THE ROLE OF THE INFORMAL SECTOR IN THE ECONOMIC DEVELOPMENT OF KISUMU DISTRICT: A CASE STUDY OF RURAL SERVICE CENTRES

by

Omondi Bowa

A thesis submitted in part fulfilment of the requirements for the Degree of Master of Arts (M.A.) in Geography (Economic Geography)
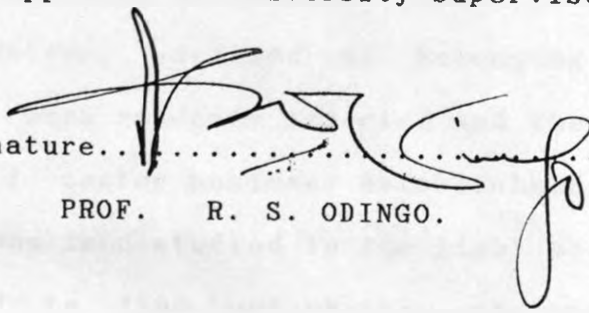
UNIVERSITY OF NAIROBI

February 1987

DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

Signature.............................

OMONDI BOWA

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

Signature............................

PROF. R. S. ODINGO.

ABSTRACT

This study investigates the role of the 'informal sector' in the socio-economic development of Kisumu District in Western Kenya. The informal sector is defined as a collection of small-scale business enterprises engaged in manufacturing, service and retail trade activities. In the study, special attention is given to the rural component of the sector, with the view to finding out its capacity for growth and its employment creation potential.

A selection of small-scale manufacturing, service and trade economic activities, located in the rural service centres (designated for development) of Kisumu District was made to represent the 'rural-based' informal sector, and to serve as a basis for an analysis of its main characteristics and contribution to development in the rural milieu. Eleven service centres, defined as belonging to the rural environment, were randomly selected and these centres yielded 210 informal sector business establishments for the study. The sector was then studied in the light of three hypotheses which aimed to find out whether it contributes to the development of the District by reducing selectively the perceived extreme population pressure on farm land, the rural-to-urban migration of school-leavers seeking work, and

whether it does succeed in providing profitable employment to these categories of persons among the rural population.

The three hypotheses were then tested by the 'means test', Chi-square test (X^2), and Multiple Linear Regression methods, respectively. The 'means test' revealed that the mean land holding per person employed in the informal sector of 0.34 hectares is significantly lower than the District's mean of 0.46 hectares per person. The critical t–value of – 1.65 was found to be greater than the computed probability of –6 for 209 degrees of freedom. Hence, the null hypothesis was rejected and the alternative accepted that the informal sector tends to selectively employ people with smaller than average parcels of farm land in the District.

Similarly, the X^2 test showed that when directed to look at the fate of primary school-leavers as an employment pool, the informal sector in actual fact employs a large proportion of both male and female operators in that category of school-leavers. For those with secondary school education, however, the proportion employed in the informal sector was found to be smaller than the District's average. In other words, with the exception of secondary school-leavers, the sector was shown to be responsible for reducing rural-to-urban migration by absorbing selectively that part of the rural population most likely to migrate to the urban centres to seek alternative employment outside agriculture. For the male

informal operators, significance was obtained by a computed X^2 value of 55.91 as compared with a critical value of 7.82. Similarly, the computed X^2 value for the female operators was 8.27 while the critical value was 5.99.

Finally, Multiple Linear Regression analysis was used to show that the profits in the informal sector businesses are significantly responsive to five 'business-influencing' factors, namely, 'the number of customers received', 'present value of fixed' and 'circulating capital', 'sub-sector of business activity (i.e manufacturing, service and trade)' and 'rank of the service centre' in which the business is located. For the whole sector, these variables explained 47% of the variance in the profits of business. By sub-sectors, the total variance explained was 48% for 'trade', 26% for 'service' and 13% for 'manufacturing' economic activities while the explanatory variables were the 'number of customers received' and 'present value of capital' for 'trade', the 'value of circulating capital', 'number of customers received' and 'years of education' for 'service', and the 'number of customers received' and 'present value of capital' for 'manufacturing'. Thus, profits of business in the informal sector were shown to exhibit moderate to low responsiveness to the factors which normally influence business performance. This was concluded to be indicating the presence of problems of business performance and the

potential for profitable economic growth of the informal sector in the District.

On the basis of the results obtained, it was concluded that the informal sector is vital as a means of relieving extreme population pressure on the land, reducing rural-to-urban migration of school-leavers at the lower levels of education, and as a source of potentially profitable economic activities. However, the recruitment of secondary school-leavers was found to be lower than the proportion of the population of the District with secondary school education. For this reason, it was recommended that the participation of secondary school-leavers in the informal sector should be promoted to enhance the capacity of the sector to absorb the potentially migrant school-leavers as a whole. Furthermore, the factors which normally influence business performance were found to be accounting for no more than 48% of the variability in business profits. Due to this, it was recommended that other factors, including the problems of business performance should be examined and resolved for a full realisation of the potential of the sector to the development of Kisumu District.

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I am similarly thankful to Miss Margaret Asir and Mr. Vitalis Oduol for proof-reading earlier drafts of this text, and to Mr. Samuel Ojode of the Department of Geography (University of Nairobi) for skillfully drawing the maps. I am grateful to all the people in the informal sector who agreed to be interviewed, for their cooperation and to the government officers, especially of the Municipal and County Councils of Kisumu for kindly availing to me official documents and information. Finally, I thank my Christian colleagues of the Apostolic Evangelical Christian Church (APECC) for persistently supplicating for me to complete the project.

With the different forms of assistance from the persons mentioned, I have tirelessly worked to clear this final script of errors and omissions. However, I take sole responsibility for any faults that might have remained.

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CHAPTER ONE

INTRODUCTION

1.1.1. Statement of the Research Problem

This study investigates the role of the rural service centre-based informal sector in the process of economic development of Kisumu District in the Nyanza Province of Kenya. There are three main justifications for the study which stem from the condition of Kenya's economy and of Kisumu District in particular.

Firstly, Kenya, like other developing countries, experiences many problems concerning its economic development. These include rapid population growth, rapid growth of unemployment among school-leavers (and the associated rapid rural-to-urban migration), inadequate capital, an inadequate market for modern manufactured goods and domination of the domestic economy by foreign producers with foreign and, often, inappropriate technology (I.L.O., 1972; Leys, 1975; Stewart, 1981; Kaplinsky, 1978).

These problems limit the extent to which the formal sector (which in Kenya is closely associated with capital intensiveness, urban concentration, foreign ownership and control, etc.) can be developed to provide an adequate solution. In 1973, for example, the formal sector was expanding by only 50,000 new employment opportunities a year

while the population of working age was growing at the rate of 266,000 persons a year (Republic of Kenya, 1979b). The informal sector is seen to be well equipped to provide vital additional opportunities which can go a long way in solving some of these development problems, particularly those of population pressure on farm land, rural-to-urban migration of unemployed school-leavers, and extreme dependency on foreign-owned and controlled product and production technology. This is because the sector is reported to have many viable features. Its enterprises have ease of entry, rely on indigenous resources, are locally owned, have a small scale of operation, are labour intensive and use adapted technology and skills not requiring formal schooling, and operate in unregulated and competitive markets (I.L.O., 1972; McGee, 1976).

A study conducted by the International Labour Office (I.L.O.) in Kenya in 1972 found that in 1969, the informal sector accounted for 25-30% of the total national urban employment and 37-39% of the total employment in the urban and rural areas. In Kisumu District, the informal sector had a labour force of some 21,000 in 1983, given an estimated total labour force of 60,000 and enumerated formal wage employment of 38,598 in that year. This study seeks to discover how this sizeable sector with such suitable characteristics for indigenous participation as outlined

above has responded to the problems of socio-economic
development in the area.

The second justification stems from the high population
density in the area. Kisumu District has a high population
density and a high population pressure on the agricultural
farm land, with net population out-migration to the rest of
the country (Republic of Kenya, 1984b, p. 59). It is located
in the Lake Victoria Basin, one of the four regions in Kenya
with high population concentrations (Ominde, 1968; Republic
of Kenya, 1979a, 1984b, pp. 6, 7). In 1979, the Lake Basin as
a whole (consisting of Nyanza and Western Provinces and the
Districts of Nandi and Kericho in the Rift Valley Province)
had a population of 5,409,282 (over 30% of the national
population)[1]. Similarly, the District is densely populated.
As Table 1.1. illustrates, it ranks fifth out of the 39
Districts (excluding the urban districts of Nairobi and
Mombasa) in Kenya, and second in Nyanza Province. Its annual
population growth rate of 3.33% is also comparable to those
of other top-ranking districts of Nyanza Province and of
Kenya.

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1 See the location of Kisumu District in Figure 1.1.

FIG. 1.1 :   LOCATION OF KISUMU DISTRICT
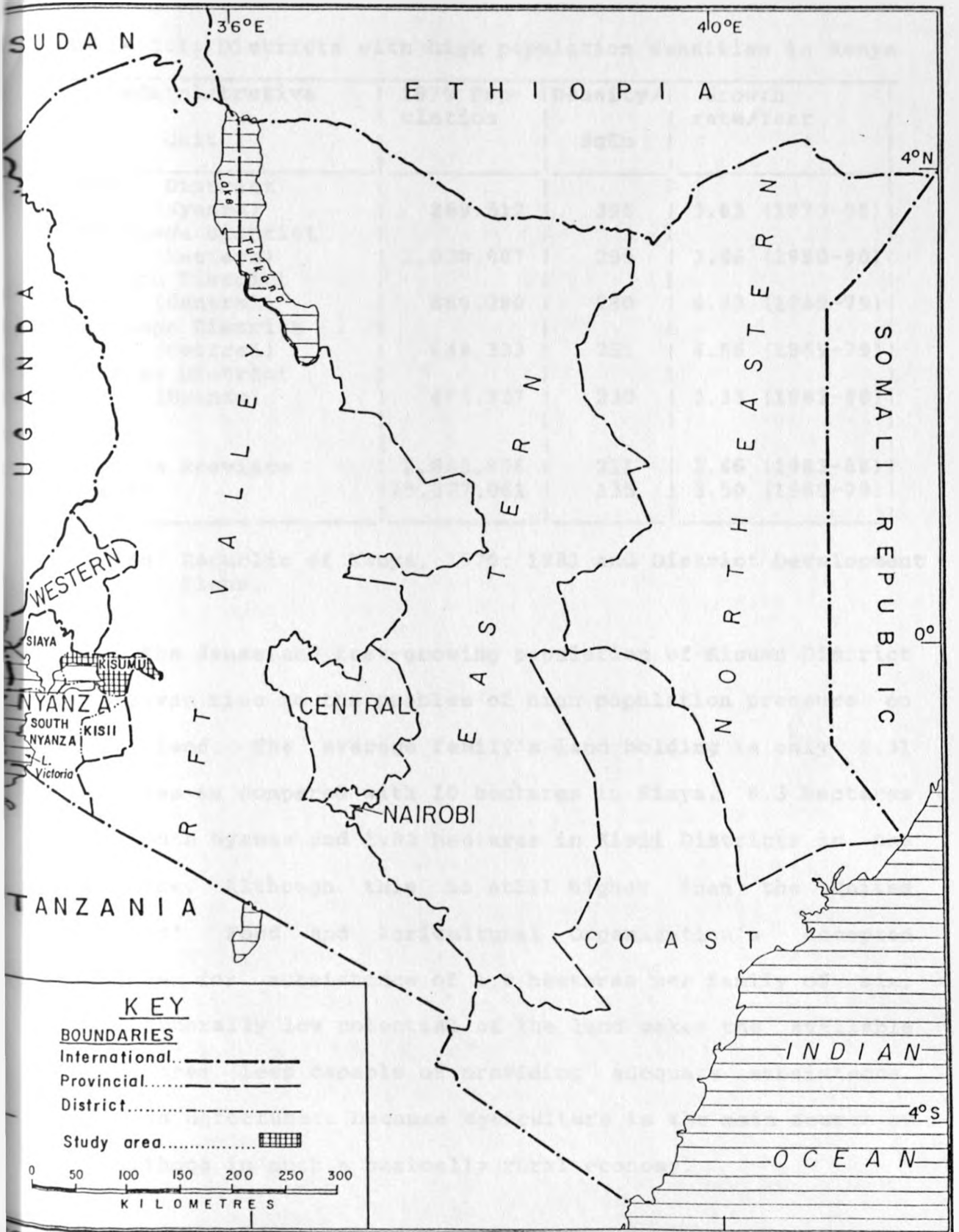
SOURCE: Atlas of Kenya, 1970

Table 1.1: Districts with high population densities in Kenya

Administrative Unit	1979 Population	Density/ SqKm	Growth rate/Year
Kisii District (Nyanza)	869,512	395	3.63 (1979-88)
Kakamega District (Western)	1,030,887	295	3.46 (1980-90)
Kiambu District (Central)	686,280	280	4.43 (1969-79)
Muranga District (Central)	648,333	261	4.56 (1969-79)
Kisumu District (Nyanza)	482,327	230	3.33 (1983-88)
Nyanza Province	2,643,956	211	3.46 (1983-88)
Kenya	15,327,061	135	3.50 (1969-79)

Source: Republic of Kenya, 1970; 1981 and District Development Plans.

The dense and fast-growing population of Kisumu District has given rise to the problem of high population pressure on farm land. The average family's land holding is only 2.31 hectares as compared with 10 hectares in Siaya, 6.3 hectares in South Nyanza and 1.92 hectares in Kisii Districts in the Province. Although this is still higher than the United Nations' Food and Agricultural Organization's accepted average for subsistence of 1.4 hectares per family of six, the generally low potential of the land makes the available land area less capable of providing adequate subsistence. This is unfortunate because agriculture is the main source of livelihood in such a basically rural economy.

Of the total arable land of about 157,300 hectares, less
than 40% is high to medium potential. The agro-ecological
zone map for the District (Figure 4.1) shows that less than
5% is Marginal Coffee Zone, 5% is high potential Sugar Zone,
25-30% is Marginal Sugar Zone, 45-50% is Cotton Zone and 15-
20% is Marginal Cotton Zone, with the first three zones being
characterised as high to medium potential land. Furthermore,
the 'black cotton' soils (Vertisols) which occupy a greater
part of the District are difficult to work by hand implements
without some moisture and become impossible to work during
the rainy season when much of the Kano Plain is covered by
floods. The delicate balance between the soils and the
moisture content makes small-scale farming risky in the rain-
fed farming conditions. The rainfall regime is also
unfavourable in most parts of the District. Rainfall is
particularly unpredictable and variable in the months
normally devoted to land preparation and seeding (Republic of
Kenya, 1984d).

The District Development Plan (ibid.) summarized the fate
of agriculture under the prevailing conditions by stressing
that the sector by itself does not support the District's
population adequately and is increasingly less likely to do
so as population pressure on the land increases. Thus, the
need to develop additional ways to earn a living is
increasing in the District and the informal sector appears to
possess many suitable characteristics that warrant further

investigation of its role in the area's development.

The third justification for the study is the presence and persistence of an extreme rural-urban economic imbalance in Kisumu District, and the consequent rapid rural-to-urban migration of school-leavers looking for employment. The spatial economic imbalance signals the need to restructure the growth centre development strategy in the District (and in Kenya) to make it suitable for rural development. Awuor (1979) noted that Kisumu Town ranks among the four largest industrial centres in Kenya and is seen as a growth centre in the Lake Victoria Basin. The town is strategically located at the hub of a communication network which serves most of western Kenya and this has facilitated its dominance as an administrative, industrial and commercial centre for this area. In 1979, the municipality had a population of 152,643, or 32% of the District's population.

In spite of its centrality, Kisumu town has facilitated little economic development in the hinterland as would be expected from the centre-periphery theory of 'trickling down' effects. On the contrary, studies examining the impact of the town and its economic activities on the District have shown that its 'growth-pole effect' is mainly parasitic, with large net drainage of resources from the countryside. Awuor (1979, p. 3) found that most of the town's economic activities are services such as dry-cleaning that induce no development in

the countryside but simply draw payments from rural consumers. Also, many industries in the town use inputs from outside the District and, hence, have no multiplier effects on the economy of the District. Furthermore, school-leavers looking for employment cluster at the town yet its formal sector base is too small to absorb them. Although Kabagambe (1975, p. 153) suggested how the informal sector might help reduce unemployment, it is clear that the urban informal sector will not employ all the migrant school-leavers if the rate of migration is not checked. On the other hand, most employees in the town spent their incomes right there and remittances to the rural areas were meagre. Thus, it would seem that the present migration of school-leavers to the town, whether it earns them employment or not, mainly represents a loss of investment on education by the countryside while it increases social and economic problems in the town. There is need to research the possibility of reducing the economic imbalance to counteract the migration of school-leavers to the town. And the rural informal sector is an especially promising ground.

Given the rural bias of the research problems which this thesis intends to address, the suitability of the rural informal sector must be studied in the context of a spatial development strategy that locationally and functionally orientates the sector to rural development. This would ensure

that sectorial perspectives are integrated into spatial
dimensions that allow an understanding of the geographical
expression of the informal sector activities over the rural
landscape. This, as will be shown later, explains the choice
of rural service centres that are officially designated for
development rather than the urban centre of Kisumu Town. At
the centres, the sector may induce the participation of rural
residents faced with high population pressure on the land and
of potential migrant school-leavers due to its locational
proximity and apparent economic attractions. It may also
consequently function to complement the local growth centre
of Kisumu Town, counteract the 'polarization effect' of the
town, and induce development in the countryside.

1.1.2. Research Objectives

Specifically, the problems of this study are how to
relieve the population pressure on land and how to counteract
the rural to urban migration of school-leavers by providing
gainful employment in the informal sector. In other words,
the study aims:

1. To find out whether the rural informal sector generates
development by selectively providing complementary or
additional means of livelihood for rural residents with
higher population pressure on land than the District mean.

2. To find out whether the rural informal sector reduces
the rural-to-urban migration of school-leavers effectively by

recruiting a larger percentage of school-leavers than their actual proportion in the District.

3. To assess the growth potential of the informal sector in Kisumu District and, by extension, in Kenya as a whole.

The first two objectives involve an inquiry into the land pressure and educational status of the operators in the sector. It is expected that the sector would be effective as a means of combating the development problems in the rural areas if it selectively draws local residents with higher than average population pressure on land and school-leavers with a high potential to migrate to the urban centres. The third objective inquires into the levels of profit in the sector with a view to establishing whether they are responsive to the business-influencing factors and, hence, whether the sector is experiencing `evolutionary' or `involutionary' growth. Evolutionary growth means an increase in the incomes per capita, along with the expansion in employment while involutionary growth refers to an increase in the number of operators without a corresponding increase (or with a decline) in the per capita incomes (or output), adding to the number of the `working poor' if not to unemployment (I.L.O. 1972).

1.1.3. Hypotheses

The following formal research hypotheses are formulated from the objectives. Both the null (H_0) and the alternative (H_1) hypotheses are stated.

1. H_0: The mean land-holding per capita for the informal operators is equal to or greater than the mean for the District.

   H_1: The mean land-holding per capita for the informal operators is less than the mean for the District.

2. H_0: The proportions of school-leavers employed in the informal sector are equivalent to or lower than the corresponding District proportions for the different levels of education.

   H_1: The proportions of school-leavers employed in the informal sector are higher than the corresponding District proportions for the different levels of education.

3. H_0: Business performance (profits) is not responsive to the factors that normally influence businesses.

   H_1: Business performance is responsive to the business-influencing factors.

1.1.4. Theoretical Framework

This study is based on a number of interrelated basic concepts which form its theoretical framework. The economy of Kisumu District and, indeed, of Kenya is broadly divisible into farm and non-farm activities. Farm activities form the

backbone of the agro-based economy but they are facing serious population pressure and land potential constraints both at the national and district levels. Only 17% (99,050 square kilometres) of Kenya's total land area of about 569,200 square kilometers is considered arable (high and medium potential) land. Meanwhile, population density on the arable land was 135 per square kilometre (excluding the populations of Nairobi and Mombasa Towns) in 1978 and was expected to rise to 158 and 250 by 1983 and the year 2000, respectively.

In Kisumu District, only 40% (72,000 hectares) of arable land is considered high to medium potential land (Jactzold and Schmidt, 1982) while the average population density is 2.31 hectares per family of six. Given the population pressure problem in the District and in the agriculturally high to medium potential parts of Kenya as a whole, the non-farm economic activities are essential complementarities to agriculture. Functionally, non-farm activities have linkages with the agricultural sector involving labour, income and material flows. For the agricultural sector, the favourable aspects of these flows do not just represent the relief of population pressure on the land but the active provision of the goods and services needed by the farming population such as marketing farm products, repairing and maintaining farm implements, making farm tools, and so on. The non-farm sector, in turn, receives

from the agricultural sector such inputs as raw materials and manpower.

Non-farm economic activities are divided into the formal and the informal sectors. In Kenya, and especially in Kisumu District, the formal sector is limited in its ability to generate enough jobs to solve the land and labour problems. Industrialization, which is the basis of the formal sector in Kenya is based on import—substitution industries which is, in turn, based on the technology of advanced countries. Stewart (1981, p. 78) has observed correctly that this technology is foreign-owned, capital-intensive and requires materials that are mainly available in the industrially advanced countries and often not in the developing countries. It is also skill-intensive, requires Western management techniques, involves products which are totally out of tune with local needs and conditions and imposes demands on the economy which it is not capable of meeting. Thus, the formal sector is characterised by limitations which make it incapable of providing an adequate solution to the economic problems of the District. Even if the sector were less foreign dominated, its technically justified large scale of operation makes it more appropriate to the large national or regional markets than to the small and locationally dispersed rural markets.

