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TOWARDS A MORE COMPREHENSIVE APPROACH
TO SQUATTER UPGRADING : A CASE STUDY
OF KIANDUTU SETTLEMENT; THIKA TOWN

BY

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for the Degree of Master of Arts
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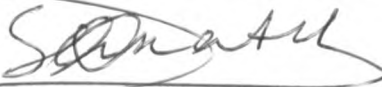
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(iii)

DEDICATION

This Thesis is dedicated to my PARENTS for their sacrifice in order to educate their children, a cause to which the fruits of this work will contribute.

ACKNOWLEDGEMENT

The completion of this work was facilitated by cooperation from many individuals all of whom I wish to thank.

I would however wish to express my special thanks to my Supervisor, Mr. S.O. Akatch for his guidance and all other members of the Department of Urban and Regional Planning for their valuable' comments.

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ABSTRACT

Presence of slums and squatter settlements in urban areas has become a characteristic feature of developing countries. Africa is no exception or Kenya for that matter. The major causal factors are among others, rapid rural to urban migration, urban unemployment and inadequacy of urban services.

The traditional method of slum demolition has come under criticism on Economic, Social and Political grounds. Alternatively, squatter improvement has been adopted by many national Governments. Yet inspite of these efforts, living conditions in these settlements continue to deteriorate and new ones to emerge.

This study on squatter upgrading was undertaken in recognition of lack of comprehensive approach to the squatter problem. It adopted a case study approach and examined Kiandutu squatter settlements in Thika Town - the Industrial town of Kenya.

The intention was to seek a comprehensive understanding of squatter settlements and their people. Setting the hypothesis that emergence of squatter settlement is more than a housing problem in urban areas, the study has also examined the current methods of squatter upgrading.

This study has after examining relevant policies, discovered shortcomings which have contributed to the emergence of these settlements. The Human Settlements policy has not been effective in strengthening the economic base of our towns. The urban land policy has not been effective in management and administration of urban land. The housing policy do not facilitate house affordability by all classes of the urban community.

Concurring with the others, the study has found that squatter settlements are inhabited by the urban unemployed and the low income earners. Yet they are not areas of despair. The inhabitants are a community with heavy social and economic responsibilities and therefore maintain strong relations with their rural areas of origin.

Examining the current improvement methods, the study has observed their housing bias after misinterpreting the problem as solely housing. Yet most housing programmes intended for squatters ultimately change hands or become sources of income, therefore qualifying the Hypothesis of the study.

Adopting a comprehensive approach to squatter upgrading, the study has suggested policy measures for dealing with squatters, with particular emphasis

on measures for increasing employment potential of urban areas, efficient urban land utilisation, and housing affordability.

To demonstrate the proposed approach, comprehensive improvement programme has been proposed for Kiandutu settlement based on the priorities of the squatters. This programme has incorporated Economic social and housing components.

Finally, the study has recognized the inevitability of squatter settlements in urban areas and therefore recommends further research on ways and means of incorporating squatting in overall urban planning.

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CHAPTER ONE

INTRODUCTION

Emergence of slums and squatter settlements has become a characteristic feature of urban areas the world over. Urbanisation is the most notable cause for this phenomenon, yet it is a crucial stage in the overall development process.

While the rate of urbanisation has slowed down or even stagnated in most developed countries, many developing countries are experiencing rapid rates of urbanisation. Urbanisation can be distinguished in the two regions. The developed countries have urbanized as a result of rapid industrialisation in urban areas and rationalisation of agriculture in the rural areas, whereas developing countries are urbanising mostly due to ailing rural economy leading to abandonment of rural areas. Hence transferring rural poverty to urban areas⁽¹⁾.

In Africa, urbanisation dates back to the late 19th and early 20th centuries and in most cases a colonial phenomena. The colonial settlers established trading and/or administrative centres, most of which became the initial urban centres in the continent. At a global level, Africa is the least urbanised but experiences the highest rate of urban growth. In 1900, only 1% of the population lived in towns 14.9% by 1950 and 32.5% in

1985⁽²⁾. This indicates that rapid urbanisation has occurred in the last 25 years, a period coinciding with the end of colonial dominance.

Urbanisation in East Africa coincides with the advent of colonization in the early 20th century. Compared to the rest of the continent, it is the least urbanised with only 16.4% urban population. Southern, Northern and Western Africa has 46.5%, 44.3% and 22.5% urban population respectively. However it has the highest rate of urban growth³.

Emergence of slums and squatter settlements has proceeded with urbanisation and at present has become the most serious urban problem in the continent. The colonial administration gave these areas little or no attention but with independence they became major housing and reception areas for the urban poor. With time, the role of these areas has prompted attention and efforts have been made to improve their conditions. However we still appear to lack appropriate strategy and methodology for dealing with such areas which therefore continue to emerge and deteriorate.

Statement of the problem

The best justification for undertaking this study lies in the roles that slum and squatter settlements play in urban areas in Kenya. They accommodate 30%⁴ of the urban population. Further the continued deterioration of living conditions in these settlements despite improvement efforts is a cause for concern. This indicates the ineffectiveness of past methods of dealing with these settlements, and lack of appropriate measures to deal with them at an early stage of their emergence.

The problem being studied here is therefore neither rapid urbanisation nor presence of slums and squatter settlements in urban areas but rather the lack of comprehensive approach to incorporate these areas into the overall urban system. The tendency has been to see urban squatter settlements as a manifestation of a housing problem only, whereas this might just be one facet of the problem.

Emerging from the nature of urbanisation in developing countries (Kenya included), the migrants are in search of opportunities to improve their incomes. Most of them are with little or no money. The available housing is therefore unaffordable. Knowing their purpose in coming to urban areas,

housing therefore becomes a means and not an end in itself. The study therefore sets out to establish the priorities of squatter and slum residents.

The current rate of provision of services and facilities indicates inadequacy. The expected high rate of urbanisation further signifies a tendency for slums and squatter settlements to emerge. Thus the issue is whether there are any possible measures for handling the problem at the initial stages to avoid and reduce huge improvement expenditures.

Finally, there is a tendency by local authorities to consider squatter residents, as incapable of managing overall improvement programmes of their own environment. The consequence has been reluctance on the part of squatters to identify themselves with these programmes and hence conceives them as yet another unnecessary interference by the authorities.

Kiandutu squatter settlement is in Thika town, a distance of 1.5 km. south-east of the main town centre. The town is a designated growth centre. It is the third important industrial town after Nairobi and Mombasa with manufacturing as the major economic activity. The town is the major employment centre

of the rich agricultural hinterland and hence experiencing a rapid influx of rural to urban migrants. Industrial jobs are low paying, and hence the workers find it expensive to obtain accommodation in the formal low cost housing. As an alternative, squatter settlements have emerged in the town - to house the low waged and the urban poor. Kiandutu is the largest and accommodates 25%⁵ of the total Thika population.

It is a unique case of squatter settlements. Initially it was a village just outside the town boundary but with boundary extension it has become a part of the town. It is characterised by lack of basic services and facilities and very high densities. Kiandutu is a crucial settlement for the overall activities of Thika town.

Definition of Important terms:

It is necessary to distinguish between terms liable to be confused in the study. The terms 'slums' and 'squatter' settlement have been traditionally used interchangeably. Some authors consider them to represent the depressed areas or subsection of population which are not integrated fully socially or economically into the National development process⁶.

However, more often than not, the term slum is used to connote poor housing conditions whether legal or illegal. This general usage has often obscured the vast difference between one type of a slum and the other⁷. 'Slum' therefore is an evaluative term and what might be a slum in one environment might not be in another. Hence in defining a 'slum' settlement one must consider the following:⁸

1. Physical condition of the living environment
2. Lack of effective social organisation
3. Social image or images that are held of the area by the larger community and self image of the residents.

The study conceives slum settlement as pertaining to the living conditions in housing areas. Its usage will be more universal in developing and developed countries.

'Squatter' is a more clearer term in that it is derived from the dictionary meaning of squatting; i.e. occupying land illegally. Therefore squatter settlements are illegal settlements in that the occupants have no legal rights on the land. They are found in both rural and urban areas. They emerge on open spaces in urban areas as efforts by the people to house themselves cheaply. The housing do not conform to any standards and are

mostly temporary structures. For the study therefore, the term 'squatter' settlements refers to settlements located on land occupied without the consent of the owner and emerge as efforts by individuals to house themselves.

The two terms are similar but not synonymous. While most squatter settlements are slums, slums are not necessarily squatter settlements. The term squatter settlements is preferred in this study. In its usage, the squatters will refer to the residents in these settlements.

Study Objectives

The need to upgrade instead of demolishing squatter settlements in urban areas has been accepted. The major concern for this study is therefore the need for a more comprehensive method of upgrading. This will entail:-

1. Assessing the current national policies which are directly related to squatter settlements thereby identifying shortcomings in policy provisions to deal with these settlements.
2. Comprehensive understanding of the squatter settlements by assessing the physical, economic,

social and environmental conditions in these areas in general and Kiandutu settlement in particular.

3. On the basis of these findings, recommendations pertaining to the improvement of the squatter settlements in urban areas will be forwarded at two levels:- policy level and for Kiandutu settlement. The latter will also entail preparation of a physical layout plan as a demonstration of the proposed improvement approach.

For the achievement of these objectives, the scope of the study has been limited to those attributes considered necessary. In particular, it has examined the human settlement, urban land and housing policies at the national level. It has further examined certain attributes of Thika town with emphasis on population trends; Employment, income and housing. Finally, a thorough assessment of the study area has been undertaken in terms of its emergence, population composition and origins and current status of services and facilities. A physical layout plan has been prepared for the area.

Assumptions of the Study

The following assumptions have been made for the study:

1. The rural to urban migration will proceed and at a high rate.
2. The resources available to the municipal council, though increasing, will not be enough for the provision of affordable housing at a rate to match the demand and hence squatter settlements will continue to emerge and grow.
3. Demolition and rebuilding is not an effective measure to deal with squatter settlements.
4. The Kiandutu population will be willing to participate in the improvement programmes proposed.

Hypothesis of the Study:

The emergence of squatter settlements seems to be more than just a housing problem. It is an accepted fact that resource limitations to many local authorities will always hinder provision of affordable housing in urban areas, and hence squatter settlements will tend to form.

The main issue therefore is to look for ways and means of tackling the squatter problem in a variety of ways ranging from local public involvement to policy approaches. Towards this direction squatter inhabitants should be fully understood and improvement measures diversified. To date most such programmes have had a housing bias and indications are that other issues have been omitted. Most

notable is the answer to the question 'why squatters are in urban areas.

Thus the emerging hypothesis for this study is that - 'though important, housing might not be the only priority for the squatters. Further, initial construction standards should cause less concern than initial layout during improvement of squatter settlements and hence a need to pay attention as soon as signs of their emergence are noticed.

Review of related literature

The problem of slums and squatter settlements in the developed countries dates back to the industrial revolution. It was then seen as an inadequacy of the planning machinery in urban areas and hence much of the literature emphasised on the need for a comprehensive urban planning legislation. Despite comprehensive planning, emergence of squatter settlements persisted and a need was felt to examine the causes and nature of their emergence.

Urbanisation as one of the major causes of squatter settlements has received wide attention. Charles Abrams (1964) has indicated the futility of trying to contain rural to urban migration. As a stage in the development process, it has to occur and

efforts can best be directed towards managing and exploiting its positive aspects.

Obudho, R.A. (1974, 1985) has contributed extensively towards understanding of urbanisation process in the developing countries. He notes that though the least urbanised. The developing countries are currently experiencing the highest rates of urban growth. He associates urbanisation with the advent of colonisation, and notes the tendency by colonial administration to discourage rural to urban migration.

Emergence of slums and squatter settlements has prompted attention from National and International authorities and voluntary organisations. The United Nations, through international and regional seminars, has initiated efforts aimed at understanding the squatter problem and ways or means of solving it. The United Nations (1970) identified the need to distinguish between these settlements in developing and developed countries by differentiating between the nature of urbanisation in the two regions.

Charles Abrams (1966) examined squatters as a problem and opportunity. He advocated the need to adopt a more diversified approach to

the problem. He concludes that squatters have a way of inevitably emerging and therefore a need for prior attention to guide their location and growth.

Housing is more than the physical structure. Thus seen, squatter settlements should be seen to play a greater role than just providing housing. Turner (1972) treats housing as a process and an activity in human life. Its physical characteristics are just a part of the process, which involves the whole community and not only the authorities. He therefore calls for autonomy in housing provision. This idea is elaborated by Turner (1976) where he notes the failure to involve owners in housing provision, particularly in squatter improvement programmes.

Literature on slums and squatter settlements in Africa is scarce and scanty where available. Notable contributions includes, Maboguunje (1978) who has attributed the problems of squatter settlements to low incomes, cultural diversity of rural migrants and colonial attitude against 'native' settlement in urban areas.

Obudho, R.A. (1985) treats the emergence of slums and settlements as a consequence of rapid urbanisation and failure of housing provision in urban areas. To him slums and squatter settlements are not, - 'blemishes on the landscape, they are

symptoms of housing shortage, high rents, land speculation, insufficient municipal services and bad land planning. These are the main aspects which needs to be examined in dealing with the squatter problems.

In Kenya, literature on squatter settlements is in form of particular case studies, mostly on Nairobi and Mombasa. Etherton (1971) in a study on Mathare valley in Nairobi observed that the degree of physical development depends on the amount of security of tenure assumed or given to the squatters. To him land is the main issue.

Yahya (1974 and 1983) attributes urban housing problem to the urban land policy. He notes the ineffectiveness of land administration and management the consequence of which is irrational boundary extensions. Many squatter settlements have emerged as a result of rural settlements being incorporated into urban areas.

Other case studies have been undertaken on Mombasa (1975) Machakos (1979) Murang'a (1978) and Kisumu. Owino (1975) has indicated the need to adopt a socio-cultural approach to squatter settlements. The squatters maintain very strong relations with

their rural origins to an extent where they never identify themselves fully with the urban areas.

Literature on the study area exists in form of pilot survey reports (1979 and 1984) and project reports (1982 and 1985). Despite recognizing the crucial role the settlement plays in the town little efforts has been made to integrate it to the town in terms of services.

Thus the quality of literature on slums varies with the level of urbanisation and magnitude of the problem. All in all, the need to improve instead of demolishing has been recognized and accepted. Methods to upgrade devised in developed countries, have been applied in developing countries with little success. Most of them however have a housing bias. This is possibly so because the existing literature treats the problem as a housing problem.

Besides adding to the knowledge on squatter settlements this study is intended to strengthen the need to adopt a comprehensive approach to the squatter problem by treating it as an economic social, housing and an environmental problem. Thus seen, research should concentrate on information on squatter population ranging from their origins, their purpose in urban areas and their priorities. It

is only thus that, effective improvement measures can be devised to incorporate squatter settlements into the urban areas. This is particularly necessary now that efforts are being made to arouse attention on the homeless. It is this realisation which has prompted the United Nations to declare 1987 as the year of shelter for the homeless.

Research Methodology

The study has been undertaken through documentary research and field surveys. Documentary research assisted in understanding squatter settlements. Primary and secondary sources were relied on in assessing issues pertaining to thika town and the study area.

Methods of data collection included conducting a questionnaire type of approach to a randomly sampled number of households in the squatter settlements which amounts to 10% of the households. The sample frame included all the households within the official Kiandutu area. The survey also included informal interview with Thika Municipal council officials.

Data analysis methods were a combination of descriptive and inferential statistical analysis accompanied by cartographic analysis where necessary.

Photographs have also been used to portray some of the important physical aspects about Thika and Kiandutu. Finally, existing aerial photographs have been used in preparing a base map for the physical layout plan.

The study has been organised into five chapters. Chapter one is an introductory one which outlines the problem and the objectives of the study. Chapter two assesses the policy background covering the relevant national policies. Chapter three is an analysis chapter reporting the main findings and identifying issues to be addressed in the recommendation chapter. Chapter five summarises and concludes the study.

Limitations of the Study

Time and resource limitation has forced this study to ignore some aspects which could have contributed to a further refinement of the findings. Such issues are with reference to the origin of the squatters. This could have involved assessing their past living standards to judge whether they are better or worse off in Kiandutu. A fuller examination of the site and service schemes as an approach to low income housing, could have assisted in measuring its success. Another major limitation of the study was lack of reliable information on emergence and

growth of Kiandutu settlement. Population figures available were contradictory.

However and in view of these limitations, the study beliefs to have done justice to the time and resources available.

FOOTNOTES:

1. United Nations (1970) : Improvement of Slums and uncontrolled settlements: ST./TAO/Ser.C./124.
2. Obudho, R.A. (1985), The Development of Urbanisation, Slum and Squatter Settlements in Africa. Towards a Planning Strategy p.5.
3. Obudho, R.A. (1985) Ibid p.7
4. Republic of Kenya Development Plan 1979-83 p.171
5. Field Survey by Author 1985.
6. Obudho, R.A. (1985) Ibid p.10
7. Abrams, C. (1964): Man's Struggle for Shelter in an Urbanizing World, Cambridge. Mass. MIT. pp. 4 - 5.
8. Solzbachev, R.M. (1970) East Africa's Slum Problem; A question of definition. Nkanga Editions p.45 Quoted in Obudho, R.A. (1985).

CHAPTER TWO

POLICY BACKGROUND

The foregoing chapter attempted to identify and outline the problems under study. This chapter further outlines the National policies on the basis of which this study will be undertaken. The necessity for such a task lies in the need to as much as possible relate and confine the findings and recommendations to the realm of policy, failure of which might lend the study proposals unimplementable. The main policies to be considered are: the human settlement policy; the urban land policy and the housing policy.

Human Settlement Policy

The concern for human settlements stems from their definition. They are the places where organised human activities occurs, whether a metropolis, a tented camp, village or scattered places of abode in the rural areas¹. In other words, human settlements are organised space regardless of their density and level of infrastructure.

