few illustrative cases could be quoted to prove the point.

For instance among the Taita, land was the embodiment of their temporal and spiritual needs. Thus, their land was inalienable since it was revered, not piously, but because it served as their socio-eco-cultural basis.[53]

The Luo regarded the land as their mother, and the tribe as a whole was the proprietor of all of it. It is true that clans and sub-clans claimed parts of the land for individuals and families but this was purely usufractuary. The moment one left the land to live elsewhere, it automatically reverted back to

the community for re-allocation.[54] Among the Kikuyu, land was paramount in their socio-economic relations. This has clearly been pointed out by Kenyatta in one of his literary works.

> As agriculturalists, the Gikuyu people depend entirely on land. It supplies them with the material needs of life, through which spiritual and mental contentment is achieved. Communion with the ancestral spirits is perpetuated through contact with the soil in which the ancestors of the tribe lie buried. The Gikuyu consider the earth as the "mother" of the tribe, for the reason that the mother bears her burden for about eight or nine moons while the child is in the womb, and then for a short period of sucking. But it is the soil that feeds the child through lifetime; and again after death it is the soil that nurses the spirits of the dead for eternity. Thus, the earth is the most sacred thing above all that dwells in or on it.[55]

Ngugi wa Thiong'o also has the following to say about land among the Kikuyu:

> Ng'ang'a was rich. He had land. Any man who had land was considered rich. If a man had plenty of money, many motor cars, but no land, he could never be counted as rich. A man who went with tattered clothes but had at least an acre of red earth was better off than the man with money.[56]

And again,

> "Education is everything," Ngotho said. Yet he doubted this because he knew deep in himself that land was everything.[57]

Whereas it is clear that the African peoples in Kenya treasured land with intimacy, there is some conflict of opinion with regard to the traditional attitude towards right to land. Some allege that land was communally or tribally owned; others

claim that individual rights were the distinguishing feature while still others suggest that ownership did not really exist in any modern context among many of the African communities. Undoubtedly, these traditions differed substantially from one tribe to another. In every case, however, and in sharp contrast to the European tradition, ownership was not an absolute indivisible bundle of rights. The ultimate right of disposal outside the tribe was essentially tribal and in this land was tribally owned.

It must be remembered, however, that the political arrangements within the tribe were such that every mature member of the tribe would have a say in such a decision. Short of this right, others were assigned or allocated to clans, families and individuals including the right to transfer and reclaim property within the clan. Rights to use land were, in effect, assigned in perpetuity to various groups within the tribe, subject always, however to the condition that resources must be properly used and their benefits appropriately distributed, not merely held idle, abused or misused, or the benefits hoarded. What emerges with clarity and force is that land and other productive assets were expected to be used for the general welfare of the community.[58]

To be sure, Kenya Africans did not hold land in the same manner and sense that it was held in England or Germany. Africans were in most cases interested in the usufructuary right rather than in absolute proprietorship as was the case in Western Europe. Ideally, land was viewed as the most important gift from God for the purpose of sustaining the life of all provided that no one claimed to own it for sale or for commercial speculation.

Land had no fixed price since it was not conceived of as a property for sale. The truth of the matter is that land could not be ceded to foreigners or outsiders, nor were foreigners allowed to control it or to make important decisions relating to its ownership or to its allocation. They could however be allowed to live on it and to use it if the community found them acceptable.[59]

The economic concept of land in pre-colonial days was in terms of cultural thought. It was viewed as the perpetuater of a society's functions and aspirations.[60] This therefore refutes the claim by Europeans that they took only the so-called "vacant" and "ownerless" lands without seriously trespassing on any established African rights. This claim is both unfounded and unjustifiable because Africans had legitimate and generally well-defined claims to all lands. The apparently vacant lands were the property of the African peoples since they used them for such purposes as hunting and the collection of forest products. To be sure, there was no vacant land in Kenya at the eve of imperialism.[61]

Between 1888 and 1894 the peoples of Kenya lost most of their lands under the guise of the protecting treaties as exemplified by the actions and behaviour of the British, Germans, French, Portuguese and Arabs in East Africa.[62] In June 1895, a Protectorate was unilaterally declared by Britain over Kenya with Arthur Hardinge being appointed as the First Commissioner to the Protectorate.

On January 10th, 1897, the British government officially

announced that the Commissioner of Kenya was authorized to grant to any person a certificate of occupation, authorizing him to hold and to occupy the land described in that certificate for a term not exceeding 21 years. On December 28th, 1897, the British government proclaimed new land regulations which among other things read as follows:-

> The Commissioner, if he thinks fit, should grant to any person a certificate authorizing him to hold and occupy the portion of land described in the certificate for a term not exceeding 99 years.[63]

In August, 1901, the East Africa (Lands) Order-in-Council was promulgated. It gave full power to the Commissioner or Governor of Kenya to alienate the so-called "Crown Lands". Crown land was any land within East Africa which was under the control of the British Monarch by virtue of any treaty, convention or agreement and any land within the protectorate which had been acquired under the 1894 Lands Acquisition Act.[64]

Between 1904 and 1908, a large part of the climatically well-located areas of Kenya were taken from Africans and reserved for Europeans. Most of these areas were in the highlands. The Africans were dispossessed of their lawful rights to land in the highlands and forced into crowded reservations. The most striking aspect of land robbery in Kenya reached its climax in 1915 when the 1915 Crown Lands Ordinance was promulgated. It is this ordinance which completed the disinheritance of Africans. It nullified their remaining legal rights to land and also brought almost every inch of land in Kenya under the legal authority of the crown. It declared that all black peoples of Kenya were to

be tenants or serfs of the British empire.

It is during this time that monetary value appeared on the scene. Rent was at the rate of 20 cents per acre per annum for the first period, revisable in 1945 and every thirtieth year thereafter.[65]

In 1932, the question of land control by a small minority of Europeans and their constant denial of land rights to the native inhabitants of Kenya was still Kenya's burning problem which could not be ignored. This led to the appointment of the Carter Commission in April 1932.

The Africans were more than insecure because of European settlement. They were angry that the Europeans resided on what they considered "stolen lands." A great deal of controversy surrounded the circumstances of European settlement in areas bordering the Kikuyu country mainly because the Kikuyu denied that the alienated lands were vacant at the time of expropriation. They argued variously that some of the lands in question were being allowed to lie fallow while their occupiers cultivated elsewhere; that the Europeans took advantage of the traditional Kikuyu practice of making temporary allocations to strangers by assuming permanent possession; and that the Kikuyu were unjustly deprived of their "ownership" of land in the European sense of the word.[66]

The White Highlands took in some 7.4 million acres of land which was divided into 3600 farms and ranches, most ranging in size from 1000 to 30,000 acres. The European area was immense. At the beginning of the 1950s the Europeans were

entirely in control and they anticipated a prosperous future. Economic prospects were good and the government was encouraging the intensification and improvement of European agriculture. This expectation of the Europeans was however overtaken by events in the form of African resistance. Change was inevitable and African interests had to be safeguarded. By 1959, the White Highlands were crumbling. In that year, the colonial government declared a new policy of ensuring that the basis of tenure and management of agricultural land would be similar throughout Kenya regardless of race or tribe.[67]

Leo[68] notes that the Europeans who began to settle in Kenya just after the turn of the century assumed that their land rights took precedence over those of the people who lived there. To be sure, much of the land was sparsely populated, but the Europeans did not hesitate, in seizing acreages which Africans obviously needed without compensating them at all.

The consequence of Europeans' disregard for African interests were far reaching especially given the fact that the African poor did not forget the land loses. Their grievances became a repeated rallying cry of political organizations, of occasional outbreaks of insurrection, and finally of the Mau Mau war which culminated in independence.

Commenting on the land situation in Kenya, Harbeson[69] noted that the Africans were forced to be squatters on it in the white highlands with no security of tenure. They were crowded into what the Europeans referred to as reserves. These usually consisted of poor lands since the best land had been taken by

Europeans. What was especially disturbing was the fact that the majority of the European settlers had taken large chunks of land for speculative purposes. This was evident from the way much of the land they had acquired lay idle with the pretext that it was ranch land. There were cases where pieces of land were bought and never developed because the purchasers were not in Kenya. It is this state of affairs which ultimately led to the unity of Africans. This unity rose from a common threat..... the threat of the robbery and raping of their land..... the land which they greatly treasured and adored.

At independence, the primacy of land in development was emphasized. It was for instance stated that land was Kenya's most important resource and that the country's economic development was dependent on its intensive and productive utilization.[70]

Once the outcome of Kenya's struggle for freedom had become clear, the existence of a large area of agricultural land reserved for the exclusive ownership of Europeans loomed as the principal anomaly in the national life. Legal restrictions on non-European ownership of this land were quickly abolished, but this did not help to solve the social, economic and political problems arising from the juxtaposition of the prosperous white highlands and the overcrowded and economically deprived peasant farming areas. The government therefore gave priority to a policy which would enable African farmers to purchase European owned land. To this end, agreement was reached with the British government on a programme, mainly financed by United Kingdom loans and grants. It consisted of buying over one million acres

of European-owned mixed farming land adjacent to densely populated African areas and dividing it into small holdings for African occupation.

Parallel with small holder settlement in the former Scheduled Areas, several continuing programmes assisted Africans to take over large-scale farms intact. These included the Compassionate farms and Assisted Owner Schemes financed by the British government; and loans made by the Land Bank, supplemented by Agricultural Financial Corporation loans for loose assets, whereby farms changed hands on a willing buyer-willing seller basis. As at 31st December 1965, approximately 550,000 acres in the former Scheduled Areas had become African property under the various schemes.[71]

During the 1970/74 Plan period, increased emphasis was placed on the land adjudication and registration programmes and it was expected that between 1969 and 1974, about 7.4 million hectares of land would be involved in the said programme.

Up to 1970, Africans had not acquired substantial interest in either the ranches or the plantations. To purchase a ranch or a plantation as an intact unit normally required a substantial investment. Very few Africans could raise that much capital. In contrast, a high proportion of the land formerly used for European large-scale mixed farms had been taken over by Africans. This had been the case both because the purchase of an intact mixed farm did not require nearly such a large investment as the purchase of a ranch or a plantation and because farms in these areas were normally suitable for subdivision

into small-scale farms.[73]

In post independence Kenya, it has continuously been recognized that land and its use are central to rural development. It has also been observed that policies with respect to land tenure and land use are critical to successful rural development. In addition, there has been emphasis on the small farm family as the main instrument for farm management and rural developemnt.[74]

In fact establishing the ownership of land in compact family farm units has been the main purpose of land adjudication and registration. By the end of 1977, 16.7 per cent of all registrable land in Kenya had been registered, a further 14.0 per cent adjudicated and an additional 6.6 per cent in the adjudication pipeline. This means that by that year 37.3 per cent of all registrable land had either been registered or was in the pipeline.[75]

During the 1984/88 Plan period, it was observed that since independence, about 1.5 million titles had been issued, over 6 million hectares adjudicated and 5.5 million hectares surveyed for adjudication and registration. The Government Policy on land has been its optimum utilization and its equitable distribution.[76]

What is clear from the foregoing is that a lot of emphasis is and has been placed on land thereby promoting demand for it. In the wake of rapid population growth in Kenya, it was once observed that by 1965, the country's land per capita amounted to 4.2 acres of potential land and that if the population continued to increase at the rate of between 3.3 per cent and 3.5 per cent

per annum, then the figure would be 2.6 in 1980 and 1.3 by year 2000.[77] We however know that the population growth rate in Kenya has been higher in the 1980s than the estimated 3.5 per cent rate of growth. This then means that land per capita in Kenya by the year 2000 would be lower than the projected one.

In view of the foregoing, it has been noted that land throughout the world has a rising commercial value since more and more people occupy an essentially fixed quantity of space and exercise increasing demands upon that space.[78]

Summary

This chapter has revealed that high land values in Kenya may be attributed to strides made in the fields of agriculture, communication, health and education, just to mention a few. In addition, it has discussed the place that land occupies in the "hearts" of Kenyans and as has been evident, it was bitterly fought for during the colonial period. It was also noted in the chapter that land has always been an integral part of the country's rural development programmes. However, as the following chapter would show, this apparent emphasis on land does not augur well for the densely populated districts.

FOOTNOTES

1. Mwangi wa Githumo, Land and Nationalism, Washington: University Press of America, 1981, p.37.

2. Ibid., p.55.

3. W.T.W. Morgan, Africa South of the Sahara, London: Europa Publications Ltd., 1986, p.548.

4. J.M. Pritchard, A Geography of East Africa, London: J.M. Dent and Sons, 1971, pp.76-77.

5. Roger Van Zwanenberg, A History of Population Growth in Kenya and Uganda, Nairobi: IDS Working Paper No.91, March 1973, pp.3-4.

6. Ibid., p.18.

7. Republic of Kenya, Kenya Population Census, 1962, Vol.III, Nairobi: Government Printer, 1962, p.2.

8. Ibid., p.19.

9. Republic of Kenya, Kenya Population Census, 1969, Vol.I, Nairobi: Government Printer, 1970, p.1.

10. _____, Population Policy Guidelines, Sessional Paper No.4, 1984, p.5.

11. Daily Nation, Friday, July 10, 1987, p.32.

12. J. Cramer, Some notes on the Population of Kenya, IDS unpublished paper, pp.1-3.

13. C.P. Kindleberger, Economic Development, New York: McGrawHill, 1965, p.3.

14. M.P. Todaro, Economic for a Developing World, Burnt Mill, Harlow, Essex: Longman, 1982, p.95.

15. Denis Goulet, The Cruel Choice: A New Concept in the Theory of Development, New York: Atheneum, 1971, p.23.

16. United Nations, U.N. General Assembly Thirty-Second Session, Supplement No.43 (A/32/43) Paragraph 19, p.36.

17. Republic of Kenya, Development Plan, 1970-74, Nairobi: Government Printer, 1969, p.i.

18. Ibid., p.166.

19. Ibid., p.iv.

20. Yudelman Montague, "Integrated Rural Projects: The Bank's Experience," Finance and Development, 14, 1, 1977, p.16.

21. Griffin Keith, "Policy Options for Rural Development," Oxford Bulletin of Economics and Statistics, 35, 4, 1973, pp.439-474.