For these reasons, the informal sector is thought to complement the formal sector and more likely to foster rural

development. The informal sector has been reported to have features suited to the needs of a developing economy. The I.L.O. mission to Kenya (I.L.O., 1972) was convinced that the sector provides the one element of self-reliant development because;

a) it is totally African owned, controlled and financed,

b) its technology is largely indigenous and appropriate to the available skills,

c) it uses locally available resources,

d) it is labour intensive,

e) it uses resources sparingly,

f) its products are appropriate to the incomes of the consumers.

Nevertheless, there is a continuous interaction between the formal and the informal sectors involving the flow of goods and services for both production and consumption.

The informal sector is locationally divisible into two; the business enterprises based in the service centres and those dispersed in the villages. In this thesis, attention is focussed on the rural service centre-based activities because:

1) at the service centres, business enterprises can utilise the available infrastructure and business links simultaneously with the rural agricultural sector and the formal sector (basically urban) to generate development for the proximate countryside;

2)   the cost of doing business declines   when   enterprises
cluster   due   to economies of agglomeration   (larger   market,
easy   access to complementary inputs from other   enterprises,
availability of information and so on);

3)   the centres have been officially designated for   rural
development.

However,   the   locationally dispersed informal .businesses
in   the   villages   also interact with those   in   the   service
centres through the exchange of goods and services.

Finally,   the rural service centre-based informal   sector
is   seen to be capable of generating development in the rural
areas   of   Kisumu District at   low   cost.   Specifically,   the
sector   is seen to reduce effectively population pressure   on
land (among those experiencing extreme pressure on the   land)
and   rural-to-urban migration of school-leavers,   as well   as
being characterised by growing incomes. The growth element is
considered   to   be   important   in   ensuring   a   productive
contribution   of the sector to the economy by relieving   land
pressure   and   unemployment.   Since the   nature   of   economic
growth depends mainly on the interaction between the farm and
the   non-farm activities,   on the one hand,   and between   the
formal   and   informal sectors,   on the other,   policy   issues
affecting   the   informal   sector must be seen   in   the   broad
perspective of inter-sectorial relationships.   The links   are

important in the development of the sector. Figure 1.2
depicts this theoretical framework.

Figure 1.2:   A MODEL OF THE INFORMAL SECTOR, ITS ROLE
              AND LINKAGES IN THE SPATIAL ECONOMY

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      ┌───────────────────┐                 ▼
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                                    └────────┬─────────┘
                                             ▼
                         ┌──────────────┐      ┌──────────────┐
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  │    ON   LAND     │  │ RURAL—TO—URBAN   │  └──────────────────┘
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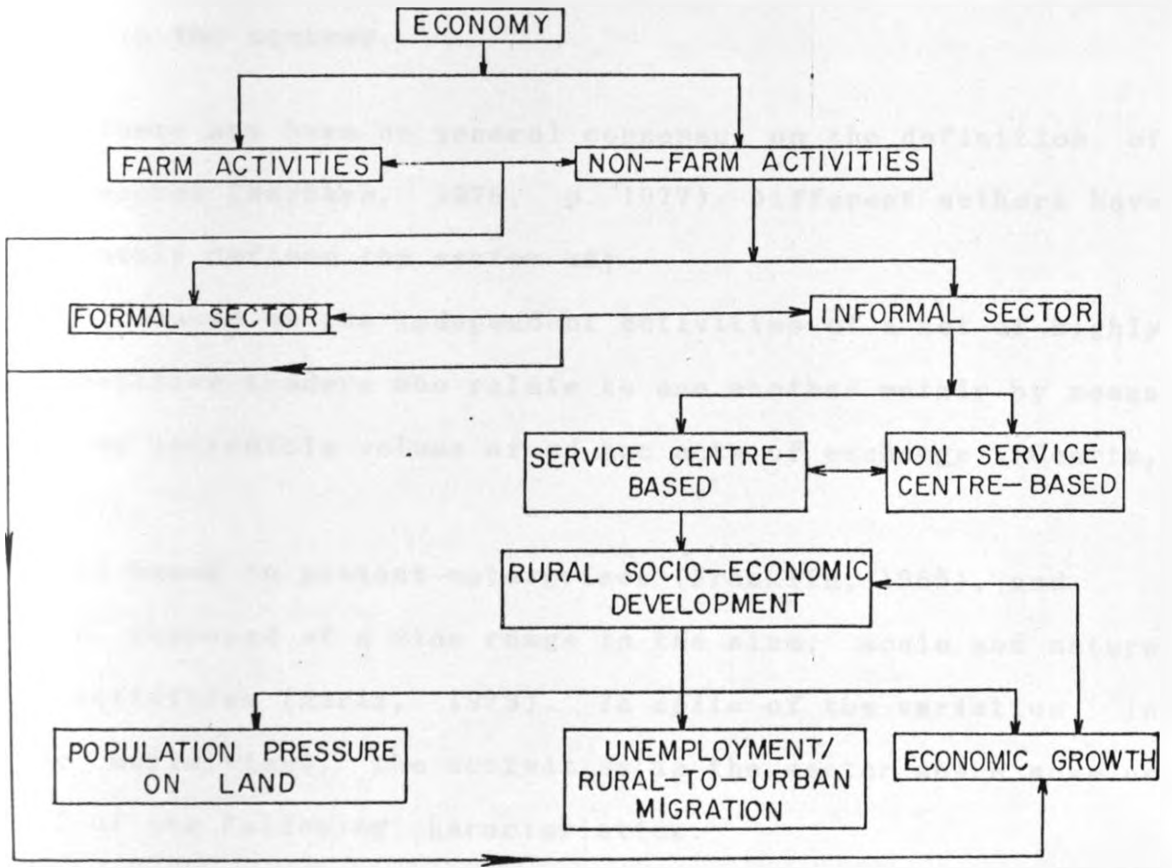
Source: Perceived by the author.

1.2. LITERATURE REVIEW

1.2.1.   The Concepts of 'Informal Sector' and Economic Development

A review of the literature on this subject must necessarily start with a definition of the informal sector and the meaning of development. This will provide an understanding of the sector and the context for analysing its role in the economy.

There has been no general consensus on the definition of the sector (Barbara, 1978, p. 1077). Different authors have variously defined the sector as;

a) based on the independent activities of a set of highly competitive traders who relate to one another mainly by means of an incredible volume of ad hoc acts of exchange (Geertz, 1963);

b) based on peasant enterprises (Franklin, 1965), and

c) composed of a wide range in the size, scale and nature of activities (Hartz, 1973). In spite of the variation in the definitions, the activities in the sector share some or all of the following characteristics:

i) They have ease of entry,

ii) They rely on indigenous resources,

iii) They are owned by indigenous entrepreneurs,

iv) They have a small scale of operation,

v) They use labour-intensive and adapted technology,

vi) They use skills not always requiring formal schooling,

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v) They use labour-intensive and adapted technology,

vi) They use skills not always requiring formal schooling,

vii) They operate on unregulated and competitive markets (I.L.O., 1972, p. 6; McGee, 1976).

In his study of what he termed the proto-proletariat, McGee (1976) adapted Geertz's (1963) systematic typology of the informal sector activities. He divided them into two groups on the basis of legitimacy and came up with the 'legitimate' and 'illegitimate' activities. 'Legitimate' economic activities are those which are socially accepted. They consist of:

a) Primary and Secondary activities (comprising farming and market gardening by squatters, building contracting, self-employed artisans, shoe-making, tailoring, household manufacturing of beers and spirits),

b) Tertiary enterprises with relatively large capital inputs (comprising housing, transport utilities, commodity speculation, renting activities),

c) Small-scale Distribution (consisting of petty trading, street hawking, catering in food and drink, bar attendant service, carrier service, commission-agent service),

d) Other Services (composed of music, dry-cleaning, barber service, night soil removing, photographic service, vehicle repairing and maintenance, brokerage and middlemanship, ritual services, herbal medicine),

e) Private Transfer Payments (comprising gifts, and similar flow of money and goods between persons, borrowing and begging).

'Illegitimate' economic activities are those that have social disapproval. They include:

a) Services (composed of hustling, black-marketing, handling of stolen goods, usury and pawnbroking at illegal interest rates, drug pushing, prostitution, smuggling, bribery, political corruption, protection racketeering),

b) Transfers (made up of petty thefts like pickpocketing, larceny like burglary and armed robbery, speculation and embezzlement, confidence trickery like money doubling, illegal gambling).

For purposes of economic development, it is normally assumed that ways should be sought for promoting, not the 'illegitimate' informal activities but the 'legitimate' ones. Furthermore, from McGee's group of 'legitimate' activities a careful selection should be made of socio-economically productive activities that might require promotion as opposed to non-productive ones like begging which might require tolerance alone.

The concept of development, on the other hand, is essential in understanding the role of these informal economic activities in a developing economy. Development according to Todaro (1981, p.270) may be perceived as;

> 'a multidimensional process involving the
> reorganization and reorientation of the entire
> economic and social systems. In addition to
> improvement in incomes and output of the indigenous
> population, it typically involves radical changes
> in institutional, social and administrative
> structures as well as in popular attitudes and, in
> many cases, even customs and beliefs' (Todaro,
> 1981, p. 270).

Todaro has also observed that in strictly economic terms,
'development' for the past two decades has been used to mean
the capacity of a national economy, whose initial economic
condition has been more or less static for a long time, to
generate and sustain an annual increase in its gross national
product (G.N.P.) at rates of perhaps 5% to 7% or more. The
1960's were, for instance, dubbed the 'Development Decade' by
a resolution of the United Nations and 'development' was
conceived largely in terms of the attainment of a 6% annual
target growth rate of G.N.P.

An alternative economic index that has commonly been used
by other economists to measure development is the growth rate
of G.N.P. per capita. The index measures the ability of a
nation to increase its output at a faster rate than its
population growth rate. It is typical to use levels and rates
of growth of 'real' per capita G.N.P. (that is, the monetary
growth of G.N.P. per capita minus the rate of inflation) to
measure in a very broad sense, the overall economic wellbeing
of a population (that is, how many real goods and services
are available for consumption and investment for the average

inequitable income distribution and the spectre of rising unemployment. Economic development was eventually re-defined in terms of the reduction or elimination of poverty, inequality and unemployment in addition to rapid rate of overall real economic growth within the context of a growing economy. 'Re-distribution from growth' became the focal issue in the redefinition and according to that definition, Kenya may not have been developing during the 'Development Decade' (Todaro, 1981, p. 271). During this period, Kenya's G.N.P. growth rate rose to 7% per year while the levels of unemployment and poverty kept rising. Regional inequalities also grew worse and began to pose serious rural-urban imbalances in which social, economic and political life was concentrated in the two major urban centres, Nairobi and Mombasa, while the rest of the country remained neglected.

With the change in the United Nations' concept of development then, Kenya and other developing countries began to incorporate the new development objectives. Development planning began to aim at reducing unemployment, poverty and regional inequality (including rural-urban imbalance) in addition to the traditional objective of rapid economic growth. A Growth Centre development strategy was adopted in Kenya in 1974 as an instrument for operationalising the decentralization programme. Socio-economic activities were to be orientated away from Nairobi and Mombasa to smaller urban

centres closer to the rural areas. Nevertheless, the means by which widespread participation of the majority of the population would be promoted within the strategy remained a matter of great concern. Decentralization of economic activity into selected Growth Centres has not necessarily increased employment or induced growth in the countryside mainly because of the mode of production in the formal sector and the type of economic activities at the centres. Production is mainly capital intensive while the inputs used are mainly imports and not products from the countryside.

This study contends that a vital means of increasing participation in economic activities with a view to attaining the wider objectives of development and combating the problems identified is to promote economic activities which are located close to rural areas and have suitable characteristics for the participation of rural people. This would ensure that the benefits from economic growth get down to the individual family to improve the well-being of the people. The informal sector is explored for such development prospects.

1.2.2. Conceptual Frameworks

A comprehensive study of the suitability of the informal sector for development must begin by reviewing the existing conceptual frameworks regarding the relationships between the

sector and the rest of the economy in a typical developing country, because these viewpoints have influenced the interpretations of the role of the sector. Some analysts have perceived the informal sector as an autonomous segment of the economy, providing employment, goods and services for the lower income groups of the urban population (Oshima, 1971; I.L.O., 1972; Sethuraman, 1975). In this analytical context, the sector is envisaged as being economically efficient and as having comparative advantages vis-a-vis similar activities developed in the formal sector. Its main advantage is the socially adequate factor proportions since labour is used at a maximum without exerting heavy pressures on capital or on foreign exchange. The latter is made possible because due to the technology used, a small amount of capital is required. In addition, the use of second-hand machinery (judged by formal sector criteria) reduces new capital requirements. The efficient use of the factors available generates an economic surplus which, if adequately reinvested, can foster further growth in the urban and rural areas. This view implicitly regards the sector as characterised by lack of links with the rest of the national economy.

Other authors have taken the position that the informal sector operates in conditions of 'subordinated autonomy' vis-a-vis the rest of the economy. The subordination of an autonomous informal sector operates mainly through its lack of access to the resources of production and to the product

market, in the urban and rural areas. The result is that the informal activities do not generate surplus and their expansion does not depend on the accumulation capacity within the sector but rather on the size of the labour surplus which cannot be absorbed in the rest of the economy and on the market possibilities left out by the formal sector (Labini, 1966; Nun, 1969; Santos, 1970; Bienefeld, 1975; Souza and Tokman, 1976). In this sense, subordination operates through lack of access and not through the extraction of economic surplus.

The informal sector has also been perceived to be highly integrated into the rest of the economy in a complementary linkage. In this way, the growth potential of the sector is envisaged as reinforced by the linkages. Within this context the sector is viewed as an exporter of all types of products, mainly services and as playing an important role in the circulation process by providing credit to under-capitalised urban and rural operators who keep adequate stocks which they sell in as small units as required by low-income consumers (Weeks, 1971; McGee, 1974). Furthermore, the integration is seen to be benign since most of the exports are service activities which are complementary to formal production and are only affected by gradual technological change.

Finally, the sector has also been seen to be integrated with the rest of the economy in a 'subordinated dependency'

relationship, giving rise to exploitation. In such a situation, the sector not only experiences marked subordination to the formal sector and lack of access to basic resources, as in the conditions of subordinated autonomy, but also suffers exploitation because the integration mechanisms operate in such a way that the surplus produced, if any, is extracted from the informal sector. These mechanisms are related to the higher prices paid for its purchases, particularly those from the formal sector in the urban area, and to the lower prices obtained for its output, sold mainly to low-income consumers in urban and rural areas, the difference being reaped by the large-scale formal sector (Gerry, 1974; Bose, 1974; Bienefeld and Godfrey, 1975). The main purchases of an integrated informal sector are inputs for fabrication, capital goods of fabrication and final products for further commercialization while the outputs sold outside the sector consist of wage goods, intermediate products and personal services. Since some inputs can be obtained from the rural agricultural sector, recuperated industrial materials and second-hand capital goods' markets, subordinate relationship will be concentrated on the import of goods for further commercialization and on the export of personal services (Frankenhoff, 1967; Bienefeld, 1974).

Tokman (1978, pp.1071-1073) has observed that each of these conceptual frameworks by itself is not adequate for analysing the diverse activities of the informal sector and proposed a synthesised framework which could allow a comprehensive study of the sector. He noted that both the subordinated and the benign relationships exist and that the problem is to determine the strength of the subordination and see how much room remains for evolutionary growth. The sector should, therefore, not be seen either as a completely integrated or as an autonomous sector, but rather as one with significant links with the rest of the economy and a considerable degree of self-containment. Its exports to other sectors are mainly personal services while the chief imports are raw foodstuffs from the agricultural sector and processed foods and inputs from the urban formal sector. Tokman's conclusion is broad and well suited to the study of the informal sector. By it the sector may be expected to contain some degree of autonomy mainly because of the contribution of informal commerce to the formal sector imports and the importance of second-hand goods. Most goods purchased from the formal sector are, in turn, sold for a profit and this will reduce the value transferred outside the sector. Also, the existence of a second-hand market for consumer durable goods and machinery will diminish direct dependence on the formal sector and minimize import expenditures.

1.2.3.   The Informal Sector in Kenya and Elsewhere

In this section,   the suitability of the informal   sector for   development   is   evaluated   on   the   bases   of   previous empirical studies in Kenya and outside.

The   recognition   of   the   informal sector   as   a   viable economic   activity has evolved over the years.   In the   past, the usefulness of the sector was not accepted at all and this 'justified'   the   stereotype   view   that   the   sector   was "stagnant,   non-dynamic and a net for the unemployed and the thinly   veiled   idleness   into which those   who   cannot   find formal wage jobs must fall" (I.L.O.,   1972,   p. 5). This view was   held   for a long time not only by   ordinary   Westernised minds who perceive economic growth and development as humming machines   but also by academic analysts of   the   subordinated autonomy school of thought (I.L.O., p. 5 and McGee, 1976, pp. 6-7).   Consequently   the   concentration   of   economic   growth strategies   on   foreign   investment,   imported   capital, technology and skills were often 'justified' to the total or nearly total neglect or blockage of the informal sector.

In   Kenya,   the attitude towards the informal sector   was the same until 1972 despite the fact that part of the   sector had been 'discovered' in 1967 (Kitching, 1980, p. 378). Until then,   the   government's policy especially towards the   urban informal   sector   had contained too few elements of   positive support   and   promotion and too many   elements   of   inaction,

restriction and harassment (I.L.O., 1972, pp. 226-228). In 1972, the I.L.O. conducted a study in Kenya from which they reported that the informal sector had a high potential for development. It then made several recommendations to the effect that policies of positive support and not merely of accommodation or tolerance and none of hostility should be adopted towards the sector. In response, the government accepted most of the recommendations (Republic of Kenya, Ministry of Planning, 1979b, pp. 71, 331, 344, 348-349, 373-374, 376; Republic of Kenya, Ministry of Planning, 1984a, pp. 55, 56, 57).

In spite of the I.L.O. recommendations, the issue of the sector's development potential has remained indeterminate. In a study of 87 small-scale rural firms (clients of Kenya's Rural Industrial Development Centres-RIDC), Child (1973, p. i) found that the 'intermediate sector' is growing at an accelerating rate and may be expected to continue. He noted that despite their typically small size, the firms provide a better than average income for their owners. Also, the rate of return on invested capital exceeds that of the modern sector by a substantial margin. Child (ibid.) further found that both the capital-output and capital-labour ratios are low and that capital invested in the 'intermediate sector' creates more employment than does an equivalent amount of

capital formation in the modern sector and exceeds wages in commercial agriculture.

These findings by Child and others tend to suggest that the informal sector operates under 'competitive autonomy' conditions. Perhaps the reason for these optimistic findings was that Child (1973) selected what he called the intermediate sector from the clients of RIDC, a subsidiary of the Industrial and Commercial Development Corporation (ICDC). The clients of RIDC, in turn, consist of indigenously owned businesses with high potential for growth and with higher levels of capital and larger scales of operation than the majority of businesses in the informal sector as defined by the International Labour Office (I.L.O., 1972, p. 5). In fact, some of the selected enterprises which employ five or more workers are enumerated in the national industrial censuses as part of the formal sector. Thus, even if his 'intermediate sector' is classifiable as informal sector, Child's findings of high potentiality has an obvious upward bias and cannot, therefore, settle the debate.

In another study, House (1978, pp. 4-7) on the premises of his own work in Nairobi and elsewhere in Kenya and on those of Rempel (1974), Friedmann and Sullivan (1974, pp. 394-395), Steel (1976, p. 25), Standing (1977, pp.38-39), and Rempel and House (1978, p. 168) also concluded that it is the 'intermediate sector' of the informal sector, and not the

greater part consisting of the 'community of the poor' that plays a vital role in the economy and has the development potential identified in the I.L.O. report on Kenya. House's intermediate sector has identical characteristics to Child's while his 'community of the poor' is described as consisting of people who are attached to the city in order to gain entrance to employment in the formal sector and who view their current plight as only temporary and still have hope of admission to the protected sector. They lack the motivation and perhaps the means to seek informal activities with growth potential or to invest funds in their current activity because they view their current predicament as temporary. In conclusion, House's findings suggest that the goals of a development strategy can be defined as maximising the development of the 'intermediate sector' and reducing the size of the 'community of the poor'. This double-edged conclusion seems to support the 'competitive autonomy' and 'subordinate autonomy' schools of thought, respectively.

The findings of both Child and House are useful in depicting the dynamism of the informal sector in Kenya. The existence of the 'intermediate sector' as defined suggests that there is an upward mobility of the technologically backward informal sector. This would, therefore, mean that the latter is not static but highly dynamic and capable of developing into a 'formal', indigenously owned economic sector with adapted and appropriate technology. On the other

'reserve army' of the unemployed undertakes in order to keep itself alive whilst waiting and hoping for the economic system, of which it is a part, to provide the more remunerative occupations which will make upward mobility a possibility (Kitching, 1980, p. 405). By referring to the operators in the informal sector as the 'reserve army', Kitching implicitly ignored any possible beneficial linkages between the sector and the rural-based agricultural and urban-based formal sctors. In summary, Kitching maintained that,

> "the informal sector is a place where people go whose only options are even worse, in the sense that the alternative uses of their labour power open to them would yield an even lower rate of return per unit of labour time than does employment in that sector" (ibid., p. 406).