This shows how a group of people shelters itself, works and interacts in a way which is in agreement with traditions, skills and natural resources. This concept is important in that it dispels the common assumption that human settlements are housing, and that

their needs can be addressed through the provision of housing alone. This definition of human settlements is only physical, and omits their other basic characteristic. To this, one should see individual settlements as subsystem, regardless of their size and their interest within an overall system spreading across local, regional and national boundaries.

Thus human settlements are the basic substructure of socio-economic development. Its overall configurations are indicators of and prerequisites for the achievement of development. That is, the achievement of a satisfactory quality of life for all segments of the population.

Another concern for human settlements stems from their character. They are points of population concentration - "population can be an asset or a constraint depending on the organisational level of human settlements"², that is the vitality of individual settlements, their capacity to act in symbiosis with their hinterlands and the quality of the linkages between the various parts of the system.

This population concentration has been referred to as urbanisation. To many this process has become

the main cause of all urban problems in developing countries. Yet urbanisation per-se is harmless. It is the overall context in which it occurs which is important. With reference to urbanisation and of a greater concern is what can be done as regards urbanisation in the developing countries and how can it be guided to exploit its potential as a powerful catalyst of development.

It is towards this direction that the Kenya Government has formulated guiding policies on human settlements. Besides addressing the above question, the human settlement policy has become necessary to rectify the existing regional disparities inherited from the colonial administration. Therefore post-independent Kenya appreciated the need to develop a sound 'system' of human settlements with particular emphasis on the following objectives:-³

1. Correcting regional development imbalance inherited from the colonial past.
2. Population distribution to reflect a balance between population and resource utilization.
3. Development of several urban centres in order to spread the benefits of urban growth throughout the country.
4. Ensure development of sound human environment.

5. Ensure effective implementation of human settlement plans.

To accomplish the above objectives, the Kenya Government has formulated a number of guiding policies:-⁴

The National and Regional Physical development policy:-

This policy involves preparation of integrated socio-economic development plans in liason with other development implementing agencies in order to provide a long-term strategy for the development of human settlements which could guide the planning and budgetting of the short term economic development plans.

The policy is concerned with the evaluation of national resources in all regions of the country and determination of their potential for exploitation. The implementation of this policy is by way of preparation of regional physical development plans, by provinces and districts.

The urbanisation policy:

This policy was formulated on realisation that urbanisation is a major element of Kenya's overall development. Hence it has to occur in a properly guided manner to avoid the primacy of a few

cities like Nairobi and Mombasa. The policy is aimed at encouraging development of a selected and limited number of existing towns, in development potential areas. These towns are those considered viable for a process of limited decentralisation of growth functions at the current stage of development.

This policy is based on the service centre strategy which aims at concentrating all infrastructural facilities for human settlements on a selected hierarchy of service centres in order to facilitate an optimum and convenient location for the areas served. The policy was implemented in 1978⁵.

Urban development policy:

The policy involves regulating urban development activities in accordance with what is considered expedient in the interest of proper planning and development of human settlements. It aims at harmonising various urban landuses in order to secure convenience and optimum utilisation of the land. The policy is implemented by way of preparing urban landuse plans for each centre, indicating various landuse zones.

The task of implementing the policy is assigned to various institutions. However, the leading role from a national point of view is played by the physical planning department (PPD)⁶. The day to day activities of the department involves preparation of physical development plans for all towns in the country. Other activities related to human settlements including training are outlined in Appendix I.

The Kenya Government is a head of many developing countries by being in a position to pay policy attention to human settlements. However the most challenging problem is the shortage of qualified personnel, not so much to prepare human settlements plans, but to implement them. The local authorities who are assigned this responsibility are ill equipped to implement and monitor the plans. Coupled with this, the human settlement policy lacks effective legislation, as a result of which, the PPD remains a mere advisor in the planning process. It does not foresee the implementation.

Urban Land Policy

Orderly management and utilisation of urban land depends on an effective urban land policy. This section outlines the policy provisions for the

land tenure and land regulation in urban areas.

Land Tenure in Kenya

Land in Kenya is an economic, social and political issue. The Kenyan economy is heavily dependent on Agriculture. Kenya's struggle for independence was particularly intensified after the local people lost their land rights, and Kenyans have a social attachment to land as a sense of belonging.

With reference to land, the tenure system is the most crucial aspect. It not only determines who and how the land is owned, but also determines its utilization. In Kenya, a piece of land would belong to one of the following classes:-⁷

1. Government or state land e.g. forests, National parks and unalienated land.
2. Public freehold i.e. Freehold held by local authorities, parastatals and other public bodies.
3. Leasehold, held either from the state or Local Government on a long lease mostly 99 years.
4. Short term leasehold or temporary occupation licence up to 33 years.
5. Trustland over which traditional or customary rights may be exercised.

6. Squatters rights which are defacto rather than legal.

Land tenure system in Kenya has changed with political changes. In precolonial Kenya, land ownership was communal and held according to clans. Colonial Kenya saw the takeover of most land rights particularly the productive portion which became crown land. Since independence the state assumed all land rights in the country. However, for its development, the above methods of ownership have been deviced. The chart below indicates the evolution of land tenure in Kenya.

Period	Ownership
Precolonial	Communal ownership
Colonial	British Administration
Post colonial	Individualised Tenure Communal Tenure

A distinction between stateland and Trust land is necessary. The latter is used by the public but administered by the County Council, whereas the former is held by public institution on leasehold basis from the local authorities. Examples of state land is that held by Kenya Ports Authority, Kenya Railways, etc.

Thus, unless land is held under any of the above classes, one is declared to be squatting. Therefore all squatter settlements are illegal settlements as land they are on is not formally owned. They are either on private or trust land.

Land Legislation in Kenya:

Comprehensive land legislation has been formulated to intensify land administration both in rural and urban areas. Most of the legislation provides for land registration or restriction and regulation in its utilisation. However, only the relevant articles are mentioned in this study.

Registered Land Acts 1963 (RLA).

This covers both rural and urban areas and governs all land registrations. According to this act, every district should maintain a land registry, in which every land parcel should have a separate entry. After registration a land certificate is issued as evidence of title, and should be produced on every registration or dealings on land. In addition, every leasehold beyond 2 years should be registered except Trustlands which are not registrable under R.L.A.

Apart from the title and documents registers,

there is a fiscal cadastre for every town in the form of a valuation roll. This is an assessment list showing the following information:

1. Parcel identification number,
2. Owner and address
3. Use
4. Land area
5. Assessed value, based on the unimproved site value. i.e. Land value without developments e.g. buildings, etc.

Therefore, whether in urban or rural areas, only with a legal title that one is allowable by law to settle on land. Without it and unless otherwise stated, one is squatting.

Land Control Act (LCA) Cap. 302

The L.C.A. controls all transactions in land whether in urban or rural areas. To enable this it provides for the establishment of Land control Boards (LCB) at Divisional and Provincial levels. The role of the LCB is to sit, listen and consider for approval all transactions in land. The main issues dealt with by the LCB are subdivisions to be held under separate titles, sales, issue, transfer mortgage or any other disposal of land within the land control.

However, vested interests should always be

prevented and as such, the LCA provides avenues for appeal against refused transactions. The Provincial Land Control Appeals Board (PLCAB) listens and decides on refused transaction. If it confirms the refusal, the appeal can be further forwarded to the Central Land Control Appeals Board (CLCAB) whose decision is final. Other functions of the Land Control Boards are:-

1. Ensure that transactions in agricultural land, even within urban areas takes place between citizens only.
2. Scrutinize the price at which land changes hands so that market prices do not rise too rapidly.
3. Prevent poor families from selling all their land and hence safeguards the interests of the young.
4. To consider subdivisions and change of use.

Despite control of land prices, there is no direct freezing of land prices in Kenya. As a result the value of urban land has been rising at an annual rate of 20%⁸ for the last decade particularly in major urban areas.

Land Planning Act (LPA) Cap. 303

The LPA stipulates the manner in which land should be utilized in urban areas. It provides for the preparation of schemes or plans for the proper control of development in urban areas. It requires the establishment of a planning authority which is the physical planning department and an executive authority, which is the local authority.

However, the main short-coming in this legislation is that the planning authority is not the executive authority and hence do not foresee the implementation of the plans.

The LPA is therefore a crucial and an important tool for land administration. It can assist in gauging the land requirements in urban areas thereby determining the need for boundary extensions. Ad hoc extensions currently practiced by the Local Government adds to the existing shortage of urban services by incorporating extra rural areas.

Land Acquisition Act (LAA) Cap.295

As mentioned earlier, the state is the overall owner of land in Kenya. In addition and as a Government policy, public landuses are supreme to private landuses, and hence given the first priority

during land alienation. However in case a particular public land use is intended and land is not available at the appropriate location and in the right size, there are provision for the Government to acquire land in the desired location and amount. The Governing Act in this exercise is the LAA.

Procedurally, the state agency for acquisition is the commissioner of lands (CoL)⁹. The LAA requires the commissioner of lands to serve a notice of intention to acquire land to the owner. Once served, the process of acquisition starts by the two parties (CoL and the owner) sending valuers to determine the amount of compensation to be paid. This may be in either an exchange of land or through cash payment at market rates.

The act requires the process of acquisition to occur through mutual understanding between the two parties. However in case of refusal to accept the determined compensation, the Government uses compulsory acquisition methods whereby the owner got no choice but to vacate.

Thus the major aspects of LAA are supremacy of public land uses, full compensation in time and fairness in determining compensation. However with effective planning acquisition can be avoided for it is an expensive affair, socially and economically.

Public Land Disposal Methods

Any land which is acquired in addition to existing Government reserve is planned, subdivided, serviced and alienated for private development. Alienation is undertaken by the Commissioner of Lands directly or through the Local authorities in urban areas. As a requirement all pending land alienation should be made public through the Kenya Gazette ¹⁰. However, special requests can be made to the C.O.L. Thus land is made available for industrial, commercial or residential purposes.

When alienating land for residential purposes, the Government aims at encouraging residential development. Hence profit is never the motive as plots are sold at cost price, i.e. expenses of servicing the land. The government objective is to satisfy even in a modest way some of the demand for inexpensive land to build on.

The procedure of alienation stipulates that once the plot has been allocated, a fifth of the plot cost (land and development) is payable as 'stand premium'. The rest is recoverable, as an annual land rent calculated at 5% of the amount owing. Roads, sewerage and other service charges are collected together with the stand premium. Thus, the

plots are far cheaper than land bought from the market. For example, a 0.2 Ha. plot which the commissioner of lands charges Kshs. 50,000 in Nairobi's high income areas could easily sell for Kshs. 500,000¹¹ in the market.

Once alienated, thereby leased, land should be developed within 2 years. It should not be transferred or sublet undeveloped and no unauthorized activity should be carried on. While the methods of alienation allows each and every one a chance to own land, initial costs demanded are restrictive to low income earners in obtaining residential land.

The Kenyan Urban land policy, stipulates the manner in which land can be held in urban areas. On this basis squatters can be identified. However, some squatter settlements have been under occupation for a lengthy of time. The main question is whether a separate type of land registration, even if it is for temporary ownership can be devised for squatter settlements. The insecurity of tenure has a great part to play in the reluctance by squatters to improve their living conditions.

Land planning and utilisation is hindered by insufficiency of qualified machinery. Hence large chunks of land are lying idle in urban areas held for speculation purposes. In spite of this boundary

extension are frequent phenomena in urban areas. The task at hand is to commission a comprehensive land inventory in urban areas.

Housing Policy in Kenya

Squatter settlements have emerged as a direct consequence of housing shortage in urban areas. Subscribing to this view for a while, it becomes necessary to assess the Government policy on housing, assuming that it has a great role to play in the housing situation in the country. The Government's concern for housing became evident immediately after independence by the commissioning of United Nation's experts on housing to assess and recommend on housing situation in the country¹². However, and based on this report the housing policy was formulated during the second development plan, whose prime objective was to:

"move towards a situation where every family in Kenya will live in a decent home whether privately built or state sponsored, which provides at least the basic standards of health, privacy and security" 13.

While no major departures are noticeable in subsequent development plans, there has been some notable improvements:-

1. Financial allocation: There has been a steady increase in the financial allocation for housing by the Central Government.

Table 1: Financial allocation for housing:
1970-88

PLAN	K £	% INCREASE
1970 - 74	27.0 million	-
1974 - 78	43.3 million	60%
1979 - 83	57.2 million	66%
1984 - 88	90.6 million	63%

Source: Development Plan 1984 - 88.

2. Slum improvement: The magnitude of the slum population in urban areas has forced the Government to, as a matter of policy, discourage slum demolition unless alternative housing is made available. Instead an improvement approach has been adopted.¹⁴
3. Standard house: With reference to urban areas, the Government conceives a standard house to be - 'A two bedroomed house with a separate kitchen and bathroom built of permanent material.
4. Housing Development Institutions:
Housing responsibilities has been assigned to a variety of institutions¹⁵. Main tasks involve research, planning, financing and execution of housing projects.

Despite the government's concern for housing,

yet by 1978 there was a short fall of 140,000 units in addition to an annual requirement of 30,000 units in urban areas for the period 1978-83¹⁶. It is further expected that within the period 1985 - 90, there will form an extra 300,000 households requiring the same number of housing units. In total, there will be an estimated housing need of 1,400,000 units by the year 2000 A.D. excluding the current shortfall in urban areas only¹⁷.

Housing situation in rural areas is poorly documented. However, notwithstanding the existing housing stock it was estimated that, during 1978-83, the annual requirement would be 90,000 units in addition to 125,000 replaceable units every year. Expected housing need for the same period is 1,075,000 units.

Thus the housing situation in Kenya's rural and urban areas has reached a crisis level. The current 5th development plan has been formulated in direct response to shortcomings of efforts in the country. Towards this end the prime policy objectives are:-¹⁸

1. To formulate and adopt realistic and performance oriented building standards especially in the area of low cost housing. Existing building standards have made housing unaffordable by many.

To achieve this objective, a complete review of the building code has to be undertaken in a manner which will lower the construction cost and at the same time guarantee acceptable building standards.

2. To encourage tenants and landlords protection by strengthening and publicising the role played by the rent control tribunal. The existence of this body to protect tenant and landlords interest is unknown by many. Rent control in residential housing is hindered by acute housing shortage. The tribunal's task is to effect control particularly in low income housing.
3. To promote self-help in housing construction both in rural and urban areas, so as to increase housing stock at reduced construction cost. This objective aims at mobilizing local labour. The major requirement is provision of technical services. This spirit has not been applied in housing provision despite being a notable strategy in Kenya's development.
4. To intensify research on use of local building materials and construction techniques. The current building code strictly requires the use of conventional building materials (cement concrete

stone) in urban areas. However if housing is to be afforded by many, low cost technology has to be allowed in urban areas. The HRDU takes the leading role. Its main requirement will be finance to demonstrate its findings.

5. To promote development of flats for sale through registration of titles for individual flats. This is a direct effort to exclude land cost from the housing cost. Land accounts for 15% of the total cost in low income housing. However being a new approach, state guidance is crucial particularly to change the existing social attachment to land.

6. To explore the feasibility of instituting a housing levy whereby employers contribute towards a consolidated housing fund:- with current land prices in urban areas, large employers should as a matter of policy assist employees to house themselves. Further industrial establishments should be required to show ways and means of housing their workers prior to being licensed. Traditional house allowance is inadequate.

Policy Appraisal

Various issues emerges from the current policy provisions for housing. Firstly, the financial allocation for housing provision by the Central Government indicates inadequacy considering the existing demand in urban areas only. The total allocation in the current plan amounts to K £ 164.4 million of which K £ 90.6m and K £ 73.8 million will be contributed by the public and private sectors respectively. Gauging by the cheapest standard house¹⁹, only 76,465 units can be constructed over the plan period or 15,293 units per annum. By 1983 30,000 units were required per annum in urban areas.

This implies that if housing provision has to match demand, either the financial allocation should be increased to K £ 322.5 million over the plan period or the unit cost should be lowered to Kshs. 22,000/- in urban areas. This requires review of building standards and extensive use of low cost building technology.

Secondly, there has been a policy bias in its rural housing provisions. Financial allocation to rural housing amounts to only 2.22%²⁰ of the total housing budget. Notable reasons for this policy bias are:-²¹

1. Assumed better housing conditions in rural areas compared with urban slums.
2. Rural housing being a question of quality rather than quantity.
3. Lack of information on rural housing.

Thirdly, the policy has completely ignored the crucial aspect of housing finance. Stringent conditions should be fulfilled when obtaining housing finance. These are beyond the ability of many urban households, particularly squatters. As a matter of policy, lending conditions by financial institutions should be reviewed. Housing as a source of income is completely ignored by financial institutions when they use the current incomes as a criteria to determine potential borrowers.

In conclusion the current policy objectives have managed to address themselves to the crucial issues of land and building standard which are liable to reduce housing costs. However, low cost housing, particularly squatter settlements have not been given thorough policy attention except recognizing the need to upgrade instead of demolition. The crucial issue of land tenure in squatter settlements has not been addressed.

Summary

The human settlements, the urban land and the housing policies are interrelated. These will have a great influence on the nature and direction of urbanisation in the country. Human settlements as centres of human economic and social activities will determine the direction of migration and therefore employment opportunities. The urban land will be required for the establishment of new human land uses and expansion of existing ones, in addition to provision of infrastructural and social facilities.

Housing is the major urban land use and therefore much of its success will depend on availability of land at affordable rates. Once land is available units have to be constructed at reasonable costs and acceptable standards, both dependent on the housing policy.

This study therefore conceives the three policies as mutually supportive, each having a role to play in conjunction with the others.