22. Republic of Kenya, Development Plan, 1979-1983, Nairobi: Government Printer, 1978, p.22.

23. Stuart Brian Hoyle, Spatial Aspects of Development, London: Wiley, 1974, p.167.

24. Michael Thomason, Economic Development in Kenya's Nyanza Province Before World War I, A Paper presented at the Fifteenth Annual Meeting of the African Studies Association in Philadelphia, November 8-11, 1972, pp.1-2.

25. Roger Van Zwanenberg, The Agricultural History of Kenya, Nairobi: East African Publishing House, 1972, pp.12-13.

26. R.J.M. Swynnerton, A Plan to Intensify the Development of African Agriculture in Kenya, Nairobi: Government Printer, 1955.

27. Ibid., p.i.

28. Stuart Brian Hoyle, Spatial Aspects of Development, London: Wiley, 1974, p.168.

29. Ibid., p.169.

30. Republic of Kenya, Development Plan, 1966-70, Nairobi: Government Printer, 1966, p.13.

31. Ibid., p.15.

32. Ibid., p.31.

33. Republic of Kenya, African Socialism and Its Application to Planning in Kenya, Nairobi: Government Printer, 1965.

34. Stuart Brian Hoyle, Spatial Aspects of Development, London: Wiley, 1974, p.169.

35. J.R. Sheffield (ed.), Education, Employment and Rural Development, Nairobi: East African Publishing House, 1967.

36. Ibid., p.5.

37. Stuart Brian Hoyle, Spatial Aspects of Development, London: Wiley, 1974, p.172.

38. Republic of Kenya, Development Plan, 1970-74, Nairobi: Government Printer, 1969.

39. Ibid., p.2.

40. Ibid., p.166.

41. Republic of Kenya, Development Plan, 1979-83, Nairobi: Government Printer, 1979, p.24.

42. _____, Statistical Abstract, Nairobi: Government Printer, 1986, p.168.

43. Ibid., p.185.

44. Republic of Kenya, District Focus for Rural Development, Nairobi: Government Printer, 1987, p.1.

45. Ibid., p.vi.

46. Republic of Kenya, Economic Management for Renewed Growth, Nairobi: Government Printer, 1986, p.7.

47. Ibid., p.9.

48. Ibid., p.62.

49. Ibid., p.63.

50. Mwangi wa Githumo, Land and Nationalism, Washington: University Press of America, 1981, p.29.

51. Ibid., p.30.

52. Ibid., p.37.

53. George C. Mkangi, Population Growth and the Myth of Land Reform in Taita, Brighton, Sussex: University of Sussex, 1978, p.45.

54. Oginga Ajuma Odinga, Not Yet Uhuru, London: Heinemann, 1968, p.13.

55. Jomo Kenyatta, Facing Mount Kenya; The Tribal Life of the Gikuyu, Nairobi: Heinemann Educational Books, 1971, p.21.

56. James Ngugi was Thiong'o, Weep Not Child, London: Heinemann, 1964, p.22.

57. Ibid., p.43.

58. Republic of Kenya, African Socialism and Its Application to Planning in Kenya, Nairobi: Government Printer, 1965, p.10.

59. Mwangi wa Githumo, Land and Nationalism, Washington: University Press of America, 1981, p.40.

60. Ibid., p.42.

61. Ibid., p.45

62. Ibid., p.155

63. Ibid., pp.169-170

64. Ibid., p.181.

65, Ibid., p.255.

66. J.W. Harbeson, Nation Building in Kenya, Evanston: North Western University Press, 1973, p.10.

67. Christopher Leo, The Political Economy of Land in Kenya: The Case of the Million Acre Settlement Scheme, Toronto: Unpublished Ph.D. Thesis, 1976, pp.6-8.

68. Ibid., p.13.

69. J.W. Harbeson, Nation Building in Kenya, Evanston: North Western University Press, 1973, p.27.

70. Republic of Kenya, Development Plan, 1966-70, Nairobi: Government Printer, 1966, p.33.

71. Ibid., pp.124-125.

72. Republic of Kenya, Development Plan, 1970-74, Nairobi: Government Printer, 1969, 194.

73. Ibid., p.199.

74. Republic of Kenya, Development Plan, 1979-83, Nairobi: Government Printer, 1978, p.51.

75. Ibid., p.53.

76. Republic of Kenya, Development Plan, 1984-88, Nairobi: Government Printer, 1983, p.187.

77. Kenya National Academy for Advancement of Arts and Sciences, Population Growth and Its Relevance to Socio-economic Development, Nairobi: KNAAAS, 1980, p.4.

78. A Paper entitled Land for Living, presented at the U.N. Commission for European Seminar at Paris between June 22, and 26, 1987.

CHAPTER FOUR

KISII DISTRICT: A CASE STUDY.

Introduction

This chapter briefly discusses Kisii from its historical, physical, social and economic perspectives. The historical aspect is tackled mainly to put some emphasis on the cultural attachment of the Gusii to land.

In the physical realm, the major aspects considered are geology, climate, vegetation, soils, ecology and topography. The major contention here is to emphasize the fact that the physical elements have an influence on land values.

The part on the district's socio-economic development covers such pertinent issues as the family size, nutrition, housing, education, health, water, sanitation, energy, electrification, posts and the communications and the transportation element. The target was to determine the level of development in the district with the view of roughly establishing whether it had any positive influence on land values. This was done in recognition of the fact that development is one of the complex variables which is said to affect land values in any part of the world irrespective of whether the land in question is urban or rural.

The Historical Perspective

The people who predominantly occupy Kisii District are the Abagusii or the Gusii. They are a bantu speaking people who share

the lake basin with the nilotes. According to Ochieng,[1] the cradle land of the Gusii was the area around Lake Turkana and Karamoja. They migrated from there past mount Elgon and along the Nzoia river to Goye. It is here that Mogusii, the founder of the Gusii people was born. The Gusii thereafter migrated to Kano where they stayed for five to seven generations. These generations are assumed to be covered between 1640 and 1755. From the middle of the nineteenth century onwards, the Gusii left the Kano Plains for their present territory which offered better opportunities for defense against other hostile tribes namely, the Luo, the Masai and the Kipsigis.

Having arrived in their present location in the nineteenth century, the Gusii began to lead a settled life.[2] The clan was the central unit of their social organization. Despite their belief in a common ancestor, Mogusii, and inspite of their common language, customs and social systems, they did not have any centralized political institutions in the period prior to British administration. Even at the clan level, political leadership in the pre-colonial period was not normally institutionalized in a set of permanent positions with fixed powers. Each clan and lineage had their own systems of authority in which elders and wealthy individuals had more power than anyone else.[3]

In pre-colonial Gusii land, the Gusii combined agriculture with animal husbandry. The major crops were wimbi and mtama together with sweet potatoes, beans and bananas. No emphasis was put on the production of crops for commercial motives.[4]

The establishment of British colonial rule meant that all the people of Kenya had to have their socio-economic institutions shaken. The Gusii were no exception although they were not seriously infiltrated upon. Indeed, they were one of the last sedentary bantu speaking people in Kenya to be brought under the British tutelage. It was in 1907 that they were finally subdued but not without a spirited resistance especially from the Getutu.[5]

Having established their rule in Gusii land in 1907, the British made an attempt of convincing the people to change some of their undesirable habits. In the realm of agriculture, they encouraged them to produce food crops for sale. The people responded enthusiastically such that by 1914, they were producing crops for sale.[6] The Gusii soon realized how rewarding agricultural "revolution" was. More and more people clamoured for more pieces of land for cultivation. This led to a period of land hunger in the district. Because of the productivity of their land, most of the Gusii never left their land to join the workers in Kenya in European farms or in urban areas.

Physical Setting

General View

Kisii is a district endowed with natural resource advantages like a good climate, fair relief features, high rainfall and good soil structures. All these are conducive to high productivity.

The district is located about 80 kilometres south of the equator, 64 kilometres north of Tanzania and 48 kilometres east of

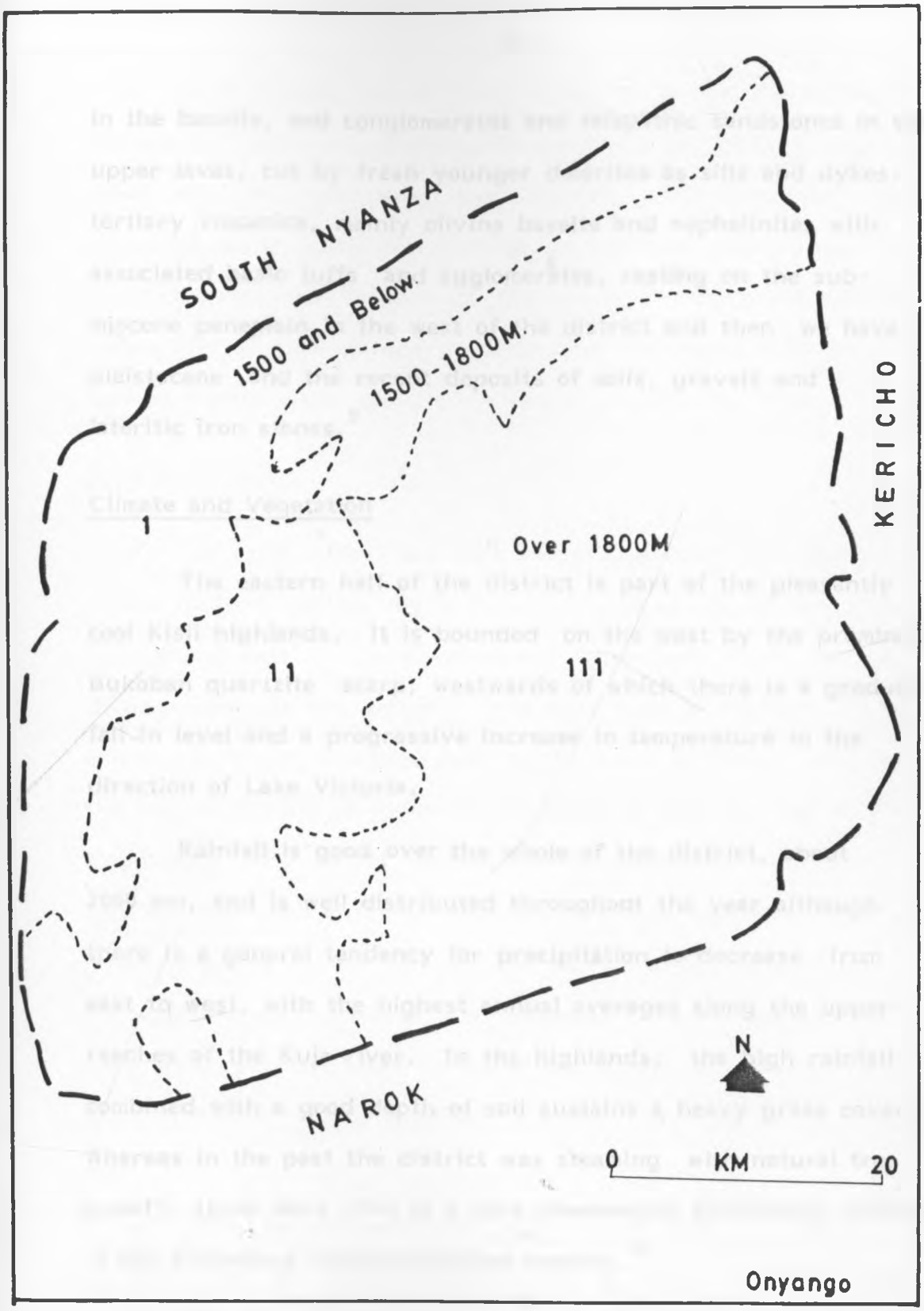
the Kavirondo Gulf on Lake Victoria.[7] It is almost entirely high lands sloping down from the east to the west and somewhat less fertile in the west.[8] See figure 4-1. It is the opinion of this study that all the physical elements of the district positively affect land values meaning that they are major causes of the prevailing high land values in Kisii district.

Geology

The district is bounded by latitudes $0^{o}30'S$ and $1^{o}00'S$ and longitudes $34^{o}30'E$ and $35^{o}00'E$. Physiographically, the area may be divided into two major units, namely; the Kisii highlands covering the eastern two-thirds of the district and the lower and generally more gentle undulating country to the west. The former is a part of a densely dissected cretaceous peneplain with summit levels of up to 2400 metres in altitude while the latter represents the sub-miocene peneplain.

The rocks exposed in the district include the steeply dipping Nyanzian (pre-cambrian) system comprising sheared acid to basic lavas with minor pyroclastic and finely banded sedimentary chart and iron stone intercalations. These are uncomfortably overlain by the Kavirondian system made up of massive boulder conglomerates with subordinate grits, felspathic sandstones and mudstones; granitic rocks of altered dolerites and a variety of minor intrusives which invade both the Nyanzian and the Kavirondian rocks. The other rocks are the Kisii series (Bukoban system) which consist of basalts, quartzites and rhyolitic and andesitic lavas, with local developments of the Kisii "Soapstone"

Figure. 4-1: Kisii Altitude Zones



Source Omare 1982 P.49.

in the basalts, and conglomerates and felspathic sandstones in the upper lavas, cut by fresh younger dolerites as sills and dykes; tertiary volcanics, mainly olivine basalts and nephelinites with associated basic tuffs and agglomerates, resting on the sub-miocene peneplain in the west of the district and then we have pleistocene and the recent deposits of soils, gravels and lateritic iron stones.[9]

Climate and Vegetation

The eastern half of the district is part of the pleasantly cool Kisii highlands. It is bounded on the west by the prominent Bukoban quartzite scarp, westwards of which there is a gradual fall in level and a progressive increase in temperature in the direction of Lake Victoria.

Rainfall is good over the whole of the district, about 2000 mm, and is well distributed throughout the year although there is a general tendency for precipitation to decrease from east to west, with the highest annual averages along the upper reaches of the Kuja river. In the highlands, the high rainfall combined with a good depth of soil sustains a heavy grass cover. Whereas in the past the district was steaming with natural tree growth, these days this is a rare phenomenon presumably because of the prevailing high population density.[10]

The minimum night temperatures of the district range in the region of 46.6^{o}F throughout the year. However, the average normal day temperature is about 66.9^{o}F with a relative humidity of between 50 and 60 per cent.