The foregoing views and findings on the potential of the informal sector in Kenya have one thing in common. They are based on the economic justification of profitability. They advocate the promotion of the informal sector only to the extent that the sector can demonstrate its ability to make profit and pay its operators competitive wages. Despite the strong economic appeal of the views, the role of the informal sector in Kenya needs to be evaluated on the broader criterion of equitable distribution of the benefits from economic growth among individual households and between the urban and rural areas rather than narrowly on the economic criterion of profit alone. This is because as the studies

conducted in Kenya indicate, the sector has the following vital socio-economic contributions:

1. Being labour intensive, the informal sector is an important source of employment and income. In 1969, it accounted for 25%-30% of total urban employment and 37%-38% of total employment in the urban and rural areas, combined (I.L.O., 1972, p. 225).

2. It provides the necessary goods and services for the lower income groups in urban and rural areas and no alternative sources of supply for such goods and services exist in the near future (ibid., p. 229; Kabagambe, 1975, p. 154).

3. The gap between job creation and that of labour force growth is widening while population pressure on farm land is increasing, indicating that the sector will expand in the coming years irrespective of policies followed (I.L.O., 1972, p. 228; Republic of Kenya, Ministry of Planning, 1984d, p. 6).

4. The sector can be a source of future growth as an integral part of an employment strategy. Since programmes undertaken officially are seldom completely comprehensive, the informal sector can be viewed as complementary to planned development (ibid., p. 229; Kabagambe, 1975, p. 153).

In agreement with the World Bank (1972), the author opines that though productivity and income in the informal sector may be low compared to the formal sector, in all probability, it exceeds that of marginal employment in

agriculture. Furthermore, the sector may supplement or complement agricultural production and is superior to it with regard to employment. Similar views were expressed in the I.L.O. report on Kenya and afterwards in McGee's report on South-East Asian cities (McGee and Young, 1977). Among the findings and recommendations in the latter case were:

1. that hawkers and vendors play a significant role in the distribution of commodities;

2. that in the short term, policies of accommodation should be developed subject to priorities for urban land use;

3. that in the long term, efforts should be made to integrate hawkers into the retailing system by upgrading their operations into shops and emporiums, as economic development occurs;

4. that provision should be made for hawker centres in new housing developments and that adequate possibilities for the upgrading of hawker activities should exist in all cities throughout a country;

5. that if slower rates of economic growth occur, hawkers would persist and short term policies of accommodation should continue;

6. that policy formation for hawkers be made part of an overall urban and national policy in which funds allocated at a national level may be available to city governments for the improvement of the conditions of the poor in the cities as part of the national goals designed to eliminate poverty;

7. that a flexible system of control of hawkers be introduced in which city administrators are concerned with law and order while the enforcement of regulations is carried out through the use of licenses and other measures;

8. that existing laws and regulations that do not make provisions for hawking should be reviewed;

9. that non-formal education of various kinds be made available to hawkers to improve themselves so that with an improved knowledge they can better serve the public and hopefully move out of this sector in the future;

10. that collective opinion of hawker communities be made available to policy makers and planners;

11. that current statistics on hawker numbers and other characteristics should be collected and monitored so that planning for them can proceed realistically and effectively.

These findings and recommendations were made with reference to the urban informal sector. But the views are useful in exploring the role of the rural informal sector and the alternative ways of dealing with its activities.

In conclusion, it may be pointed out that the controversy on the potential of the informal sector should not obscure the vital role that the sector might play in the economic development and rural transformation of Kenya. As Kitching (1980, p. 378) submitted, the emergence of the sector was spontaneous and consequent upon the socio-economic realities

that faced Kenya. This does not, however, mean that profitability considerations should be ignored altogether but that in evaluating the role of the sector, ways should be sought of invigorating the marginal small-scale component as well. After all the latter component constitutes the bulk of employment in the sector and bears the true characteristics of the informal sector identified earlier in this review.

From the foregoing, it is evident that the informal sector consists of a variety of activities from which a careful selection has to be made for purposes of economic development. The criteria to consider might be social legitimacy, employment and income generation, profitability or a combination of all these. It is also evident that the presence of the sector is known, yet it is not fully recognized as productive and worth promoting. The task of this study is to investigate the role of the controversial marginal small-scale component of the informal sector in combating the specified development problems in Kisumu District. The study is even more urgently needed for the District where, apart from the work of Kabagambe (1975), no similar empirical research on the role of the informal sector has been carried out. Furthermore, whereas Kabagambe's work was based on Kisumu Town, this study pursues the role of the informal sector in the rural service centres distributed over the whole District.

1.2.4. Rural Service Centres and their link with the
        'Informal Sector'

Since this study is based on the rural service centres of
Kisumu District, the theoretical basis of the location of
these centres and their purpose in the overall national
development strategy requires a brief review. The spatial
development strategy in Kenya draws mainly on the 'Growth
Centre' and the 'Central Place' theories which emphasize that
economic growth does not occur everywhere at the same time
but in discrete locational concentrations.

The Growth Centre theory is a broadened and re-orientated
version of the original Growth Pole theory postulated by
Perroux (1950, 1955) and defined as 'centres or foci from
which centrifugal forces emanate and to which centripetal
forces are attracted. Each centre being a centre of
attraction and repulsion, has its proper field which is set
in the field of other centres'(Perroux, 1950, p. 27). In its
original version, then Perroux had defined the notion in
terms of the processes of growth as reflected by the
appearance and development of new activities and not by the
spatial pattern of economic activity or the geographic
implications of economic growth and intra- and inter-
industrial shifts (Harmansen, 1971, p. 21). Perroux's focus
on the structural characteristics of Growth Poles and
interrelation between industries to the exclusion of the

spatial dimension of development was a major weakness in his formulation. While he concluded that the industrial clusters will become Growth Poles if several young propulsive idustries came together to form a large enough complex to exert an influence over the industrial environment, he did not explain how the leading industry with strong inter-industry linkages would find a location to serve as a nucleus around which other industries would cluster (Misra, Sundaram and Prakasa Rao, 1974, p. 183).

Thus, despite the fact that Perroux recognized growth as being concentrated in various spatial locations, his concept of the pole had no spatial or geographic connotation.The line of inquiry culminating in the articulation of the Growth Centre theory by Boudeville (1966) and others was initiated independently by Myrdal (1957) and Hirschman (1958). They attempted to synthesise a theory of the geographical incidence of growth with a hypothesis of the mechanism for the geographical transmission of development impulses. They started from the assumption that development does not appear everywhere simultaneously and that once development has appeared, powerful forces will make for a spatial concentration ofeconomic activity and growth at the initial starting points. Hirschman argued that for an economy to lift itself to higher levels of income it must and will first develop within itself one or several centres of economic strength (p. 158) where industries can benefit from localized

external economies - technical as well as pecuniary - and form an 'industrial atmosphere'. Associated with this proposition is the assumption that initially, economic operators will overestimate the importance of agglomerating economies in the growing points and neglect equally good or better investment opportunities in the country. But in the long run development occurring in the geographical growth points will induce development in the backward hinterlands. These 'trickling down' forces would work through inter-regional trade and the transfer of capital to the backward regions. Their effects depend largely on the existence of the complementarities between the industries in the Growth Centre and the hinterland. Furthermore, migration from the hinterland to the Growth Centre may absorb some disguised unemployment and raise the marginal productivity of labour and the per capita income of the hinterland.

Myrdal (ibid.), on the other hand, emphasized the tendency for the polarization forces to be stronger than the 'trickling down' effects with labour, capital and goods moving cumulatively upwards into the lucky regions and downwards from the unlucky ones. From the standpoint of regional development strategy, Hirschman argued in favour of the need for initial geographic imbalance through the creation of development centres while Myrdal contended that

the mechanisms for spread effects should be strengthened from the outset.

Boudeville carried the Growth Centre notion further by introducing the concept of the polarized region. In contrast to Perroux's abstract conception of space and Hirschman-Myrdal's theories of unbalanced growth, his emphasis was on the regional character of economic space (Darkoh, 1977, p. 14). Boudeville perceived economic space as 'tied to geographic space through a functional transformation that describes the relevant properties of economic processes' (Harmansen, 1972b, p. 197). On the basis of this, he defined a polarized region as a 'heterogeneous, continuous area (localized in geographic space), whose different parts are interdependent through mutual complementary relations centered round a regional centre of gravity' (Richardson and Richardson, 1975, p. 163). Richardson et al have noted that this broader definition is much more useful, especially in the context of a developing country. It gives the analysis a comprehensiveness capable of linking the theories of location, central places and regional growth (Lasuen, 1971). In this way it can be related to the deductive theories of the urban hierarchy associated with Christaller (1966), Losch (1954) and Bos (1965).

In Kenya, the broader concept of Growth Centres, incorporating elements of Central Place theory, has been used

in development planning. Settlement clusters of varying sizes offering localized agglomeration economies in varying degrees have been designated for regional development. The objective of this strategy is to limit economic concentration and spread growth to other parts of the country. It is realized that the concentration of economic, social and political life in the two main cities of Nairobi and Mombasa carries dangers of an economic and cultural gulf being created between them and the rest of the country. A hierarchy of urban growth centres has been created since the 1970's. By 1979, there was a four-tier hierarchy ranging from Urban Centres to Local Centres as depicted by Table 1.2.

Table 1.2:   Designated Service Centre Hierarchy

	Residents	Catchment Area	Number of Centres
Urban Centres	> 2,000	120,000	96
Rural Centres	> 1,500	40,000	150
Market Centres	> 1,000	15,000	420
Local Centres	> 300	5,000	1,015

Source: National Development Plan, 1979b, p.46.

Urban Centres are large to medium-sized towns which have been designated to serve as the main commercial centres for a district. Generally, they also contain the district administrative headquarters. In 1979, they had a resident and catchment area population of about 2,000 and 120,000, respectively. Since 1974, eleven high ranking Urban Centres

with Municipality status have also served as 'rapid development centres'. They consist of Nairobi, Mombasa, Kisumu, Nakuru, Eldoret, Thika, Kitale, Nyeri, Kakamega, Embu and Meru. The centres are given the highest investment priorities by the government, with a bias away from Nairobi and Mombasa.

Rural Centres have been designated to provide at least 40,000 people in rural areas with administrative, social and commercial services. It is expected that the centres will grow into small towns of 1,500 and 40,000 resident and catchment area populations, respectively. They are considered to be important in improving the volume and quality of services and amenities in the rural areas due to their rural location. Administrative and other services (such as health and education) are to be concentrated in them while amenities such as public water supply, electricity and all-weather roads will also be provided. They are also most suited to the development of rural cottage industries. In 1979, there were 150 such centres in the whole of Kenya. In the third tier are Market Centres which have been designated for the development of a lower order of services for a rural catchment area population of at least 15,000. Health centres, chief's headquarters, secondary schools, public water supply, banking and postal services are planned for the centres. Local Centres, the lowest in the hierarchy, are planned to serve a rural population of 5,000 with even lower order trading and

social functions and with no administrative functions. Since

the service centres were ranked in 1974, some changes have

been made. For example, some major towns such as Kisumu,

formerly designated Urban Centres have been renamed Regional

Centres, while others such as Ahero and Maseno, formerly

Rural Centres have become Urban Centres.

The growth centre strategy is designed to promote

national development by working towards rural-urban balance.

The national Development Plan (1979, p. 49) states that this

requires;

> 'an urban development strategy that controls
> polarization towards Nairobi and Mombasa, and that
> emphasizes the development of other centres with
> the potential for supporting rural development.
> Furthermore, those smaller centres at rural and
> market levels with obvious spatial ties will be
> provided with economic and social infrastructure in
> order to establish and strengthen their functional
> links with the larger centres, particularly in the
> regions with high rural development priorities'.

In Kisumu District, however, rural-urban balance between

the town and the complementary service centres has continued

to decline in spite of the national development objective.

The reasons for this can be summarized as; a) the dominance

of service activities such as dry-cleaning that induce no

development in the countryside and simply draw payments from

rural consumers, b) the inability of the town to provide

employment for all migrants of working age seeking employment

and the tendency of most urban dwellers to spend their

incomes right there, and fail to provide remittances to the rural areas.

This imbalance can be corrected in two ways. One could involve reorientating the functions of the Growth Centre to provide a production structure which can transmit growth from the modern sector to the non-modern sector (Santos, 1976). Investment and employment at the centre would need to be increased to provide employment to the incoming migrants. Part of the new investments would consist of processing industries that use agricultural raw materials from the countryside and, hence, stimulate the rural economy. The other could involve activating the economic activities in the complementary service centres by promoting not only the service functions but also the manufacturing ones. The first option involves costly investment and could only be undertaken as a long term plan. The second appears more feasible both in the short and long run. The promotion of small-scale economic activities at the centres would be less costly and could have far reaching development effects in the countryside where they are located. It is in this locational context that this thesis explores the viability of the informal sector as an economic entity that can be promoted to transmit development to the rural areas of Kisumu District.

Theoretically, the service centres are locationally appropriate since the informal sector enterprises in them; a)

reduce their costs of doing business when they cluster there, b) get a large market for their goods and services, c) have better accessibility to Kisumu Town and could benefit from trading relations with the formal sector in the town. Furthermore, the centres can transmit development to their hinterlands because the businesses in them a) have ease of entry, b) rely on locally obtainable resources, c) are owned by indigenous families, d) are labour-intensive, e) require simple skills acquired outside the formal school system, f) require low levels of initial capital, g) have competitive markets, and h) produce and sell necessary products demanded by the low income group, at low prices.

1.3. Scope and Limitations of the Study

Scope

The study generally covered the entire informal sector in the rural areas of Kisumu District but focused on the better organized part of the sector, based in the rural service centres. Furthermore, only the 'legitimate' and economically productive activities were studied. They included activities in the sub-sectors of manufacturing, trade and service. Highly mobile self-employed operators such as public service vehicle operators (manambas) with no fixed premise were omitted for obvious reasons. It was difficult to get them down for an interview.

Limitations

A number of difficulties were encountered during the field work. Below are some of the problems and how they were managed.

Scanty Records – Operators did not have written business records and answers to the questions seeking business information had to rely on the memory of informants. However, this limitation had been anticipated and catered for. It was minimised by designing interrelated, checking and probing questions.

Low Aptitude – Operators with low levels of education tended to be slow in recollecting and answering the questions. This caused a considerable waste of time. But the problem was reduced by engaging a research assistant.

Location of Business Premises – Some business premises were located in hidden places which could not be seen easily. More time had to be spent checking out all possible places. The problem was reduced by the question which required informants to comment on the intensity of competition they faced from other operators in similar trades. In answering the question, the informant also gave information on where similar businesses were located within the particular trading centre.

Cost – The District is vast and travelling from one service centre to another was financially expensive, time consuming and physically exhausting.

In spite of all the limitations, information inaccuracies, time and financial constraints were reduced in the ways indicated. Furthermore, my personal knowledge of the study area and of the local language also reduced the problems considerably.

1.4. Conceptual Definitions

The meanings of the basic concepts used in this study are given below.

1. 'Informal Sector' refers to small-scale income-earning, 'socially legitimate' economic activities which are productive and have business premises in temporary structures or in no structures at all. It includes both licensed and unlicensed activities. Activities which may be economically productive but are 'socially illegitimate' such as prostitution are excluded. Furthermore, the concept applies to activities organized as regular businesses and not to occasional market-day exchange of miscellaneous farm products in the market place.

2. 'Temporary structure' refers to a structure constructed to below semi-permanent standards, for example a tin structure, bamboo structure, grass-thatched mud house. The concept also includes verandas of permanent and semi-permanent houses. A temporary structure may or may not occur on legally recognized spaces.

3. 'Informal Enterprise/ Business/ Economic Unit' are used interchangeably and refer to a unit of business under one management.

4. 'Value of Capital' refers to the total value of machine tools, stock, monthly rent, cost of constructing the business structure.

5. 'Profit of Business' refers to the perceived income accruing to the proprietor(s) minus wages to employees and costs of inputs/ stock purchased.

6. 'Designated Rural Service Centres' refers to the rural service centres that are officially designated for development in Kisumu District (See Figure 2.1). The concept excludes Kisumu Town which is also designated for development but which hosts the urban as opposed to the rural informal sector. The service centres consist of 30 Local Centres (Akado, Reru, Bodi, Kaloka, Magwar, Kondik, Kipasi, Ulalo, Nyag Bongo, Wath Orego, Kibos, Nyamasaria, Nyang'ande, Korowe, Ramula, Ambaka, Nyamarimba, Bodi in Nyakach, Nyabondo, Sigoti, Onyuongo, Kibogo, Onjiko, Masogo, Makindu, Koru, Tamu, God Abuoro, Daraja Mbili, and Songhor); 12 Market Centres (Awach in Seme, Awach in Kano, Pawakuche, Daraja Mbili, Kisian, Otonglo, Chiga, Rabuor, Kusa, Pap-Onditi, Awasi and Kibigori); 6 Rural Centres (Kombewa, Kiboswa, Sondu, Miwani, Chemelil and Muhoroni); and 2 recently upgraded Urban Centres (Maseno and Ahero).

7.   'Service Centre-based Informal Sector' refers to
informal   sector   activities   with premises   of   business   in
temporary   structures   or   in no structures   at   all   in   the
designated   service   centres.   Operationally it excludes   the
rural informal activities located elsewhere.

In   the next chapter,   the methodology employed to   probe
the   objectives of the study is described.   Both   qualitative
and quantitative methods are used to test specific hypotheses
in order to verify the role of the informal sector in the
development of the District.

CHAPTER TWO

METHODOLOGY

The methods used to verify the hypotheses of this study
consisted of fieldwork which involved sampling, designing and
administering recording schedules and personal interview
schedules, obtaining local authority and central government
records, and analysing, presenting and interpreting the data
and other information.

2.1. Methods of Data collection

Data and other information was obtained by fieldwork.

2.1.1. Facilities for the fieldwork

Certain facilities were essential at different stages
of the fieldwork. A settlement base-map of the designated
service centres in Kisumu District and the roads joining them
helped in drawing up a schedule to be followed so that the
randomly selected centres could be visited in sequence. A
camera was also used for taking photographs to illustrate the
nature of the informal activities. After fieldwork was over,
the computer was used extensively to perform most of the
statistical analyses.

2.1.2. Sampling

Sampling was done in three stages. Firstly, the universe
was defined, then the working population was delineated and,

finally, the sample was drawn.

1) The universe consisted of all the people engaged in the informal economic activities in Kisumu District. Based on the available statistics, the universe was estimated at 21,000 for the year 1983. This was taken to be the difference between the total non-agricultural wage employment of 60,000 estimated for the District for 1983 and the formal non-farm wage employment of 38,598 enumerated for the same year.

2) The working population was composed of all the informal enterprises in all the designated rural service centres. The centres were selected because they were likely to attract economic activities with regular business characteristics due to the agglomeration economies they provided, as contrasted with dispersed activities in the countryside.

3) The sample that was finally drawn was obtained in three stages, designed to ensure its representativeness of the working population. Firstly, the stratified hierarchy of the service centres was taken as it was, namely, 30 Local Centres, 12 Market Centres, 6 Rural Centres and 2 Urban Centres (see Figure 2.1). Secondly, random sampling numbers were used to select centres from each stratum. The proportion of centres selected from each stratum also took into account the relative importance of the centres in terms of the actual built-up area. Consequently, a half of the Urban Centres, a

third of the Rural Centres, a quarter of the Market Centres
and a sixth of the Local Centres were selected. Thirdly, all
the informal economic activities in the selected centres were
studied as economic enterprises, with proprietors and their
employees being interviewed under their respective
enterprises. The sampling procedure is summarized in Table
2.1.

Table 2.1: Sampling Procedure

Rank of Centre	Proportion randomly selected	Number of Enter-prises studied	Number of Propri-etors	Estimated Number of operators engaged in the Centres sampled *	Estimated Number of operators in all Centres *
(1)	(2)	(3)	(4)	(5)	(6)
U.C.	(1/2) =1/2	89	97	185	370
R.C.	(2/6) =1/3	40	46	69	207
M.C.	(3/12)=1/4	33	39	69	276
L.C.	(5/30)=1/6	48	55	100	600
		210	237	423	1,453

* consists of proprietors, paid employees and assistants.
Column 6 is the product of the reciprocals of column 2 and
     the elements of column 5.
U.C. = Urban Centre   M.C. = Market Centre
R.C. = Rural Centre   L.C. = Local Centre

A total of 210 enterprises engaging 237 proprietors and
186 employees and assistants were studied. This represented
30% of the estimated working population of 1,453. The latter,
in turn, represented 7% of the estimated universe.

The service centres that were drawn in the sample were Ahero (U.C.), Chemelil (R.C.), Kombewa (R.C.), Rabuor (M.C.), Pap-Onditi (M.C.), Awasi (M.C.), Akado (L.C.), Nyamasaria (L.C.), Msogo (L.C.), Tamu(L.C.) and Kibos (see Figure 2.1).

2.1.3. Primary Data

The acquisition of primary data involved designing and conducting recording and interview schedules.