FOOTNOTES:

1. Ramchandran A (1983): Review of the global Situation in Human Settlements. U.N. Seminar Paper Nairobi, p.8.
2. Ibid p.9
3. Republic of Kenya, National Development Plan 1970-74.
4. Republic of Kenya. National Development Plan, 1979-83.
5. Republic of Kenya (1978) Human Settlements in Kenya: A Strategy for Rural Development Nairobi, 1978.
6. The Physical Planning Department is under the Ministry of Works Housing and Physical Planning, with the headquarters in Nairobi.
7. Yahya, S (1983) Kenyan Monograph for the U.N. Seminar of experts on land tenure for issues related to housing for the poor. Tallberg, Sweden, p.1.
8. Yahya, S. (1983) Ibid. p.5.
9. The COL is charged with the responsibility of handling all land issues in the country.
10. The Kenya Gazette is a weekly Government Publication in which all public notices are published.
11. Yahya (1983) op.cit. p.7.
12. Bloomberg, L.N. and Abrams, C. (1965) United Nations Mission to Kenya on Housing, Nairobi.
13. Republic of Kenya : Development Plan, 1970-74.
14. Republic of Kenya : Development Plan, 1974-78.

15. List of Housing Institutions:

- (a) Housing Research and Development Unit (HRDU) University of Nairobi in charge of Research.
 - (b) Ministry of Works Housing and Physical Planning charged with financing and policy formulation.
 - (c) National Housing Corporation (NHC). The project implementation arm of the Government.
 - (d) Housing Finance Company of Kenya (HFCK). Government Housing Finance Institution.
16. Republic of Kenya, Development Plan, 1979-83, p. 171
17. Republic of Kenya Economic Review, 1985 p. 29
18. Republic of Kenya, Development Plan 1984-88 p. 164 - 65.
19. The H.R.D.U. estimated the cost to be 43,000/= by 1984 prices.
20. Republic of Kenya, Development Plan, 1984-88, p. 169-70.
21. Sterkenberg, J.J. (1978) Housing Conditions in Rural Kiambu, H.R.D.U., Nairobi.

CHAPTER THREE

REPORT OF SURVEY AND ANALYSIS

The preceding chapter has attempted to examine National policies which govern the main aspects of this study i.e. Urban Land, Human Settlements and Housing. At this stage the study sets out to report and analyse the major findings in an attempt to identify issues to be addressed to in the recommendations. It is divided into three main parts: Housing situation in urban areas; Thika Town in its National Regional and Local context; and Kiandutu squatter settlement (study area).

Housing Situation in Urban Areas

Emergence of squatter settlements is seen in the wider context of urban housing provision among other aspects. It therefore becomes necessary to examine the status of housing in urban areas. The current rate of rural-urban migration is beyond the capacity of the local authorities in their attempts to provide both infrastructural facilities and community services. As a result the newly arriving migrants and the existing urban poor live in substandard conditions. At present, about 30%¹ of the urban households lives in substandard housing areas. More recent studies estimate the figure to be 40%². Majority

of them are in slum and squatter settlements.

Urban housing situation is best presented by a survey³ commissioned by the Kenyan Government to assess urban housing. The survey was based on 32 towns accounting for 89% of the urban population. Appendix II lists the sample towns.

To assess the magnitude of the housing problem by the year 2000 AD, urban population was projected assuming a constant fertility and mortality rates.

Table II

Growth of Urban Population and households

	1969	1979	1990	2000
Total pop. ('000)	10,943	15,327	24,872	37,505
Urban pop ('000)	1,080	2,310	5,334	11,411
Urban pop (as % total)	9.9	15.1	21.4	30.4
Urban Households ('000)	256	547	1,262	2,700
Average size of households	4.22	4.23	4.23	4.23

Source: Economic Review 1985 p.28.

The growth of urban population results from four factors:

- (i) Natural Increase of the existing population

- (ii) Rural-urban and urban-urban migration
- (iii) Boundary expansion
- (iv) Reclassification of rural settlements

The contribution of each factor varies. The former two factors accounts for 25% and the latter two 75% of the growth. Accordingly and if the proportions hold, 300,000 additional households can be expected to form between 1985-1990 and a little under 1.1 million more between 1990-2000. Considering the total urban housing stock in 1979 accommodated nearly 550,000 households, the output of new urban dwellings required over the next five years represents 55% of the entire housing stock existing in 1979, while the output required between 1990-2000 amounts to almost twice the 1979 total. That is, 302,000 and 1.1 million new units will be required for the periods 1985-1990 and 1990-2000 respectively. This excludes those required to replace outworn or temporary units and to reduce accumulated deficits.

Quality of Existing Housing

Quality of housing was measured in terms of two indicators:

- (i) Type of building materials
- (ii) Provision of infrastructure and domestic services.

In assessing the type of building materials, distinction was made between durable and non-durable construction materials used for roofing, walling and floors. This was in reference to standard residential units and excluded informal housing units. Provision of infrastructure and services included water, toilets, bathroom and electricity (see tables III and IV)

TABLE III

Building Materials of Residential Units - 1983.

MATERIAL	PERCENTAGE	TOTAL
<u>Floors:</u>		
Durable	76.6	100
Non-Durable	23.4	
<u>Walls:</u>		
Durable	69.6	100
Non-durable	30.4	
<u>Roofs:</u>		
Durable	90.4	100
Non-Durable	9.9	

Source: Housing Survey 1983 (Eco. Review 1985 p.32).

The definition of the type of building materials to be used in urban housing has been

one of the major causes quoted for shortage of housing in urban areas. The standards stipulates that any housing should be of durable material defined as stone/burned brick walls, concrete floor and iron or tiled roofs. This has made construction costs very high for the low income earners. Considering the magnitude of housing required, the building materials required in urban areas should be reviewed.

TABLE IV

Provision of Infrastructure and Domestic Facilities - 1983.

FACILITY	PERCENTAGE WITH	PERCENTAGE WITHOUT	TOTAL
Water Inside	40.0	60.0	100.0
Flush Toilet	47.3	52.7	100.0
Private Bath	36.9	63.1	100.0
Electricity	41.8	58.2	100.0

Source: Housing Survey 1983 (Eco. Review 1985 p.33)

The availability of facilities even in the standard housing is inadequate. If one consider that most of these facilities are not available in squatter settlements the magnitude of the task to the local authorities is enormous. This again indicates the overreliance on conventional

infrastructural standards e.g. pit latrines of any type are not allowed in most urban areas. Considering the costs of installing water-borne sanitation efforts should be made to adjust standards to affordable and acceptable ones in urban areas.

Housing Market:

Table V below shows the contributions of various market sectors in housing production.

TABLE V

Housing Production by Sectors:

MARKET SECTOR	PERCENTAGE
Private individuals	61.4
Private Developer	4.8
Tenant Purchase	2.0
Site and Service	3.1
Other public agencies (Local Authorities, employers, etc.)	28.6
Total	100

Source: Housing Survey 1983 (Eco. Review, 1985 p.34).

Private individuals are the dominant housing producers; either for self occupation or rental purposes. The contribution of other public agencies is also significant. Currently the local authorities do not produce rental houses

any more due to stoppage of Local Government financial assistance/loans. The employers are potential housing producers in that they can easily meet the conditions stipulated in housing provision particularly finance availability. In lieu of house allowance, efforts should be made to engage employers in actual housing production.

The site and service schemes is the main programme for low income housing. Adopted in the early 1970s, the programme is aimed at promoting house ownership by assisting low income earners in construction through material loans, subsidized and serviced land. The housing survey, therefore examined the mode of house ownership i.e. whether rented or owner occupied as a measure of house affordability and to show the manner in which the current housing demand is being met.

TABLE VI

STATUS OF OCCUPANTS AND HOUSING TYPES

MARKET SECTOR	OWNER OCCUPIED	RENTED	TOTAL
Private Individual	35.7	64.3	100.0
Private developer	23.4	76.6	100.0
Tenant Purchase	16.2	83.3	100.0
Site and Service	5.9	94.1	100.0
Others	14.5	85.5	100.0
Total	27.7	72.3	100.0

Source: Housing Survey 1983 (Eco. Review 1985 p. 35).

Renting is the dominant mode of house ownership accounting for over 70% of the occupiers. These figures are surprisingly high since, mortgages advanced to those buying houses from private developers, tenant purchase schemes, site and service schemes, are usually intended to enable people buy their own homes. This may mean in some cases, that title holders of these dwellings own and live in a second home, or more probably, that they either prefer to live in cheaper rented accommodation or are sharing their homes with subtenants.

These findings indicate that housing is conceived as a source of income by many. The proportion of tenants in site and service scheme (94.1%) which was meant to be wholly owner occupied strengthens the need for incorporating the economic aspects in low income housing.

Sources of Housing Finance

Availability of finance is a major handicap to housing provision by Government and individuals. Housing finance can be obtained either from financial institutions or through own savings. In both cases there are limitations particularly to low income earners who on the one hand cannot meet conditions by the institutions to obtain finance and their meagre incomes makes savings difficult, on the other. The survey enquired into the methods of housing finance:-

TABLE VII

SOURCE OF FINANCE BY HOUSING TYPES

MARKET SECTOR	* SOURCES OF FINANCE									TOTAL
	A	B	C	D	E	F	G	H	I	
Private Individuals	30.5	8.1	4.2	1.9	4.4	22.8	10.2	7.1	10.8	100.0
Private Developers	21.9	16.3	21.7	0.3	19.9	4.5	4.7	5.3	5.4	100.0
Tenant Purchase	1.1	5.8	25.9	-	1.1	6.9	1.1	5.2	52.9	100
Site and Service	22.9	2.4	8.4	-	1.2	37.4	6.0	6.0	15.7	100.0
Others	19.6	2.3	26.2	1.9	0.2	9.6	2.3	3.7	34.2	100.0
Total	26.1	6.6	11.9	1.7	3.8	18.3	7.3	6.0	18.2	100.0

Source:- Housing Survey 1983 (Eco. Review 1985 p.36)

*whereby:

A - Commercial Banks

B - Housing Finance Company
of Kenya

C - National Housing Corporation

D - Insurance Companies

E - Other Financial Institutions

F - Co-operatives

G - Employers

H - Relatives

I - Others (Local
authorities and
private savings

From the table above, conventional housing finance institutions (Sources A - E) provides finance for the construction of 50% of all the dwelling units.

However the above mentioned financial institutions are only accessible to those who can fulfil the conditions set. In most cases, the major requirements are: a reliable security (land or property) and a reliable income. The two requirements therefore excludes majority of the urban households particularly those in squatter settlements and those engaged in informal activities. They are characterised by unreliable income and lack of property. Possibilities of improving their incomes from the obtained housing are completely ignored.

Production of Urban Housing

Housing supply and demand unlike urban households, are difficult to compute. However, statistics on formally permitted housing is available but informal housing statistics are unreliable where available and in most cases non existent. As such the only method is to match the permitted housing units against existing and expected households. Going by this method, all those accommodated in the informal housing (squatter settlements) are ignored.

Table VIII below shows the magnitude of the housing deficit in urban areas. Out of the total households formed between 1979-1984, only 20.0% were housed

by the new units. Even if one considers that 25% of the new households are due to boundary extension and therefore possibly housed, only 26.9% of the new households were housed. The possibility of more than one household sharing a house still indicates some deficit.

TABLE IX

Recorded completion of dwellings compared with the formation of new urban households:-

AGENCY	1979	1980	1981	1982	1983	1984	TOTAL	%
N.H.C. Houses	4,085	3,527	2,755	2,928	687	2,398	16,380	37.2
Site and Service	2,389	2,454	2,719	2,550	598	2,099	12,809	29.1
Min. of Works & Housing	156	482	471	49	968	154	2,280	5.2
Other Public Sector	221	481	206	443	790	155	2,296	5.2
Private Sector	2,716	2,065	1,918	2,083	981	451	10,214	23.2
Total	9,567	9,009	8,069	8,053	4,024	5,257	43,979	100.0
Estimated Number of new urban Hse/holds	29,800	32,100	34,700	37,400	40,400	43,600	218,000	
Recorded new units as % to new House holds	32.1	28.0	23.3	21.5	10.0	12.1	20.2	

Source: Housing Survey 1983 (Eco. Review 1985 p. 38)

The figures indicate that 80% of the new households must have been either accommodated in the informal housing or in existing housing thereby indicating very high occupancy rates.

On this basis, housing situation in Kenya's urban areas is worsening, and with the current urbanisation there is little hope of this trend abating.

Thika Town

Historical Background

The history of Thika town is very much part of the history of urbanisation in Kenya and particularly the development of Nairobi. Urbanisation in Kenya, coincided with effective colonial occupation, of the country in the late 19th and early 20th centuries. This linkage of urbanisation and colonisation in Kenya has prompted conclusions to the extent that

---"the process of urbanisation in Kenya can be attributed directly to non-African settlers (Europeans, Asians, and Arabs) particularly in the central highlands region which accounts for 80% of Kenya's urban centres" 4

Nairobi's dominance in Kenya originates as the Kenya-Uganda railway headquarters (1899) and later its being declared Kenya's capital in 1907.⁵ With the discovery of the central highlands as potential farming

areas, a need was felt to open these areas, by connecting the already emerging centres to Nairobi ⁶.

Thika was one of such centres. It was already established as a service centre for the nearby coffee and sisal farmers (European). Thika was connected to Nairobi by railway between 1910-1911, ⁶ thereby facilitating transportation of farm produce and inputs to and from markets. The already flourishing cash economy and increasing services available in Thika prompted the administration to gazette it as an administrative centre in 1924. Despite its designation

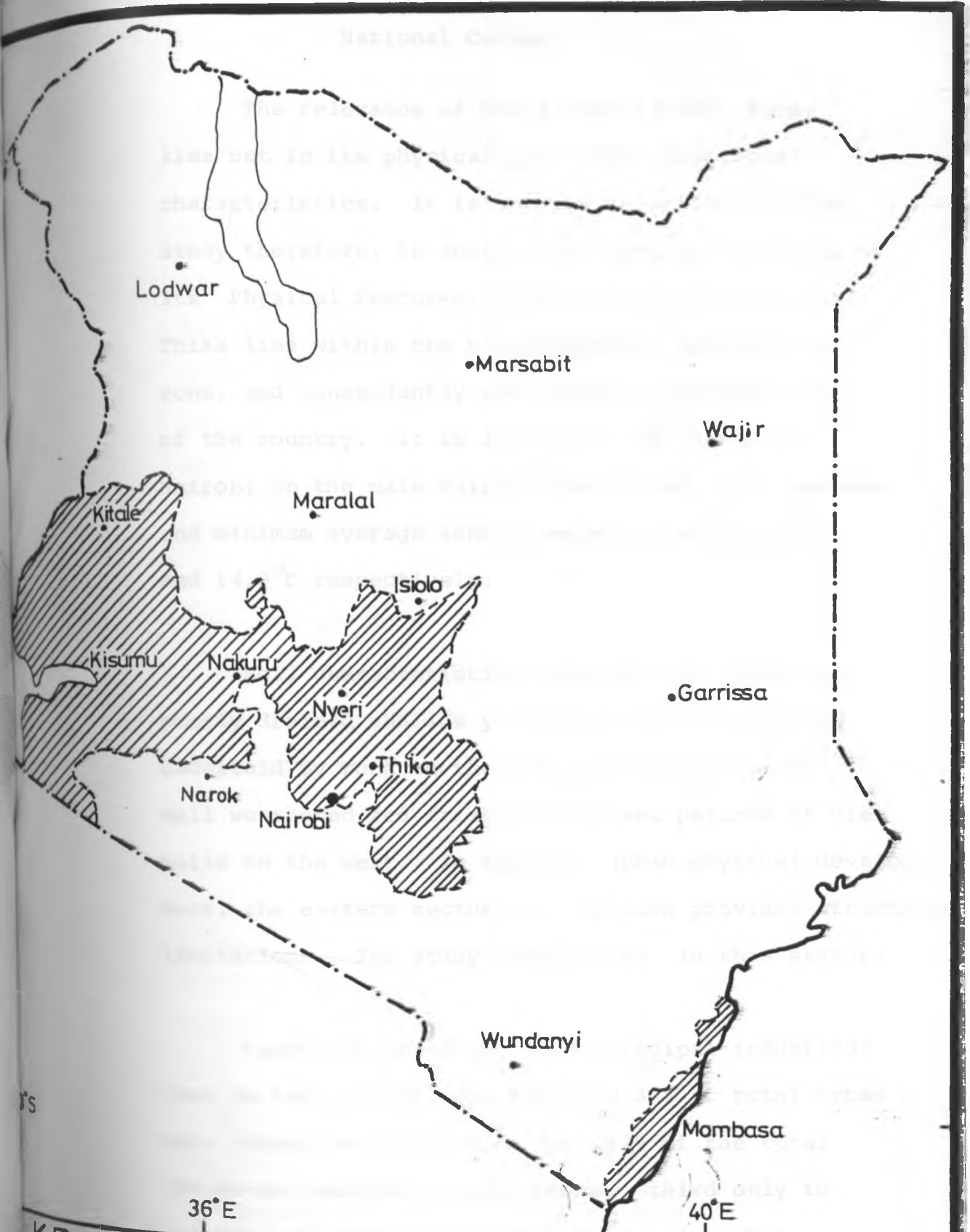
--early Thika experienced a very slow growth primarily because it was mainly a service centre for the surrounding areas"7

The current status of Thika as an Industrial centre started after the 2nd world war. The 'invasion' of Nairobi by African population, prompted the colonial administration to impose strict decentralisation policy on Nairobi. Thika became an obvious satellite due to the railway and the then upgraded Thika-Nyeri Road. Commercial importance of Thika town, which had already started was enhanced by the construction of a formal traditional market. 'Thoko' (market) became the main focus particularly for the local people.


With increasing activities in the town, and having no formal planning, population pressure in

terms of shortage of facilities and services became evident. Housing shortage particularly for the African labourers became a major problem to an extent where a commission was set up in 1950 to look into the problem and recommend on possible measures ⁸. Health, water and sewage facilities were the other pressing problems.