On the whole, the original vegetation of the district which was probably a moist, montane forest has been replaced by a moist montane scrub grass land and cultivation savannah. Dark green groves of black wattle trees and scattered eucalyptus and cypress occasionally interrupt the gently sloping green hills and ridges and provide boundary markers for individual fields as well as a wind break along the swampy streams and rivers.[11]

Soils and Ecology

The soils of Kisii are dark red friable clays with high humus content, giving way to red friable clays and shallow stony soils to the west.[12] More specifically, three soil types may be distinguished in the district. The first type is the Kisii red loams. This type occupies much of the Sotik Settlement Area and the Northern parts of Nyaribari, Kitutu and West and North Mugirango. The second type is the Kisii highlands loam. It consists of a deep highland loam and a shallow highland loam that is found mainly on hill tops and hill sides and is characterised by shallow stony soils and rock outcrops. The last type is the Kisii Savannah loam which is mainly found over the southern and western Kisii lowlands, especially in areas bordering South Nyanza district.[13]

The district is well covered by three types of grasses namely; bracken grass, Kikuyu grass and star grass. Bracken and Kikuyu grasses are concentrated in the upper areas of the district while the star grass is predominant in the lower areas.[14]

Topography

The district can be sub-divided into three zones corresponding to their altitudes. The first zone consists of those areas which fall below 1500 metres. It stretches along the western boundary of the district and is considered part of the Lake Victoria basin. The second zone which can be referred to as the middle lands has altitudes ranging from 1500 metres to 1800 metres. It consists of the major parts of the Kuja basin, western parts of Irianyi and west Kitutu and the northern parts of Nyamira division. The third zone consists of the highlands which rise above 1800 metres. This zone covers about half of the district's total area. It consists of parts of Nyamira, Kitutu and Irianyi.[15] See figure 4-1.

Kisii in its National Setting

Kisii is the fifth smallest of the forty one districts in the Republic of Kenya in terms of land area after Mombasa (275 km^2), Nairobi (690 km^2), Kirinyaga (1437 km^2) and Busia (1766 km^2)[16]. When the urban districts are eliminated from the district ranking system in Kenya, Kisii becomes the third smallest after Kirinyaga and Busia.[17] See table 4-1.

Table 4-1:

The Districts of Kenya from the largest to The smallest.

Name of District	Area in Sq. Km.	Rank	Name of District	Area in Sq. Km.	Rank
Marsabit	78078	1	Lamu	6814	21
Turkana	61769	2	West Pokot	5076	22
Wajir	56501	3	Kericho	4890	23
Garissa	43931	4	Uasin Gishu	3784	24
Tana River	38694	5	Nyandarua	3529	25
Kitui	29389	6	Siaya	3525	26
Mandera	26470	7	Kakamega	3520	27
Isiolo	25605	8	Nyeri	3284	28
Kajiado	21105	9	Bungoma	3074	29
Samburu	20809	10	Nandi	2745	30
Narok	18513	11	Elgeyo Marakwet	2722	31
Taita	16975	12	Embu	2714	32
Machakos	14183	13	Kisumu	2660	33
Kilifi	12523	14	Murang'a	2476	34
Baringo	10790	15	Trans-Nzoia	2468	35
Laikipia	9718	16	Kiambu	2451	36
Meru	9022	17	Kisii	2196	37
			Busia	1766	38
Kwale	8322	18	Kirinyaga	1437	39
South Nyanza	7778	19	Nairobi	684	40
Nakuru	7200	20	Mombasa	275	41

Source: Wanjiku, 1986, p.112.

Kisii in its Regional Context

Kisii is one of the four districts which make up the Nyanza Province in western Kenya. The others are South Nyanza, Siaya and Kisumu. Of the four, Kisii is the smallest while South Nyanza is the largest. South Nyanza is more than three times the size of Kisii district.[18] See Table 4-2.

Table 4-2:

Relative Areas of Nyanza Districts.

Rank	District	Area in Sq. Km.	% of Provincial area
1	South Nyanza	7778	48
2	Siaya	3525	22
3	Kisumu	2666	16
4	Kisii	2196	14
Total		16159	100

Source: Wanjiku, 1986, p.118.

In contrast to the areal picture depicted above, the most densely populated of the districts in Nyanza Province is Kisii. In 1979, it had an average of 395 persons per square kilometre.

During the same period, Kisumu had 230 persons per square kilometre while Siaya and South Nyanza had 180 and 143 per square kilometre respectively. See Table 4-3.

Table 4-3:

The 1979 Population Situation in Nyanza

Rank	District	Total Population	% Provincial Total	Density
1	Kisii	869512	33.0	395
2	South Nyanza	817610	31.0	143
3	Kisumu	482327	18.2	230
4	Siaya	474516	17.8	180
Total		2643956	100	

Source: Wanjiku, 1986, p.138.

As can be seen from Table 4-3, Kisii and South Nyanza have more or less the same population size despite the fact that South Nyanza is three and a half times bigger than Kisii and accounts for almost one half of the area of Nyanza Province. Kisii on the other hand occupies only 14 per cent of the provincial area but carries 33 per cent of the population of the province.[19]

The Socio-economic Profile of the District

The Social Profile

Although there are many indicators of welfare, the following are noteworthy: fertility rate, the literary level, the level of auxiliary social amenities and health standards.[20] The following was the social situation among the Gusii at the time of research.

Family Size

Kisii had the highest birth rate and a population growth rate of well over 4.2 per cent per annum. It was evidently higher than the national average which as was noted in chapter 3 stood at 4.1 per cent in the 1980s. As a result of the apparent high birth rate in the district, its average family size at the time was between 8-10 persons.[21] This population boom apparently created pressure on the available land in terms of over utilization, excess demand and high land values.

Nutrition

The health of a people to some extent depends on their dietary arrangements. By virtue of the natural endowments, many food crops like maize, millet, sorghum, bananas, sweet potatoes and beans do well in the district. In addition, such horticultural crops as tomatoes, pineapples, cabbage and Kale do well. In general, the nutrition standards of the Kisii people have drastically improved. This improvement has had a bearing on land values since it boosts population growth.

Housing

Four types of houses may be identified in the district. The first type is the traditional structure of mud and wattle with a thatched roof. See Plate 4-1.

Plate 4-1:

A Typical Kisii Thatched House

The second category of housing is mud and wattle with the roof covering being corrugated iron sheets. See Plate 4-2.

Plate 4-2: A Kisii GCI House

3rd

The third category comprises of houses with a permanent floor. See Plate 4-3.

Plate 4-3: A Typical Semi-Permanent Kisii House

The fourth category of houses in the district consists of houses constructed with permanent materials. See Plates 4-4 and 4-5.

Plate 4-4: A Brick Permanent House.

Plate 4-5: A Block Permanent House.

This does not mean that all the houses in the district are of a good quality. See Plates 4-6, 4-7, 4-8 and 4-9.

Plate 4-6: A Poorly maintained Kisii thatched house.

Plate 4-7: A Poorly maintained Kisii thatched house.

Plate 4-8: A Poorly maintained Kisii thatched house.

Plate 4-9: A Poorly maintained GCI Kisii house.

In general, the housing standards in Kisii have improved since many people are now putting up permanent structures. Many Gusii are moving away from the thatched houses and that partly explains why such houses are not well maintained.

Whereas it is not fair to conclude that all Gusii houses are of good quality, it is nevertheless a fact that in the near future most of the Gusii will be having permanent structures especially with the upcoming of mass brick production projects in the area. The way Kisii houses are constructed contributes to the existing land shortage since it is required that each boy has a hut all for himself. This certainly influences the increment in land values.

Education

It is not easy to show the rate of literacy for the district because of the unavailability of relevant data, but there has certainly been an improvement. Basic education in the district has expanded tremendously. By the end of 1982, there were 826 primary schools with a total enrolment of 262665 pupils.[22] In 1979, there were 172 active secondary and high school institutions in the district. By 1982, these schools had risen to 250.[23] Apart from primary and secondary schools, there are several colleges and polytechnics which offer specialized education. The level of literacy has improved over the years meaning that the level of awareness among the Gusii has increased. This has in a way elevated the minds of the people on how to use land and certainly one can justifiably speculate that the level of education in the

district has a bearing on the prevailing high land values.

Health Facilities

The district has several health institutions which are almost evenly distributed.[24] See Table 4-4. This means that the social welfare of the people is well catered for. This situation promotes population growth and hence has a bearing on the upsurge of land values in the district.

Water and Sanitation

The Kenya government has as its basic objective the provision of potable water to all citizens by the year 2000. In Kisii, water is well distributed with the major sources being wells, springs, streams and roof catchments. In the recent past, boreholes have also become a major source of water. Piped water is not common in most parts of the district except for the urban areas and their immediate surrounding.[25] It is the submission of this study that the well distribution of water in the district has a bearing on the prevalent high land values.

Pit latrines are a major feature in many Gusii homesteads with water borne sanitation being restricted to the major urban centres like Kisii, Keroka, and Nyamira.

Energy and Electrification

The official policy of the government of Kenya is to intensify the rate of rural electrification with a view of diverting our energy needs from firewood and paraffin to electricity.

Table 4-4:

Kisii, the Distribution of Health Facilities.

	Administrative Division	Type of Health Facility	Number in 1979	Number in 1983
1.	Kisii Municipality	Hospitals	2	2
		Maternity and Nursery homes	2	3
		Clinics	4	6
		Dispensaries	1	1
2.	Nyamira	Hospitals	1	1
		Health Centres	0	4
		Dispensaries	0	15
3.	Irianyi	Health centres	4	4
		Dispensaries	6	6
4.	Bosongo	Hospitals	1	1
		Health centres	3	3
		Dispensaries	3	3
5.	Ogembo	Health centres	4	4
		Dispensaries	5	5
6.	Manga	Health centres	2	2
		Dispensaries	10	11
	Total		48	71

Source: Kisii District Development Plan, 1984-88.

However, not much electrification has been done in many parts of Kisii district although there is every reason to believe that positive plans are underway. At the present however, firewood forms the backbone of cooking fuel in the district with paraffin lamps being the major source of domestic lighting.[26] Since trees are grown on land, the level of electrification does have an influence on land values. In the Kisii case, the low level of electrification has a positive influence on land values.

Posts and Telecommunications

At the beginning of the 1979/83 plan period, 21 service centres in the district were already being served by a post office or a sub-post office each. At the end of that plan period, the sub-post offices had risen to 31.[27] Several more have been put up in recent years. This study holds that this development has contributed to the prevailing high land values in the district.

Roads and Public Transport

The policy of the government of Kenya is to open up as many roads as possible throughout the country. As a general rule, the higher the population density and the agricultural potential of an area, the greater the need for roads.[28] There has been some improvement in the road network in the district although the situation is not altogether satisfactory. The most hit areas are Wanjare, North Mugirango Chache, West Mugirango and South Mugirango. Even in East Mugirango, Kitutu and Nyaribari areas the roads are not good especially during the rainy season.[29]

Generally however, there has been an improvement in the rural road network in Kisii in the recent past. For instance, while at the beginning of the 1979/83 plan period there were 1111.6 kilometres of classified roads in the district, by 1983 there were 1191.6 kilometres of such roads.[30] This represents a 7 per cent improvement. See figure 4-2.

This study holds that the improvement in roads is a significant determinant of land values in Kisii district.

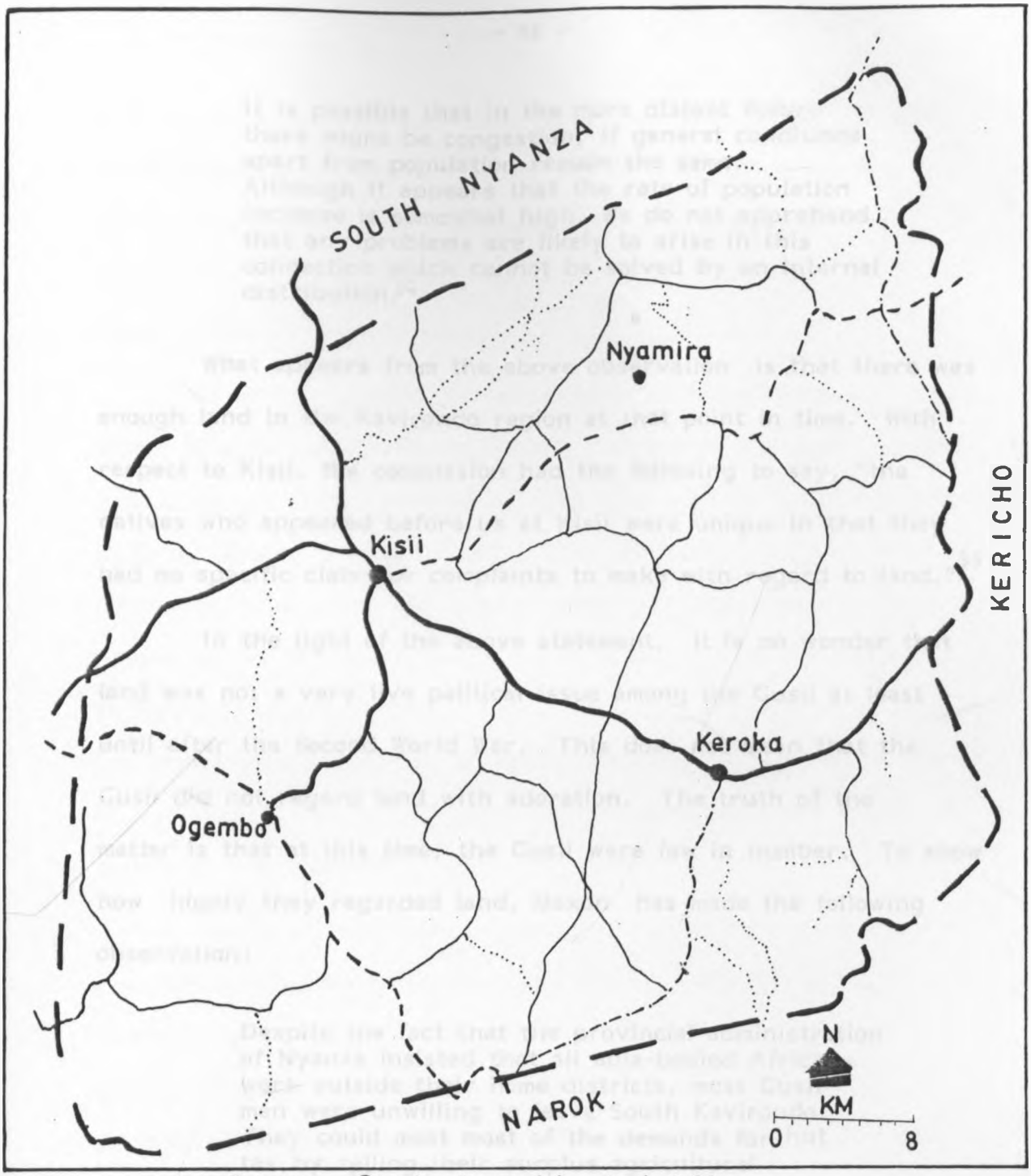
The Economic Profile

Land forms the backbone of the Gusii economy. It is the basis of their existence and development. This is not strange because for men and women everywhere in our world, land has at one point in time shaped their economic, social and political organizations.[31]

Land tenure in Kisii was based on the principle that an individual had inheritable rights over his arable lands mainly cultivated by his wife or wives while sharing with his kinsmen other resources such as grazing lands, forests and salt-licks claimed by his community. However, this system of ownership could only be maintained as long as there was adequate land.[32]

As late as 1935, there was enough "vacant" land for the Kikuyu and Lagoli people to be allowed to settle in Gusii highlands. In fact, at the time of the Carter Land Commission,[33] the Gusii had no specific land claims to make. Commenting on the whole of the Kavirondo reserves to which Kisii belonged, the commission in 1933 made the following observation:

Figure. 4-2: Kisii Classified Road System.