1) Recording Schedule Design

Questions were designed by the researcher with the aim of gaining a detailed knowledge of the various vital aspects of the informal businesses and of the operators engaged. The questions were also aimed at acquiring statistical data to be used to analyse the role of the sector in the economic development of the District. Questions were designed to probe into the issues asked so as to expose any possible contradictions in the responses of the informants. This was done so that in places where contradictions were apparent, the informants would be asked to clear them up. Consistency among the answers provided was considered important in maximising the level of accuracy since errors would easily be detected and the informants re-examined to recollect more precisely the information required. The questions were also made open-ended deliberately to allow any unexpected responses to be recorded.

FIG. 2.1 : KISUMU DISTRICT: MAJOR TRANSPORTATION LINES AND DESIGNATED SERVICE CENTRES

KEY

District boundary
Principal Town
Principal Town
Urban Centre
Rural Centre
Market Centre
Local Centre

ROADS

International Trunk — A
National Trunk — B
Primary — C
Secondary — D
Minor — E
Railway Line

KILOMETRES
0   5   10   15   20   25
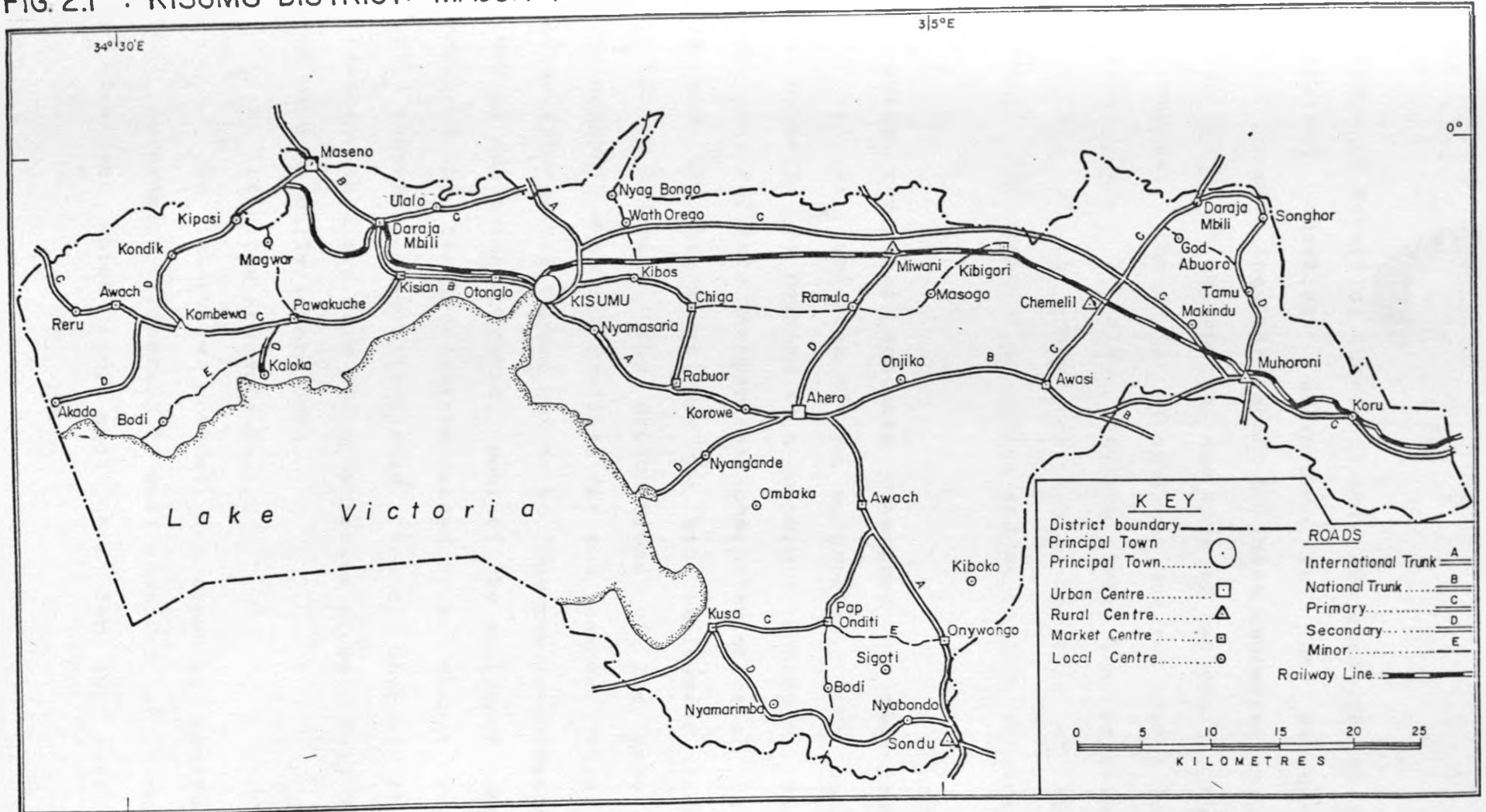
Two types of Recording Schedules were designed. The first one contained questions addressed to the business proprietors. It made inquiries about business characteristics such as the age of an enterprise, the size of employment, the value of capital, the profit of business and the source of intermediate goods. It also inquired into the personal characteristics of the proprietor such as the size of his land holding, the years of education and so on (See Appendix 1).

The other recording schedule consisted of questions addressed to the employees of an enterprise, with each employee expected to respond to a separate schedule. The questions inquired into the personal characteristics of the employee and the way he related to his employment (See Appendix 2). However, the expectations of the second recording schedule were not realised for two reasons. First, most of the enterprises turned out to be 'one-man businesses' and so had no employees. Second, most of the employees who were reported by the proprietors tended to be absent and could not, therefore, be interviewed. Hence, most of the information was obtained from the proprietors alone. Only 31 employees were actually interviewed.

2) Interview Schedule Design

The interview schedule was aimed at central and local government officers. It was composed of broad leading questions which left much room for any useful

information that the technical personnel would provide (see Appendix 3).

3) Administration of the recording schedules

To ensure uniformity in the understanding of the questions, interviews were conducted by the researcher himself in the first month of the fieldwork. In the meantime, a research assistant was trained to help in conducting the interviews. Later, the assistant and the researcher worked together in one service centre at a time to enable close supervision.

A service centre was first surveyed by conducting a rough count of the enterprises. This gave a rough picture of the total number to expect. The two researchers would then separate and begin conducting the interviews from opposite ends of a row of informal businesses, and go from from one enterprise to another until they met. The exercise was repeated for other rows until all the enterprises were covered. About eight enterprises were covered in a day.

Most operators were cooperative and answered the questions frankly. A few were, however, suspicious initially. But after introductions were made and the purpose of the research clarified, the informants became free and willing to offer the necessary information. Only on two occasions did some operators prove so difficult that they nearly refused to answer the questions. However, they were luckily convinced at

last without resort to legal action. The later alternative would have been disastrous since it would have scared away unlicensed operators and spoilt the quality of the information from the licensed but equally frightened operators. This is because written business records rarely exist in the informal sector and one has to rely on the memory of the informants.

On the whole, the informants turned out to be more cooperative than had been anticipated. This was most probably due to the ease of communication in the local language and to frequent similar encounters that the informants had had with researchers before.

The interviews were conducted in private and the informants assured of confidential treatment of their answers. The purpose was to minimise external influence on the informants and, thereby, maximise frankness and truthfulness. Only discussions were conducted in public to assess the comparative soundness of opinions.

4) Administration of interview schedules

Interview Schedules were conducted by the researcher in person. Appointments to interview the officers concerned were made a few days before the interview. An unfilled interview schedule was given to the officer at the same time so that he would be able to study the questions and prepare answers. On the appointment date the interview was

conducted and the answers filled in if this had not been done. This was followed by discussions regarding the informal sector, in relation to the answers given during the interview. This provided valuable additional information.

2.1.4. Secondary Data

Secondary data was sought from the Municipal and the County Council license records. However, when they were cross-checked with primary data, some were found to be incomplete. For example, 23% of the enterprises sampled were operating without licenses and so were missing on the official records.

v) Personal Observation

Personal observation was equally important in obtaining the visual impression of the informal sector. It was conducted throughout the fieldwork period which lasted from October 1984 to February 1985. Many important observations were made in this way for later use in qualitative analysis.

2.2. Methods of Data Analysis

Both qualitative and quantitative methods were used to analyse the sample data and the general information obtained from the field.

2.2.1. Qualitative Methods

These consisted of classifying and summarising the sample data and the general information.

1) Typology

Field data relating to the economic activities in the informal sector were arranged into categories to allow subsequent analyses to be made for the whole sector together and for its sub-sectors separately. Enterprises in the sector were classified into sub-sectorial categories, namely services, manufacturing and trade. Further classifications enabling more detailed analyses involve the grouping together of specific trades in the sector such as tailoring, bicycle repair, metal goods fabrication and so on.

2) Summary Statistics

Descriptive statistics were used to summarize the mass of data collected from the field into a few numbers that measured in some way the various aspects of interest to the study. These included averages, the standard deviation, the skewness and percentages. Histograms and bar-graphs were also used to illustrate the dispersions of some important features of the sector.

2.2.2. Quantitative Methods

This involved the use of statistical methods to test the research hypotheses. Three suitable methods were used for the purpose, namely, the means test, the chi-square goodness of fit test and regression analysis. These techniques will

now be introduced to show what they involved and the roles
they were intended to play in the analyses to follow in
chapters 4 and 5.

1) The means test

This test can be used to compare the sample mean
with that of the universe and decide whether or not the two
are statistically similar (Mills, 1955, pp.213-226; Blalock,
1972, pp. 184-193; Erickson and Nosanchuk, 1977, pp. 151-
160). The technique was applied in this study to test the
hypothesis that the informal sector absorbs participants
mainly from the section of the population with higher land
pressure than the mean land holding per person in Kisumu
District. In other words it tested whether the sector
effectively tackles the pressure on farm land.

The means test normally requires knowledge of the
mean (μ) and the standard deviation (σ) of the universe
and assumes that the sample population is normally
distributed. The normal probability value 'Z' can then be
computed by the formula:

$$Z = \frac{\bar{x} - \mu}{\sigma / \sqrt{N}}$$

where $\bar{x}$ = sample mean
N = sample size
μ, σ & Z = same as defined above

This value is then compared to a critical value of the
standardardised normal deviate (Z—value) to decide whether or

not the computed Z is less than the critical Z-value at a selected level of confidence. If the computed Z is greater than the critical Z, then there is enough statistical evidence that the sample mean is based on a population whose mean is different from that of the universe.

When the standard deviation of the universe is missing, the means test is slightly different. Because sample values tend to reflect universe values, the sample standard deviation can be used to estimate the σ of the universe by the formula:

$$\hat{\sigma} = sd = \sqrt{\frac{\sum (x_i - \bar{x})^2}{N-1}}$$

The formula denotes that an estimate of the standard deviation of the universe, $\hat{\sigma}$, is given by the standard deviation of the sample. This estimation transforms the Z-test into the t-test, and the t-values are computed by the formula:

$$t_{N-1} = \frac{\bar{x} - \mu}{\hat{\sigma} / \sqrt{N}}$$

The means test was specifically applied in this study to compare the sample statistics relating to the population pressure on land facing the informal sector operators with the District's population-land pressure index. Because only the mean land holding index, and not its standard deviation, was available in the official records, the t-test version of

the means test was used instead of the Z-test. The test
confirmed, as will be shown later in chapter 4, that the
sample mean land holding per person is less than the
District's mean.

2) The Chi-Square Goodness of Fit (χ^2)

This technique is used to test the concordance of
an actual frequency distribution with an expected one (Mills,
1955, pp. 522-540; Croxton, 1959, pp. 267-283; Snedcor and
Cochran, 1972, pp. 236-237; Hammond and McCullagh, 1974, p.
171). In the study it was applied to test whether or not the
informal operators have higher levels of education than those
of the District. To confirm the hypothesis that the informal
sector effectively combats rural to urban migration of
school-leavers, the levels of education attained by the
operators were expected to be higher than comparable
proportions for the District's population.

The procedure of the chi-square test involved taking the
difference between the observed frequency in each class of
education (O_i) and its corresponding expected, or computed
frequency (E_i), squaring the value, dividing the expected
frequency, and summing these quotients. The equation for this
is:

$$\chi^2 = \sum_{i=1}^{n} \frac{(O_i - E_i)^2}{E_i}$$

The probability of that X^2 value occurring by chance is then obtained to decide whether or not the sample distribution is different from the expected one.

But care has to be taken in examining and interpreting X^2 in the light of the actual distribution of the discrepancies since the computation of the chi-square does not take into account the manner in which the discrepancies between the observed and the expected frequencies are distributed. These discrepancies may substantially influence the judgment as to the goodness of a given fit. For example, the successive values of the observed, minus the expected frequency values, counting from the lower limit of the variable elements, might be alternately positive and negative. If chance alone accounted for the discrepancies between the observed and the expected frequencies, then something approaching this alternation would be expected. But it is possible that in one case successive values of the observed minus the expected values might be alternately positive and negative while in another case all the values below the median might be positive and all those above it might be negative, yet in both cases, computations may show that chance alone accounted for the differences. In such an instance, more confidence would attach to a fit marked by alternations of positive and negative deviations than to one in which a series of positive deviations were bunched together on the scale and negative discrepancies were correspondingly clustered.

Thus, the actual sample frequencies (observed frequencies) are also compared with the corresponding expected frequencies (of the universe) to tell the nature of the difference, if any. The sample frequencies were expected to be higher than the District's frequencies in the higher levels of education and lower in the lower levels. This is in accordance with the hypothesis that the informal sector effectively reduces the rural-to-urban migration of school-leavers most likely to migrate to the town(s), by providing employment in the countryside.

As will be demonstrated in chapter 4, the results showed that the X^2-values are significant for both the male and the female components of the informal sector operators, though the significance is stronger for the former. Furthermore, the discrepancies between the frequencies of the sample and those of the District show negative values (of O_i-E_i) at the lower ends of the frequency scales, and positive ones at the upper ends, except for the secondary level of education. This indicated that the sector is effective in reducing the rural-to-urban migration of primary, but not of secondary school-leavers.

3) Multiple Linear Regression (MLR)

The multiple linear regression technique is used to describe the nature of the relationship between two sets of variables; a dependent and one or more independent variables

so that the former can be estimated if the values of the latter are known (Blalock, 1972, pp. 361-502; Johnston, 1978, pp. 60-87). In this study it was used to test the hypothesis that the informal sector has the potential for evolutionary growth. It was expected that the sector is sufficiently responsive to the business-influencing factors to allow incomes to rise relative to employment, with favourable changes in business conditions. Field data relating to business performance were used to test the hypothesis. Perceived business profit was selected as the dependent variable to measure the economic performance of an enterprise. Eight independent variables were also selected for the test.

The independent variables consisted of the present value of capital (PVC), the initial value of capital (IVC), the number of customers served in a week (NOCW), the operator's years of education (YOE), the age of an enterprise (AOE), the age of the operator (AOO), the period of apprenticeship (PAPP), and the pressure on the operator's farm (POFL). Along with the independent variables, five dummy variables were also used to test whether the value of the dependent variable varies significantly according to the rank of a service centre (RSC), the sub-sector of an enterprise (SUB), the perceived value of intermediate goods (i.e. circulating capital) required (VCCA) and the gender of the business

proprietor (GEN). All the variables were measured on the interval scale except for the dummy variables which were measured on the nominal or ordinal scales.

The response of economic performance to the independent variables was measured by the Multiple Linear Regression coefficients. The purpose of applying MLR is to determine the nature and explanatory power of the business-influencing variables on the economic performance of the enterprises and to derive an equation for estimating the latter. To do this successfully, it was first necessary to perform correlation analysis. The analysis made it possible to determine whether the independent factors were really independent of one another, otherwise multi-collinearity might be present. Multi-collinearity is a statistical problem which can severely bias the regression coefficient estimates and their standard errors in a multivariate equation. In practical terms, strong intercorrelation suggests that the variables involved could be surrogate measures of the same thing which itself might be missing. It might indicate then the need to seek the true variable or to drop one of the highly correlated ones. In this study, the results showed low correlation coefficients between the independent factors except between the IVC and the PVC as will be shown in chapter 5. The strong correlation ($r=0.7$) between these factors was due to the overlap between them. A large part of the IVC in the enterprises was still present in their PVC,

especially in the service and manufacturing sub-sectors where a good part of the capital was fixed in durable producer goods such as machine tools. The strong correlation also meant that the enterprises that had started off with larger values of capital had maintained the lead. It was, therefore, decided that the variable IVC be dropped in further analyses since it was, in fact, incorporated in the variable PVC.

Having ascertained the statistical independence of the independent variables, partial correlation analysis was applied to determine which of the independent variables by itself had a significant correlation with perceived business profit. A stepwise MLR employing the GLIM (Generalised Linear Interactive Modelling) computer package (Baker, 1978) was used to compute the partial correlations. The package has an additional advantage of being able to plot a scattergram of the dependent variable against the standardized values (FV) of the independent variables together on one graph. Up to nine independent variables can be standardized in this way. Thus, not only were the partial correlation coefficients obtained for each of the independent variables but the scattergrams for the variables in the equation were also plotted and examined to see whether they reflected a good fit for the line of least squares. It was clear from the initial scattergrams that the relationship was curvilinear rather than linear. Several transformations were then tried on both

the dependent and independent variables and a scattergram constructed for each trial. Extreme outliers were also removed from the plots. The final models presented contain the independent variables with significant individual influence on the dependent variable in the form that reflects the best fit for the line of least squares. The magnitude of influence of each of the regressors on the dependent variable was also reflected in the size of their respective partial correlation coefficients 'r'. Hence, it was also possible to tell in which sequence the independent variables were related to the dependent one.

The statistical operations described above were performed for the whole sector together and for each sub-sector separately as will be shown in chapter 5. The equations derived were of the following forms:

Whole Sector

$$\ln POBM = b_0 + b_1 \ln NOCW + b_2 \ln PVC + b_3 YOE + b_4 VCCA(1)$$
$$- b_5 RSC(2) - b_6 RSC(3) - b_7 RSC(4) + b_8 SUB(2)$$
$$- b_9 SUB(3). \quad \ldots \ldots \ldots \ldots \ldots \quad 1$$

Service sub-sector

$$\ln POBM = b_0 + b_1 YOE + b_2 VCCA(1) + b_3 NOCW. \quad \ldots \ldots \quad 2$$

Manufacturing sub-sector

$$\ln POBM = b_0 + b_1 NOCW + b_2 PVC. \quad \ldots \ldots \ldots \quad 3$$

Trade sub-sector

$$\ln POBM = b_0 + b_1 PVC + b_2 NOCW \quad \ldots \ldots \ldots \quad 4$$

where, for the 4 equations;
POBM = perceived profit of business in a month (in KSh.)
b_0 = regression constant.
b_1 ,b_2 ,b_3 ...b_n = slopes of the regression surface.
NOCW,YOE,PVC=independent variables as already defined,
    with significant individual influence on the
    dependent variable
VCCA(1), RSC(2), RSC(3), RSC(4), SUB(2), SUB(3)=dummy
    variables (to be defined in chapter 5), with
    significant individual influence on the profit
    of business.
ln = natural logarithm.

It will be seen later that these results show that business profits in the informal sector are responsive to some specific business influencing factors. But the degree of responsiveness varies between the sub-sectors for reasons to be examined in chapter 5.

In the next chapter, the study area, its economy and the place of the informal sector are introduced. Qualitative methods of analysis are used extensively to show the internal characteristics of the economic activities involved and their prospects for development.

CHAPTER THREE

THE IMPORTANCE AND NATURE OF THE INFORMAL SECTOR
IN THE STUDY AREA

3.1 Introduction

To understand the economic and spatial implications of the informal sector in Kisumu District, it is first necessary to survey the interrelated physical and human conditions in the area. This chapter introduces the general physical and economic conditions of the District in the first section to provide the spatial and economic context in which the role of the informal sector activities, presented in the second section, take place.

Kisumu District has a total land area of 2,660 square kilometres of which 567 square kilometres is covered by water. The District is situated between 0° 30'S and 0° 15'N Latitude and between 34° 25'E and 35° 25'E Longitude. It is the second largest of the four Districts that comprise the Nyanza Province of Kenya, after South Nyanza District. The District is bordered on the south by South Nyanza; on the east by Kericho; on the north-east by Nandi; on the north by Kakamega, and on the west by Siaya (see Figure 1.1.).

Kisumu District is divisible into three topographic regions, namely, the Kano Plain, Nyabondo Highland areas and Nyando-Maseno Escarpments and Highland areas. The Kano Plain

lies on the floor of the Nyanza Rift Valley and is a product
of downfaulting between two parallel faults, the Nyabondo
Fault in the south and the Nyando Fault in the north
(Saggerson, 1952; Gibb and Partners, 1956; Ojany and Ogendo,
1973, p.119). The Nyando Escarpment continues westwards after
Kajulu and Kisian Ranges to Maseno where it rises to 1,835
metres above sea level and into Kombewa, Seme. To the south
of Kombewa is a lower part of this belt. On the whole, the
District varies in altitude from 1,144 metres above sea level
on the Kano Plain, through 1,525 metres in South Nyakach
Location (Nyabondo area) to 1,835 metres in the areas .of
Maseno (see Figure 3.1).