With recommendations by the Commission, formal housing estates, health services and other facilities were provided and by 1953 Thika became the headquarters of the then Thika District ⁹. With independence, Thika was declared a municipality. With improved services in the town, and increasing operation costs in Nairobi, Thika became an obvious alternative attracting big industries. Thika's potential was formally recognized with its designation as a growth centre in the urban development policy ¹⁰. To date the town has not only a strong industrial base but also has become a major commercial and service centre. Administratively it is a divisional headquarter. Thus the once colonial service centre has grown into a major industrial centre, third only to Nairobi and Mombasa.



KENYA: Main population concentration. map 1

 HIGH AGRIC. POTENTIAL ZONE



SCALE 1 : 6000000

source Senga 1982

National Context

The relevance of Thika Town to the study lies not in its physical but rather functional characteristics. It is not the intention of this study therefore, to engage into in-depth analysis of its Physical features. Suffice it to state that, Thika lies within the high potential agricultural zone, and consequently the densely populated zone of the country. It is located 47 km¹⁰ north of Nairobi on the main Nairobi Nyeri Road. The maximum and minimum average annual temperature is 25.2°C and 14.0°C respectively.

Soil characteristics indicate that there are poorly drained shallow yellow-brown friable clays underlaid by rock to the east, and well drained, well weathered red friable clays and patches of vlei soils to the west. In terms of urban physical development, the eastern sectors of the town provides structural limitations. The study areas falls in this sector.

Functionally, Thika is a principal industrial town in the country, contributing 3 % of total urban wage labour and accounting for 2.2% of the total industrial earning in the country, third only to Nairobi and Mombasa in manufacturing (see Table X below).

TABLE X: Distribution of Wage Employment and earnings among the major towns of Kenya:

TOWN	TOTAL EMPLOYED	EMPLOYED IN MANUFACTURING	TOTAL EARNING (KE '000)	EARNING IN MFG. SECTOR (KE '000)
NAIROBI	242,003	53,433	287,715	52,167
MOMBASA	77,739	19,705	73,867	16,946
NAKURU	17,813	5,528	14,680	3,691
KISUMU	15,950	3,765	11,681	1,937
ELDORET	13,272	7,202	8,679	3,831
THIKA	12,467	9,043	9,928	7,084

Source: Statistical Abstract 1981 p. 273

Thika is a designated growth centre and with its potential therefore it has a fundamental growth function at the National level in absorbing the rural-urban migrants.

Regional Context

Thika town is in Kiambu district of central province. The province accommodates about 2.3 million people in an area of 13,000 sq.km. Nationally it accounts for 15.5%¹¹ of the total population. Comparatively, the high level of agricultural development and cash crop development in the province is accompanied by a higher level of urbanization¹². In terms of development of infrastructural facilities

and social services, the province is the most advanced with reference to spatial organisation of human settlements. However, it only contributes 4.5% of the total urban population due to existence of small centres not defined as urban. The major urban centres are Murang'a, Kiambu, Nyahururu, Nyeri (All district headquarters) Karatina, Limuru and Thika.

Since independence, the province has been characterised by migration to other parts of the country in search of agricultural land and better opportunities in urban areas. This trend is expected to continue particularly to urban areas. Hence infrastructural employment capacity of these towns should be intensified.

Functionally Thika's dominance in its region of location, stems from its economic contribution rather than administrative function.

Table XI indicates that Thika contributes 40% of the total wage bill and 43% of the total earnings in the province. More prominently, Thika generated 95% of the income and of the total employment in the manufacturing sector.

TABLE XI: Distribution of Wage Employment and earnings of the major towns in Central Province, 1980.

TOWNS	WAGE EMPLOYMENT	EARNINGS (KE '000)
THIKA	13,996	9,928
KIAMBU	5,555	2,764
LIMURU	2,537	1,713
MURANG'A	2,736	1,511
NYAHURURU	1,818	1,448
NYERI	7,883	5,221
KARATINA	1,039	568
TOTAL	35,564	23,152

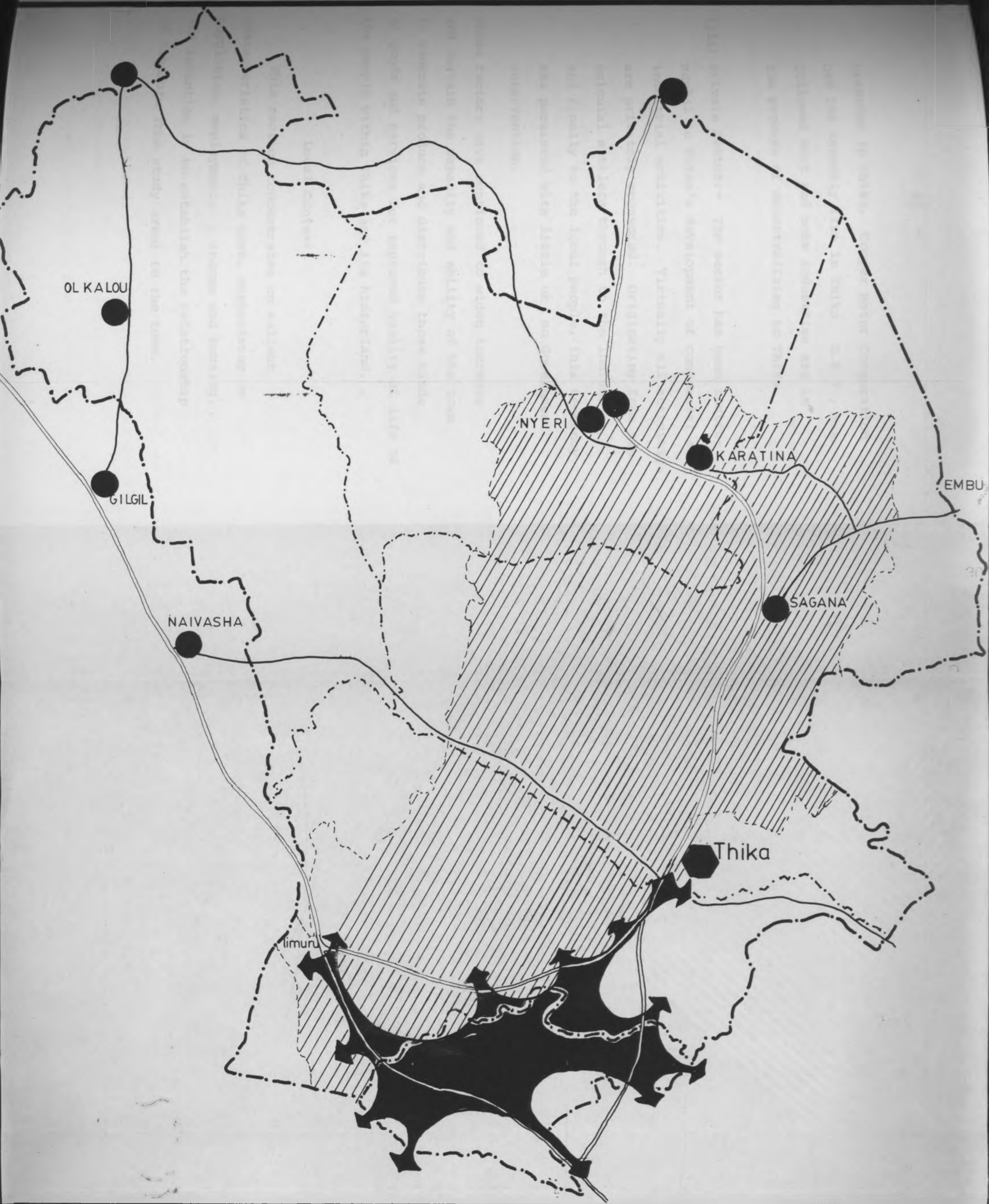
Source: Senga, W.M.(1982).(Compiled from established Abstract, 1981) (p.85).

In the commercial sector Thika derives maximum earnings from wholesale than retailing being the main supplies depot for its hinterland as far as Nyeri. Thika town is thus a regional apex of economic development.

Development Determinant Factors

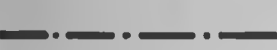

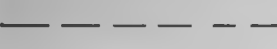

Thika's dominance and growth has not been accidental. It has been due to combination of physical, economic, social and political factors:-


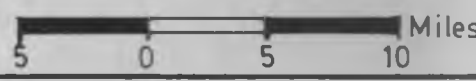
- (i) The hinterland: Thika's region of location is traditionally a high potential agricultural zone with commercial agriculture in coffee tea, sisal and wattle. This has attracted agricultural processing industries in the town, particularly food canning, leather tanning, tobacco processing etc. The commercial agricultural economy has resulted into high incomes therefore purchasing power of goods and services in the town. It is the same hinterland which prompted the construction of the railway by the colonial administration.
- (ii) Proximity to Nairobi : Thika is a de-facto satellite of Nairobi. Its connectivity to Nairobi by the railway and a modern highway facilitates proximity to specialised markets not only for Thika's industrial products, but also raw materials, besides skilled labour. Due to its location, within Nairobi's metropolitan region , vertical and horizontal industrial integration has developed. The tanning factory supplies leather to nearby Bata Shoe factory in Limuru whereas Metal factories in Thika supplies containers to the local canning industries. The most notable aspect is the tendency for parent industries in Nairobi to establish



THIKA: Regional Context.

MAP no2

	PROVINCIAL BOUNDARY		High pop. & agr. potential zone
	DISTRICT		Nairobi region

 N	 Miles
	Ndorongo TG DURP MA THESIS 1986
	Source: central province physical plan.

branches in Thika. Cooper Motor Corporation has its assembly firm in Thika. B.A.T., has followed suit and more industries are in the process of decentralizing to Thika.

(iii) Private Sector:- The sector has been instrumental in Thika's development of commercial and industrial activities. Virtually all activities are privately sponsored. Originating from the colonial settlers through to the Indians and finally to the local people, this tendency has persisted with little or no Government intervention.

These factors have continued to widen increase and sustain the capacity and ability of the town to generate produce and distribute those kinds of goods and services for improved quality of life of the people within Thika and its hinterland.

Local Context

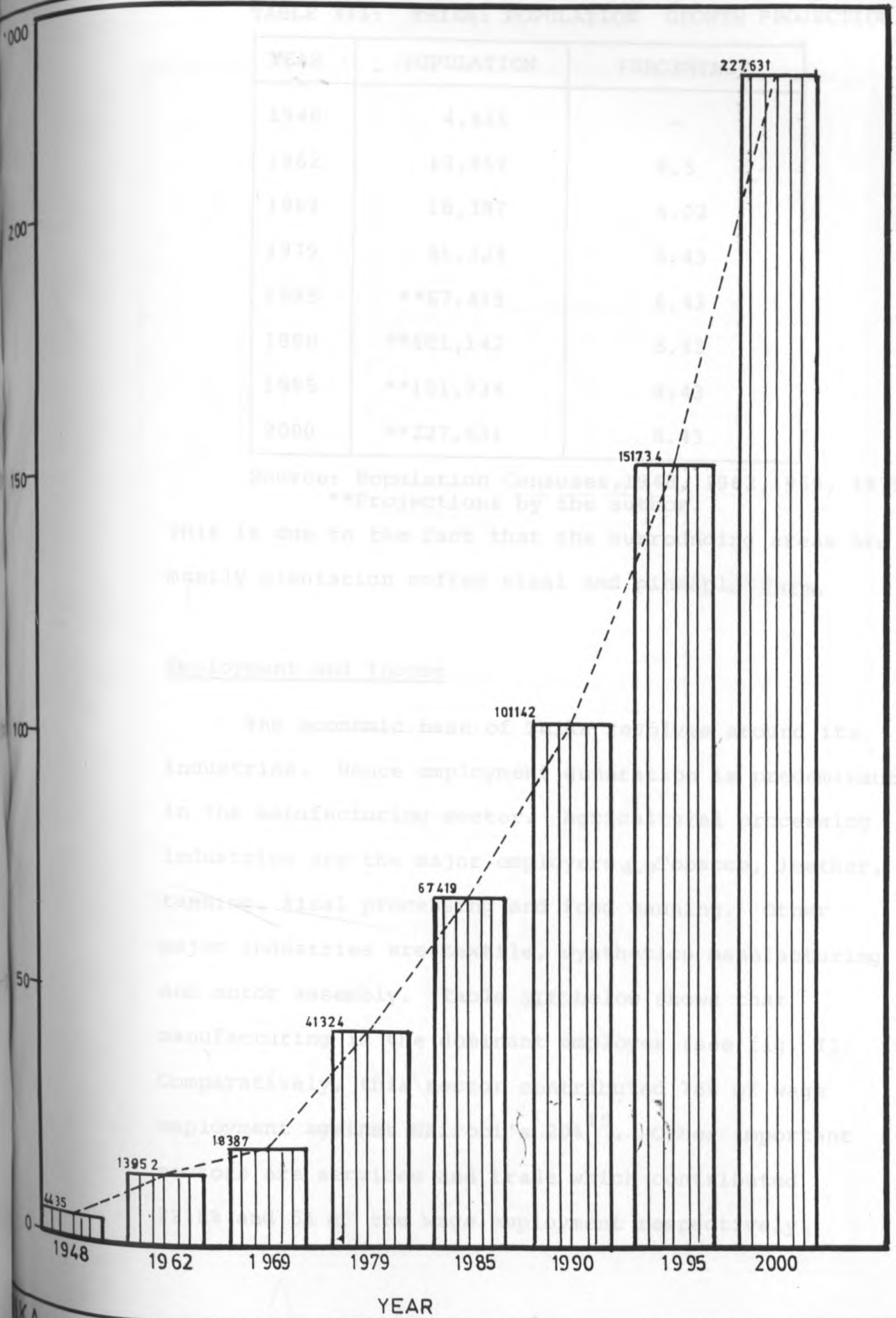
This section concentrates on salient characteristics of Thika town, emphasising on population, employment, income and housing. The intention is to establish the relationship of Kiandutu (The study area) to the town.

Population

The population of Thika town has been steadily growing. The first National census in 1948 registered a population of 4,435 people. The 1962 census registered 13,952 people giving an annual growth rate of 8.5%. During the 1969 census population growth rate slackened to 4% per annum, thereby registering a population of 18,387 people. The population growth rate however picked up to 8.43%, and by the 1979 census Thika registered 41,324 people. This rate is higher than the National urban population growth rate of 6.63%.

Assuming a constant annual growth rate of 8.43% and constant mortality and fertility rates, population projection for Thika town indicates that by the year 2000 AD, Thika will have 227,631 people. Table XII presents Thika's population growth, and illustrated in figure I.

Thika's population growth has been attributed mainly to rural urban migration which accounts for 5%¹³ of the 8.43% population growth rate. The nature of this migrant population indicates a tendency of leaving the wife and children in the rural areas. As such single men households in Thika town accounts for 60% of all the households¹⁴. The contribution of boundary extension to Thika's population growth has been minimal.



KA: population growth - 1948-2000

fig 1

TABLE XII: THIKA: POPULATION GROWTH PROJECTION

YEAR	POPULATION	PERCENTAGE
1948	4,435	-
1962	13,952	8.5
1969	18,387	4.02
1979	41,324	8.43
1985	**67,419	8.43
1990	**101,142	8.43
1995	**151,734	8.43
2000	**227,631	8.43

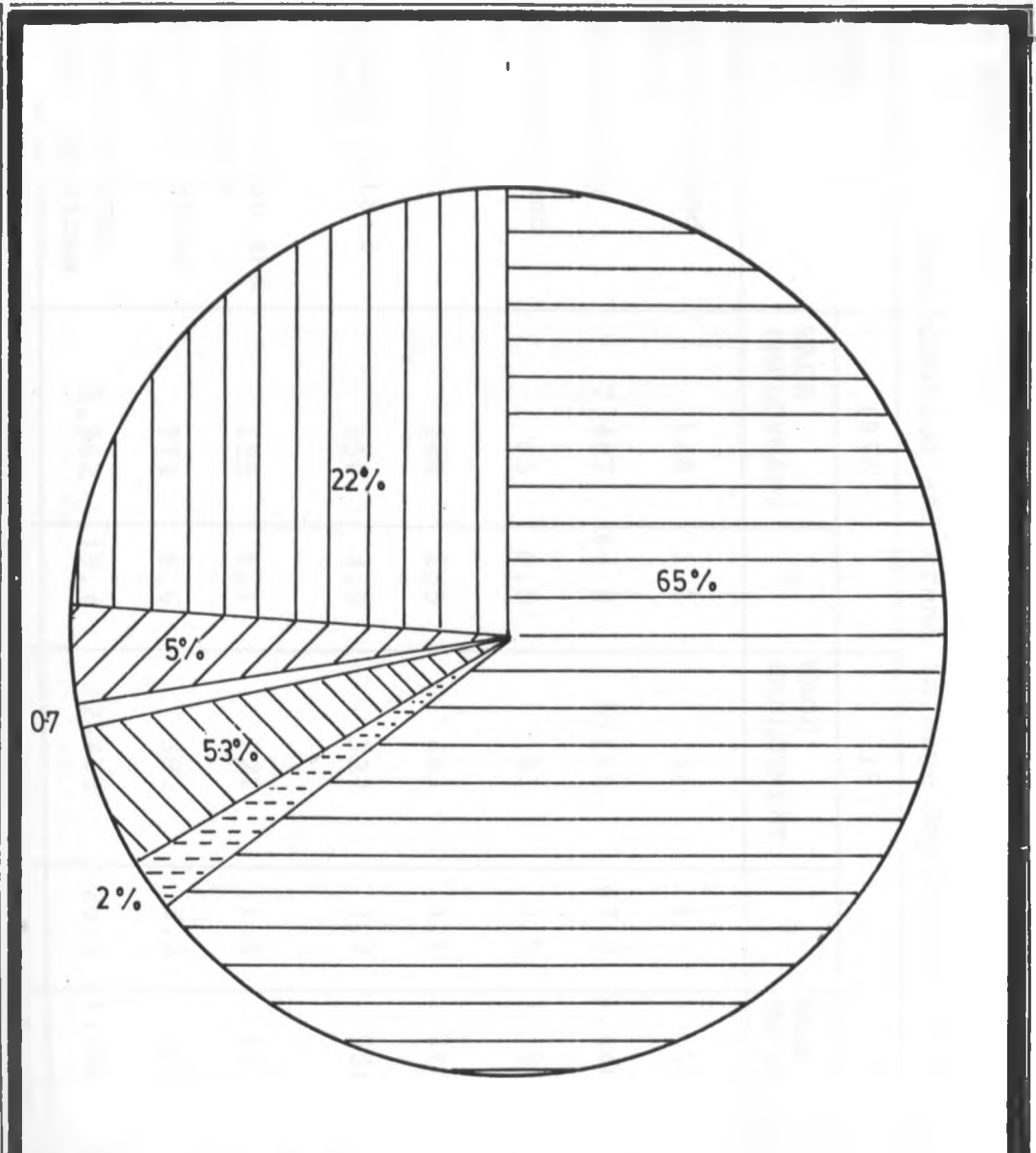
Source: Population Censuses, 1948, 1962, 1969, 1979.