Source: Sterkenberg J.J. et.al; p.62

— — — District Boundary
——— International Trunk Roads
—·—·— Primary Roads
——— Secondary Roads
····· Minor Roads

> It is possible that in the more distant future there might be congestion, if general conditions apart from population remain the same. Although it appears that the rate of population increase is somewhat high, we do not apprehend that any problems are likely to arise in this connection which cannot be solved by an internal distribution.[34]

What appears from the above observation is that there was enough land in the Kavirondo region at that point in time. With respect to Kisii, the commission had the following to say, "the natives who appeared before us at Kisii were unique in that they had no specific claims or complaints to make with regard to land."[35]

In the light of the above statement, it is no wonder that land was not a very live political issue among the Gusii at least until after the Second World War. This does not mean that the Gusii did not regard land with adoration. The truth of the matter is that at this time, the Gusii were few in number. To show how highly they regarded land, Maxon has made the following observation:

> Despite the fact that the provincial administration of Nyanza insisted that all able-bodied Africans work outside their home districts, most Gusii men were unwilling to leave South Kavirondo. They could meet most of the demands for hut tax by selling their surplus agricultural produce.[36]..... Very few Gusii who went away from home to work stayed for a very long period.[37]

This land "honey moon" was however soon to come to an end. In the post World War II years, Kisii was hit by a land shortage crisis as a result of population growth. It is at this time that the land crisis became a reality among the Gusii. In addition, it was around this time that a majority of land disputes

were recorded such that by 1953, 75 per cent of the time of the South Nyanza Appeal Court[38] and the District Office hearing appeals was taken up by Gusii land cases.[39] It was for this reason that the idea of land registration was embraced by the Gusii when it appeared on the scene.

Land registration started in Kisii in 1965 and by 1971 almost all the holdings in the district had been registered. It has been observed that land litigation has been reduced by the processes of land adjudication, consolidation and registration. The major consequence of these measures however has been that many people have been left landless. As Omare[40] puts it, Kisii district is suffering from limited land resources and that the amount of land per capita among the Gusii is among the lowest in Kenya. It stands at less than 0.5 hectares in contrast to the national one which stands at 0.5 hectares.

Aware of the impending dangers of this adverse land population ratio, farmers in the district have boldly risen up the challenge and redoubled their efforts to maximise the use of available resources. This has included the intensification of production per land unit, the diversification of crops to suit given soil structures, and varying altitudes, the improvement of the quality of livestock and the conservation of the limited land against the factors of erosion.

Mixed farming is widely practised in the district and it mainly involves cattle/crop, sheep/crop, and goats/crop combinations. Further more, crop production is to a large extent based on multi-cropping systems. See Plates 4-10, 4-11, 4-12, 4-13, 4-14 and 4-15.

Plate 4-10: Multi-cropping system in Kisii.

Plate 4-11: A Tea farm in Kisii District.

Plate 4-12: Multi-cropping system in Kisii.

Plate 4-13: Multi-cropping system in Kisii.

Plate 4-14: Multi-cropping system in Kisii.

Plate 4-15: Multi-cropping system in Kisii.

It has been estimated that about 116472 hectares or 80 per cent of the available agricultural land is under multiple cropping. The main crops grown are coffee, tea, pyrethrum, maize, finger millet, sorghum, groundnuts, beans, bananas and an assortment of horticultural crops.[41]

The major cash crops in the district are coffee, tea and pyrethrum. Coffee was introduced in Kisii in 1955 as a commercial crop and has been doing well. For instance, the total output during the 1979/83 plan period was 75,106,000 kilograms. The crop does best in the coffee zone which comprises of areas between the district's western boundary and the 1800 metre contour line.[42]

Tea was introduced in the district in 1959 under the auspices of the Special Crops Development Authority. It expanded strongly under the Kenya Tea Development Authority after 1964. In 1974 the total hectarage amounted to some 6090 hectares with 20,000 tea growers while in 1978 the 10,000 hectares mark was reached.[43] The hectarage has been increasing rapidly in recent years.

Pyrethrum was introduced in the district in 1952. Between 1979 and 1982, the district produced a total of 21,588,000 kilograms of dry pyrethrum flowers. The average annual hectarage under the crop during the four year period was 12,000 hectares.[44] The hectarage has however been decreasing in the recent past because of its low returns.

Apart from the three cash crops the other crops such as bananas and sugar cane earn the Gusii good money. In the 1970s, passion fruits were widely grown but are now on the decline.[45]

The picture which emerges from the foregoing is that the economic base of the Gusii is their land. It is productive although the average size per household is small. For instance, the per capita income of the Gusii was estimated to be K£582 and K£861 for 1979 and 1980 respectively.[46] It has been rising over the years. In view of this, the study holds that the income derived from the productivity of the land contributes to the prevailing high land values in the district.

The major problem now facing the district is the scramble for land which accelerates the rate of land mutation.[47]

Summary

This chapter lucidly reveals that apart from having a high population growth rate, Kisii is endowed with among other things good climate, fertile soils and a good landscape. It has over the years experienced development in such important sectors as nutrition, housing, education, health and communication. It has however began to experience a land shortage crisis and as the following chapter would show, it has been recording high land values.

FOOTNOTES

1. William R. Ochieng, A Pre-colonial History of the Gusii of Western Kenya from C. AD. 1500 to 1914, Kampala: EALB, 1974, p.15.

2. Frank E. Bernard and Simon K.Anzagi, Population Pressure in Rural Kenya, Ohio: Ohio University, 1979, pp.156-157.

3. R.M. Maxon, British Rule in Gusii Land. Morgan Town, Ph.D. Thesis, 1971, p.7.

4. Ibid., pp.11-12.

5. Ibid., p.29.

6. Frank E. Bernard and Simon K. Anzagi, Population Pressure in Rural Kenya, Ohio: Ohio University, 1979, p.158.

7. V.C. Uchendu and K.R.M. Anthony, Agricultural Change in Kisii District, Kenya, Nairobi: East African Literature Bureau, 1975, p.10.

8. J. Heyer, et al., Rural Development in Kenya, Nairobi: East African Publishing House, 1971, p.29.

9. A. Huddleston, Geology of the Kisii District, Nairobi: Government Printer, 1951, p.iii.

10. Ibid., p.1.

11. V.C. Uchendu and K.R.M. Anthony, Agricultural Change in Kisii District Kenya, Nairobi: EALB, 1975, p.12.

12. J. Heyer, et al., Rural Development in Kenya, Nairobi: East African Publishing House, 1971, p.29.

13. V.C. Uchendu and K.R.M. Anthony, Agricultural Change in Kisii District, Kenya, Nairobi: EALB, 1975, p.11.

14. J. Heyer, et al., Rural Development in Kenya, Naiorobi: East African Publishing House, 1971, p.29.

15. Republic of Kenya, Kisii District Development Plan, 1984-88, Nairobi: Government Printer, 1984, p.1.

16. Mwagiru Wanjiku and Pal N. Njue, A Modern Geography of Kenya, Nairobi: Mwassco Publications, 1986, p.112.

17. Republic of Kenya, Kisii District Development Plan, 1979-83, Nairobi: Government Printer, 1980, p.i.

18. Mwagiru Wanjiku and Pal N. Njue, A Modern Geography of Kenya, Nairobi: Mwassco Publications, 1986, p.118.

19. Ibid., p.138.

20. Republic of Kenya, Kisii District Development Plan, 1984-88, Nairobi: Government Printer, 1984, p.4.

21. Ibid., p.3.

22. Ibid., p.22.

23. Ibid., p.24.

24. Ibid., p.20.

25. Ibid., p.15.

26. Ibid., p.11.

27. Ibid., p.13.

28. J.J. Sterkenburg, et al., Rural Housing Conditions in Kisii District, Kenya, A joint Project by the Department of Geography of Developing Countries, University of Utrecht, and HRDU, University of Nairobi, 1981, p.20.

29. Ibid., p.21.

30. Republic of Kenya, Kisii District Development Plan, 1984-88, Nairobi: Government Printer, 1984, p.9.

31. James J. Obol-Ochola, Land Law Reform in East Africa, Kampala: Milton Obote Foundation, 1969, p.96.

32. V.C. Uchendu and K.R.M. Anthony, Agricultural Change in Kisii District, Nairobi: EALB, 1975, p.26.

33. A Land Committee set up in 1932 under Chairman Carter to look into the land grievances in Kenya.

34. Great Britain, Kenya Land Commission Report, London: HMSO, 1933, p.291.

35. Ibid., p.297.

36. R.M. Maxon, British Rule in Gusii land, Morgan Town: Ph.D. Thesis, 1971, p.82.

37. Ibid., p.271.

38. Kisii was part of South Nyanza District up to July 1961.

39. R.M. Maxon, British Rule in Gusii Land, Morgan Town: Ph.D. Thesis, 1971, p.207.

40. C.N. Omare, Effects of Population Change on Land Use in Kisii District, Kenya, M.A. Thesis, 1981, pp.4-10.

41. J.J. Sterkenburg, et al., Rural Housing Conditions in Kisii District, Kenya, A Joint Project by the Department of Geography of Developing Countries, University of Utrecht and HRDU, University of Nairobi, 1981, p.42.

42. Ibid., p.43.

43. Ibid., p.7.

44. Ibid., p.45.

45. Ibid., pp.46-48.

46. Republic of Kenya, Kisii District Development Plan, 1984-88, Nairobi: Government Printer, 1984, p.8.

47. The Standard, Wednesday, March 6th, 1985, p.11.

CHAPTER FIVE

LAND MARKET AND POPULATION GROWTH.

This chapter is exclusively devoted to the evaluation and analysis of data relating to the land market and population growth in the study area during the study period (1967-87).

The required data for the study hinged on the land market and population growth. The relevant data on the land market were: the year of transaction, the place of transaction i.e. the sublocation, the nature of interests sold, the hectarage of plots sold, land prices and the participants. The data on the actual place of transaction was useful for classifying the sales into their respective altitude zones. These were discussed in chapter four and illustrated by figure 4-1. The objective here was to show the regional variations of the land market in the district.

The major source of the land market data was the Kisii Land Offices' Presentation and Land Title Documents. The data constituted a sample of the total sales during the study period since the author has studied it at a five year interval. However, for every year studied i.e. 1967, 1972, 1977, 1982 and 1987 the listed data is all that could be procured from the documents availed to the author. These were obtained between November 6th and December 20th, 1987.

Additional data on the land market were obtained between February 15th and 29th, 1988 through the administration of questionnaires to those who had purchased land in the District between 1967 and 1987. In total, a sample of 100 from the target

group was obtained with each year of study being represented by 20 people. The unconventional method of first-come-first served was used in selecting the sample. This was the only workable procedure at the time due to the complexities involved in tracing the target group - those who had purchased land within the district during the study period.

Data on population for the study period were obtained by making projections based on the 1962, 1969 and the 1979 population census documents.

Data Analysis

Data was manually analysed in accordance with the objectives set. The ones on the general aspects of the land market were evaluated and analysed by way of frequency distributions and percentages. The main technique used to derive the trend line equation was the Least Squares Geometric Straight Line Approach. However, before the equation was computed, price adjustments were made through the deflation process with 1977 taken as the base year. The main mechanism in the deflation process was that every item in the value series was divided by a 1977 index. The general procedure used to calculate the trend equation was as follows:

1. The natural values of both Xs (representing years) and Ys (representing values) were plotted on a graph paper.

2. The origin was set at the middle of the series i.e. 1977 and X values assigned to each year.

3. The X values were squared to obtain $\sum (X^2)$.

4. The logarithms of all the Y values were found to obtain $\sum \log Y$.

5. The logarithms of each Y value was multiplied by the X value of that year and the two products summed to get $\sum X(\text{Log } Y)$.

6. The Y intercept and the slope were computed using the following formulae.

$$\text{Log } b = \frac{\sum X(\text{Log } Y) - \bar{X}\sum \text{Log } Y}{\sum X^2 - n\bar{X}^2}$$

$$\text{Log } a = \frac{\sum \text{Log } Y}{n} - \bar{X} \text{ Log } b$$

Other steps were the expression of the trend equation in logarithmic terms, the calculation of trend values by simply substituting the X values in the trend equation, the conversion of the logarithmic trend values to antilogarithms and the plotting of the trend line on a graph paper.

Since log b is the logarithm of the ratio of each time unit to the preceding one, it was expressed as a percentage and then 100 deducted from it. The result was a constant rate of change in Y per unit of X and in this form, b defines the average annual rate of change in the land value series. Being an abstract measure, it permitted the comparison of the population

and land value trends.

Presentation of Results

The results are presented in written texts with tables, graphs and equations in an ordered chapter format.

The author however submits that the study may be having some drawbacks in its findings. For instance, data on land values may not have been fully reflective of the true market situation. The reason for this is that the main source was the Lands Office whose recorded values are usually said to be lower than the market ones because vendors tend to declare lower values to minimize stamp duty payments. Secondly, it is possible that not all the transactions during the study period were recorded such that the conclusions reached on the basis of the available data may not be wholly valid. Lastly, the rating of land value determinants done by interviewees was subjective and may not be conclusive.

Notwithstanding these limitations, the findings in this study are reliable. Data on land values are valid upto 90 per cent confidence level as discussed elsewhere in this study. (See pages 127-130).