Geologically, the Kano Plain is an alluvial peneplain of
quarternary sediments with dark loam soils, while the
Highlands and Escarpments have residuals of brown volcanic
and sandy soils (Ojany and Ogendo, 1973; D'Costa and Ominde,
1973; Odenyo and D'Costa, 1979).

The physical terrain has important implications for
agriculture in the area since it influences the farming
conditions and, hence, the population-holding capacity of the
land. For instance, the slopes of the escarpments which
consist of well drained but poor shallow soils imply easy
cultivation but low potential yields. On the other hand, the
deep and more fertile but poorly drained clay soils
(Vertisols) in the alluvial peneplain may imply difficult

FIG. 3. 1. : KISUMU DISTRICT: TOPOGRAPHY
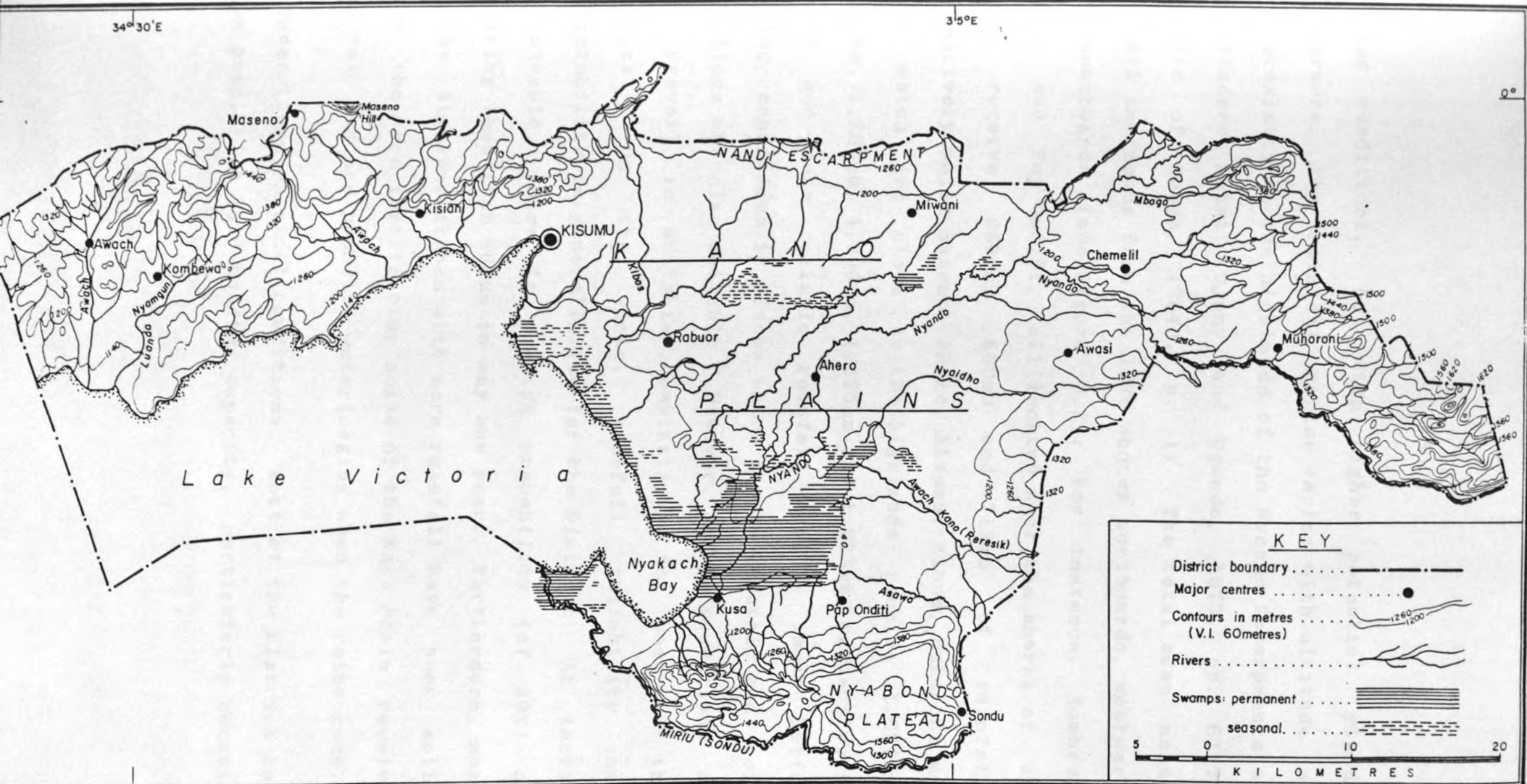
SOURCE: Constructed from 1:250,000 KISUMU and 1:50,0000 ASEMBO BAY (115.2) Map Sheets.

farming conditions, but with higher potential yields. Furthermore, the rainfall regime varies with altitude and with proximity to the highlands of the Nyando Escarpments and the Tinderet massif (Ojany and Ogendo, 1973, pp. 61-72; Republic of Kenya, 1984d, p. 1). The total mean annual rainfall increases from the lake shores northwards, westwards and southwards (see Figure 3.2). For instance, Kombewa, Awasi, and Pap-Onditi, all located near the shores of the Lake, receive 660mm, 560mm and 712mm of rainfall, respectively while Maseno, Ahero, Kisumu, Kibos, Muhoroni and Koru, which are close to the highlands receive 1,630mm, 1,260mm, 1,280mm, 1,290mm, 1,525mm and 1,203mm, respectively. Higher and more reliable rainfall amounts imply better farming conditions in places where the topographic and soil conditions are also suitable. However, these conditions do not prevail in suitable combinations for most of the District. On the whole, rainfall reliability and predictability is generally low for the District. At Ahero, for example, there is a high probability (of 30%) of receiving less than 900mm in any one year. Furthermore, most of the highland slopes with more rainfall have poor soils while the more fertile clay soils of the Kano Plain receive less rain and are prone to waterlogging when the rains come.

Under these physical conditions, most of the District has a low population land-holding capacity, particularly because

FIG. 3.2 : KISUMU DISTRICT: DISTRIBUTION OF AVERAGE ANNUAL RAINFALL

KEY
MEAN ANNUAL RAINFALL (mm)
Below 1200 . . . . .
1200 — 1400 . . . .
1400 — 1600 . . . .
1600 — 1800 . . . .
Above 1800 . . . .

KEY
District boundary . . . .
Approximate isohyets . . . . . . 1400 mm
Rivers . . . .
Roads . . . .
Railway line . . . .

0   5   10   15   20   25
K I L O M E T R E S

SOURCE: Min. of Agri. and Ger. Agri. Team.

75
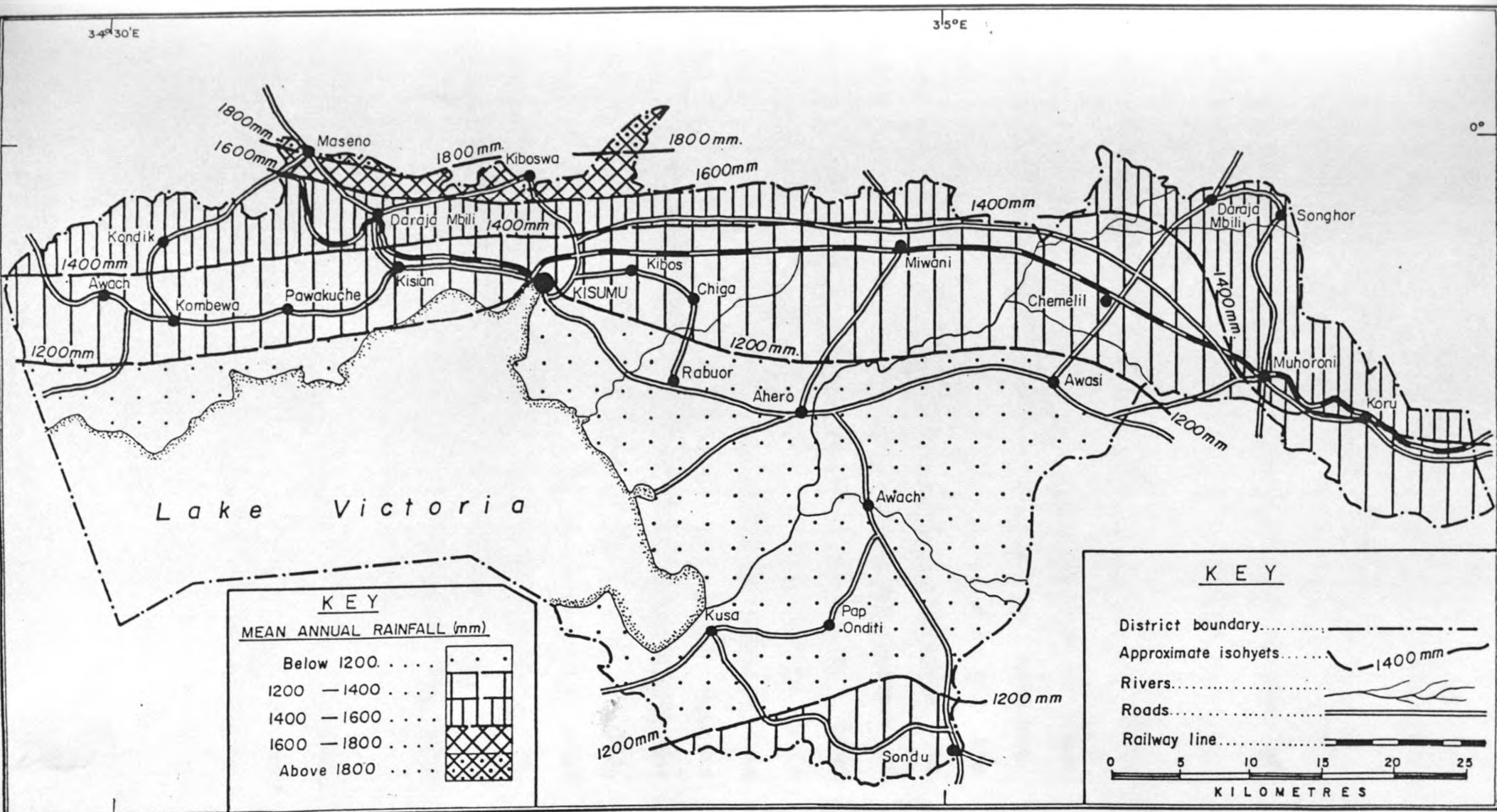
Republic of Kenya,   1984d, p. 4).

    i) Marginal Coffee Zone   < 5%

   ii) High Potential Sugar Zone   < 5%

  iii) Marginal Sugar Zone   25-30%

   iv) Cotton Zone   45-50%

    v) Marginal Cotton Zone

      (Rice, Swamp Zone)   15-20%

      (See Figure 4.1, p. 140).

Subsistence crops are also grown in these zones. There
are even pockets of high potential for the production of
maize and sorghum. Nevertheless, research findings express
quite a pessimistic overall prognosis. More than 75% of the
District   is classified as unsuitable for economically
successful small-scale farming. The Ministry of Agriculture
and the German Agricultural Team (Jactzold, et al, 1982,
p. 200) observed that;

> "Extremely heavy soils combined with warm climate,
> relatively low annual rainfall and repeated
> flooding makes farming a heavy burden...Lasting
> improvement of the socio-economic situation of most
> small-scale farmers of the District can only be
> achieved through large investment in drainage and
> irrigation by the government. The Sugar-Belt yields
> return mostly to large farms only"

Thus, it is apparent that at present, agriculture, the
main source of livelihood in the District, has a limit to
which it can be exploited to support the population. The same
conclusion was reached in another study of the influence of

soils on the agricultural land-use pattern of the area by the author (Bowa, 1983, pp. 104-106). While present projections show that the capacity of the agricultural sector is limited, population is increasing rapidly. In 1979, the total population of Kisumu District was 482,327, with 329,684 living in the rural areas (outside Kisumu Municipality), 152,643 in the Municipality and a population dependency ratio of 1:0.996 (Appendix 4). Seven thousand of the rural population were living in the service centres (Jactzold, et al, 1982, p. 196). Table 3.1.1 shows the 1979 population distribution by location, overall density and density on the agricultural land. The available agricultural land was calculated by the Ministry of Agriculture and the German Agricultural Team (Jactzold, et al, 1982) to be 2.31 hectares for an average household of 5 people and 0.46 hectares per rural resident. Population pressure on agricultural land is, thus, quite high on the average and will rise in the coming years in spite of the net population out-migration, especially of working age, to neighbouring Districts and the rest of the country (Oucho, 1985, p.154). This is well indicated by the projection made on the basis of the District's population growth rate of 3.33% per annum for the 1983-88 period (Appendix 5). According to the projections, the population of the District, in 1985, was higher than in 1979 by 173,305, implying that the pressure on

Table 3.1.1: Population Distribution by Location

ation/ ision/ icipa- ty	Population	Area in square kilom- etres	Overall Density	Agricul- tural Land in square kilomet- res	Number of House- holds	Land per House- hold in hecta- res	Land Per Person in hecta- res
umu t/West	33,621	118	284	89	6,623	1.34	0.26
ie East	32,080	139	229	126	6,072	2.08	0.39
ie West	27,487	122	224	108	5,546	1.95	0.39
ASENO	93,188	380	245	323	18,241	1.79	0.35
rth-East Kano	41,693	202	205	167	8,421	2.27	0.46
uth-East Kano	36,853	296	124	237	6,646	3.81	0.68
YANDO	78,546	498	165	404	15,067	3.04	0.57
orth Nyakach	34,129	183	186	128	6,489	1.97	0.38
outh Nyakach	23,939	79	301	61	4,233	1.44	0.25
est Nyakach	19,057	97	195	72	4,025	1.79	0.38
YAKACH	77,125	359	227	261	14,744	1.73	0.34
est Kano	32,305	144	223	94	5,173	1.82	0.29
INAM	32,305	144	223	94	5,173	1.82	0.29
horoni	10,293	76	134	66	8,818	1.99	0.54
ru	7,565	78	96	61	1,687	3.62	0.80
wani	9,500	102	92	82	2,603	3.65	1.01
emelil	21,162	182	116	164	4,817	3.30	0.73
UHORONI	48,520	439	110	356	11,925	3.15	0.77
sumu nicipal- ity	152,643	270	565	---	32,458	----	----
SUMU STRICT	482,327	2,093	230	1,438	97,611	2.31	0.46

Source: Republic of Kenya (1981), Ministry of Agriculture and the German Agricultural Team, 1982, pp. 196,197,198.

land resources has increased considerably, given the low carrying-capacity of the land.

Agriculture is complemented by fishing which constitutes the second most important primary occupation. Fishing is done in the Nyanza Gulf mainly by the local inhabitants. According to estimates made at the 1979 prices, the income from fishing was 5 million Shillings a year. This was sufficient to support 1,000 families or 6,400 people assuming 6.4 persons per family at 5,000 Shillings a family (Republic of Kenya, Ministry of Finance and Planning, 1984d, Kisumu District, p. 12). By 1985, these figures had definitely increased as more people are likely to have joined the occupation as a result of the population pressure on resources. The future of the fishing industry seems promising, though its small size may delay its rapid development.

3.3. The Formal Sector

The formal sector constitutes another important source of employment and income. It is the second most important source after agriculture in terms of the employment of labour. Activities in the formal sector consist of large and small-scale non-farm wage employment in the public and private sub-sectors. The public sub-sector consists of central and local government activities while the private sub-sector is composed of privately owned small- to large-scale formal

economic activities by industrial categories. Employment in these activities in 1980 are shown on Table 3.1.2.

According to the Ministry of Finance and Planning, the formal sector employed 33,932 people in 1980. This expanded slowly to 34,356; 35,373; and 38,598 in 1981, 1982, and 1983, respectively (Republic of Kenya, Ministry of Finance and Planning, 1984, pp. 229-239). Furthermore, 54% of the employees of 1983 were in Kisumu Town alone, confirming the concentration of the sector in the town.

Table 3.1.2: Employment in the Formal Sector, 1980
(i.e Non-farm wage employment)

Community, Social and Personal Services	15,523
Manufacturing	7,520
Agriculture and Forestry	4,345
Wholesale and Retail, Restaurants and Hotels	1,857
Construction	1,777
Transport and Communication	1,704
Finance, Insurance, Real Estate and Business Services	721
Mining and Quarrying	260
Electricity and Water	225
Total =	33,932

Source: Republic of Kenya, Ministry of Finance
and Planning, 1983, p. 30.

This spatial imbalance, coupled with the slow expansion of employment in the town imposes a limit on the extent to which the formal sector can provide an adequate solution to the socio-economic problems of the basically rural population of

the District. Even at the national level, the size and rate of expansion of formal employment is similarly small as has been shown in chapter 1. The slow rate of expansion is mainly due to the difficult operational requirements of the sector. It is difficult to venture into, relies on imported inputs, is largely foreign owned, has large scale of operation, employs capital-intensive technology, requires elaborate formal education and operates in regulated and monopolistic markets. Thus, like the agricultural sector, the formal sector cannot be expected to absorb a large portion of the swelling labour force of Kisumu District either within the District or at the national level.

3.4. The Informal Sector

The size of the informal sector is not known precisely, partly because of the differences in perception and partly because many operators in the sector are not licensed or registered businessmen. However, the District Development Plan (Republic of Kenya,1984a) estimated a labour force of 21,000 for the sector in 1983. This puts the sector third in employment after the agricultural and formal sectors. The distribution of this labour force between the urban and the rural areas is more balanced than for formal employment. According to official estimates, the sector had 4,000 operators in the Municipality, and 17,000 in the rural areas,

including the service centres. Thus, the share of rural employment in the informal sector is nearly equal to that of enumerated non-agricultural wage employment in the rural areas. It would seem, therefore, that the size of the informal sector in the District is large and although the scope of this study is limited to the better organized, market orientated part alone, lessons learned can contribute immensely to the exposition of the role and potential of the entire sector in economic development.

i) Activities in the Informal Sector

In this section, the economic and spatial features of the informal sector in the District are explored to provide a basis for explaining the role of the sector in development. Due to the scarcity of documented information on the sector in the area, primary field data and information have provided the basis for the analysis.

Informal sector activities are highly varied and seemingly indistinguishable. However, they can be grouped by some specific criteria that can enhance a systematic study of the sector. House (1978) recognized this and used the conventional economic sub-sectorial types, namely, manufacturing, service and trade. Similar categories are used in this study for the same purpose. The manufacturing sub-sector consists of activities which add value by fabricating or changing the product such that the end product takes a

form which is different from the original material. The
service sub-sector, on the other hand, is composed of
activities which add value by performing service operations.
Their value-added is on the expertise of rendering a service
and not on fabrication or the selling of materials alone.
Finally, the trade sub-sector consists of activities which
add value, not by changing the form of the materials sold but
by making goods easily available to consumers.

Because some business units undertake more than one sub-
sectorial operation, enterprises in this study are classified
into the sub-sector which accounts for most of their value-
added. The sub-sectorial categories will be vital in
subsequent analyses of the informal sector since they give
order to the informal activities. Different sub-sectors may
have peculiar business characteristics, including
opportunities and limitations with regard to development and
this can only be probed when operators with some basic
similarities are grouped together. Table 3.1.3 shows the
informal sector businesses by sub-sectorial categories and
their frequencies in the sample. The service sub-sector is
the largest, followed by manufacturing and trade.

An analysis of the enterprises will now be made to
characterise economic activities in the informal sector.

Table 3.1.3: Trades in the Informal Sector

Number of Enterprises

Services:

Bicycle Repair	26
Shoe Repair	18
Clothes Repair	15
Vehicle Repair	7
Watch Repair	7
Shoe-Shine	7
Barber Service	6
Hair-Dressing	3
Radio Repair	2
Bus Agent	2
Dry-Cleaning	2
Metal-containers Repair	1
Plastic-containers Repair	1
Spotlight Repair	1
Furniture Repair	1
Total	99

Manufacturing:

Tailoring	27
Metal-goods fabrication	20
Furniture-making	11
Shoe-making	7
Bag-making	1
Yoke-curving	1
Total	67

Trades:

Processed food (including tea , soft drinks and porridge kiosks)	19
Grocery	11
Charcoal	7
Unprocessed food	2
Tyre-trade	1
Miscellaneous	1
Total	44
Grand total	210

Source: Field data.

ii) Types of Structures

The structures housing the activities of the informal sector were selected on the basis of temporariness because businesses which could afford permanent or semi-permanent structures were expected to have higher levels of capital and, hence, to possess features closer to small-scale (private) economic activities in the formal sector. Besides, this was a practical criterion of selecting informal economic activities from formal ones in a trading centre. A similar procedure was followed by House (1978) in his study of the urban informal sector in Nairobi to select business enterprises with informal sector characteristics.

Table 3.1.4 shows the types of structures and their frequencies in the sample obtained from the field (Percentages are also shown).

Table 3.1.4: Business Locations and Building Structures

Type of Structure	Frequency	Per cent
Shop-veranda	91	43.3
Pole and mat structure	27	12.9
Open-air in tree-shade	27	12.9
Shop-veranda and part of shop	25	11.9
Tin structure	16	7.6
Open-air with no shade	11	5.2
Wooden structure	7	3.3
Grass-thatched mud-house	6	2.8
Total	210	99.9

Source: Field data.

From the Table, it is observed that 'Shop-veranda' and 'Shop-veranda and part of shop' provided business premises for 55% of the enterprises. The rest were housed in other temporary structures, namely, 'pole and mat structure', 'tin structure', 'wooden structure', and 'grass-thatched mud-house', all of which accounted for 26% of the business units. Finally, 'open air in tree-shade' and 'open air with no shade; constituted premises for 18% of the enterprises. Plates 3.1 and 3.2 illustrate these premises.