**Projections by the author.

This is due to the fact that the surrounding areas are mostly plantation coffee sisal and pineapple farm.

Employment and Income

The economic base of Thika revolves around its industries. Hence employment generation is predominantly in the manufacturing sector. Agricultural processing industries are the major employers i.e. Tobacco, leather, tanning, sisal processing and food canning. Other major industries are textile, synthetics manufacturing and motor assembly. Table XIII below shows that manufacturing is the dominant employer (see fig. II). Comparatively, this sector contributed 76% of wage employment against Nairobi's 20%¹⁵. Other important sectors are services and trade which contributed 22.8% and 5% of the wage employment respectively.



THIKA : Employment by Sectors.



FIG. II

Ndorongo TG DURP
University of Nairobi 1986

TABLE XIII

Distribution and Trend in Wage Employment in Thika 1976 - 1980

SECTOR	1976		1977		1978		1979		1980	
	WAGE EMPLOYMENT	%	WAGE EMPLOYMENT	%	WAGE EMPLOYMENT	%	WAGE EMPLOYMENT	%	WAGE EMPLOYMENT	%
Agriculture and Forestry	148	1.3	36	0.3	14	0.1	26	0.2	26	0.
Manufacturing	7,487	64.2	8,169	67.9	9,440	76.3	10,199	78.5	9,043	64.
Electricity and water	65	0.5	83	0.7	83	0.7	-	0.0	-	0.
Construction	288	2.5	493	4.1	216	1.7	205	1.6	276	2.
Wholesale Retail and Hotels	504	4.3	327	2.7	551	4.5	507	3.9	703	5.
Transportation and Communication	125	1.1	121	1.0	131	1.1	71	0.5	103	0.
Finance and other services	774	6.6	390	3.2	437	3.5	374	2.9	648	4.
Community Social Personal services	2,262	19.4	2,419	20.1	1,501	12.1	1,605	12.4	3,193	22.
Total	11,653	100.0	12,038	100.0	12,373	100.0	12,989	100.0	13,996	100

Source: Statistical Abstract, 1981.

These are sectors which have shown some growth unlike manufacturing which declined in 1980. This contribution of public service confirms the notion of Thika being a growth rather than a service centre

The informal sector in Thika is less developed than in Nairobi¹⁶ yet Thika has long been a job enclave. The Council's strict control on informal activities was noticed. However, this is a major source of income in the informal housing areas.

Thika is predominantly an industrial town hence unskilled labour at very low wages dominate. Preparing the report for the 1979-83 development plan, the municipal Council observed that 93.5% earned less than 1200/= 4% earned 1200-2700 and 2.5% earned 2700/= and above per month¹⁷. The low incomes indicate the affordability level of services and facilities particularly housing.

Housing:

Housing provision in Thika town is by three agencies. The Public sector, Private sector and informal sector. Public intervention is of crucial importance to how the housing sector develops. Through the 1960s virtually all housing was promoted by Thika Municipal Council (TMC) for rent. By 1969

Council rented housing accommodated 25% of the population in Thika¹⁸. In addition the TMC made available most plots used by private developers.

However in 1969 the Government completely abolished financial allocations for rental housing. Instead it emphasised on site and service schemes as an attempt to mobilise private resources and reach the low income people. Makongeni site and service scheme was the first in 1971, but allocations waited until 1974 and construction in 1977. Thus a period of 6 years had passed with only 250 public rental houses produced for an estimated increase in population of 15,000. Nothing at all had been produced for the low income population¹⁹.

The result was a considerable upswing for the Kiandutu village and other informal housing areas outside the Municipal boundary, settling 50% of the new households. The share of households accommodated in the informal housing areas tripled from 7% in 1969 to 21% in 1977²⁰.

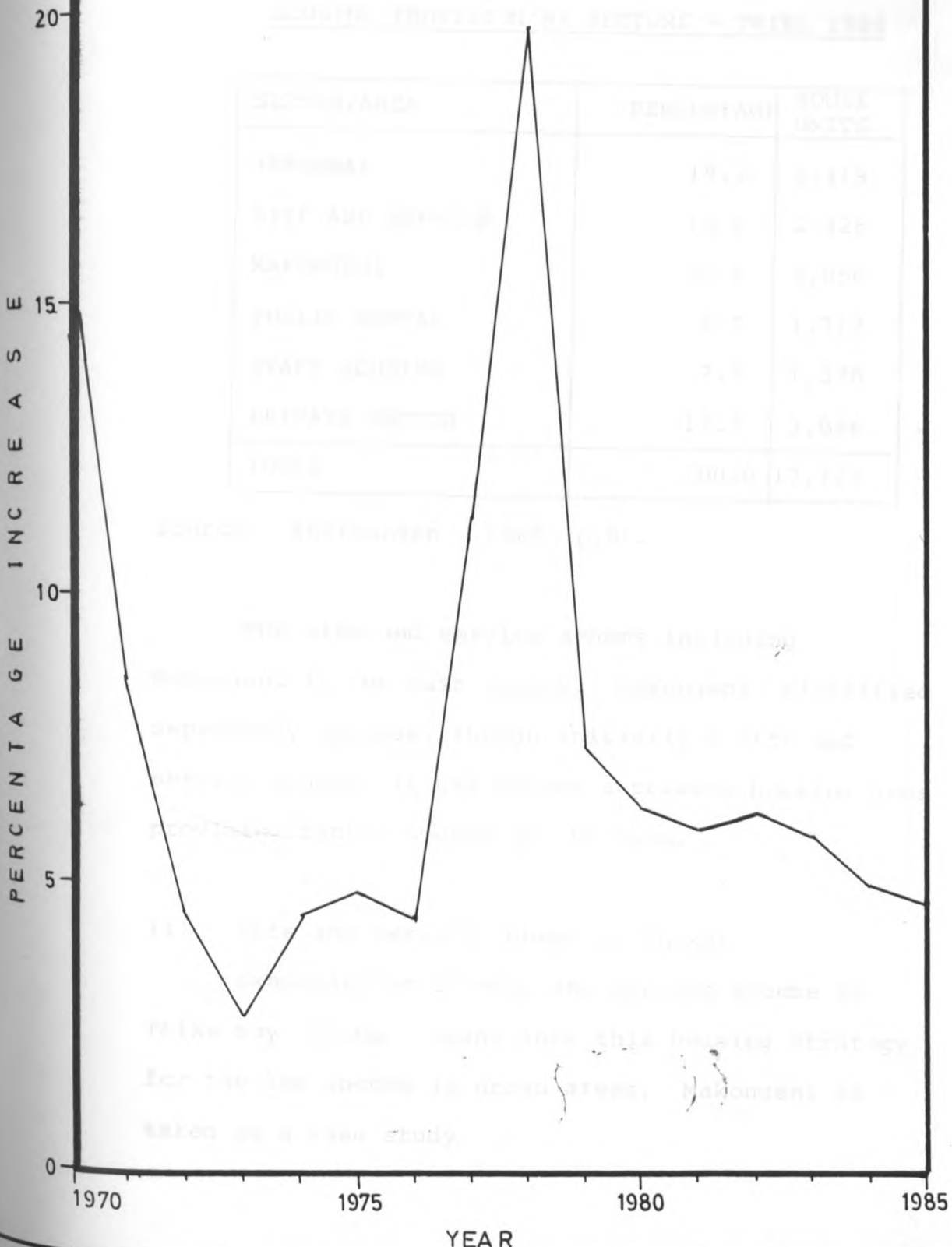
Currently they accommodate about 30% of the total households in Thika. The private sector provides housing both in site and service schemes and also rental houses. The latter is mostly high income. The major housing agencies in Thika and their contribution is shown in Table XIV. Figure III further presents

percentage increase in housing stock

TABLE 1 (1)

ANNUAL PERCENTAGE INCREASE IN HOUSING STOCK - THIRUVALE

YEAR	PERCENTAGE INCREASE	HOUSING UNITS
1969	19.2	2,113
1970	18.3	2,325
1971	10.8	3,020
1972	4.7	1,712
1973	2.4	1,378
1974	4.7	2,088
1975	4.7	2,127



THIK A : percentage increase in housing units. 1969-85

percentage increase in housing stock.

TABLE XIV:

HOUSING PROVISION BY SECTORS - THIKA 1985

SECTOR/AREA	PERCENTAGE	HOUSE UNITS
INFORMAL	19.3	3,419
SITE AND SERVICE	13.1	2,328
MAKONGENI	33.0	5,850
PUBLIC RENTAL	9.7	1,712
STAFF HOUSING	7.7	1,370
PRIVATE SECTOR	17.2	3,046
TOTAL	100.0	17,725

Source: Andreansen 1985 p.61.

The site and service scheme including Makongeni is the main agency. Makongeni, classified separately because, though initially a site and service scheme, it has become a private housing area providing rental houses by the room.

(i) Site and Service Scheme in Thika:

Examinations of site and service scheme in Thika may throw light into this housing strategy for the low income in urban areas. Makongeni is taken as a case study.

Initially the programme aimed to supply 1200 plots for the low income groups. The whole programme during 1972-1979 was conceived on the basis that 93.5% of the housing demand will come from the low income group. It was therefore to house 15,000-24,000 people; thereby diverting potential squatters to a more organised environment.

The programme was meant for low income population only, but fatal to the possibility of low income people developing a house on the plot, the following regulations were to be followed:

- (1) All ttees should pay the total cost of water sewerage before obtaining a building permission (an amount which together with other fees amount to Shs. 12,000/= i.e. A year's salary of an industrial worker.
- (2) Occupancy permit would only be issued upon completion of all the 8 rooms in permanent materials.

The consequence was that 85% of the plots changed hands before the construction started to private developers. The money was spent either on children's education, purchasing land, or starting business. Hence the most possible reason for selling was either inability to finance the construction or the priorities

attached to other things than housing. Hence Makongeni developed predominantly as any other private rental scheme. The standard rent in this and other low income housing scheme is Kshs.200/room per month compared with Kshs. 50-100/=/room per month in the informal housing areas.

The emerging indication is that informal housing areas are crucial for the low income earners in Thika. 66.9% earn less than 600/= /month and hence spending 33% of their income on housing is most unlikely. This coupled with the tendency of Thika's population to maintain very close relationship with their rural areas strengthens the case that informal housing areas will continue to emerge even if just outside the municipal boundary. Indications are already there with subdivisions taking place just beyond **Kiandutu**.

Thika - A summary:

Thika, once a colonial service centre has evolved into an important industrial town. Its rich hinterland and proximity to Nairobi indicates potential for growth. Being the major regional employment centre rural migrants will continue to converge here at a greater rate, thereby increasing the population and demand for services. The nature of economic activities

suggests that, majority of the population will be predominantly low wage earners. Provisions of low cost housing will be the most challenging task to the municipal council. Existing efforts in terms of site and service schemes already indicates the inability of the low income earners to obtain housing and hence informal housing areas will continue to be the only alternative. Kiandutu squatter settlement, remains the major housing area and the magnitude of the accommodated population rules out Council's intentions to earmark it for demolition. Though against town planning practice the settlement provides a test on how the Council will tackle other potential squatter settlements and no strategy short of integrating it to the town will work. Public resources has to be spent to improve the living environment in Kiandutu.

Kiandutu Squatter Settlement (Study area)

In the context of Thika town the study at this stage embarks on an in-depth analysis of the study area referred hence-forth as KIANDUTU. It is the biggest of the three squatter settlements (informal housing areas) in Thika Town in terms of area and population, covering 38.5 Ha and accommodating a population of more than 8,000 people. In terms of location, Kiandutu is 1.5 km. to the south-east of the town centre. It is bordered to the east

by the industrial area; to the north by the main Garissa road; and to the south and west by private coffee and subsistence farms.

Historical Development:

The manner in which Kiandutu has emerged is in itself enough reason for the Municipal Council to device a special approach to the settlement.

Kiandutu, unlike many squatter settlements in urban areas, was not initially a squatter area. It was a part of the Kianjau cooperative society farm bought in 1964 from a white settler. The members felt a need for residential plots and the farm was divided into 2 portions - Residential and agricultural. The area abutting the Municipal boundary was designated for residential use and divided into 100' x 100' plots, which were allocated to the 400 members. A small village thus originated as members started putting up shelter. Thus as at the time of emergence, Kiandutu was a legal settlement²¹.

The period soon after independence experienced unprecedented rural to urban migration in search of better employment opportunities. Thika was an obvious destination due to its emerging industries. Housing became a serious problem for the new migrants. The

proximity of Kiandutu to the work places, had already prompted construction of extra rooms to rent as a source of income.

With development control not applicable (the settlement was outside the Municipal boundary) and increasing housing shortage, more rooms were constructed and with no facilities a slum was already in the making. Government's concern culminated with the acquisition of the settlement in 1971, and the owners compensated in the site and service scheme No.4. While the members did agree by accepting the compensation, there is still disagreements on the size of the plots allocated and hence members have refused to surrender the 38.5Ha. on which Kiandutu stands. However, officially, this is registered Government land.

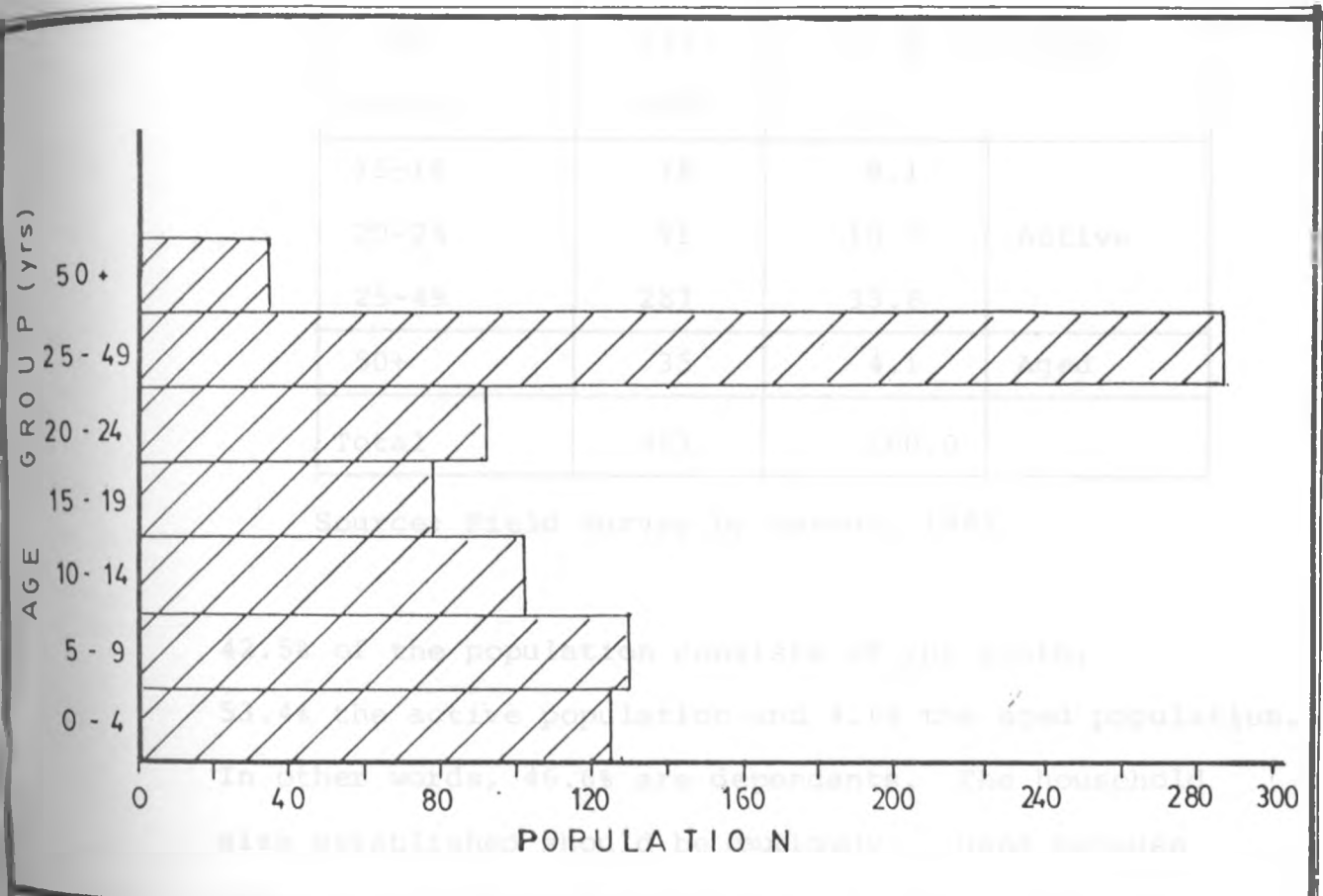
Physical development of Kiandutu occurred between 1969 and 1978 as indicated by available aerial photographs (see plates I and II). This is despite repeated threats of demolition by the Council. More vigilant intervention by the Council in 1978 managed to stop further construction (see plates III and IV). However, the efforts came too late since the initial tendencies to confine structures to the plot boundary was ignored. Rooms are clamped together with little space between them,

and as a result high residential densities are characteristic feature of the settlement with no social and infrastructural facilities. (Plate V).