Distribution of Land Transactions

The peak of land sales in Kisii District was in the 1970s and by the 1980s, the sales were on the decline. See table 5-1.

Table 5-1:

Number and Percentage of Land Transactions, 1967-87.

Year	Number of transactions	Percentage of the total
1967	150	21.1
1972	172	24.2
1977	150	21.1
1982	130	18.2
1987	110	15.4
Total	712	100.0

Source: Kisii Lands Office, 1987.

Several reasons can be given as an explanation for the activeness of the land market in the 1970s. First, it was at this time that land had become a transactable commodity following the completion of the processes of land adjudication, consolidation and registration. Second, the average hectarage of land per household was big at the time. Third, it was at this time that land purchases were being made in the settlement areas and so some people sold portions of their land to make such purchases. The reason for this was the larger farms in the settlement areas.

In general, the concentration of the land market during the study period was in zone II. The zone as pointed out in chapter four covers portions of Kisii with altitudes ranging from 1500 to 1800 metres. See Table 5-2.

Table 5-2:

Zonal Land Transactions, Kisii, 1967-87

Year	Transactions in Zone I	Transactions in Zone II	Transactions in Zone III	Total
1967	0	137	13	150
1972	5	145	22	172
1977	8	116	26	150
1982	7	93	30	130
1987	18	70	22	110
Total	38	561	113	712

Source: Kisii Lands Office, 1987.

As the table above depicts, the land market in zone I has been largely inactive but for the 1980s when there were signs of picking up momentum. The main reason for the near dormance of the market in the 1960s and the early 1970s was the

backwardness of the zone. Not many prospective purchasers were ready to buy land there. This trend has however tremendously changed in the recent past with the dawn of comprehensive development strategies throughout the district.

Hectarages of Land Transacted.

Sales over the study period showed a declining trend in hectarages as can be seen from Table 5-3.

Table 5-3 reveals that in 1967, sales of up to 0.5 hectares constituted a mere 19.4% of the year's total sales while for 1972, 1977, 1982 and 1987, the respective percentages were 64.6%, 61.9%, 88.5% and 89.2%. This shows a general decline in hectarages except for 1977 where a small deviation was noted due mainly to the larger pieces of land sold in that year in zone I and the settlement areas.

The sales of between 0.5 hectares and 1.0 hectare in 1967 constituted 40.6% of the total sales while those of 1972, 1977, 1982 and 1987 constituted 20.3%, 21.4%, 11.5% and 9.9% of their respective total sales.

The sales of between 1.0 hectare and 1.5 hectares as shown by table 5-3 made up for 10% of the total sales recorded in 1967 while for 1972, 1977, 1982 and 1987 they made up for 7%, 4%, 0% and 0% of their respective total sales. The same picture is portrayed for hectarages in excess of 1.5 hectares in that for 1967, 29% of the total transactions fell under that category while for 1972, 1977, 1982 and 1987 the respective percentages were

Size in Hectares	1967		1972		1977		1982		1987	
	Fre-quency	% of the total sales	Fre-quency	% of the total sales	Fre-quency	% of the total sales	Fre-quency	% of the total sales	Fre-quency	% of the total sales
Below 0.2	0	0.0	39	22.7	10	6.7	38	29.3	20	18.2
0.2-0.3	6	4.0	44	25.6	27	18.0	44	33.8	46	41.8
0.3-0.4	16	10.7	22	12.8	44	19.2	27	20.8	29	26.5
0.4-0.5	7	4.7	6	3.5	12	8.0	6	4.6	3	2.7
0.5-0.6	5	3.3	5	2.9	10	6.7	10	7.7	5	4.5
0.6-0.7	6	4.0	7	4.1	4	2.7	0	0.0	3	2.7
0.7-0.8	28	18.7	11	6.3	15	10.0	5	3.8	2	1.8
0.8-0.9	5	3.3	6	3.5	2	1.3	0	0.0	1	0.9
0.9-1.0	17	11.3	6	3.5	1	0.7	0	0.0	0	0.0
1.0-1.1	3	2.0	3	1.7	1	0.7	0	0.0	0	0.0
1.1-1.2	5	3.3	2	1.2	5	3.3	0	0.0	0	0.0
1.2-1.3	2	1.3	5	2.9	0	0.0	0	0.0	0	0.0
1.3-1.4	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0
1.4-1.5	4	2.7	2	1.2	0	0.0	0	0.0	0	0.0
1.5-1.6	3	2.0	3	1.7	2	1.3	0	0.0	0	0.0
1.6-1.7	3	2.0	1	0.6	1	0.7	0	0.0	0	0.0
1.7-1.8	3	2.0	0	0.0	1	0.7	0	0.0	0	0.0
1.8-1.9	2	1.3	0	0.0	0	0.0	0	0.0	1	0.9
1.9-2.0	4	2.7	3	1.7	4	2.7	0	0.0	0	0.0
Over 2.0	30	20.0	7	4.1	11	7.3	0	0.0	0	0.0
Total	150	100.0	172	100.0	150	100.0	130	100.0	110	100.0

Table 5-3: Hectarages Sold, 1967-87

Source: Kisii Lands Office, 1987

8.1, 12.7, 0 and 0.9.

The general picture portrayed from the foregoing analysis is that there is a land shortage in Kisii and that this shortage began early. For instance, as early as 1972 the concentratin of the hectarages disposed were in the region of between 0.2 and 0.5. Several reasons could be given for this apparent decline. In the first place, the district's population density has been high with a subsequent low land per capita. This apparently created a general unwillingness of people in disposing the small portions that they held. In effect, where they sold at all, they sold small pieces as they could not part with all the land since most of them depended on it for survival.

Interests sold in Land Transactions

The major interests in land which are usually sold in rural land markets are freeholds and leaseholds. The Kisii land sales showed that there were no leasehold dealings during the study period. See Table 5-4.

No sales of the leasehold interest were recorded. One reason for their absence is lack of emphasis on it with the result that not many people are aware of it. Secondly, the would be buyers of the interest consider it to be an insecure investment vis-a-vis absolute proprietorship.

However, the absence of recorded leasehold transactins in the land registry does not imply that they are non-existent. To the contrary, the author found out that they exist except that they are not recorded. They may in fact be a major feature of the

Kisii rural land market in the near future.

Table 5-4:

Type of Interest Sold

Year	Frequency of Freeholds
1967	150
1972	172
1977	150
1982	130
1987	110
Total	712

Source: Kisii Lands Office, 1987.

Unadjusted Land Values

Land values have been on the increase throughout Kisii district over the years and indeed during the study period. See Table 5-5.

Value in Kshs.	1967		1972		1977		1982		1987	
	Frequency of sales	Percentage of the total sales	Frequency of sales	Percentage of the total sales	Frequency of sales	Percentage of the total sales	Frequency of sales	Percentage of the total sales	Frequency of sales	Percentage of the total sales
Below 1000	9	6.0	3	1.7	0	0.0	0	0.0	0	0.0
1000-2000	46	30.7	10	5.8	0	0.0	0	0.0	0	0.0
2000-3000	46	30.7	3	1.7	0	0.0	0	0.0	0	0.0
3000-4000	29	19.3	3	1.7	7	4.7	0	0.0	0	0.0
4000-5000	14	9.3	7	4.1	1	0.7	0	0.0	0	0.0
5000-6000	1	0.7	6	3.6	2	1.3	0	0.0	0	0.0
6000-7000	2	1.3	5	2.9	3	2.0	0	0.0	0	0.0
7000-8000	2	1.3	1	0.6	2	1.3	0	0.0	0	0.0
8000-9000	1	0.7	3	1.7	9	6.0	0	0.0	0	0.0
9000-10000	0	0.0	4	2.3	11	7.3	0	0.0	0	0.0
10000-11000	0	0.0	1	0.6	2	1.3	0	0.0	0	0.0
11000-12000	0	0.0	4	2.3	4	2.7	0	0.0	0	0.0
12000-13000	0	0.0	6	3.6	3	2.0	0	0.0	0	0.0
13000-14000	0	0.0	4	2.3	5	3.3	0	0.0	0	0.0
14000-15000	0	0.0	9	5.2	5	3.3	0	0.0	0	0.0
15000-16000	0	0.0	1	0.6	2	1.3	2	1.5	0	0.0
16000-17000	0	0.0	3	1.7	5	3.3	0	0.0	0	0.0
17000-18000	0	0.0	3	1.7	4	2.7	3	2.3	0	0.0
18000-19000	0	0.0	7	4.1	1	0.7	1	0.8	0	0.0
19000-20000	0	0.0	6	3.5	8	5.4	5	3.8	1	0.9
20000-25000	0	0.0	24	14.0	13	8.7	17	13.1	4	3.6
Over 25000	0	0.0	59	34.3	63	42.0	102	78.5	105	95.5
Total	150	100.0	172	100.0	150	100.0	130	100.0	110	100.0

Table 5-5: Land Values per Hectare, 1967-87 at Unadjusted Prices.
Source: Kisii Lands Office, 1987.

Table 5-6 among other things shows that in 1967, over 85 per cent of the sales were made at prices below 4000 shillings per hectare while in 1972 the land values were concentrated at over 20,000 shillings per hectare. This was a tremendous increase. This can partly be explained by the nature of the economy during the two time periods. For one, between 1964 and 1970, Kenya's economy was influenced by vagaries of weather, crop diseases and low international commodity prices.

Although 1967 was generally a good year from the point of view of the weather, tea production was held back by firstly a period of drought and secondly a period of excessive rain and hailstorm. During the same year, coffee production was seriously reduced by a severe infestation of Coffee Berry Disease. These conditions made the economy in the 1966/67 financial year to grow at the rate of 3.9 per cent.[1] Nineteen seventy two on the other hand was a fairly good year when the average growth of the economy was 6.5 per cent.[2] The variations in the land values of 1967 and 1972 can therefore be seen as a result of the economy. In 1972 there was more money in the hands of the Gusii who grow both coffee and tea as cash crops relative to 1967 when the crops were affected by vagaries of weather and pests.

Table 5-6 in addition shows that for 1977, 1982 and 1987, the concentration of land values was at the upper limit of the table i.e. between 20,000 and 25,000 Kenya shillings per hectare. This also can partly be explained by the performance of the economy during the 1970s and the 1980s. The country during these years had to absorb such international and local shocks as the oil crisis

of 1973 and 1979, the world recession of the early 1980s and the 1979 and 1980 droughts. These were however offset to a certain extent by some good years and hence the high values of land during the 1970s and the 1980s. The good years included the coffee boom in 1977 and 1978 and the country's spectacular price stability throughout the 1960s and the early 1970s.[3]

Adjusted Land Values

For proper comparison of the land values during the study period, a 1977 price index was used. The purpose of this was to find the real values of the time series data through deflation. Deflation was achieved by dividing the values of a given year by the price index and then multiplying by 100. See Table 5-6.

Table 5-6:

Percentage Price relatives index for Kisii Rural Land Values, 1967-87.

Year	Average Price per Hectare	Price relative to 1977	Index
1967	2000	0.18	18
1972	8500	0.77	77
1977	11000	1.00	100
1982	40000	3.64	364
1987	53000	4.82	482

Source: Own Calculation using Lands Office Data

The figures in column three on table 5-6 are ratios of the average land prices in given years to the average land price of the base year (1977). On the other hand, figures in column four were obtained by using the formula:

$$\frac{P_n}{P_o} \times 100$$

where P_n represents the average land prices for 1967, 1972, 1977, 1982 and 1987; while P_o stands for the average land price in the base year.

Even the adjusted values show an upward trend as can be seen from table 5-7.

Value per Hectare in Kshs.	1967		1972		1977		1982		1987	
	Frequency of sales	Percentage of the total sales	Frequency of sales	Percentage of the total sales	Frequency of sales	Percentage of the total sales	Frequency of sales	Percentage of the total sales	Frequency of sales	Percentage of the total sales
Below 1000	0	0.0	2	1.2	0	0.0	0	0.0	0	0.0
1000-2000	0	0.0	3	1.7	0	0.0	0	0.0	0	0.0
2000-3000	2	1.3	8	4.8	0	0.0	0	0.0	0	0.0
3000-4000	3	2.0	5	2.9	7	4.7	2	1.6	0	0.0
4000-5000	2	1.3	3	1.7	1	0.7	4	3.3	1	0.9
5000-6000	4	2.7	1	0.6	2	1.3	5	3.5	4	3.7
6000-7000	6	4.0	5	2.9	3	2.0	6	4.6	3	2.7
7000-8000	9	6.0	5	2.9	2	1.3	7	5.4	2	1.8
8000-9000	8	5.3	7	4.1	9	6.0	8	6.3	5	4.5
9000-10000	9	6.0	4	2.3	11	7.3	5	3.5	2	1.8
10000-11000	10	6.7	1	0.6	2	1.3	5	3.5	8	7.2
11000-12000	12	8.0	3	1.7	4	2.7	2	1.6	5	4.5
12000-13000	8	5.3	3	1.7	3	2.0	2	1.6	4	3.7
13000-14000	5	3.3	1	0.6	5	3.3	2	1.6	3	2.7
14000-15000	4	2.7	3	1.7	5	3.3	1	0.8	1	0.9
15000-16000	2	1.3	4	2.3	2	1.3	1	0.8	2	1.8
16000-17000	7	4.7	4	2.3	5	3.3	2	1.6	1	0.9
17000-18000	5	3.3	1	0.6	4	2.7	2	1.6	4	3.7
18000-19000	7	4.7	4	2.3	1	0.7	3	2.3	1	0.9
19000-20000	1	0.7	9	5.2	8	5.4	4	3.3	4	3.7
20000-25000	26	17.3	18	10.6	13	8.7	9	7.0	10	9.1
Over 25000	20	13.4	78	45.3	63	42.0	60	46.1	50	45.5
Total	150	100.0	172	100.0	150	100.0	130	100.0	110	100.0

Table 5-7: Land Values Per Hectare, 1967-87 at 1977 Constant Prices ; Source : Kisii Lands Office, 1987.

Table 5-7 shows that in 1967 most of the sales were over 10,000 shillings per hectare. It also depicts an upsurge of land values for 1972 with the result that over 50 per cent of the transactions recorded for that year were done at over 20,000 Kenya shillings per hectare. The economic position of the country is seen as a partial explanation to this upward trend. In 1977, the same upward trend in land values is evident since over 50 per cent of the transactions undertaken in that year were concluded at over 20,000 shillings per hectare. The coffee boom and the favourable weather at the time is a partial explanation to this trend. The sales of 1982 and 1987 showed the same trend of the land values being concentrated at the upper limit of the table.