These structures imply difficult physical working conditions for a large part of the sector. Perhaps with the exception of some businesses housed in the 'verandas', 'tin' and 'wooden' structures and in the 'grass-thatched mud-house', most of the enterprises were fully exposed to weather and to insecurity in general.

Furthermore, many enterprises had difficulties in procuring secure business sites. Forty-seven had had such problems at the time of establishment while for 34%, the problem was still there. Current site problems took different forms. Businessmen who operated on verandas felt insecure in the hands of shop-owners on whose permission they entirely depended. Some operators had even been evacuated when the shop-owners decided to put the spaces to other uses. Operators using open spaces on which they had no ownership rights also lived in the fear of evacuation by the

PLATE 3.1: OPEN-AIR WORKSHOP FOR METAL CONTAINERS REPAIR AT AHERO

Photograph by O. Bowa,   February, 1985.

PLATE 3.2:   OPEN-AIR CHARCOAL TRADE AT AHERO

Photograph by O. Bowa,   February, 1985.

authorities without notice. Some had been moved from such sites before. Frequent changes in business sites interrupted business activities, especially through its effect on the flow of customers. Enterprises would lose customers temporarily or permanently because the new sites were too far away or unknown to the former customers while winning new customers took time.

It can, therefore, be seen that while the simplicity of the structures implied lower financial costs for installing and subsequently running the businesses, their insecurity posed a problem to business operation.

iii) Distribution of Enterprises in the Service Centres

The business units were distributed in all the centres of various sizes as depicted by Table 3.1.5. Eighty-nine (42%) were in the Urban Centre of Ahero; 40 (19%) in the Rural Centres of Kombewa and Chemelil; 33 (16%) in the Market Centres of Rabuor, Awasi, and Pap-Onditi; and 48 (23%) in the Local Centres of Akado, Kibos, Nyamasaria, Masogo and Tamu.

Table 3.1.5: Spatial Distribution of Enterprises

Rank of Centre	No. of Enterprises	Per cent
Urban Centre	84	42%
Rural Centre	40	19%
Market Centre	33	16%
Local Centre	48	23%

Source: Field data.

The distribution of the enterprises show that the higher-ranking service centres host more activities. Ahero (U.C.) had 42% of the enterprises while Kombewa and Chemelil (R.C.s) had 9.5% each. The Market and Local Centres came last with 4% and 4.5% of the enterprises for each centre, respectively. The hierarchical distribution reflected the response of the economic activities to the market opportunities and other agglomeration economies. Larger service centres provided more opportunities for reliable supplies of inputs, better information and so on and, hence, attracted more enterprises. Smaller centres had fewer such business-promoting opportunities.

However, for all the service centres, lack of electric power supply was reported as posing an operational constraint to 66% of the enterprises sampled. These enterprises felt that they could operate more efficiently if they had access to electric power. Metal craftsmen, for example, would use the power for welding in metal fabrication. This would save the time spent on lighting charcoal for welding and raise productivity since electric power would be more economical to use and, hence, cheaper than charcoal in this respect. Motor vehicle and bicycle repairers, laundrers and others would also raise their efficiency. But these possibilities were hampered by lack of electric power supply in the service centres in the sample, except in Ahero. In fact in the whole

District, rural electrification was still largely lacking. Out of the 50 designated service centres, only five, namely, Kisumu Town, Ahero, Maseno, Muhoroni and Otonglo had the power supply. But even in these centres, some needy enterprises still lacked access to the power. At Ahero, for example, only 7 operators, all dealing in steel fabrication, had access to the power.

iv) Age of Enterprise

Figure 3.3.1 summarizes the age structure of the business units. Comparative figures for each of the sub-sectors are also shown.

Figure 3.3.1: Age of Enterprise (AOB)
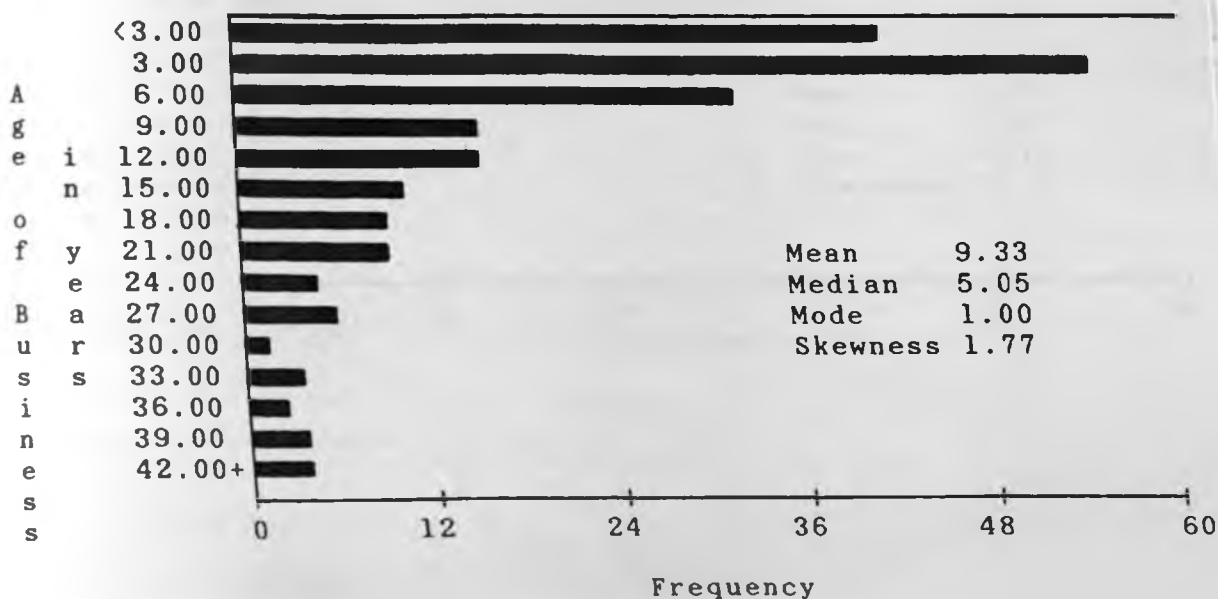
Whole Sector (AOB)

Source: Field data.

Service Sub-sector (AOB)

Age in years of Business

Age	Mean	11.24
2.50	Median	7.20
5.50	Mode	1.00
8.50	Skewness	1.44

Frequency

Manufacturing Sub-sector (AOB)

	Mean	8.70
	Median	4.57
	Mode	3.00
	Skewness	2.24

Frequency

Source: Field data

94

Trade Sub-sector (AOB)

Age in years of Business	Frequency
1.50	
4.50	
7.50	
10.50	
13.50	
16.50	
19.50	
22.50	
25.50	
28.00	

Mean 6.00
Median 2.40
Mode 1.00
Skewness 1.72
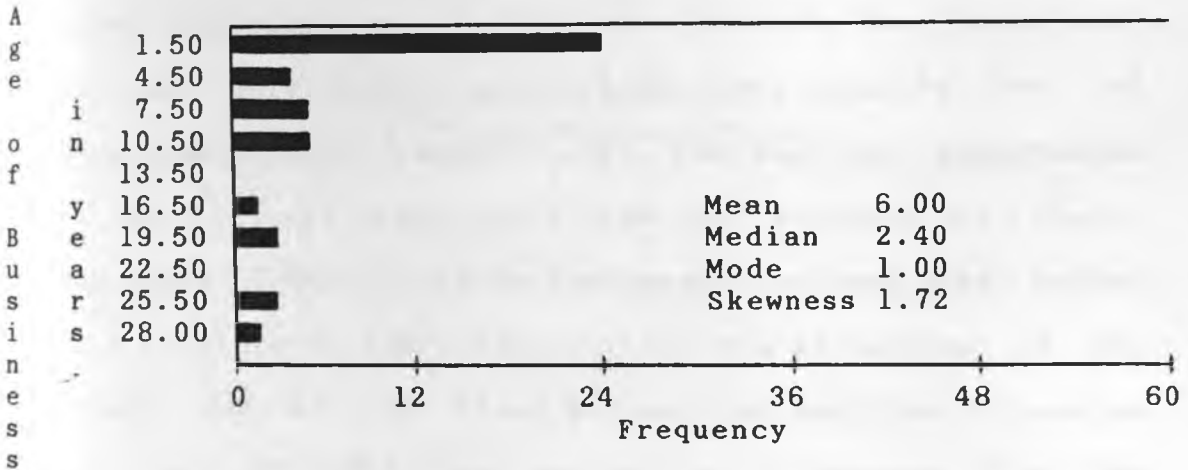
Source: Field data

The business units ranged in age from less than one year to 55 years, with a mean of only 9 years for the whole sector. Furthermore, 50% of the business units were only 5 years old or less, giving the distribution a positive skewness of 1.77. Thus, most of the business units were young.

Comparatively, the service sub-sector had the highest mean and median values, followed by the manufacturing and trade sub-sectors, respectively. This suggests that the service sub-sector is better established and more stable than the manufacturing sub-sector which is, in turn, more stable than trade. The low modes, on the other hand, suggest that entry into the businesses is generally easy and that the sector actively attracts new proprietors.

v) Ownership of Enterprise

Most of the enterprises were 'one-man businesses'. One hundred and eighty-seven (89%) were owned by one proprietor alone and only 19 (9%) and 4 (1.9%) were owned by two and three proprietors, respectively. The Business proprietors were mainly local inhabitants from the neighbouring areas. Sixty-eight (32%) lived in the service centres they worked in, a further 74 (35%) lived within two kilometres of the centres, and 48 (23%) lived between two and five kilometres away. Only 20 (9%) lived beyond five kilometres from the centre where they operated a business. It can be seen that the businesses were locally-owned and contributed directly to the development of the countryside.

vi) Value of Capital

The informal sector was characterised by labour-intensive techniques of production. Labour intensiveness was reflected in the capital per head in the business units and not on the number of employees per business unit (which was found to be extremely small). Figures 3.3.2 and 3.3.3 illustrate the distribution of the initial and present values of capital for the entire sector and for the sub-sectors, in Kenya Shillings.

Figure 3.3.2: Initial Value of Capital (IVC)

Whole Sector(IVC)
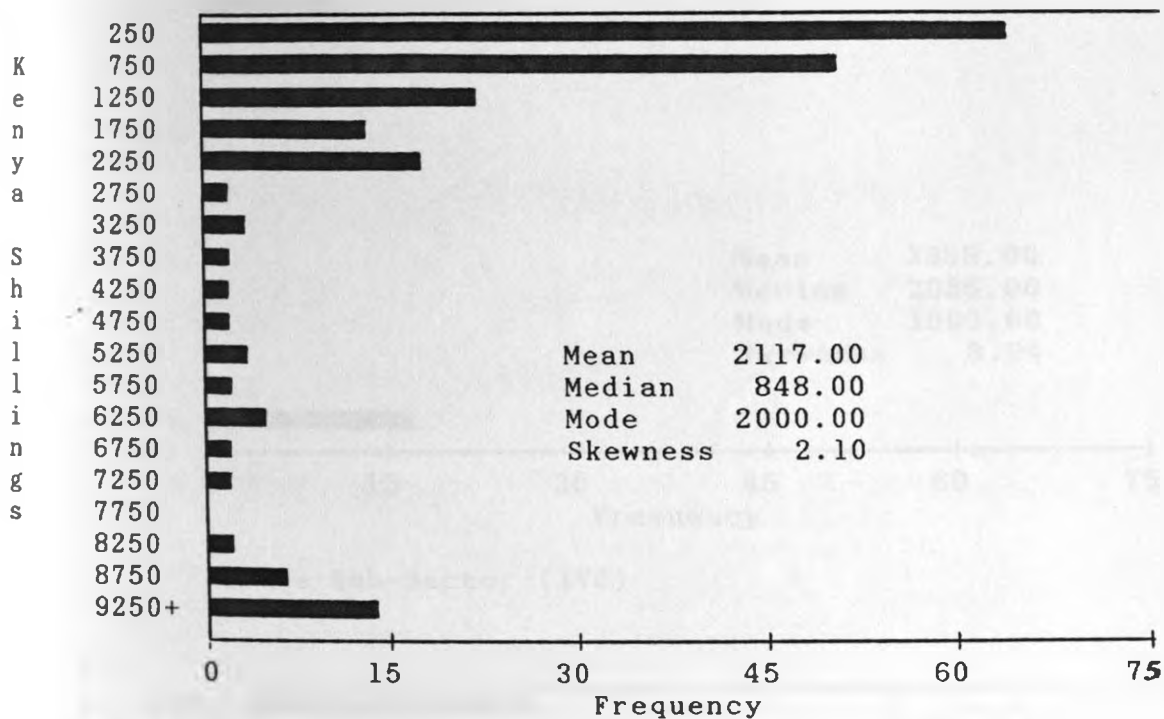
Service Sub-sector (IVC)
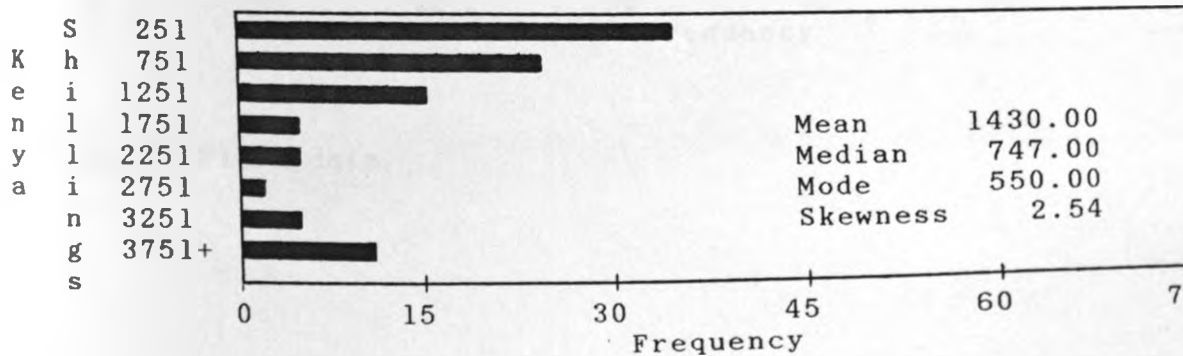
Source: Field data.

Manufacturing Sub-Sector (IVC)

Mean	3958.00
Median	2035.00
Mode	1000.00
Skewness	0.94
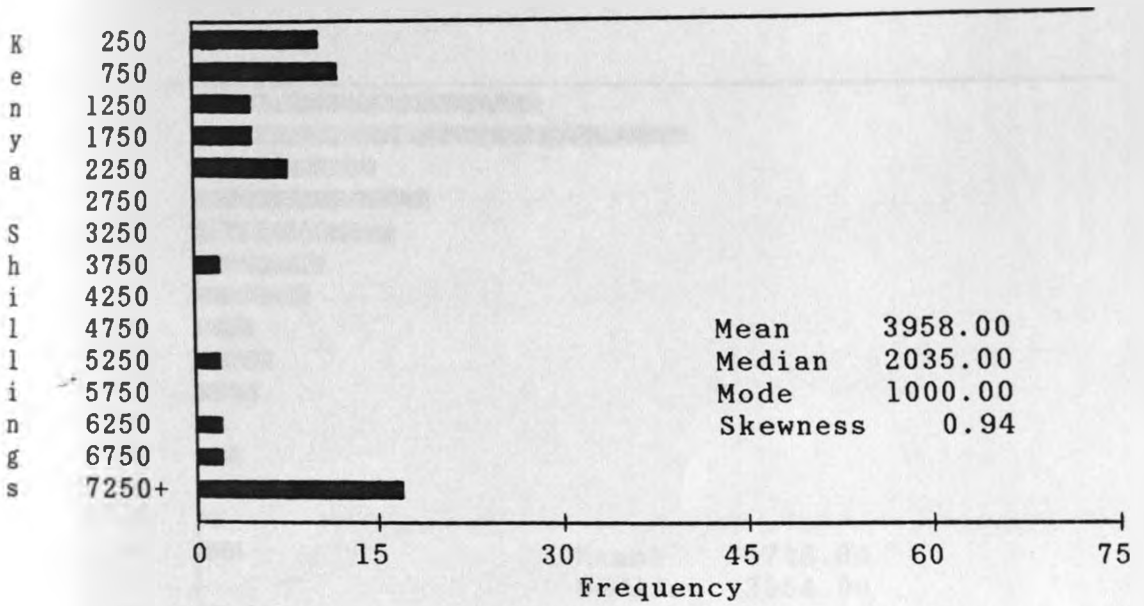
Trade Sub-Sector (IVC)

Mean	859.00
Median	503.00
Mode	2000.00
Skewness	5.36
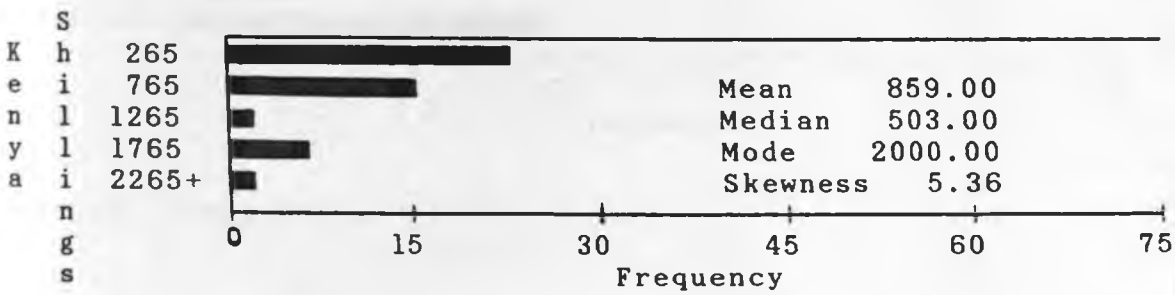
Source: Field data

Figure 3.3.3: Present Value of Capital (PVC)
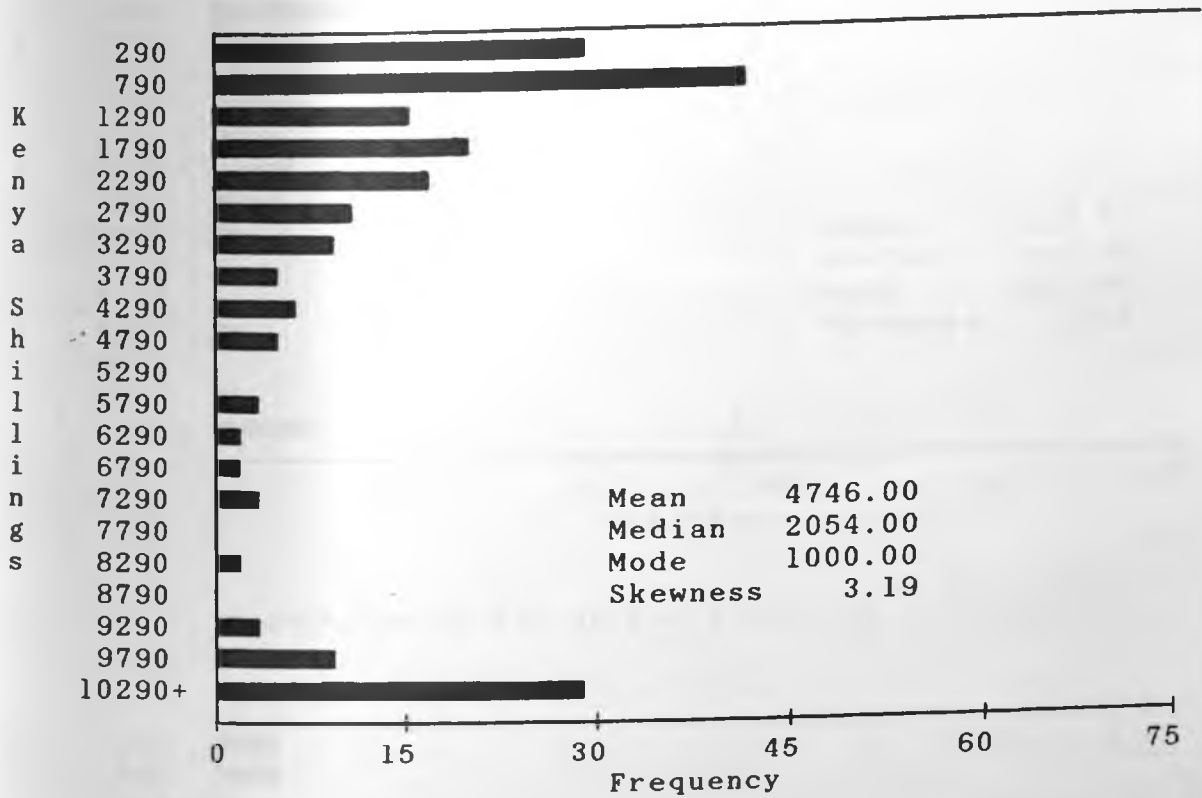
Whole Sector (PVC)

Source: Field data.

Service Sub-sector (PVC)

Mean	3192.00
median	1890.00
Mode	600.00
Skewness	2.11

Manufacturing Sub-sector (PVC)

Mean	9177.00
Median	6981.00
Mode	1000.00
Skewness	1.99

Source: Field data.