Population Characteristics and Origin

Existing population records are conflicting. A survey by a task force in 1982 indicated a population of 15,259 people whereas, the Council registered 11,675 people in 1984. A thorough population census had to be carried out. Accordingly Kiandutu accommodates 8,530 people, comprising of 4,680 males and 3,850 females, giving a sex ratio of 83. The registered number of households amounted to 2,080 thereby indicating an average household size of 4.0 persons.

The age structure of this population is further presented in Table XV and further illustrated in figure IV.



K I A N D U T U : population age structure 1985.

fig IV

TABLE XV

AGE STRUCTURE - KIANDUTU - 1985

AGE GROUP	NUMBER	PERCENTAGE	CATEGORY
0-4	125	14.7	Youth
5-9	135	15.8	
10-14	102	12.0	
15-19	78	9.1	Active
20-24	91	10.7	
25-49	287	33.6	
50+	35	4.1	Aged
Total	853	100.0	

Source: Field Survey by Author, 1985.

42.5% of the population consists of the youth, 53.4% the active population and 4.1% the aged population. In other words, 46.6% are dependants. The household size established should be cautiously used because it excluded the household members in the rural areas. A recent survey identified 53%²² of the population to have a household size of 7 including those in the rural areas. This indicates the possible responsibilities of Kiandutu residents.

The survey also undertook to investigate the origins and previous occupations of Kiandutu residents as an indicator of living standards: The responses

are classified by provinces:-

TABLE XVI:

PLACES OF ORIGIN

PROVINCE	NUMBER	PERCENTAGE
Central	110	52.9
Eastern	37	17.8
Western	24	11.5
Nyanza	9	4.3
N.Eastern	4	1.9
Nairobi	2	1.0
Rift Valley	2	1.0
Coast	1	0.5
Born in Kiandutu	15	7.2
No response	4	1.9
Total	208	100.0

Source: Field Survey by Author, 1985.

The survey indicated that most of Kiandutu residents come from surrounding areas, with the bordering Central and Eastern provinces accounting for over 70% of the residents. Even then, Kiambu, Muranga and Machakos (the neighbouring districts) contributes 90% of the total from central province. Ethnic composition therefore indicated a predominance of Kikuyus and Kambas. Western Province contributed about 10% of the people. The fact that most of the people are from nearby strengthens the proposition

of strong relationships with the rural areas.

Further efforts to establish the occupation at origin indicated that most of the migrants were either unemployed or under-employed. Hence the purpose of migration was sort. The responses are presented in table XVII. The responses are categorised as economic and social purposes. Economic reasons are those aimed at better incomes whereas social reasons varies from education to misunderstanding with parents.

TABLE XVII:

PURPOSE OF MIGRATION - 1985

PURPOSE	NUMBER	%
Economic	157	75.5
Social	32	15.4
Not applicable (Born in Kiandutu)	15	7.2
No response	4	1.9

Source: Field survey by Author, 1985.

Thus, most of those who migrate to Thika come for better incomes. Under economic purposes, majority (87%) came in search of work. The dominant social purpose was either to join parents or came with parents. Education purposes wereminimal. Survey on education levels indicated that most of the residents are

school dropouts or with primary level education. This concurs with other survey which indicates that only 24%²³ of the residents have 8 years education.

Economic Activities:

Any assessment of Economic activities in squatter settlements should concentrate on informal activities. However, Kiandutu accommodates the core of the industrial labour force. Therefore the employment characteristics indicated that 40% of the residents are employed in the industries, and only 20% in services. Therefore there was a very high level of unemployment to the level of 40% who did not have any formal and regular employment.

Hence, informal activities have grown in Kiandutu as sources of income. Small vegetable stalls, furniture workshops, butcheries and bars and cultivation on unutilized public land are the main activities. On the average 1 person for every 6 household is engaged in the informal economy. The list of informal activities is given below:

TABLE XVIII

LIST OF INFORMAL ACTIVITIES - KIANDUTU 1985

ACTIVITY	NUMBER	PERCENTAGE
Shopkeeping	46	24.5
Grocery	40	21.6
Bar and Hotel	31	16.8
Butchery	29	15.5
Carpentry	12	6.4
Tailoring	11	5.8
Charcoal selling	7	3.7
Shoe making	4	2.1
Blacksmith	4	2.1
Cycle repair	2	1.0
Total	187	100.0

Source: Field Survey by Author 1985.

This indicates the dominance of catering activities - shop-keeping, hotels and grocery.

Income

Establishing the levels of income in squatter settlements proved to be the most difficult task of this study. With the exception of those formally employed, income figures given contradicted expenses given. As such a consumer index was impossible to prepare. However, the survey requested for an indication of the major expenditure

of the residents as a guide to estimate incomes. In the final analysis, the findings concurred with previous conclusions by others²⁴ that Kiandutu is characterised by very low incomes.

TABLE XIX:

INCOMES DISTRIBUTION IN KIANDUTU

1985

INCOME GROUP	NUMBER	PERCENTAGE
0 - 199	3	1.4
200 - 399	36	17.3
400 - 599	54	26.1
600 - 799	35	16.8
800 - 999	35	16.8
1,000 +	40	19.2
No Response	5	2.4
Total	208	100.0

Source: Field Survey by author 1985.

The survey indicated that 45% of the residents earns less than Kshs. 600/= per month whereas 80% earn less than Kshs. 1,000 per-month. According to the survey, the major expenses included food, transfer payments, school fees and housing in order of importance. With a household size of 4 - 7, then the burden to most Kiandutu residents is great considering most have 2 households. In an attempt to investigate on land

availability, 66% indicated lack of land in Thika or the rural areas and hence relies on the available income. Even where available, the rural land is inadequate alone to maintain the life of the family without wage supplement, and the wage alone is insufficient to keep up the life of the family in town. Hence the tendency to leave the family in the rural areas.

Economic life in Kiandutu indicates high unemployment, low incomes and consequently low standard of living.

Infrastructural Social Facilities:

This includes water, sanitation, roads, housing as infrastructural facilities and education, health and recreation as social facilities.

With the exception of water, all the other facilities are either non-existent or in deplorable conditions. Water to Kiandutu was provided in early 1985 after a long reliance on nearby swamps for water. The impetus came after an outbreak of serious epidemics in 1984. The water is served through six water kiosks operated by individuals.

Sanitation in Kiandutu is in form of shallow pit latrines with very poor structure. (see plate vi) The bed rock is very close to the surface over most of the settlement and hence deep pits are impossible to dig. Hence most of the latrines are full and some overflowing. Ideally each and every plot is supposed to have a pit latrine but many do not have. Roads in Kiandutu are in form of narrow earth tracks leading from the nearby Garissa road to the settlement meandering through the settlement. During rainy season, they are not passable.

Social facilities in Kiandutu exist in the form of a nursery school which had an enrolment of 30 in 1985. There are no health or recreational facilities. Health services are obtained from Thika Hospital characterised by congestion²⁵. With a population of 8,000 Kiandutu is badly in need of health services.

Housing Characteristics:

Housing in Kiandutu requires a more in-depth analysis. Like many other slum and squatter settlements, housing in Kiandutu is in deplorable conditions not so much in terms of building materials but rather occupancy rates. The houses had a definite grid-iron pattern initially but with increasing

population and the Government acquisition of the land, haphazard house construction has resulted into very high congestion.

The predominant building materials are iron sheets for roofs, mud and wattle for walls and earthen floors. Due to negligence in maintainance as a result of the acquisition most of the houses are structurally very weak and almost falling (Plate VI).

Housing in Kiandutu is single room units with an occupancy rates of 3 persons per room. The average number of rooms registered was 11, but very high occupancy rates of 72 rooms per plot was registered, (Plate V), accommodating about 300 people. Rents in Kiandutu are relatively low and on average rooms rents range between 50 - 80/= per month. An attempt to establish the feelings of the residents indicated that housing was to them not a major priority, though they expressed dissatisfaction with present housing conditions. However, asked to indicate the amount they are willing to pay for better housing, it ranged between Kshs. 150 - 180/=, a figure below the lowest rents charged in the site and service schemes.

The low rents in Kiandutu, and the provision of water to the settlements in 1985 has resulted into a wave towards Kiandutu. Today it is more difficult to obtain a room in Kiandutu than any other place in Thika town. Andreasen, J. observed that only 5% of the residents moved to site and service schemes whereas 90% obtained accommodation in another room in Kiandutu. The rest moved to other informal housing areas. Thus unless the formal low income housing areas charges lower rents, Kiandutu residents will continue to stay or move to new informal housing areas.

Kiandutu - A Summary:

Emergence of Kiandutu was a consequence of housing shortage in Thika. Then it was a legal settlement but has been declared a squatter settlement with boundary extensions. In both circumstances, it plays a crucial role in the activities of Thika town. It accommodates the core of the industrial workforce and the urban poor of Thika. Efforts to discourage people from settling in Kiandutu has only resulted in 5% of Kiandutu residents moving to these areas. More has flocked to Kiandutu, particularly after water provision in 1985.

Kiandutu settlement consists of a community with more pressing priorities than housing. It is a community with very close bond with their rural areas of origin having families to support. Their stay in Kiandutu is in search of extra income to supplement farm incomes which on its own cannot sustain the family. They will therefore go to any extent to avoid any unnecessary expenditures in Thika.

Kiandutu enables minimum expenditures in housing. Yet from the planning point of view the living environment is intolerable and intervention by the authorities is inevitable. The form of intervention is the issue. Kenya's past approaches to upgrading has not been very successful. In Kiandutu's case any improvement programme should be addressed to the following questions: Shall the houses be cleared? Shall new site and service scheme replace the settlement? Shall house owners be compensated though they do not own the land? Shall all or some inhabitants be considered for rehousing or plot allocation? Where shall people live if not considered? Finally, how should the improvement be managed with 8,000 people living there?

The recommendations in the next chapter aims at attempting to answer these questions.

Footnotes

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CHAPTER FOUR

SQUATTER UPGRADING

The need to adopt an upgrading approach to slums and squatter settlements in Kenya, stems from the nature and causes of emergence of slums on the one hand and their characteristics on the other.

The history of urbanisation from the colonial era indicates a bias on the part of the administration to discourage local people from settling in urban areas. Yet the role they played in providing labour required their presence in urban areas. With no alternative, the local people had to squat outside the town boundaries thereby avoiding the authorities and at the same time, being near their places of work. With boundary extensions, these areas get incorporated within the town, and are expected to henceforth conform with town regulations. To many squatter residents therefore this after thought is conceived as an unnecessary interference.

Added to this, urbanisation, not only in Kenya, but in most developing countries occurs as a result of deteriorating rural agricultural economies. People, skilled and unskilled, move to urban areas in search of opportunities to improve their incomes.

our urban areas are not industrialized as was the case in developed countries and hence employment opportunities are limited. It becomes a desperate situation. The new arrivals, escaping rural poverty discovers non-existence of employment opportunities, yet they have to be expectant and have to be around. With or without relatives, the squatter settlement, becomes the only affordable areas. Once here, it becomes easy to adjust and join those in search of employment. In most cases, -- even after obtaining employment and a regular income, progressive mobility to better housing areas is not obvious. Responsibilities in the rural areas occupies first priorities.

Characteristically therefore, slums and squatter settlements in urban areas accomodates the urban unemployed and those earning the lowest incomes. However, they are not areas of despair and any available chance will be utilized to improve their incomes. Socially squatters are a unique urban community with a common purpose, that of self improvement both economically and socially. While household heads might accept their current living standards, all expressed a wish for their offsprings never to live in such conditions. Hence education for their children becomes a major

expenditure, whether in the rural areas or urban areas, as an open avenue to better living.

It is such a community that the local authorities have approached and defined their problem as basically housing. Efforts have been made to rehouse them in site and service schemes with little success. Those who manage to retain these houses do so as sources of income while they continue to reside in the squatter settlements.

Planning Implications

From the foregoing analysis, certain planning implications can be identified.

Firstly, it is a futile exercise to try and curb urbanisation. It can best be managed and directed through decentralization of activities. Currently, the economic bases of most of the urban areas is very weak. They are service centres. Employment opportunities available are mostly for skilled labour. Most of the migrants are unskilled therefore with limited employment opportunities. Thus, there will always be potential squatters in urban areas. The issue here is for planning to intensify efforts aimed at strengthening and diversifying economic bases of urban centres.

Secondly the problem of slums and squatter settlements in urban areas is more than housing problem. It is also a land, and economic problem and therefore solutions should incorporate these aspects.

Thirdly and emerging from above; housing in urban areas should be seen in its totality. i.e. as a physical social and economic commodity. By doing so, the issue of standards would be made realistic to conform with the capability of those requiring housing in urban areas - the urban poor and low income earners.

Recommendations

The emerging recommendations are at two levels in recognition of the fact that the problem of slums and squatter settlements in urban areas requires more comprehensive policy solutions. At the policy level the recommendations are addressed to policy failures or shortcomings identified in an earlier chapter. At the local level, specific recommendations are proposed for the improvement of Kiandutu squatter settlement, in an attempt to demonstrate the approach being advocated by this study.

Policy Approach

The Kenya Government maintains a human settlement policy based on the growth and service centre strategy. Growth centres are conceived to contain economic growth potentials and hence are priority centres for the location of economic activities. They therefore have the highest employment potential. Service centres on the other hand are supposed to offer services to their rural hinterlands. The major objective of the government was to accelerate rural development on the one hand and curb migration to Nairobi and Mombasa. Hence decentralisation of activities is a policy strategy to achieve this.

However, despite maintaining a decentralization policy, there exists a warning against direct measures due to the fear that

"Mandatory and artificial restrictions on private commercial and industrial development in Nairobi and Mombasa would discourage the economic development of the country as a whole."¹

This fear has made decentralisation a matter of individual freewill, and hence the economic function of the growth centres, which was to rely on government intervention in location of activities, has not yet taken off. Left on their own, location

of activities will be directed by economies of scale and hence the capacity of the identified growth centres to absorb migrants will never be improved.

It is only through policy that the economic base of these centres can be improved, thereby increasing individual incomes and more important improve the financial capacity of local authorities through rates etc. By doing so these authorities will be in a better position to offer services and facilities to a larger population. Further, the service function employs a sizeable urban population, and hence there is a need to combine the growth and service function in the same centre. It is only by making such centre really strong that it can deter the strong attraction to Mombasa and Nairobi.

Urban land has become a scarce commodity. Despite the shortage and in agreement with Yahya, (1983) land administration in urban areas has been very lax. Its documentation is mostly outdated, and few authorities maintains an accurate estimate of land requirements.

As a result, boundary extension has become a common phenomenon in urban politics. The extensions are mostly unplanned and hence incorporates rural

settlements within urban areas. The local authorities do not have the resources to compensate the owners or service the land, thereby allowing rural environments to coexist with urban standards. Many squatter settlements in Nairobi (Mathare) Mombasa and Kisumu have emerged in this manner.

It is recommended that there be established an urban land utilisation policy addressed at existing idle land in urban areas. It should also formulate a criteria on the basis of which boundary extensions should be undertaken. Land planning and effective control are the most handy tools to facilitate land administration and management in urban areas.

The housing policy in Kenya has been based on very ambitious standards. It defines a standard house in urban areas in terms of permanency of building materials. Yet, over 40% of urban households, are accomodated by 'substandard building materials and lives at very high occupancy rates. This has been due to the underlying concept of housing as a physical product. Social and economic function of housing has been ignored. John Turner's (1972) conception of housing as a verb has been ignored. The current housing responsibilities facing Kenya's urban areas indicates that little can be achieved

if housing is judged by the existing standards.

It is this misconception of housing which promotes site and service schemes. The result has been to stipulate on what type of housing is to be erected and the exact size of the house. The consequence has been the disposal of the allocated plots to those who can afford to conform with the conditions. The proceeds are used for other pressing problems. The emerging observation is therefore that, the amount of resources invested in our housing research institutions are wasted. Existing squatter upgrading programmes do not change the environment. Mathare Valley² in Nairobi is the most researched squatter settlements. Dandora site and service scheme, meant for Mathare residents experienced an influx of middle income earners. Few of the allottees settled here, but many disposed the plots, retained them as sources of income.³

Thus if these programmes of low income housing are to succeed, there is a need for more owner participation in determining the type of housing required and the pace at which construction will be undertaken. Further there is an urgent need for demonstration of research findings in building materials are a campaign to review standards. The

building material used is the major determinant of the housing costs. Hence with free land available in site and service schemes construction costs can be lowered effectively through appropriate building materials.

The fact that squatters conceive site and service schemes as chances to augment their incomes is an indication that the economic component of improvement programmes has been very weak. A further recommendation is therefore to approach improvement programmes from an economic front in form of intensification and organisation of informal activities in squatter settlements. This will make them employment areas besides residential, thereby assisting squatters to fulfill their purpose of being in urban areas.

Kiandutu Improvement Programme

The study has established the role of Kiandutu in the overall development of Thika town. It has further established the futility and incapacity of the Municipal Council to undertake an elaborate resettlement and redevelopment of Kiandutu. The study therefore recommends a gradual improvement aimed at finally converting Kiandutu into a formal low cost housing area. To be comprehensive the improvement

programme recommended contains physical, economic and social components.