The Trend Line Equation

Whereas the foregoing analysis has shown that land values have been increasing in the study area during the study period, the rate of increase per annum has not been shown. The present section does this by deriving the trend equation using the time series data. The method of deriving the equation has been the least squares geometric straight line approach. See Table 5-8.

Table 5-8:

Derivation of the Trend Line Equation

Year	X	X^2	Y	Log Y	$\bar{X}$(Log Y)	Log Y_t
1967	-2	4	10650	4.0273496	-8.0546992	4.0700094
1972	-1	1	14970	4.1752218	-4.1752218	4.0761624
1977	0	0	11000	4.0413927	0	4.0823154
1982	1	1	11060	4.0437551	4.0437551	4.0884684
1987	2	4	13300	4.1238516	8.2477032	4.0946214
Total		10		20.411577	+ 0.0615373	

Source: Own Calculations based on Land Office Data, 1987.

X represents the study years while Y stands for the means of the adjusted land values for the respective years.

The rate of change per unit of X is

$$\text{Log } b = \frac{\sum X(\text{Log } Y) - \bar{X} \sum \text{Log } Y}{\sum X^2 - n\bar{X}^2}$$

$$= \frac{0.0615373 - 0}{10 - 0} = 0.00615373X$$

The Y intercept is

$$\text{Log } a = \frac{\sum \text{Log } Y}{n} - \bar{X} \text{ Log } b$$

$$= \frac{20.411577}{5} - 0 = 4.0823154$$

Hence, the trend line equation for land values in the study area during the study period is:

$$\text{Log } Y_t = 4.0823154 + 0.00615373X$$

or

$$Y_t = 12{,}087\ (1.0142686)^X$$

This means that between 1967 and 1987, land values in Kisii district increased at an average annual rate of 1.43 per cent.

For effective interpretation and comparison, Log Y_t is converted to natural numbers. See table 5-9.

Table 5-9:

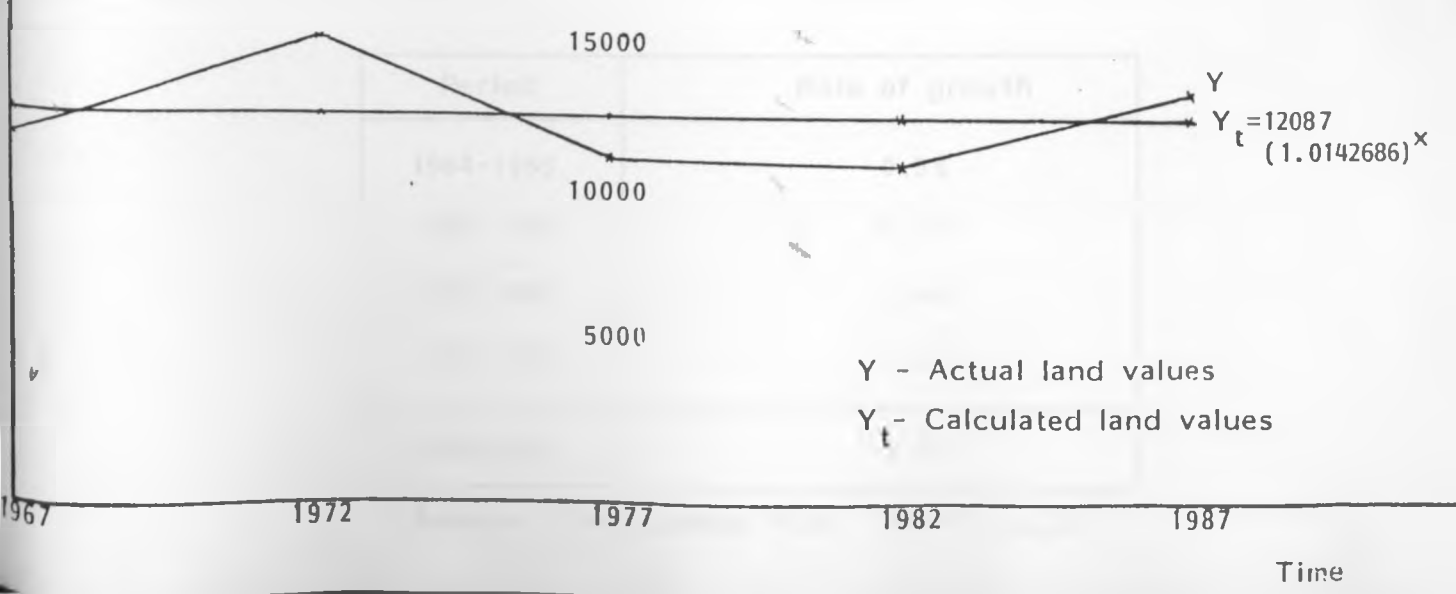
The antilogarithms of the logarithmic trend values.

Year	Logarithm	Antilogarithm
1967	4.0700094	11749
1972	4.0761624	11917
1977	4.0823154	12087
1982	4.0884684	12259
1987	4.0946214	12434

Source: Own Calculations

The graphical representation of the trend line against the actual observations is shown in graph 5-1.

Graph 5-1: The trend line of Kisii District Land Values at 1977 constant prices.



Graph 5-1 shows the trends of land values with Y representing the means of the actual observations and Y_t representing the calculated values using the derived equation.

Curve Y reveals swings in the rates of change of land values. It shows that between 1967 and 1972 the rate of increase of land values was highest with the peak being recorded in 1972. It is also clear from the graph that land values were on the decrease from 1972 up to 1977. Between 1977 and 1982, the values were constant and there was no apparent increase or decrease. The years between 1982 and 1987 reveal an increasing trend in land values. These variations could not have been chance occurrences. Explanations for this could be traced from the economic performance of Kenya during the 1960s, the 1970s and the 1980s.

The increasing trend in land values between 1967 and 1972 find their explanation in the excellent performance of the Kenyan economy between 1964 and 1968. See table 5-10.

Table 5-10.

Kenya's Economic Growth Rates, 1964-68

Period	Rate of growth
1964-1965	0.5%
1965-1966	14.5%
1966-1967	3.9%
1967-1968	6.6%
Average	6.3%

Source: Development Plan, 1970-74, p.28.

It is clear from the table that the average growth rate of the Kenyan economy between 1964 and 1968 was 6.3 per cent. This among other things increased the amount of disposable income in the hands of Kenyans. This was mainly reflected in the increased trends in the demand for goods and services during that period. That is why land values were on the increase at the time in Kisii.

The declining trend in land values between 1972 and 1977 was a consequence of the somewhat poor performance of the economy at that time. There was an upsurge in oil prices in 1973 and this created disorders in international trade relations. The country underwent a series of crises especially with respect to sharp changes in relative prices, recessions, inflation abroad and the failure of the big nations to take essential steps to put balances of payments in order.[4]

Between 1977 and 1982, land values in the district were constant. This was mainly the result of the cancelling out of the economic performance in the good years and the bad ones. The positive occurrences during this period were the coffee boom of 1977 and 1978 and the country's price stability throughout the 1960s and the early 1970s. On the other hand, the negative happenings during the period were the 1979 oil crisis, the world recession of the early 1980s and the drought of 1979 and 1980.

The economy however recovered in 1981 due to the good performance of agriculture at the time in contrast to its performance in the previous two years.[6] This recovery saw the economy

growing at the rate of 5.5 per cent. This could however not be sustained in 1982 when among other things there were unfavourable terms of trade in the international trade relations.[7] Inspite of all these, graph 5-1 shows that land values were increasing, though at a sluggish rate. A major contributory factor to this was the dropping of the oil prices as from 1982. The rising level of inflation also led to these high land values in 1980s.

Reliability of the Land Values Data and Findings.

This section is aimed at determining whether or not the land value data obtained from the Kisii Land office on which the above findings have been based can be relied on.

As has already been ascertained (page 118), the unadjusted mean land prices per hectare in Kisii district were Kenya shillings 2,000; 8,500; 11,000; 40,000 and 53,000 for 1967, 1972, 1977, 1982 and 1987 respectively with 1977 taken as the base year and all land values within the study period deflated using appropriate indices. The indices arrived at were 0.18, 0.77, 1.00, 3.64 and 4.82 for 1967, 1972, 1977, 1982 and 1987 respectively.

The unadjusted means divided by respective price indices give the adjusted means. See table 5-11.

Table 5-11:

Calculation of Adjusted Land Value Means.

Year	Unadjusted Mean Ksh.	Price Index	Adjusted Mean Ksh.
1967	2,000	0.18	11,111
1972	8,500	0.77	11,039
1977	11,000	1.00	11,000
1982	40,000	3.64	10,989
1987	53,000	4.82	10,996

Source: Own Calculations based on Data from the Kisii Land Office.

On the basis of the adjusted means, the grand mean was calculated as follows:-

$\bar{X} = \frac{\Sigma X}{n}$ Where $\bar{X}$ = Grand mean
Σ = Summation sign
X = Individual mean (Observation)
n = Number of observations

$$= \frac{11,111 + 11,039 + 11,000 + 10,989 + 10,996}{5}$$

$$= \frac{55,135}{5}$$

$$= \underline{11,027}$$

The variance of the adjusted means and the Standard deviation were calculated as follows:-

Table 5-12

Calculation of the Variance and the Standard Deviation

X	$X - \bar{X}$	$(X - \bar{X})^2$
11,111	84	7,056
11,039	12	144
11,000	-27	729
10,989	-38	1,444
10,996	-31	961

Source: Own calculation based on Data from the Kisii Land Office.

The variance, $S^2 = \frac{\Sigma (X-X)^2}{n}$ Where X = Individual Observation
$\bar{X}$ = Grand mean
n = Number of observations
Σ = Summation sign

$$= \frac{7,056 + 144 + 729 + 1,444 + 961}{5}$$

$$= \frac{10,344}{5}$$

$$= \underline{2,066.8}$$

The Standard Deviation, $S = \sqrt{\frac{\Sigma (X-\bar{X})^2}{n}}$

$$= \sqrt{\frac{10,344}{5}}$$

$$= \sqrt{2,066.8}$$

$$= \underline{45.5}$$

Findings from a sample of 100 observations obtained from the field showed a grand mean of K.sh.11,034 per hectare.
See Table 5-13.

Table 5-13.

Calculation of the grand mean from a sample of 100 Observations.

Year	Unadjusted mean Ksh.	Price index	Adjusted mean Ksh.
1967	1,948	0.18	10,822
1972	8,505	0.77	11,045
1977	11,110	1.00	11,110
1982	40,380	3.64	11,093
1987	53,490	4.82	11,098

Source: Own Calculations based on data from the field.

The grand mean of the adjusted data from the field was calculated as shown below:

$$\bar{X} = \frac{\Sigma X}{n}$$

$$= \frac{10,822 + 11,045 + 11,110 + 11,093 + 11,098}{5}$$

$$= \frac{55,168}{5}$$

$$= \underline{11,034}$$

The figures from the field reflect the actual prices of land. In this case, Ksh.11,034 was the average price per hectare in Kisii district during the study period at 1977 prices.

To establish the reliability of the data from the land office which gave an average price of Ksh.11,027 per hectare in the district during the study period at 1977 prices, it was found necessary to test the null hypothesis that there is no difference between the two grand means. The normal deviate Z test statistic was selected and the procedure used was as follows:-

Step 1: H_O: There is no difference between the two means i.e.

$H_{O:}\mu = 11,027$

Step 2: H_A: There is a difference between the two means i.e.

$H_A: \mu \neq 11,027$

Step 3: Ninety per cent was taken as the confidence level. This means that

$$A_Z = \frac{0.90}{2} = 0.4500 = 1.65$$

The implication here is that the calculated statistic, Z, had to lie within the acceptance region which was 1.65 either side of μ = 11,027 for the null hypothesis to be accepted.

Step 4: Calculation of the normal deviate.

$$Z = \bar{X} - \mu \div S/\sqrt{n}$$

$$= \frac{11,034 - 11,027}{S_{\bar{X}}}$$

$$S_{\bar{X}} = \frac{S}{\sqrt{n}} = \frac{45.5}{\sqrt{100}} = \frac{45.5}{10} = 4.55$$

Hence $\frac{11,034 - 11,027}{4.55} = \frac{7}{4.55} = 1.54$

CONCLUSION: The calculated normal deviate was found to be 1.54 and was clearly within the acceptance region of 1.65 either side of μ. On the basis of this finding, the null hypothesis was accepted and an affirmation made that at 90 per cent confidence level, there is no difference between the land values which were obtained from the land office documents and the actual land values which were obtained from the field through the administration of a questionnaire. This means that up to 90 per cent confidence level, the findings in this study on land values are valid.

Population Growth

At the time when land values have been on the increase, the population of Kisii district has been growing too. See table 5-14.

Table 5-14 Population Trend in Kisii District

Year	Total Population	Density in square km.
1962	518226	234
1969	675041	304
1979	869512	395

Source: CBS: Kenya Census
Documents for 1962, 1969 and 1979.

On the basis of the above data on population, it is evident that the annual rate of increase was 3.8 and 2.6 per cent between 1962 and 1969 and between 1969 and 1979 respectively. In 1987, it was estimated that there were 1.3 million Gusii in Kisii district. Table 5-15 shows the calculated population figures for 1967, 1972, 1977, 1982 and 1987.