Trade Sub-sector (PVC)

	S	290	
K	h	790	
e	i	1290	
n	l	1790	
y	l	2290	Mean 1497.00
a	i	2790	Median 776.00
	n	3290	Mode 700.00
	g	3790+	Skewness 3.61
	s		

Frequency
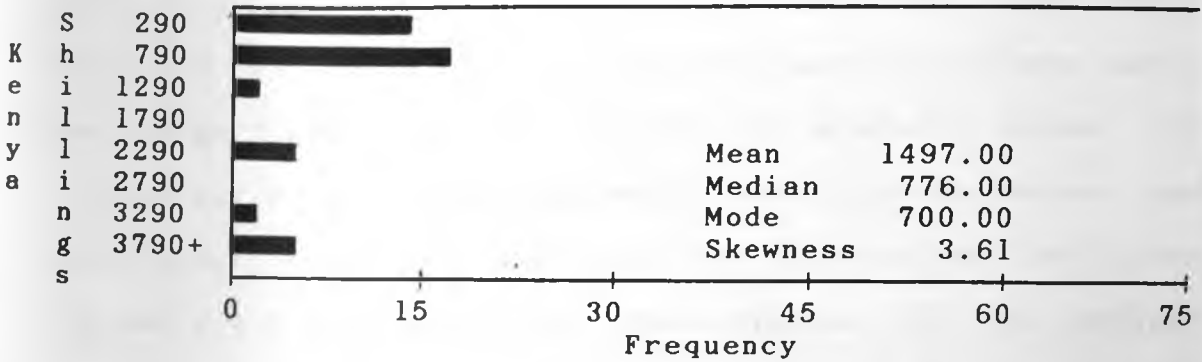
Source: Field data.

Initial values of capital for the whole sector ranged from nil to Sh.15,000 with a mean of Sh.2,117 and a median of Sh.847. For present values of capital, the mean and median values were Sh.4,746 and Sh.2,054, respectively, while the range was from Sh.40 to Sh.50,000. Thus, the initial and present values of capital were both low, though the former were lower. The higher present values of capital was a function of both the price rise with time and the gradual rise in the total real capital stock held by the business units.

Comparatively, the manufacturing sub-sector had the highest mean value of the initial and present capital. For initial values, it had Sh.3,957 and Sh.2,034 for the mean and the median worth of capital, respectively. For the present values it had Sh.9,176 and Sh.6,981 for the mean and median, respectively. The skewness was only slightly positive for

both the initial and present values of capital, indicating that most enterprises were close to the mean. The higher values of capital in the manufacturing sub-sector were due to the high cost of the industrial producer goods and circulating capital used. Examples were electric motors and appliances, tool sets and metal for fabrication (See Plates 3.3 and 3.4 for illustration). Nevertheless, the low absolute level of capital in the sub-sector was possibly because a good number of its enterprises also employed simple local production techniques, using as inputs, recuperated waste material obtained at low cost. For example, some key-cutters, tinsmiths, blacksmiths and shoe-makers obtained their inputs locally from abandoned vehicles, factory metal waste, worn-out tyres and so on.

The service sub-sector came second with the initial mean and median values of capital of Sh.1,430 and Sh.746, respectively. The present mean and median values were Sh.3,192 and Sh.1,890, respectively. The skewness was moderate for both the initial and the present values of capital. Most service enterprises were also using industrial goods of high value. Examples were machine tools and spare parts for motor vehicles, bicycles, watches, radios and sewing-machines (See Plates 3.5 and 3.6 for illustration). Such business units with relatively high value of capital accounted for 77 (75%) of the enterprises in the sub-sector.

PLATE 3.3:   METAL GOODS FABRICATION AT AHERO

Photograph by O. Bowa,   February, 1985.

PLATE 3.4:   OTHER METAL PRODUCTS AT AWASI

Photograph by O. Bowa,   February, 1985.

PLATE 3.5:   WATCH AND CLOCK REPAIR AT AHERO

Photograph by O. Bowa,   February, 1985.

PLATE 3.6:   CLOTHES REPAIR AT AHERO

Photograph by O. Bowa,   February, 1985.

Finally, the trade sub-sector had the least initial mean and median capital values of Sh.558 and Sh.776. The large and positive coefficient of skewness showed that most business units had values much smaller than the mean. Most of the capital in the trade sub-sector was in the form of goods of trade, mainly processed food, groceries and charcoal. The low values of capital reflected the absence of working tools.

The generally low levels of capital was a further indication of the ease of entry into the sector. However, for successful business performance after entry, they represented an obstacle, especially for enterprises in the manufacturing and service sub-sectors that required relatively higher levels of capital.

Indeed, lack of adequate capital was, by far, the greatest obstacle to business performance. Eighty-three per cent of the enterprises had had difficulties in acquiring adequate capital at the time of establishment. Even at the time of the interview, 70% of the enterprises were still suffering from undercapitalization due to lack of financial support from financial institutions. Most of the enterprises had not had any external financial support. Eighty-seven per cent had been financed solely by the proprietor(s) while 10% had received some support from relatives and friends. Only three enterprises (6%) had obtained financial support from

the District Trade Development Board and from a church organization.

Although most enterprises (78%) had not, actually sought commercial loans formally, there was little hope that they would be successful. Only two out of 25 enterprises that had applied had been successful. It was probably due to the loan procurement difficulties that the remaining 10% of the enterprises had decided not to seek loans at all. Though most operators expressed their need for loans for developing their businesses, many were reluctant to try because it was common knowledge among them that no loans were obtainable without adequate security, a condition which many could not satisfy. Others feared eventualities such as business failure, loan defaulting and the ultimate legal action.

vii) Sources of Inputs

It has been mentioned that the service and the manufacturing sub-sectors were found to employ machine tools and intermediate inputs for carrying out repair services in their production processes while the trade sub-sector required commodities of trade alone. Nearly all the machine tools were obtained from the formal sector in Kisumu Town. Similarly, 166 (79%) of the business units sampled obtained their intermediate goods from the formal sector (mainly in Kisumu Town), while 3 (1.4%) patronized both the formal and the informal suppliers. The remaining 41 (19%) business units

obtained their intermediate goods from the informal sources alone, mainly from the surrounding areas in the countryside. Most of the intermediate goods obtained from the formal sector went mainly to the service and manufacturing sub-sectors while those from the informal sector went to the trade sub-sector. It was, therefore, apparent that most of the businesses in the rural informal sector depend on the urban formal sector for their inputs.

The spatial distribution of the sources of inputs reflected the hierarchical order of the service centres. Many of the business units (64%) in all service centres obtained their inputs mainly from Kisumu Town as Table 3.1.6 illustrates. Sixty-nine per cent of the enterprises in Ahero, 55% in Chemelil, 50% in Kombewa, 75% in Rabour, 54% in Awasi, 40% in Pap-Onditi, 80% in Masogo, 73% in Kibos, 73% in Nyamasaria and 50% in Tamu obtained supplies mainly from the town. The dominance of the town as a supplier of inputs explained, in part, the general decrease in the number of enterprises per service centre away from the town. The next major source of inputs was the formal businesses within the centres themselves. Twenty-eight per cent of the enterprises in Ahero, 16% in Chemelil, 33% in Kombewa, 25% in Rabuor, 15% in Awasi, 20% in Pap-Onditi, 20% in Masogo, 20% in Kibos, 18% in Nyamasaria and 38% in Tamu obtained their supplies in this way. These formal businesses had the advantage of being close to the informal operators and were able to offset, in part,

TO FROM	AHE (UC)	CHE (RC)	KOM (RC)	RAB (MC)	AWAS (MC)	PAP (MC)	MASO (LC)	KIBO (LC)	NYAM (LC)	TAMU (LC)	AKAD (LC)	Total	% of Total
KSM.(PT)	62 69% (21)	17 55% (46)	6 50% (27)	6 75% (11)	7 54% (40)	4 40% (39)	8 80% (35)	11 73% (7)	8 73% (4)	4 50% (61)	2 67% (36)	135	64%
AHE.(UC)	25 28% (0)	0 0% (25)	0 0% (48)	0 0% (10)	2 15% (19)	3 30% (18)	0 0% (14)	0 0% (17)	0 0% (17)	1 12% (44)	0 0% (57)	31	15%
N/A	2 3%	9 0%	0 0%	0 0%	1 8%	0 0%	0 0%	1 7%	1 9%	0 0%	0 0%	14	7%
CHE.(RC)	0 0%	5 16% (0)	0 0% (73)	0 0% (35)	0 0% (6)	0 0% (43)	0 0% (18)	0 0% (53)	0 0% (42)	0 0% (19)	0 0% (82)	5	2%
KOM.(RC)	0 0%	0 0%	4 33% (0)	0 0% (38)	0 0% (67)	0 0% (66)	0 0% (62)	0 0% (34)	0 0% (38)	0 0% (88)	0 0% (9)	4	2%
RAB.(MC)	0 0%	0 0%	0 0%	2 25% (0)	0 0% (29)	0 0% (28)	0 0% (24)	0 0% (18)	0 0% (7)	0 0% (54)	0 0% (47)	2	1%
AWAS.(MC)	0 0%	0 0%	0 0%	0 0%	2 29% (0)	0 0% (37)	0 0% (33)	0 0% (47)	0 0% (26)	0 0% (25)	0 0% (76)	2	1%
PAP.(MC)	0 0%	0 0%	0 0%	0 0%	0 0%	2 20% (0)	0 20% (23)	0 0% (37)	0 0% (16)	0 0% (53)	0 0% (66)	2	1%
MASO.(LC)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 20% (0)	0 0% (42)	0 0% (31)	0 0% (33)	0 0% (71)	2	1%
KIBO.(LC)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3 20% (0)	0 0% (11)	0 0% (66)	0 0% (43)	3	1%
NYAM.(LC)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2 18% (0)	0 0% (61)	0 0% (40)	2	1%
TAMU.(LC)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3 38% (0)	0 0% (97)	3	1%
AKAD.(LC)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0% (0)	0	0%
AKALA**	0 0%	0 0%	1 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 33%	2	1%
MUHO *	0 0%	0 0%	0 0%	0 0%	1 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1	0%
KATITO*	0 0%	0 0%	0 0%	0 0%	0 0%	1 10%	0 0%	0 0%	0 0%	0 0%	0 0%	1	0%
BUSIA**	0 0%	0 0%	1 8%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1	0%
Total	89 100%	31 100%	12 100%	8 100%	13 100%	10 100%	10 100%	15 100%	11 100%	8 100%	3 100%	210	100%

N/A = Neighbouring areas.
* = Service centres in the District but not in the sample.
** = Service centres outside the District.
( ) = Approximate distance (in kilometres) between centres by road.
0 = No enterprise in the specified destination obtains supplies
   from the specified origin.
PT = Principal town, UC = Urban centre, RC = Rural centre
MC = Market centre, LC = Local centre

Source: Field data.

KSM = Kisumu
AHE = Ahero
KOM = Kombewa
RAB = Rabuor
AWAS= Awasi
PAP = Pap-Onditi
MASO= Masogo
KIBO= Kibos
NYAM= Nyamasaria

AKAD = Akado
MUHO = Munoroni

the higher retail prices of their goods. In this category, Ahero urban centre stood out as a supplier of inputs to informal enterprises in lower order centres as well. It supplied 30%, 15% and 12% of the enterprises in Pap-Onditi, Awasi and Tamu, respectively. But here again, the friction of distance appeared to deter business interactions so that Tamu, the farthest away (40 kilometres) had the least trade with Ahero. Other enterprises obtained a good part of their supplies from neighbouring areas, namely farms and informal businesses in the villages. Twenty-nine per cent of the enterprises in Chemelil, 9% in Nyamasaria, 8% in Awasi, 7% in Kibos and 3% in Ahero obtained their supplies in this way. The remaining enterprises obtained most of their inputs from other centres in the District (Muhoroni and Katito) and outside (Akala and Busia).

The trading patterns showed that the informal sector has strong trading links with the formal sector. They reflected the economic linkages existing between the formal and the informal sectors within the service centre spatial structure in the District. The basically rural-based informal sector had strong trading links with the formal sector (basically urban-based). The latter served as the main supplier of intermediate goods for further trade. Furthermore, it was evident that inputs flowed down the service centre hierarchy, with Kisumu Town being the major source. This suggests that

policies affecting the rural informal sector need to take into account the business linkages with Kisumu Town so as to enable the informal sector businesses in the rural areas to benefit from, rather than lose to the urban-based formal businesses. In fact, the informal sector operators noted that they were realising only minimal benefits in terms of profits in their trade links with the formal sector because the low levels of capital, for instance, limited their ability to purchase goods from the formal sector in large quantities at discounted rates.

viii) Demand for Outputs and Competition in Business

Figure 3.3.4 shows the distribution of customers served by a business unit in a week for the whole sector and for each sub-sector.

Figure 3.3.4: Number of Customers Served in a Week (NOCW)

Whole Sector (NOCW)
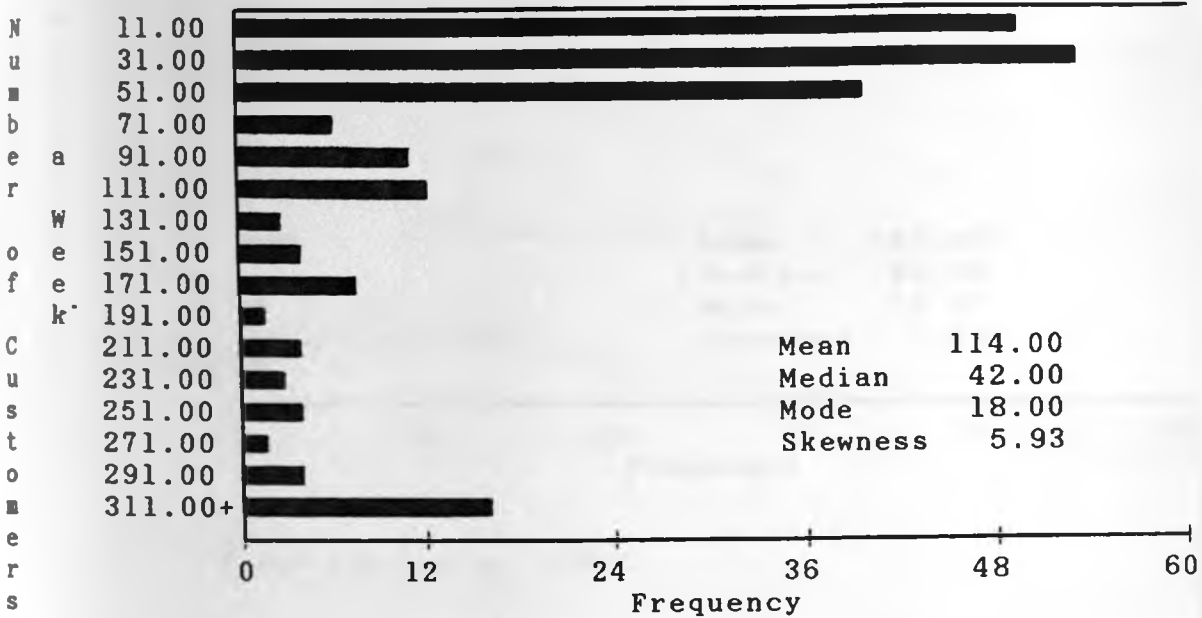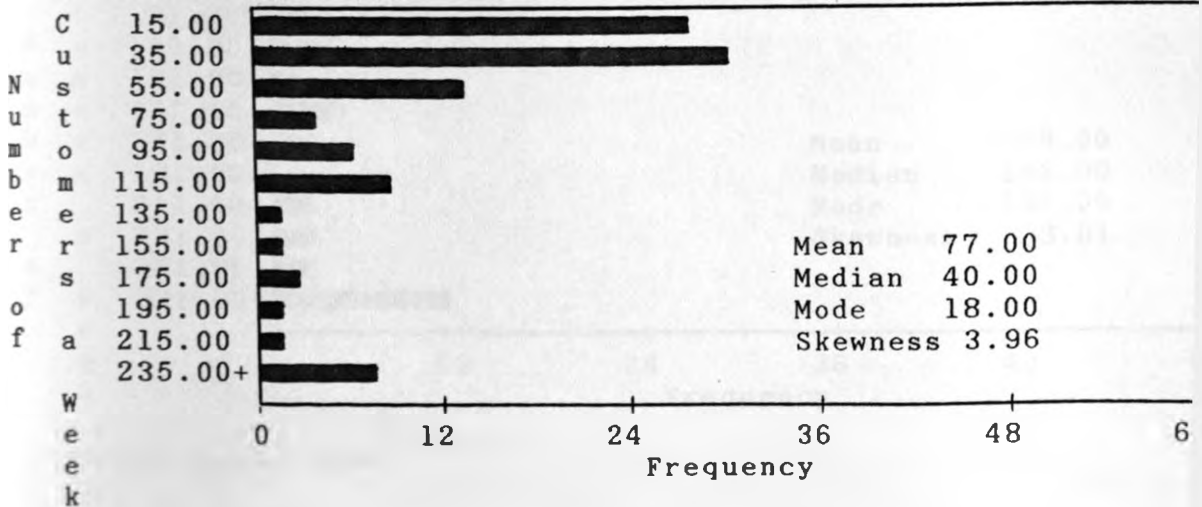
	Mean	114.00
	Median	42.00
	Mode	18.00
	Skewness	5.93

Service Sub-sector (NOCW)

	Mean	77.00
	Median	40.00
	Mode	18.00
	Skewness	3.96

Source: Field data.

x

Manufacturing Sub-sector (NOCW)

Mean 42.00
Median 24.00
Mode 18.00
Skewness 2.58

Trade Sub-sector (NOCW)

Mean 309.00
Median 142.00
Mode 150.00
Skewness 3.01
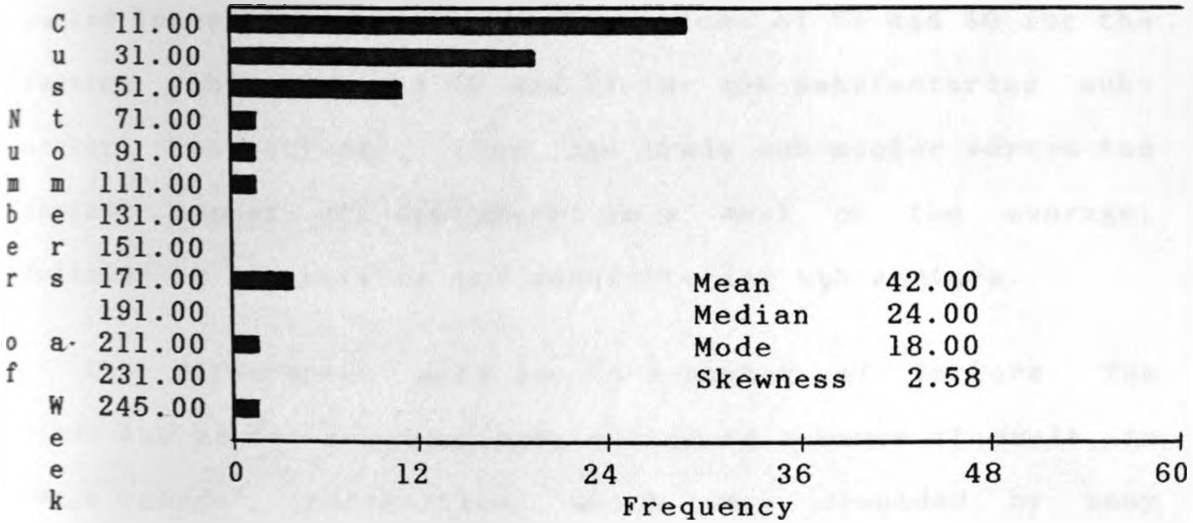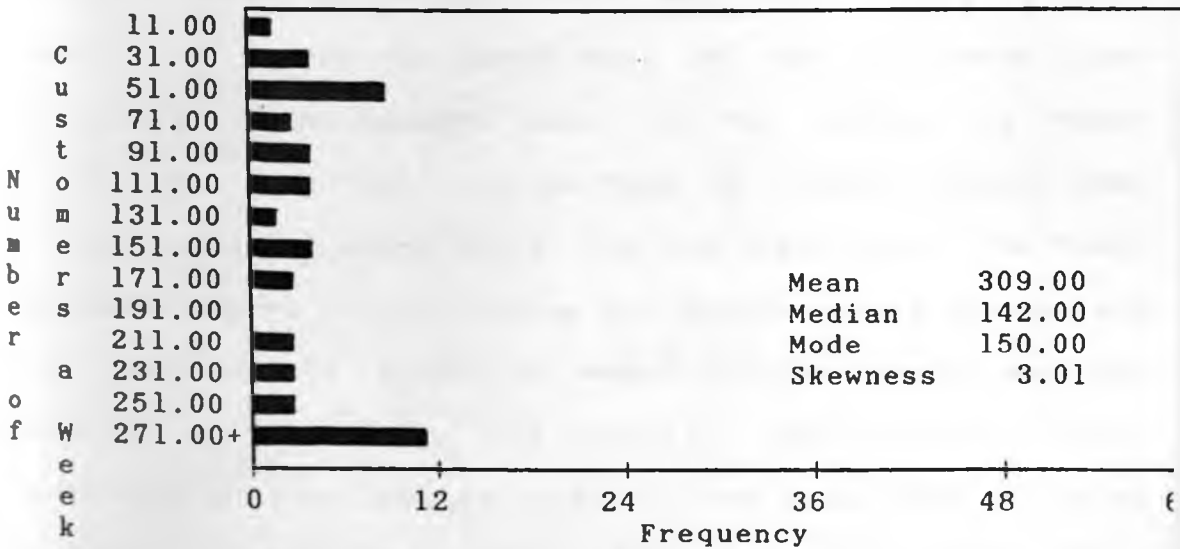
Source: Field data.