Kiandutu at present accomodates 8530 people. Assuming a growth rate commensurate with that of the town ie. 8.0%; the settlement will have a population of 25,377 by the year 2000 A.D. This assumption is derived from observed characteristics of Thika population, dominated by low wage earners. Hence there will be a tendency to seek housing in the cheapest areas. With improvement, Kiandutu will be a priority area for not only the newly arriving but also the existing low wage earners in the town.

Recommendations are made for the following aspects:

Economic Activities

Kiandutu population is characterised by very low incomes. Over 80% earns less than Kshs. 1000/- per month. In addition 40% of the residents are unemployed. As alternative sources of income, informal activities have flourished in the settlement. On average, one in every six households derives its livelihood from the informal sector.⁴ Despite this fact, these activities are undertaken haphazardly throughout the settlement on available spaces.

The study therefore recommends intensification and organisation of these activities by providing a centralised 'work place' within the settlement. This will include kiosks, /stalls and workshops. The main activities to be considered are shopkeeping grocery, carpentry etc. The stalls should be strictly allocated to 'established' Kiandutu residents. To avoid resale of the stalls, the programme should avoid unnecessary stringent conditions particularly financial. Many such programmes have failed due to high rental or repayment charges. The amount of land to be reserved for this programme is 1.5 ha. While adjustments should be made where necessary, the standards stipulates one shop for every 50 households. Tentatively and as a guide Kiandutu will require 42 shops (kiosks) excluding workshops etc. The location is indicated on the layout plan.

Roads:

As indicated elsewhere in this study, circulation in Kiandutu is in form of earthen tracks meandering through the settlement. Most of them are not motorable. Further there is no motorable road connection between the settlement and the major workplaces (town centre and industrial area). Yet Kiandutu accomodates most of the workforce.

It is recommended therefore to provide roads in Kiandutu designed to be incorporated in the long term plan of Kiandutu as a low income housing area. Elaborate circulation network is not a priority. Hence accessibility should be maximised to proposed public land uses, thereby reducing costs. To integrate the settlement to the major work places, two roads are proposed, thereby making it possible for the operation of public transport to and from the settlement. The proposed network is portrayed in the plan.

Sanitation:

Sanitation in Kiandutu is in deplorable conditions. The existing pit latrines are full and structurally insecure. The shallow pits is due to presence of the bedrock near surface and hence deep pits are impossible. Hence it is recommended that the council assist in digging pit latrines at strategic locations. Further arrangements should be made to empty the pits once full. Elaborate water borne sanitation is not a priority as at now.

Water:

Currently Kiandutu is supplied water through six water kiosks. The designed capacity of supply was 15,000 people, almost double the current Kiandutu population. With the exception of providing 3

additional kiosks to reduce walking distance, water is not a priority at present. However if the assumptions made on the population holds and the projected population is realised, the capacity of supply will be reached in 7 years time. Therefore additional supply should be installed.

Education Facilities:

Kiandutu, with a population of 8530 people is provided by only one nursery school with an enrollment of 30 pupils in 1985. Primary education is obtained from the town centre, 1.5 km. away. However, there is a primary school currently under construction. According to the stipulated standards,⁵ there should be a nursery school for every 2,500 people, a primary school for every 5,000 people and a secondary school for every 20,000 people. Therefore, Kiandutu requires 3 nursery schools immediately. In addition, the primary school should be completed with immediate effect. It will also require another primary school in 2 years time.

In addition, Kiandutu residents are characterised by very low education levels and therefore restricted in obtaining formal employment. To enable them to engage in self employment, vocational education should be encouraged. In keeping with the current government

programme of village polytechnics, this study proposes the establishment of one such institution in Kiandutu. The amount of land reserved for these facilities is 6.0 ha. and located as per the layout plan.

Health Facilities:

Health facilities of any kind are not available in Kiandutu. Residents rely on Thika district hospital. Considering that there is no public transport to town, it becomes difficult for patients to reach the hospital. The unreliable Municipal Council transport for patients is insufficient. According to stipulated standards, there should be a dispensary for every 5,000 people, and a health centre for every 20,000 with a maternity wing.

A dispensary is therefore recommended for Kiandutu requiring 0.5 ha. as per the layout plan.

Recreational Facilities:

Recreational facilities are not available for Kiandutu residents. The youth utilize the open spaces for recreation. Social organisations undertake their functions in the open. The study recommends provision of playgrounds and a community centre, the latter to be combined with the polytechnic, and a

nursery school. The playgrounds should be so located as to enable utilisation by the schools and the community of Kiandutu. Recreational facilities can play a major role in curbing negative social activities particularly in slum and squatter settlement. These should be located as per the plan.

Plot Demarcation:

With services provided, the next task should be demarcation of plots on the basis of a comprehensive plan incorporating the provided facilities. The objective here should be to settle all the established households in Kiandutu. Based on the 1985 figure, 2100 plots will be required. The size of the plot is 156 sq. m.

The major issue here is allocation of the plots. The study proposes a thorough registration of all Kiandutu households in advance on the basis of which the allocation should be done. Measures should be taken to ensure that non-Kiandutu households are not registered for plot allocation.

House Improvement:

In the final analysis, the improvement programme is geared towards an acceptable living environment. With the problem of land tenure in Kiandutu solved,

house improvement should be encouraged. The pace and the type of improvement to be undertaken should be left to the residents to decide. It is the contention of this study that, once the land ownership is established, there will be a willingness from the residents to improve their own housing.

The role of the participatory agencies in house improvement should be limited to demonstrating possible improvement measures. Of priority in this direction should be the use of low cost housing technology and locally available building materials. Efforts should be confined to demonstration projects within the settlement. The most effective method of demonstration is to use the same technology and building materials in constructing the proposed public utilities and facilities. It will be a futile exercise to publicise a particular technology or material without applying it.

Housing improvement therefore becomes a future programme after economic aspects and services have been considered.

Implementation Procedure and Implementing Agencies

The success in the implementation of this programme will depend on the cooperation between the local people, Thika Municipal Council and other identified agencies. The role of the Municipal Council is

coordination, being the main agency charged with the development of the town. However in the provision of services and facilities, it should be the main participant particularly in the provision of roads and pitlatrines.

In housing improvement, the council is a supervisory authority. This is a task which should be left to the housing research institutions. The Housing Research and Development Unit of the University of Nairobi should play a leading role in demonstrating low cost housing technology. Other voluntary organisations should be involved for example Action Aid etc.

The local people on their part are the most determinant factor for the success of the programme. Most projects might involve demolition of some existing structures for adequate space particularly roads. Furthermore, the mode of financing the social services will rely heavily on the self-help spirit for the finance and labour. It is expected therefore that labour costs in these programmes should be minimal and only for technical aspects beyond the local people's ability. Finally, operation and maintenance of projects are determinant on the performance. Therefore the study assigns the local people overall responsibility in the maintenance of

toilets, schools, and recreational facilities. Technical services should be provided by the Municipal Council.

Priorities:

With the exception of water, all the proposed programmes are required immediately. This can only be done by sharing of responsibilities. While the Municipal Council is involved in provision of infrastructural facilities, the local people should organise to undertake the construction of social facilities ie. dispensary, polytechnic and nursery schools.

With provision of roads, definite neighbourhoods will be established. These should be subdivided into plots and allocated. Housing improvement should then be gradually encouraged.

Costing and Financing:

The cost of proposed programmes is expected to be minimal. Deliberate efforts have been made to avoid comprehensive circulations system. Maximum cost reduction is however expected from the use of low cost housing technology in the provision of services.

Financing of this improvement programme will involve the local authority, local people and participatory agencies. Thika town has been included in the third urban housing project.⁶ Kiandutu has been earmarked for improvement and therefore these funds should be used for this programme. supplementary funds should be provided by the central government particularly for demonstration programmes.

Kiandutu Layout Plan:

In preparing the plan the neighbourhood concept has been adopted with adjustments . Therefore the neighbourhood size is 3000 people instead of 5000 people.

The site analysis indicates that Kiandutu settlement is on a fairly flat terrain. The major limitation will be posed by the bedrock which in some places is very near the surface. It covers an area of 38.5 ha.

When making proposals, the plan has recognized the need for minimum disruption of the existing situation. Therefore proposed neighbourhoods have been conformed with established patterns. The work place has been located in the identified focus of the settlement in terms of existing activities. In siting the nursery schools efforts have been made

to keep minimum distance from homes. Recreational facilities have been located in close proximity with educational facilities to facilitate usage by the community and the schools.

Residential density assumed amount to 300 persons per hectare. The proposals are presented using the conventional landuse colours as per Map IV and V.



KIANDUTU SQUATTER SETTLEMENT: Existing Situation.

- study area
- water supply
- - - - - foot paths
- housing
- water kiosks
- ▨ proposed pit latrines

Map 3

N

50 0 50 100 150

METRES

Naerongo T.G
DURP 1926



KIANDUTU : Proposed Layout Plan.

Map no
4

Legend. EXISTING

- water supply
- footpaths
- housing units
-

PROPOSED

- residential
- industrial
- educational
- recreational
- public purpose
- commercial
- public utility
- transportation



1:2000



PREPARED BY:
Ndorongo TG, D U R P
University of Nairobi June 1986



KIANDUTU SQUATTER SETTLEMENT: Existing Situation.

- — study area
- water supply
- fact paths
- ▣ housing
- ▣ water kiosks
- ▣ proposed pitlatrines

Map 3



Naorongo TG
OURP 1926

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

Emergence of slums and squatter settlements in urban areas has become a characteristic feature of urban areas in the developing countries. These areas play a major role in the overall activities of the urban areas. Their major function is in accomodating the low income earners, the urban poor and the unemployed. Besides they are reception areas for the rural to urban migrants incapable of obtaining housing in formal areas. The magnitude of these settlement and the living conditions has made them the most serious problem facing the urban areas today.

Initially, these settlements were considered undesirables in urban areas and efforts were made to clear them the moment signs of emergence were noticed. However with inadequate resources and the role squatter settlements play in the urban areas, local authorities have discouraged demolition and adopted an improvement approach aimed at incorporating and integrating these settlements into the urban system. These efforts ^{have} has not been very successful in improving the living conditions and incorporating the settlements to the urban system.

This study on squatter upgrading in urban areas was undertaken in recognition of lack of comprehensive approach to the problem of slums and squatter settlements. It therefore set out to examine the salient characteristics of these settlements and examine existing approaches to this problem, thereby identifying their shortcomings. With this knowledge, efforts have been made to suggest a comprehensive approach to the problem. The study adopted a case study approach and examined Kiandutu squatter settlement in Thika Town through documentary research, formal and informal interviews.

The most important causal factors identified are; rural to urban migration composed of those in search of employment, population growth; urban unemployment and acute shortage of housing in urban areas.

It has also been found out that, squatter settlements are characterised by urban poverty in terms of very low incomes, unemployment and very poor living environment devoid of basic services and facilities. Socially the squatter community has been identified as a unique urban community with a culture. Squatters maintain a negative attitude

not only towards the authorities but also towards the affluent urban community. Further, the squatters maintain very strong relations with their rural areas of origin and identify themselves more with these areas than the urban areas.

In assessing the upgrading approaches, the study has come to identify the somewhat misconceived prioritisation of the squatters' needs by the authorities. Hence, their problem has been defined as basically housing and methods devised to solve it through site and service schemes etc. An assessment of these schemes in Thika and Nairobi has indicated that there is more to the problem than housing only. The allocated plots are either sold and the money used in educating children or invested in income generating activities. Those retained become sources of income and not for owner occupation.

With this realisation therefore, the study has approached the squatter problem by recommending more comprehensive measures to integrate them into the urban systems on the one hand and encourage them to improve their own living environments on the other. In doing so the study accepts the capability of the squatters to draw their own priorities and act on them.

This view has been strengthened by the observation that squatters have heavy responsibilities in their areas of origin. Hence their being in town is in search of better opportunities to assist in fulfilling them.

This does not imply that squatters are not progressive. There were strong indications that chances for self improvement would be utilized to the maximum, hence the high prioritisation of children education whether in the rural or urban areas.

These findings confirm the hypothesis of the study that housing though important is not a major priority in squatter settlements. Therefore any upgrading approach with a housing bias is bound to be inadequate, thereby indicating a need to adopt a more comprehensive approach to squatter upgrading by incorporating economic social and housing components.

In the recommendations therefore, all these issues have been incorporated. The study has approached the problem at policy and local levels. Policy recommendations have been confined to the human settlements, urban land and housing policies. Economic bases of our urban areas should be intensified

to increase their employment capacity. Instruments to intensify urban land management and administration must be made effective, and the housing policy should enable housing affordability by all classes of the urban community.

Recommendations pertaining to Kiandutu settlement have recognized the need to allow squatters to define their priorities. Hence they are confined to measures identified as necessary to encourage squatters in self improvement of their own welfare and the living environment. They have been assigned the key role in improvement programmes with the local authorities playing an advisory role where possible. Chart I summarises the proposed improvement programme for Kiandutu.

Further Research

The study has established the inevitability of emergence of squatter settlements in urban areas. It has further established the dilemma facing the local authorities in dealing with squatter settlements. ie. Not being able to provide adequate services and facilities to all urbanites on the one hand, and having to improve living conditions in areas which emerge as a failure to provide services and facilities.

This indicates the need to incorporate squatting in urban planning. While a difficult task yet it has to be done because whatever happens in the current rural development initiatives, rural to urban migration will occur. This study therefore recommends further research on ways and means of dealing with squatter settlements at an early stage of their emergence.

CHART I.

ASPECT/SECTOR	EXISTING	PROPOSED	AGENCIES	COMMENTS
ECONOMY	Informal Activities performed in kiosks and open air workshops.	Provide a central work place consisting of 42 shops grocery stalls and workshops.	Municipal Council of Thika.	
INFRASTRUCTURE :- ROADS.	Earth Tracks	Provide a comprehensive circulation network to maximise accessibility to public land uses within the settlement. Connect the settlement to the town centre and the industrial area.	Municipal Council of Thika Ministry of Transport and Communication. Local people.	Avoid expensive surfacing
SANITATION	Shallow pit latrines.	Provide improved pit latrines and extend emptying services once filled	Municipal Council of Thika Local people	
SOCIAL FACILITIES EDUCATION	1 nursery school 1 primary school under construction	Provide 3 nursery schools Provide 1 village polytechnic.	Municipal Council of Thika Ministry of Education Local people.	

CHART I CONTD.

ASPECT/SECTOR	EXISTING	PROPOSED	AGENCIES	COMMENTS
HEALTH	None	Provide 2 dispensaries	Municipal Council of Thika Ministry of Health.	
RECREATION	None	Provide 1 community centre Provide 1 play ground Provide necessary facilities.	Municipal Council of Thika Ministry of Culture and Social Services Local people. Voluntary organisations.	
PLOT DEMARCATION AND HOUSING	Mud, wattle and Iron sheet houses	Demarcate 2080 plots and Allocate. Demonstrate low cost housing technology. Encourage house improvement.	Housing Research and Development Unit. Municipal Council of Thika Ministry of Works Housing and Physical Planning. Voluntary organisations.	

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APPENDIX I

EXISTING INSTITUTIONS DEALING WITH TRAINING ACTIVITIES RELATED
TO HUMAN SETTLEMENTS DEVELOPMENT IN KENYA

NAME OF INSTITUTION	SETTLEMENT POLICIES & STRATEGIES	SETTLEMENT PLANNING	SHELTER & COMMUNITY FACILITIES	INDIGENOUS CONSTRUCTION SECTOR	LOW COST INFRASTRUCTURE	LAND	FINANCE	INSTITUTION MANAGEMENT
<u>UNIVERSITY OF NAIROBI</u>								
-HOUSINGRESEARCH & DEVELOP.UNIT	X	X	X	X	X	X	X	X
-DEPT.OF URBAN & REG.PLANNING	X	X	X	X	X	X	X	X
-DEPARTMENT OF ARCHITECTURE			X					
-DEPT. OF CIVIL ENGINEERING					X	X	X	X
-DEPARTMENT OF SOCIOLOGY	X		X	X				
-DEPT. OF DEVELOP. STUDIES	X							
-SCHOOL OF:ENVIRONMENTAL STUDIES	X	X				X		X
-FACULTY OF LAW		X				X		X
<u>KENYATTA UNIVERSITY COLLEGE</u>								
-APPROPRIATE TECHNOLOGY			X	X	X			
<u>DIRECTORATE OF PERSONNEL MANAGEMENT</u>								
-KENYA INST.OF ADMINISTRATION(KIA)	X	X		X	X	X	X	X
-NATIONAL COUNCIL FOR SCIENCE & TECH.	X	X						
-COMMISSIONER OF LANDS						X		
<u>MIN. OF LANDS, SETTLEMENTS & PHYSICAL PLANNING</u>								
DEPT. OF PHYSICAL PLANNING	X	X	X	X	X	X	X	X
<u>MINISTRY OF LOCAL GOVERNMENT</u>								
-LOCAL AUTHORITIES	X	X	X	X	X	X	X	X
<u>MINISTRY OF HIGHER EDUCATION</u>								
-POLYTECHNICS(NAIROBI, MOMBASA)			X	X	X			
-KENYA INSTITUTE OF EDUCATION								X
-INSTITUTE OF SCIENCE & TECHNOLOGY			X	X	X			
<u>MINISTRY OF WORKS AND HOUSING</u>								
-DEPARTMENT OF HOUSING	X	X	X	X	X	X	X	X
-NATIONAL HOUSING CORPORATION		X	X	X	X	X	X	X
-HOUSING FINANCE CO. OF KENYA			X			X	X	X
-DEPARTMENT OF BUILDING			X	X	X			
-NATIONAL CONSTRUCTION CORP.			X	X	X			
-KENYA BUILDING CENTRE			X	X	X			
<u>MIN.OF CULTURE &SOCIAL SERVICES</u>								
-VILLAGE POLYTECHNICS			X	X	X			
-KAREN VILLAGE TECHNICAL UNIT			X	X				
<u>MIN.OF ENVIRON. & NATURAL RESOURCES</u>								
-NATIONAL ENVIRONMENT SECRETARIAT	X	X	X	X	X	X	X	X
-(INC.KENYA MISSIONS TO HABITAT & UNEP)								
<u>MIN.OF CO-OPERATIVE DEVELOPMENT</u>								
-CO-OPERATIVE COLLEGE OF KENYA								X
-NATIONAL CO-OP. HOUSING UNION			X			X	X	

Source: Maleche Z. (1983) Training and research for Human Settlements Seminar Paper, Nairobi.