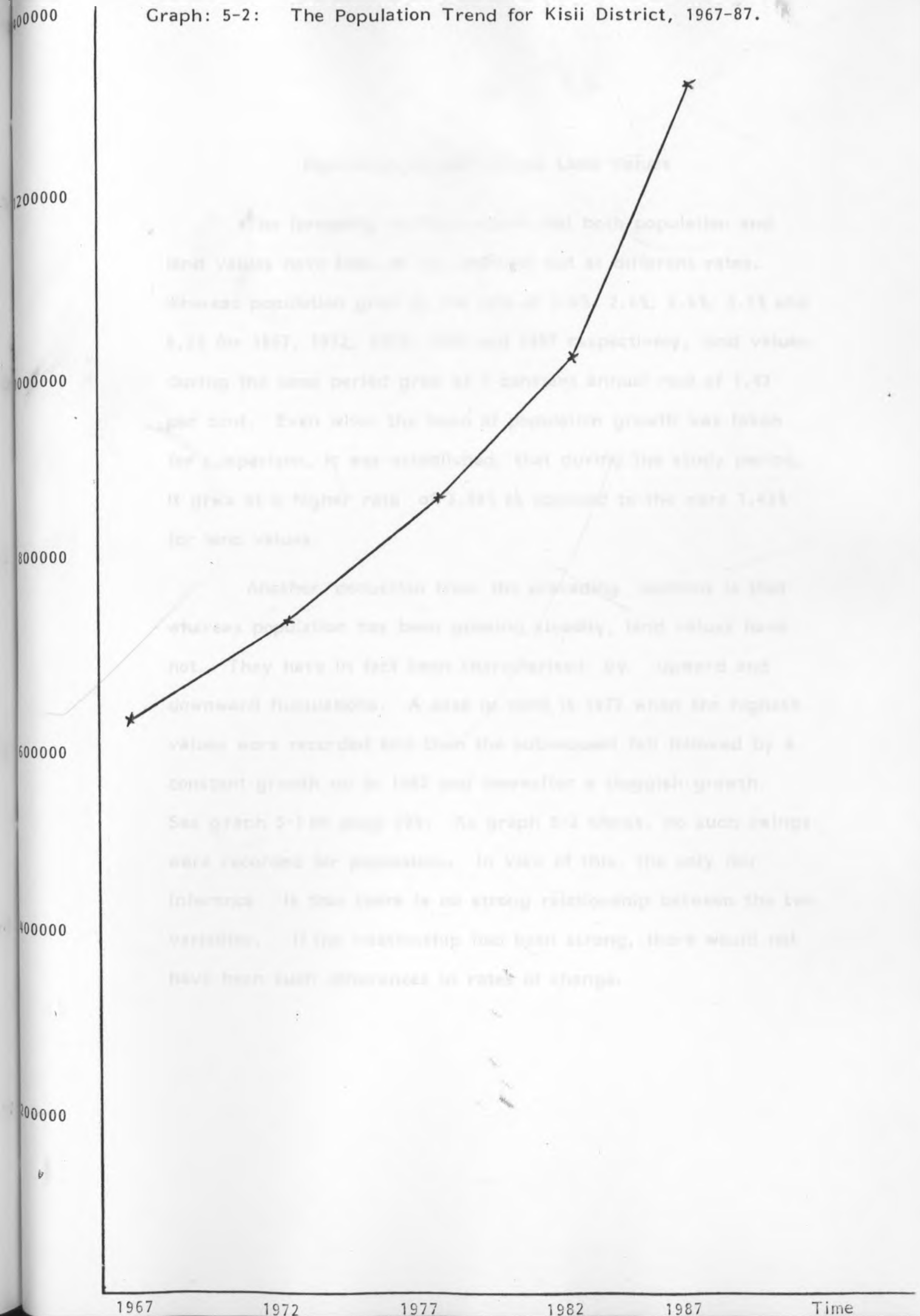
Table 5-15:

Calculated Population figures for 1967-87

Year	Population	Growth Rate
1967	624,462	3.8%
1972	729,078	2.6%
1977	828,910	2.6%
1982	1,012,329	5.2%
1987	1,300,000	5.2%

Source: Calculated on the basis of official Data.
See Graph 5-2 for the population graphical representation.

Graph: 5-2: The Population Trend for Kisii District, 1967-87.



Population Growth versus Land Values

The foregoing sections reveal that both population and land values have been on the increase but at different rates. Whereas population grew at the rate of 3.8%, 2.6%, 2.6%, 5.2% and 5.2% for 1967, 1972, 1977, 1982 and 1987 respectively, land values during the same period grew at a constant annual rate of 1.43 per cent. Even when the mean of population growth was taken for comparison, it was established, that during the study period, it grew at a higher rate of 3.88% as opposed to the mere 1.43% for land values.

Another deduction from the preceding sections is that whereas population has been growing steadily, land values have not. They have in fact been characterised by upward and downward fluctuations. A case in mind is 1972 when the highest values were recorded and then the subsequent fall followed by a constant growth up to 1982 and thereafter a sluggish growth. See graph 5-1 on page 124. As graph 5-2 shows, no such swings were recorded for population. In view of this, the only fair inference is that there is no strong relationship between the two variables. If the relationship had been strong, there would not have been such differences in rates of change.

Rating of Possible Land Value Determinants

The sample which was selected to rate the possible land value determinants rated them in the manner portrayed by table 5-16.

Whereas the ranking of the factors is not conclusive, it is evident that no single factor can be singled out as the sole determinant of land values. It is true that population growth is rated first but with only a 58% majority meaning that its relationship to land values is not necessarily strong.

	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}
Rank	Frequency of raters in %	Frequency of raters in %	Frequency of raters in %	Frequency of raters in %	Frequency of raters in %	Frequency of raters in %	Frequency of raters in %	Frequency of raters in %	Frequency of raters in %	Frequency of raters in %	Frequency of raters in %	Frequency of raters in %
1	58	44	0	0	0	0	0	0	0	0	0	0
2	42	56	0	0	0	0	0	0	0	0	0	0
3	0	0	99	0	0	1	0	0	0	0	0	0
4	0	0	1	99	0	4	0	0	0	0	0	0
5	0	0	0	1	26	19	38	4	0	0	0	0
6	0	0	0	0	20	46	22	4	4	0	0	0
7	0	0	0	0	21	15	39	27	3	0	0	0
8	0	0	0	0	11	4	1	63	10	2	0	0
9	0	0	0	0	12	1	0	2	72	2	0	0
10	0	0	0	0	0	0	0	0	4	68	4	0
11	0	0	0	0	0	0	0	0	7	28	94	0
12	0	0	0	0	0	0	0	0	0	0	2	100
Total	100	100	100	100	100	100	100	100	100	100	100	100

The variables represented by X_1, X_2 .....X_{12} are as follows:

X_1 - Population growth.
X_2 - Cultural attachment to land
X_3 - Good climate.
X_4 - Soil fertility.
X_5 - Inflation.
X_6 - Distance from a growth centre.
X_7 - Economic development.
X_8 - Per capita income.
X_9 - Political stability.
X_{10} - Government intervention.
X_{11} - Speculation.
X_{12} - Others.

Table 5-16: Rating of Land Value Determinants; Source: Field Survey, 1988.

Summary

This chapter has shown that the Kisii rural land market has been active but has been declining in recent years. The evidence of this is the decreasing trend of the recorded land sales and the decreasing size of the units of sale during the succeeding years of the study period. This chapter has in addition revealed that whereas both population and land values have been increasing, they have not been doing so at the same rate. Indeed, population has been growing at a higher rate. By virtue of the variations in the rates of change of the two variables, their relationship does not come out as a strong one. This does not however mean that population growth is not one of the determinants of high land values.

FOOTNOTES

1. Republic of Kenya, Development Plan, 1970-74, Nairobi: Government Printer, 1969, p.28.

2. _____, Development Plan, 1979-83, Nairobi: Government Printer, 1979, p.2.

3. _____, Development Plan, 1984-88, Nairobi: Government Printer, 1984, p.xvi.

4. _____, Development Plan, 1979-83, Nairobi: Government Printer, 1979, p.3.

5. _____, Development, 1984-88, Nairobi: Government Printer, 1984, p.xvi.

6. Ibid., pp.2-4.

7. Ibid., p.67.

8. Ibid., p.73.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

This chapter concludes on the findings of the study based on chapter five. It shows among other things that population growth in Kisii during the study period of 1967-87 was high and that the district's rural land market has been on the decline as from the 1980s. It is reaffirmed that land values have been high but that the causes are many and must never be attributed to a single factor such as population growth.

It was noted that 1967 constituted 21.1% of the total sales recorded during the study period while the respective figures for 1972, 1977, 1982 and 1987 were 24.2%, 21.2%, 18.2% and 15.4%. The first revelation on the land market was that it began to be active when land assumed a transactable status following the commencement of the processes of adjudication, consolidation and registration in 1965. As was pointed out earlier, these processes became officially operational in Kisii as from 1965 such that by 1971, most of the land registrations had been done.

Another revelation on the land market was that whereas it was active in the years before 1972, it thereafter reduced its tempo. As table 5-1 revealed, the peak of the district's land market was 1972 when 172 sales were recorded as opposed to 150, 150, 130 and 110 sales for 1967, 1977, 1982 and 1987 respectively. It was established that this trend was mainly a consequence of the low land per capita in the district.

This low land per capita was attributed to the prevalent high rate of population growth in the district. It was further established that the low hectarages held by most of the Gusii who almost entirely depend on agriculture for survival barred them from selling the little land in their possession.

On the same note, the analysis revealed that most of the sales were concentrated in the district's zone II as opposed to zones I and III. One reason for this trend in zone II was its high population density. It was here that the land shortage crisis was first experienced in the district. This created a lot of awareness among the residents such that many of them were selling portions of their land in order to make economic purchases in the settlements where larger farms existed.

No sales were recorded for zone I in 1967. In 1972, only 5 sales out of the 172 recorded transactions for the year represented the zone. This means that for that year, the zone constituted a mere 2.9% of the total land sales made. The trend was not any different in 1977 since the sales from the zone represented only 5.3% of the total transactions. In 1982, the sales in the zone constituted 5.4% of the total transactions recorded for that year while a change was noted in 1987. In that year, the zones' sales represented 16.4% of the year's total land dealings. The picture which emerged from the analysis was that the land market in the zone had began to assume an upward trend. It was expected that this trend would persist for some time before the declining one would be assumed.

It was in addition established that whereas the land market had been active in the district's zone II, it had progressively been declining in successive years. For instance, in 1967, the zone represented 91.3% of the year's recorded transactions while the respective figures for 1972, 1977, 1982 and 1987 were 84.3%, 77.3%, 71.5% and 63.6%.

The trend of zone III has almost been akin to that of zone II. In 1967, its sales constituted 8.7% of the year's total sales when the respective figures for 1972, 1977, 1982 and 1987 were 12.8%, 17.4%, 23.1% and 20.0%.

The conclusion drawn with respect to the future activeness of the land market in zones II and III was that it would be minimal in so far as the freehold interests were concerned.

As for the pieces of land in the market, the analysis revealed that as from the 1970s they had progressively become smaller. It was evident that in 1967, the disposable units of less than 0.5 hectares constituted 19.3% of the total sales for that year while the respective percentages for 1972, 1977, 1982 and 1987 were 64.5, 62.0, 88.5 and 89.1. For hectarages within the range of 0.5-1.0, they made up for 40.7% of 1967's total sales while for 1972, 1977, 1982 and 1987 the respective figures were 20.4%, 21.3%, 11.5% and 10.0%. As for the pieces of land in the range of 1.0 and 1.5 hectares, 1967 recorded the highest percentage of 10% while 7%, 3.3%, 0% and 0% were respectively recorded for 1972, 1977, 1982 and 1987.

It was in 1967 that the larger plots in excess of 1.5 hectares were significantly sold. In that year, such pieces of land constituted a spectacular 30% of the recorded transactions while for 1972, 1977, 1982 and 1987 the respective figures were 8.1%, 13.4%, 0% and 0.9%.

As pointed out earlier, the reasons for the small disposable units in the market hinged on the district's population density and the overdependence of the Gusii on agriculture.

The conclusion drawn from the foregoing trend was that there has been a land shortage crisis in Kisii and that the future of larger transactable units in the district is bleak in so far as the freehold interest is concerned.

The analysis on land values indicated that they have been on the increase. It was pointed out that in 1967, 30.4% of the sales recorded were priced at over 20,000 shillings per hectare while in 1972, 1977, 1982 and 1987 the respective figures were 55.9%, 50.7%, 53.1% and 54.6%. In other terms it was evident that in 1967, sales of below 10,000 shillings per hectare made up for 28.7% of the total sales whereas the respective figures for 1972, 1977, 1982 and 1987 were 25.0%, 23.3%, 28.5% and 15.5%. In contrast, sales of over 10,000 shillings per hectare constituted 71.3%, 75.0%, 76.7%, 71.5% and 84.5% of the total sales recorded for 1967, 1972, 1977, 1982 and 1987 respectively.

The analysis further revealed that whereas the land values have been increasing, they have been doing so at an average annual rate of 1.43%.

It was further pointed out that the causes of high land values

included such factors as good climate, fertile soils, population growth, economic development, political stability, inflation, per capita income and location.

The most obvious conclusion on land value trends was that whereas they have been increasing, in real terms they have not been rising at a very high rate. Fluctuations in land values were evident from the analysis. For instance, between 1967 and 1972, they were rising while between 1972 and 1977 they were on the decline. Between 1977 and 1982 they were somewhat constant only to pick up on the upward trend after 1982. All these swings found explanations in both local and international economic conditions.

It was for instance noted that the upward trend in land values between 1967 and 1972 was due to the somewhat excellent performance of the Kenyan economy at the time. The economy as was established was growing at 0.5% between 1964 and 1965 while it was growing at 14.5%, 3.9% and 6.6% during the 1965/66, 1966/67, and the 1967/68 financial years respectively. This means that the economy, at the time, was growing at an average annual rate of 6.3%.

The declining trend in land values from 1972 to 1977 as was established was the aftermath of the country's dismal economic performance at the time. This was caused among other things by the prevailing high oil prices, the sharp changes in relative prices, recessions and inflationary trends.

On the same note, the constant growth in land values between 1977 and 1982 found explanation in the effects of both the

good and the bad years during the period. The good years were characterised by among other things the coffee boom of 1977 and 1978 while the bad ones were characterised by such disorders as high oil prices. These developments cancelled out in their effects such that aggregate demand was almost constant.

After 1982, there resulted an upward trend in land values and these were the aftermaths of the prevailing low oil prices, inflation and the good performance of the country's agricultural sector at the time. The good performance of the economy meant that the people's disposable income was high and hence the boosting of aggregate demand.

The analysis further revealed that Kisii is a densely populated district. In 1967, its population was 624,462 while for 1972, 1977, 1982 and 1987 it was 729,078, 828,910, 1,012,329 and 1,300,000 respectively. This represented an average annual population growth rate of 3.88% although there were cases when the population was growing at an annual rate of 5.2%. The conclusion drawn from this trend is that population has been growing at a high rate which needs some remedial measures.

It was in addition established that the relationship between population growth and land values is not strong. In the first place, population apparently grew at a higher average annual growth rate of 3.88% as opposed to the one of land values which stood at a mere 1.43%. Secondly, it was evident that whereas population assumed an upward trend with no fluctuations, land values were characterized by both ascending and descending swings. If the relationship between the two were strong, then cases of declining

land values would not have been noted. This is true notwithstanding the fact that the population factor was highly rated as a determinant of land values. The only fair conclusion which could be drawn is that land values are a consequence of physical, social, economic and political (government) forces and can in no way be attributed to any one single factor like population growth.

Recommendations

In view of the analysis done, one of the most obvious revelations is that both land values and population have been on the increase. Whereas it was established that the two variables are not strongly related, it was nevertheless admitted that population growth is one of the factors which cause or influence land values. In view of the high rate of population growth in the district, it is recommended that incentives in favour of smaller families be initiated by both the local and the central governments.

Throughout the study, it was shown that there has been too much emphasis on land. This has over the years encouraged high demand for it and whereas this was a healthy development in the past, it no longer holds true. Other alternatives other than agriculture need to be sought, initiated and be emphasized. This should be the responsibility of all citizens and especially those in control of the planning mechanisms.

As for the activeness of the land market, the study showed that only freehold sales were made during the study period. This painted a rather pessimistic picture to the future of the rural land market. This was particularly the case since all the sales considered

were freeholds. It is therefore proposed that freehold sales be discouraged in favour of leaseholds. This could for instance be done through an Act of Parliament which would stipulate that no freehold land dealings must be ventured into. If this is done, it is expected that the land market would thrive and may not come to a "stand still" since at the expiry of a term in an old lease, a fresh one would be negotiated or the old one renewed or extended. This is in contrast to the freehold sales where the seller has no reversionary interest and hence no recourse for a re-sale.

As for the upward trend in land values, it is the submission of this thesis that the trend would persist given that land is a scarce resource whose values are a synthesis of myriads of domestic and international forces. This does not therefore guarantee the setting of "ceilings" or "floors" for land values in a mixed economy such as Kenya's which has a capitalist bias. It is however reiterated that less emphasis be placed on land ownership. People should be encouraged to take up such other alternatives as retailing, tailoring, carpentry, masonry, pottery and all sorts of skills in the informal sector. For such a programme to work, the government should launch a special fund with branches in every village whose responsibility would be the promotion of other workable forms of employment.

It is also proposed that land nationalization could possibly be a partial solution to high land values. The contention here is that if all land is nationalized, it is the government which would be the sole landlord. Instead of selling land in perpetuity to

individuals, it will be leasing it to them for a specific term. It is the submission of this thesis that the government would not under such circumstances charge high rent as a private landlord would. This would therefore drastically lower land values.

Suggested Areas for Further Study.

1. The relationship between population growth and land values in another densely populated district in Kenya preferably during the same period (1967-87) for comparison.

2. The relationship between the economic climate (inflation/depression) and the performance of the land market in Kenya.

3. The effectiveness of land nationalization in controlling the upsurge in land values.

4. The relationship between land use and land values.

5. The feasibility of a leasehold rural land market in Kenya.

BIBLIOGRAPHY

BOOKS

Alonso, W., Location and Land Use, Cambridge; Massachusetts Institute of Technology, 1968.

American Institute of Real Estate Appraisers, The Appraisal of Real Estate, Chicago: AIREA, 1974.

Arlo Woolery, Recapturing Society's Share of Increased Land Values, Cambridge, Massachusetts: Lincoln Institute of Land Policy, 1978.

Arvil, R., Man and Environment, Harmondsworth, Middlesex: Penguin Books Ltd., 1967.

Bernard, F.E. and Anzagi, S.K., Population Pressure in Rural Kenya, Ohio: Ohio University, 1979.

Bryant, R.W.G., Land: Private Property Public Control, Montreal: Harvest House Ltd., 1972.

Balchin, N. Paul, Urban Land Economics, London: Macmillan Publishers Ltd., 1985.

Caldwell, J.C., Population Growth and Family Change in Africa, Canberra: Australian National University Press, 1963.

Chisholm, M., et al., Regional Forecasting, London: Butterworths, 1971.

Clark, C., Population Growth and Land Use, London: Macmillan Press Ltd., 1977.

Cullen Matthew, World Congress on Land Policy, Boston: Oelgeschlager, Gunn and Hain, 1985.

Desai-Mutelik Priya, Economic and Political Development of Kenya, Bombay: Himalaya Publishing House, 1979.

Flanagan, Dennis, et al., The Human Population, San Francisco: W.H. Freeman and Company, 1974.

Found, W.C., A Theoretical Approach to Rural Land Use Patterns, London: Edward Arnold, 1971.

Frankel, L.B., This Crowded World, Washington D.C.: Columbia Books, Inc., 1970.

Gray, H.P., Economic Development and Population Growth, Lexington, Massachusetts: D.C. Heath and Company, 1970.

Griffin, K.B., Planning Development, London: Addison-Wesley Publishing Company, 1970.

Goldberg Michael, Urban Land Economics, New York: John Wiley and Sons, 1984.

Goulet Denis, The Cruel Choice: A New Concept in the Theory of Development, New York: Atheneum, 1971.

Harbeson, J.W., Nation Building in Kenya, Evanston: North Western University Press, 1973.

Heyer, J. et al., Rural Development in Kenya, Nairobi: East African Publishing House, 1971.

Hoyle Brian Stuart (ed.) Spatial Aspects of Development, London: Wiley, 1974.

Hoyt Homer, One Hundred Years of Land Values in Chicago, Chicago: University of Chicago Press, 1933.

Huddleston, A., Geology of the Kisii District, Nairobi: Government Printer, 1951.

Hutton, G.H., Value in Building, London: Applied Science Publishers Ltd., 1973.

Jacob, E.H., Man and Land, London: Andre Deutsch, 1971.

Johnson, V.W., Land Problems and Policies, London: McGraw-Hill Book Company, Inc., 1984.

Kenyatta, Jomo, Facing Mount Kenya; The Tribal Life of the Gikuyu, Nairobi: Heinemann Educational Books, 1971.

Kindleberger, C.P., Economic Development, New York: McGraw-Hill Company, 1965.

Koenigsberger, O.H. (ed.), A Review of Land Policies, Oxford: Pergamon Press, 1981.

Land Economics Institute, Modern Land Policy, Urbana: University of Illinois Press, 1925.

Lapin, L.L., Statistics for Modern Business Decisions, New York: Harcourt Brace Javanovisch, Inc., 1982.

Leibenstein, H., A Theory of Economic-Demographic Development, Princeton: Princeton University Press, 1954.

Liversage, V., Land Tenure in the Colonies, Cambridge: Cambridge University Press, 1945.

Malthus, T.R., On population. A Summary of Population, New York: New American Library, 1969.

Marison Clawson, et al., Land for the Future, Baltimore: The Johns Hopkins Press, 1960.

Marx Karl, Capital, A Critical Analysis of Capitalist Production, Vol. 1, New York: International Publishers Company, Inc., 1967.

McNamara, R.S., One Hundred Countries, Two Billion People, New York: Praeger Publishers, 1973.

Mishan, E.J., The Economic Growth Debate, London: George Allen and Unwin, 1977.

Morgan, W.T.W., East Africa: Its Peoples and Resources, Nairobi: Oxford University Press, 1972.

Mwangi Wa Githumo, Land and Nationalism, Washington: University Press of America, 1981.

National Academy of Sciences, Rapid Population Growth: Consequences and Policy Implications, Baltimore: The John Hopkins Press, 1971.

Ngugi Wa Thiong'o, Weep Not Child, London: Heinemann, 1964.

Nyasani, J.M., The British Massacre of the Gusii Freedom Defenders, Nairobi: Nairobi Bookmen, 1984.

Oberlander, Peter, H., Land: The Central Human Settlement Issue, Vancouver: University of British columbia Press, 1985.

Obol-Ochola, Y.J., Land Law Reform in East Africa, Kampala Milton Obote Foundation, 1969.

Ochieng, W.R., A Pre-Colonial History of the Gusii of Western Kenya from AD.1500 to 1914, Kampala: EALB, 1974.

Odinga Ajuma Oginga, Not Yet Uhuru, London: Heinemann, 1968.

Ominde, S.H., Population Growth and Economic Development in Africa, London: Heinemann, 1972.

Osborn, S., (ed.), Our Crowded Planet, London: Allen and Unwin, 1963.

Pritchard, J.M., A Geography of East Africa, London: J.M. Dent and Sons, 1971.

Polanyi Karl, The Great Transformation: The Political and Economic Origins of Our Time, Boston: Beacon Press, 1957.

Rhind, D., Land Use, New York: Methuen and Company, 1980.

Salas, R.M., Reflections on Population, New York: Pergamon Press, 1984.

Sheffield, J.R., (ed.), Education, Employment and Rural Development, Nairobi: East Africa Publishing House, 1967.

Sorrenson, M.P.K. Origins of European Settlement in Kenya, Nairobi: Oxford University Press, 1968.

Spengler, J.J., Demographic Analysis, Glencoe; The Free Press, 1956.

Steele, R.W., Problems of Population Pressure in Tropical Africa, Institute of British Geographers, 1970.

Swynnerton, R.J.M., A Plan to Intensify the Development of African Agriculture in Kenya, Nairobi: Government Press, 1955.

Todaro, M.P., Economics for a Developing World, Burnt Mill, Harlow, Essex: Longman, 1982.

Uchendu, V.C. and Anthony, K.R.M., Agricultural Change in Kisii District, Kenya, Nairobi: EALB, 1975.

Vink, A.P.A., Land Use in Advancing Agriculture, New York: Springerverlag, 1975.

Wanjiku Mwagiru and Njue P.N., A Modern Geography of Kenya, Nairobi: Mwassco Publications, 1986.

Whittemore Claire, Land for People: Land Tenure and the very Poor, Oxford: Oxfam, 1968.

Zelinsky, et al., Geography and A Crowding World, London: Oxford University Press, 1970.

Zwanenberg, R., The Agricultural History of Kenya: Nairobi: East African Publishing House, 1972.

Government Publications

_____, Development Plan, 1966-70, Nairobi: Government Printer, 1966.

_____, Development Plan, 1970-74, Nairobi: Government Printer, 1969.

_____, Development Plan, 1974-78, Nairobi: Government Printer, 1974.

_____, Development Plan, 1979-83, Nairobi: Government Printer, 1979.

_____, Development Plan, 1984-88, Nairobi: Government Printer, 1984.

_____, Kenya Population Census, Vol.III, Nairobi: Government Printer, 1962.

_____, Kenya Population Census, Vol.II, Nairobi: Government Printer, 1970.

_____, Human Settlements in Kenya, Nairobi: Government Printer, 1978.

_____, Population Policy Guidelines, Sessional Paper No.4, 1984.

_____, Kisii District Development Plan, 1984-88, Nairobi: Government Printer, 1984.

Journals and Other Publications

Arab Republic of Egypt, Population and Development, Cairo: Central Agency for Public Mobilization and Statistics, 1978.

Building, January, 1970.

Chartered Surveyor, May, 1969.

Keith Griffin, "Policy Options for Rural Development," Oxford Bulletin of Economics and Statistics, 35, 4, 1973.

Sterkenburg, J.J. et al., Rural Housing Conditions in Kisii District, Kenya, A Joint Project by the Department of Geography of Developing Countries, University of Utrecht, and HRDU, University of Nairobi, 1981.

The Valuer, Vol. 25, Nos. 1-6, 1980-81.

The Valuer, Vol. 27, Nos. 1-4, 1982.

United Nations, Report on Habitat: United Nations Conference on Human Settlements, A/CONF. 70/15, 1976.

World Bank, Agricultural Land Settlement, Washington D.C.: World Bank, 1978.

Theses and Dissertations

Barbara Knapp Hertz, Demographic Pressure and Economic Change: The Case of Kenyan Land Reforms, Yale University, Ph.D. Thesis, 1974.

Keriasek, C.S., Trends in Agricultural Land Values and Land Administration in Nakuru, Uasin Gishu and Trans Nzoia Districts, Nairobi University MA. Thesis, 1977.

Leo Christopher, The Political Economy of Land in Kenya: The Case of the Million Acre Settlement Scheme, Toronto: Ph.D. Thesis, 1976.

Olima, W.H.A., A Study Towards an Understanding of Rural Housing Provision and Requirements for Siaya District, Nairobi University, MA. Thesis, 1986.

Omare, C.N., Effects of Population Change on Land-use in Kisii District, Kenya, Nairobi University, MA Thesis, 1981.

Ominde, S.H., Land and Population in the Western Districts of Nyanza Province, Kenya, Makerere University, Ph.D. Thesis, 1963.

APPENDIX 1

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1987/88 Academic Year.

QUESTIONNAIRE

I The Respondent's Particulars:

1. Name .....

Occupation .....

Marital Status: 1 = single, 2 = married,

3 = separated (Tick one).

2. Division .....

Location .....

Sub-location .....

II Land Ownership:

3. (a) Do you own land? 1 = Yes, 2 = No, (Tick one).

(b) If Yes, how did you get it? (Tick one).

1 = I inherited it.

2 = I bought it.

3 = I inherited part of it and then bought the other part.

4 = I was given.

4. What is the acreage of your land? .....

5. (a) Do you have a title deed?

1 = Yes, 2 = No, (Tick one).

(b) If No, why? .....

6. What interest do you own?

1 = Freehold.

2 = Leasehold.

3 = Other.

III Particulars of the Land and the Transactions:

7. (a) Name of seller .....

(b) Occupation of seller .....

(c) Time of purchase .....

(d) Acreage of land bought .....

8. (a) Do you have a title deed to the land you bought?

1 = Yes, 2 = No, (Tick one).

(b) If No, why? .....

9. What interest did you buy? (Tick one).

1 = Freehold.

2 = Leasehold.

3 = Others

10. How much did you pay for your land? .....

.....

11. What factors influenced you to pay that amount? Rate the factors according to their influence on the price you paid for the land.

Good climate

Fertility

Good neighbourhood

Competition from other buyers (high demand)

Distance from the growth centre.

Others (specify) .....

.....

.....

.....

12. (a) If you were to sell the land you bought, how much would you get for it today? .....

.....

(b) Why would you ask that much? .....

.....

.....

.....

IV LAND VALUE DETERMINANTS:

13. (a) Rate the following factors in terms of their causative effect on land values in Kisii District.

Good climate

Land fertility

Land Speculation

Population growth

Inflation

Economic Development of the District

Per capita income

The cultural attachment of the Abagusii to land.

Government intervention e.g. through the operation of the land control board.

Distance from the growth centre.

Political Stability

Others .....

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