APPENDIX II

LIST OF SAMPLE TOWNS

A. NAIROBI PROVINCE

1. Nairobi.

B. COAST PROVINCE

1. Mombasa
2. Kilifi
3. Malindic
4. Voil
5. Lamu.

C. EASTER PROVINCE

1. Embu
2. Machakos
3. Athi River
4. Meru.

D. NORTH EASTERN PROVINCE

1. Garissa

E. CENTRAL PROVINCE

1. Nyeri
2. Karatina
3. Thika
4. Murang'a
5. Nyahururu

F. RIFT VALLEY PROVINCE

1. Nakuru
2. Naivasha
3. Eldoret
4. Kitale
5. Kericho
6. Kabarnet
7. Kapenguria
8. Nanyuki.

G. NYANZA PROVINCE

1. Kisumu
2. Kisii
3. Siaya
4. Homabay

H. WESTERN PROVINCE

1. Kakamega
2. Webuye
3. Bungoma
4. Busia.

Total No. of Towns. 32 Accounting for 89% of the total urban population.

HOUSEHOLD QUESTIONNAIRE

Date of Interview _____ Plot No. _____

No. of Households on the Plot -----

1.0 IDENTIFICATION

1.1 Name of Household Head (optional)-----

1.2 Members of the Household males -----

Females -----

1.3 Age, Sex Educational structure -----

2.0 HOUSING:

2.1 Period of stay in Thika /Kiandutu -----

2.2 Ownership : Rented ----- owned-----

2.3 If 'owned' how did you obtain it-----

2.4 Rooms occupied -----

2.5 Rent per month Kshs.-----

2.6 Building material : Roof----Wall----Floor----

2.7 Are you satisfied with the present quality
of housing Yes-----No-----

2.8 If "No", what improvements would you desire

2.9 How much are you prepared to pay for an
improved house Kshs.-----p/m.

2.10 (For interviewer) comments on condition of
house and possible immediate improvements:

3.0 INFRASTRUCTURE

3.1 Place of work : Industrial area:

Town centre

Others, specify

3.2 Means to place of work

Walking----Bicycle----Others (specify)-----

3.3 Comments of transport -----

3.4 Sources of water -----

3.5 Comments on water -----

3.6 Means of sewage disposal-----

.. Private-----Communal -----

Any drainage problems during rainy seasons

3.7 Gabbage disposal: MCT----Burning----None----

Comments on sewage disposal:-----

3.8 What facilities would you require in your

Neighbourhood immediately:

Educational----Commercial----Transport-----

Recreational----Water----Sewage disposal----

Health----Others (Specify)-----

4.0 INCOME

4.1 If unemployed what do you do for a living:

4.2 Other sources of income

a) -----

b) -----

c) -----

d) -----

4.3 Do you own any land at place of origin

Yes ----- No-----

4.4 If 'yes' who takes care of it: wife/husband----

4.5 What energy do you use-----

4.6 Sources of energy -----

4.7 What is your current major expenditure:

Clothing -----

Food -----

Housing -----

School fees -----

Others: (Specify)-----

4.8 List your priorities in terms of:

Clothing-----Food-----Housing-----

School fees-----Transfer payments-----

Others -----

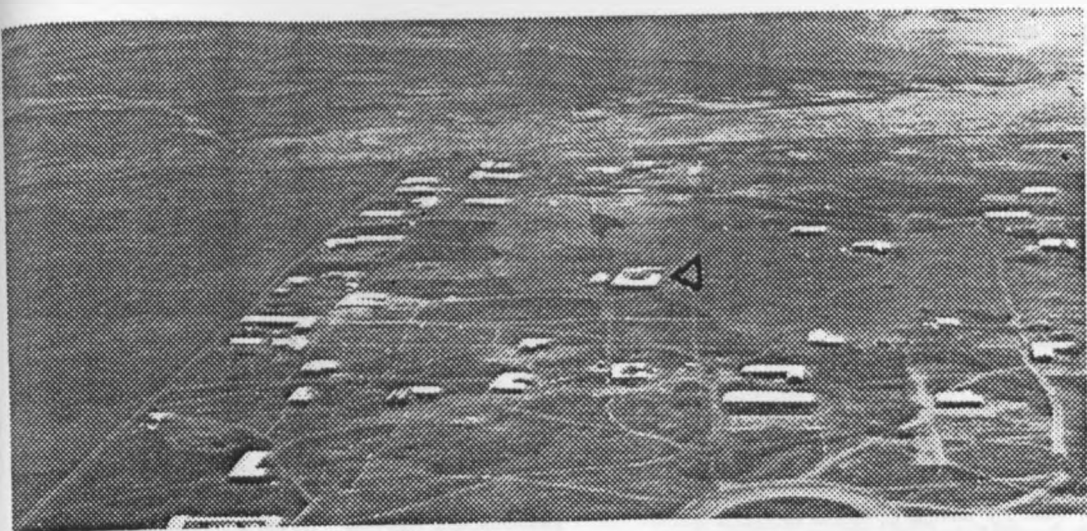


Plate 1

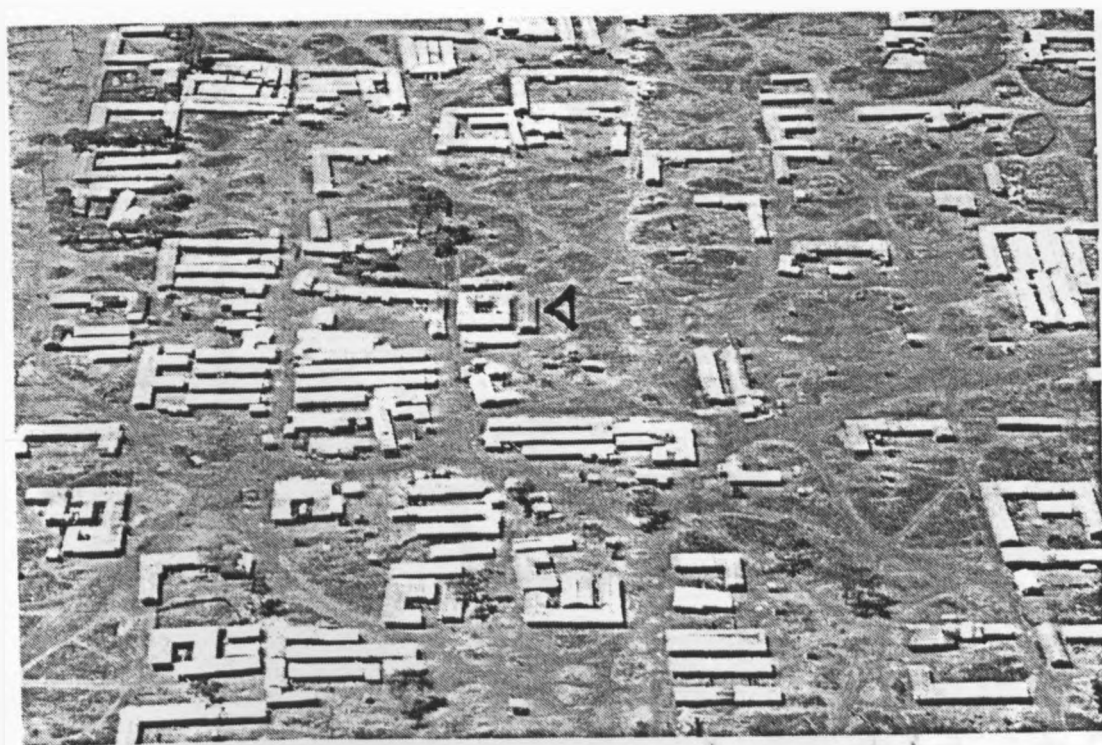


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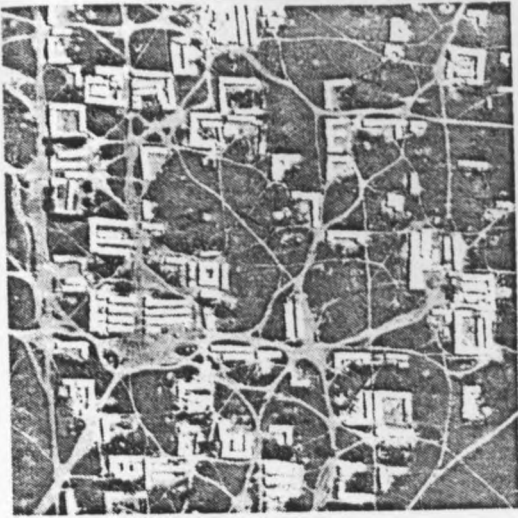


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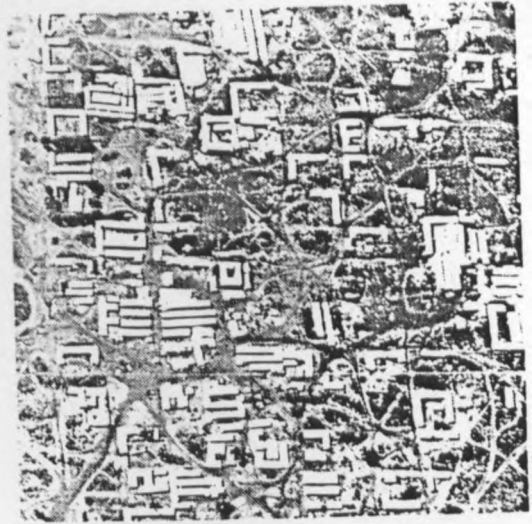


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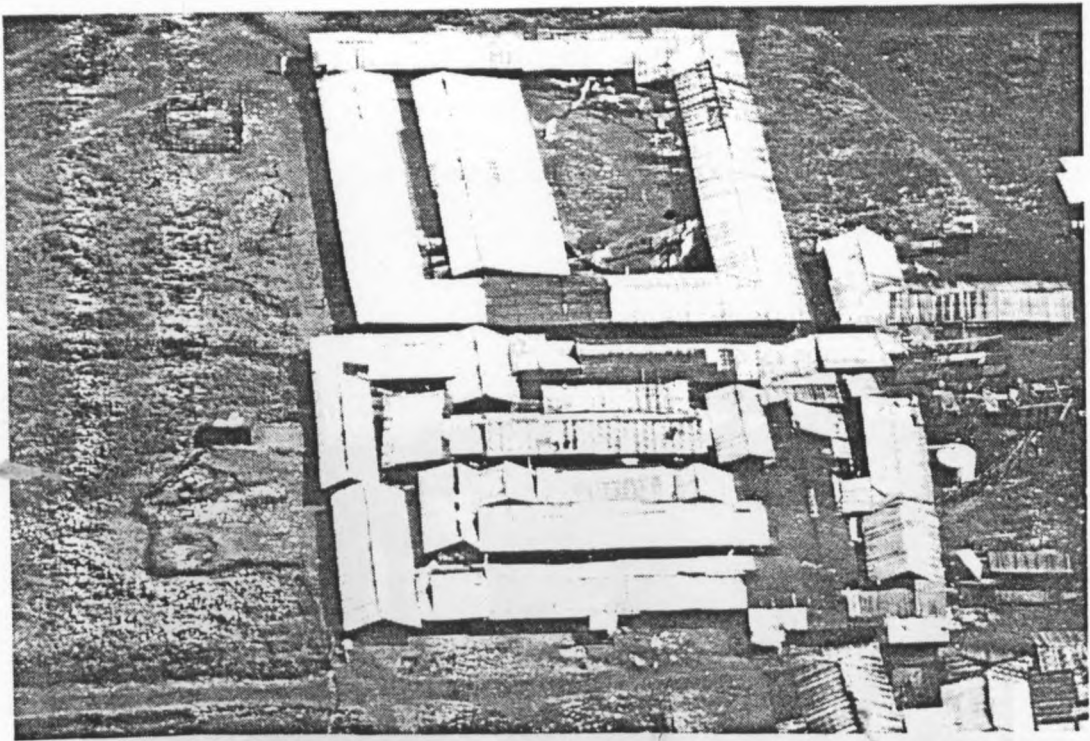


Plate 5



Plate 6

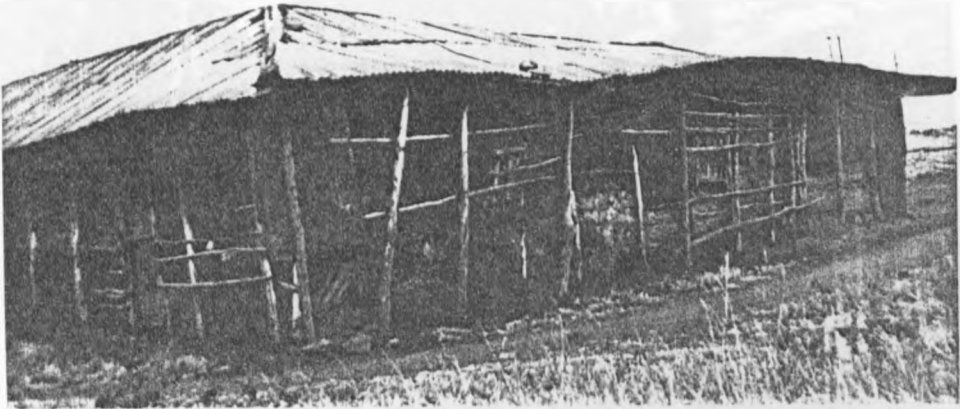


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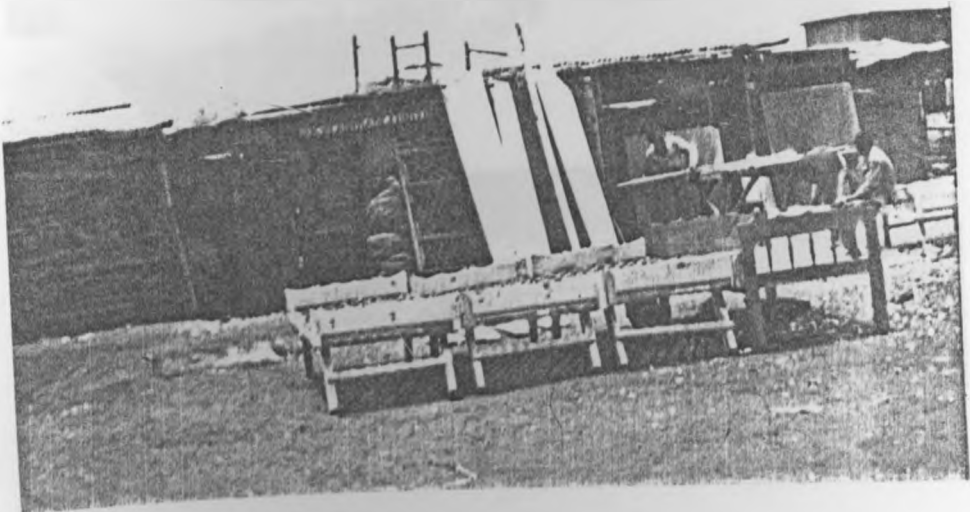


Plate 8



Plate 9

Plate 11



Plate 10

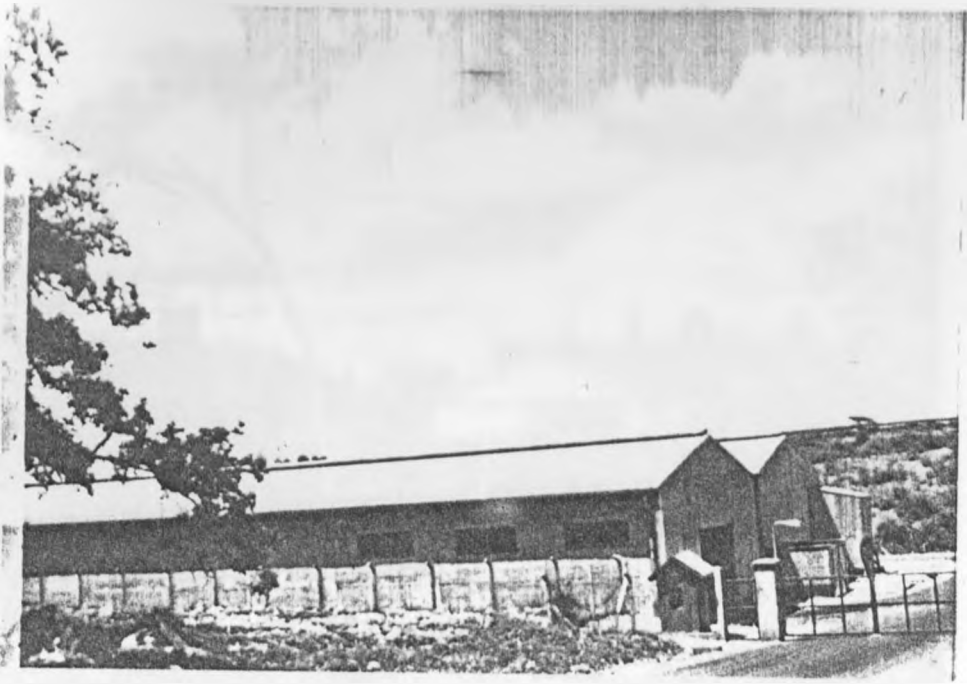


Plate 11



Plate 12



Plate 13



Plate 14