The mean number of customers in a week was 114 for the whole sector while the median and skewness were 42 and 6, respectively. The trade sub-sector served more customers than

this, the mean and the median being 309 and 142, respectively. The service and manufacturing sub-sectors ranked lower with mean and median values of 77 and 40 for the service sub-sector and 42 and 24 for the manufacturing sub-sector, respectively. Thus, the trade sub-sector served the largest number of customers in a week on the average, followed by the service and manufacturing sub-sectors.

The differences were due to a number of factors. The trade sub-sector received many customers because it dealt in 'wage goods' (necessities) which were demanded by many customers in small quantities but more frequently. Examples were charcoal, meat, porridge and groceries. Furthermore, the business units in the sub-sector were able to keep a good quantity of stock to serve most of the customers that patronized them because most of the capital in these enterprises were held in the form of stock rather than machine tools and spare parts. On the other hand, the fewer customers served in the service and manufacturing sub-sectors were due to the nature of demand for the goods and the quantity of stock held. For example, some business units, particularly those dealing in fabricated goods such as metal products, furniture, shoes and clothes received fewer customers because the goods were consumer durables that were purchased less frequently. Also, the larger proportion of capital held in the form of machine tools reduced the

ability of the enterprises to hold adequate stocks of intermediate goods required for production. This also explained why enterprises dealing in services that were not consumer durables such as bicycle repair, shoe repair and clothes repair, received fewer customers than those in the trade sub-sector. They required costly machine tools such as sewing machines and tool sets.

On the other hand, business competition based on the perceptions of proprietors seemed to be low as most enterprises reported only moderate to no competition. One hundred and thirty-six (65%) of the enterprises sampled operated in conditions of moderate competition while 14 (7%) faced no competition at all. Only 60 (28%) faced stiff competition from other enterprises in similar trades. The majority of the enterprises that faced stiff competition were in the trade sub-sector. This was due to the relative ease of entry and to the negligible differentiation in the goods sold compared to the manufacturing and the service sub-sectors. In the latter sectors the differences in the qualities of the goods and services they were trading in tended to create oligopolistic market conditions in which the customers, once won by an operator, continue to have special preference for his products for a long time.

The enterprises sold their products mainly to private individuals though a few also made sales to formal sector

institutions. One hundred and fourty-eight (70.5%) enterprises made sales only to private individuals while only 7 (3%), 28 (13%) and 27 (13%) made large, small, and very small sales to the formal sector, respectively. Among the products which were sold to the formal sector were metal window-frames and metal door-frames, metal beds, metal door hinges and locks, furniture, clothes, clock-repair services, charcoal and beef.

Consumers come mainly from the areas neighbouring the service centres. One hundred and eighty (86%) enterprises served customers mainly from the neighbouring areas while only 30 (14%) served those from outside. This indicate that the informal sector is a source of goods and services demanded mainly by the local low-income consumers. It was also evident that the sector has weak market links for the sale of its finished products with the formal sector.

ix) Wage Employment in the Enterprises

It has been mentioned that 237 proprietors and 186 employees and assistants were engaged in the enterprises. Wage employment was, however, small, consisting of eighty-four workers. Thirty-six (17%) enterprises had one employee each, while 23 (11%) had two or three employees each. The remaining 151 (72%) had no employees at all. Twenty-two out of 67 (33%) enterprises in the manufacturing sub-sector had at least one employee. In the service and trade sub-sectors,

the number of enterprises employing at least one wage employee were 28 out of 99 (28%) and 5 out of 44 (9%), respectively.

Business assistants (apprentices) were slightly more than wage employees, being 102 in total. Apprentices had paternal relationships with the business proprietors. They were sometimes paid some commission for their services while they were also often required to pay some fees for the training they received. The Manufacturing sub-sector had the largest number of apprentices, followed by the service and the trade sub-sectors. There were 49 enterprises (out of 67) with apprentices in the manufacturing sub-sector, 26 (29%) in the service sub-sector and 27 (61%) in the trade sub-sector.

Thus, the manufacturing sub-sector led in the employment of labour and in the training of apprentices. The service sub-sector was second with regard to labour employment but last in the training of apprentices, while the trade was last in wage employment but second in the training of apprentices. The trends indicated that the manufacturing and service enterprises required more labour by establishment and had the potential to absorb more labour per unit of business when business expanded. On the other hand, trade enterprises appeared to be typically one-man businesses, with expansion in employment being likely only when the actual number of establishments increased.

Most of the wage employees were local residents who commuted to the service centres from their homes in the neighbourhood and were, therefore, directly involved in rural development. Their remuneration ranged from Sh.120 to Sh.600 per month, with a mean of Sh.340 and a standard deviation of 144. On the whole their wages compared less favourably with those of the unskilled and semi-skilled workers in the formal sector as will be apparent in the next section.

x) Incomes of Enterprises

The incomes accruing to the informal enterprises were vital because they comprised one criterion by which the productivity of the sector was evaluated. They are summarized by Figure 3.3.5 which describes the incomes of the enterprises, less the cost of production or purchase value and wages to employees.

Figure 3.3.5: Monthly Business Profit (POBM)

Whole Sector (POBM)
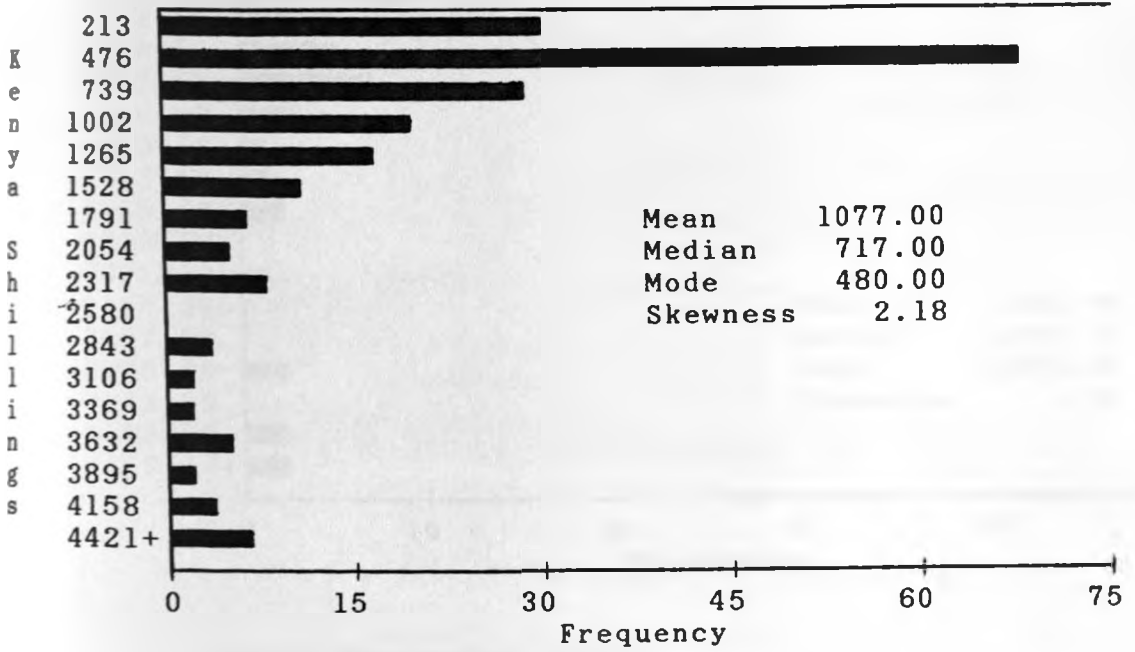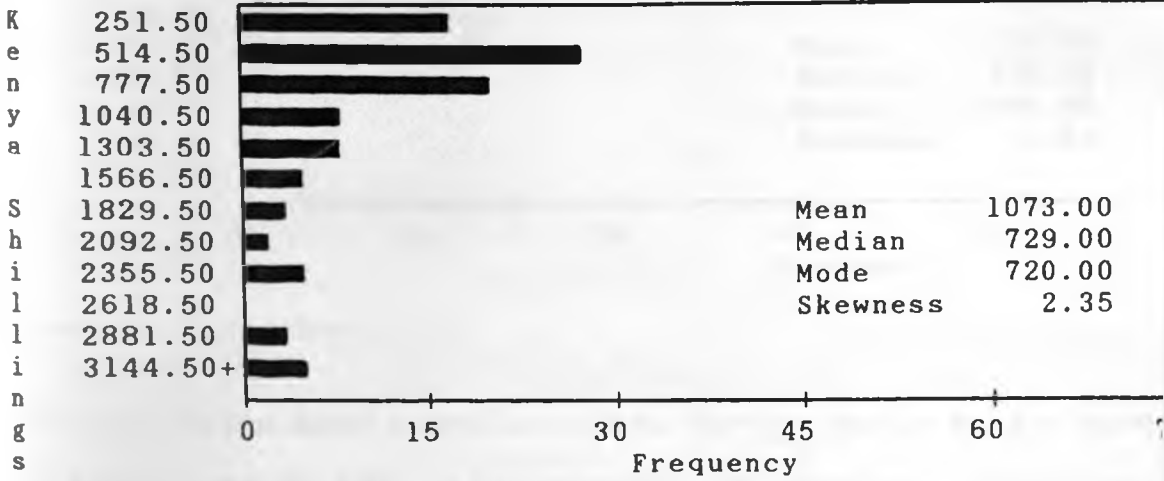
Mean	1077.00
Median	717.00
Mode	480.00
Skewness	2.18

Service Sub-sector (POBM)

Mean	1073.00
Median	729.00
Mode	720.00
Skewness	2.35

Source: Field data.

Manufacturing Sub-sector (POBM)

Kenya Shillings

251.50	
514.50	
777.50	
1040.50	
1303.50	
1566.50	
1829.50	
2092.50	
2355.50	
2618.50	
2881.50	
-3144.50	
3407.50	
3670.50	
3933.50	
4196.50	
4459.50+	

Mean	1436.00
Median	1000.00
Mode	1200.00
Skewness	1.56

0   15   30   45   60   75
Frequency

Trade Sub-sector (POBM)

Kenya Shillings

217.50	
480.50	
743.50	
1006.50	
1269.50	
1532.50	
1795.50	
2058.50+	

Mean	537.00
Median	430.00
Mode	480.00
Skewness	3.03

0   15   30   45   60   75
Frequency
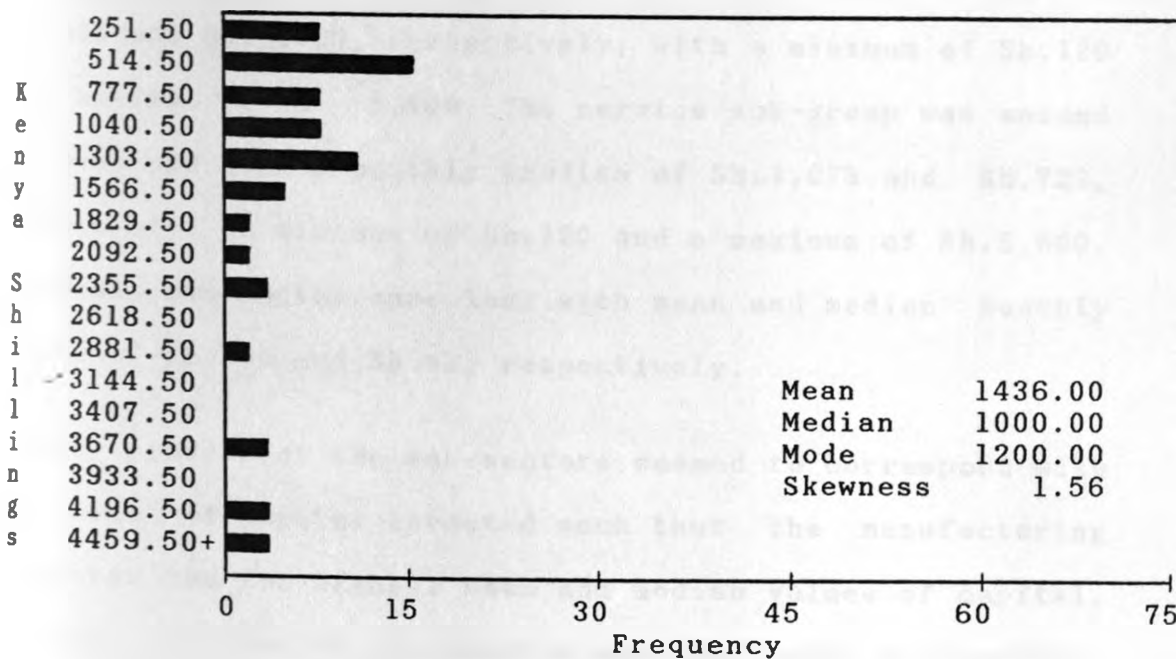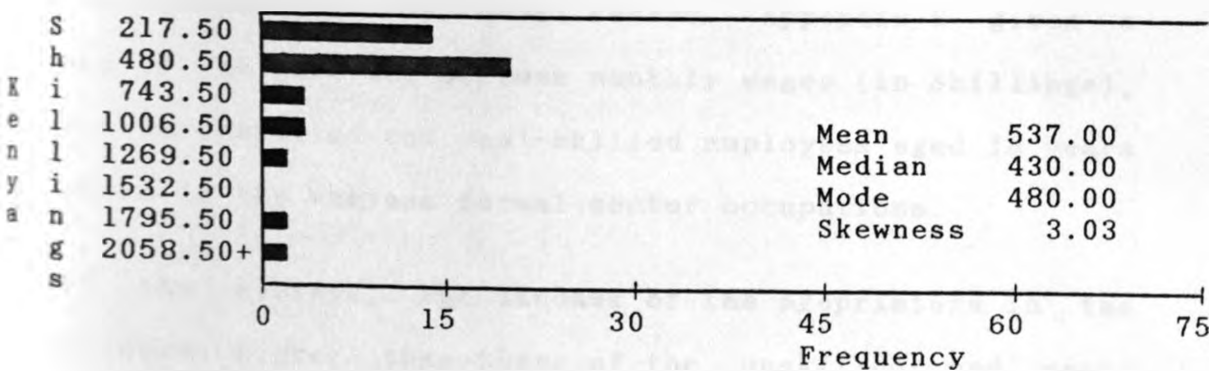
Source: Field data.

The mean and median monthly profits for the whole sector were
Sh.1,077 and Sh.717, respectively. The maximum profit was
Sh.5,600 while the minimum was Sh.86.

A breakdown by sub-sectors showed that the manufacturing sub-group had the highest mean and median monthly profits of Sh.1,436 and Sh.1,000, respectively; with a minimum of Sh.120 and a maximum of Sh. 5,400. The service sub-group was second with mean and median monthly profits of Sh.1,073 and Sh.729, respectively; a minimum of Sh.120 and a maximum of Sh.5,600. The Trade sub-sector came last with mean and median monthly profits of Sh.536 and Sh.43, respectively.

The profits of the sub-sectors seemed to correspond with the value of capital invested such that the manufacturing sub-sector had the highest mean and median values of capital, followed in order by the service and the trade sub-sectors. Furthermore, the incomes in the informal sector compared favourably with those accruing to the unskilled and semi-skilled workers in the formal sector. Appendix 6 gives a summary of the gazetted minimum monthly wages (in Shillings), payable to unskilled and semi-skilled employees aged 18 years and above in the various formal sector occupations.

On the average, the incomes of the proprietors in the sector were higher than those of the unskilled and semi-skilled wage employees in the formal sector. Whereas most categories of unskilled and semi-skilled workers in the formal sector earned KSh.800 or less, the mean monthly profits for operators in the informal sctor was KSh.1,077

The sector was, therefore, highly competitive as a source of income for medium to low level labour.

xi) Licensing of Enterprises

All the enterprises in the informal sector were required by law to have operating licenses. Appendix 7 gives a summary of the annual license fee structure of the local government for the rural service centres. In addition to these, the central government, through the Ministry of Commerce and Industry, also charged fees ranging from nil for such trades as hair-dressing and charcoal-trade through Sh.25 for trades such as bicycle- and watch-repair to Sh.80 and above for trades such as tailoring and radio repair. On the whole, the fees charged by the local government were higher than those of the central government. Most proprietors felt that the former were too high and burdensome. One hundred and thirty-nine (66%) enterprises felt that they were too high, 30 (14%) felt that they were high and only 41 (19%) thought they were fair. These responses might explain why 52 (23%) enterprises were operating without licenses. Of these, 22 (10%) were operating in a scheme of 'pay-as-you-work' where enterprises were charged operating fees of Sh.1 to Sh.4 on a daily basis by the county council and municipal council market masters. The remaining 13% completely evaded all forms of taxation and were in constant fear of the law-enforcing authorities.

In addition to the high licence fees, businesses in the trade sub-sector, particularly those dealing in foods reported excessive health requirements demanded by the government. For example, porridge traders were required to undergo medical check-up every six months, yet such a frequent medical exercise was costly, time-consuming and even demoralising to the traders. Furthermore, these traders were required to keep hot water for hand-washing besides soap, yet this was unnecessary and wasteful on the use of fuel.

These excessive licensing requirements indicate a need to re-structure license fees and associated health requirements to meet the financial ability of the enterprises and basic hygiene alone.

xii) Farming and other occupations of the operators

Nearly all the operators owned land. Only 3 proprietors did not own any land. Figure 3.3.6 gives the structure of the per capita land holdings in a proprietor's family in hectares.

Figure 3.3.6: Pressure on Farm Land (POFL)

Whole Sector (POBM)

Mean   0.34
Median   0.23
Mode   0.20
Skewness 2.30
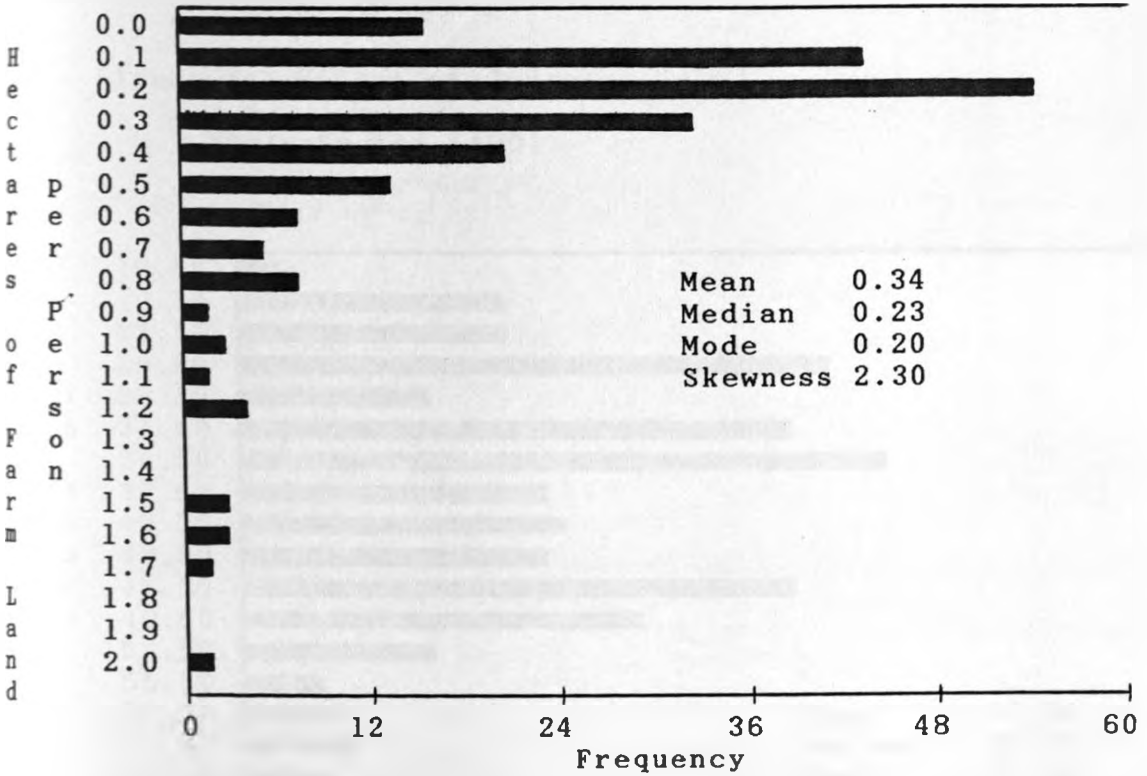
Source: Field data.

The mean and median acreages per head in the families were quite small, only 0.34 and 0.23, respectively, for the whole sector. Nevertheless, 156 (74%) operators had large enough holdings to practice farming. For two thirds of the proprietors (65%), the informal activity was also the most important source of livelihood. One third (72 or 34%) ranked their businesses as a secondary source of livelihood. Thus, the sector seemed to be an important source of livelihood for rural residents with small pieces of land.

xiii) Age, Sex, Education and Training of the Operators

The age structure of the business proprietors is shown in Figure 3.3.7 for the whole sector and for each sub-sector.

Figure 3.3.7: Age of Operator (AOO)
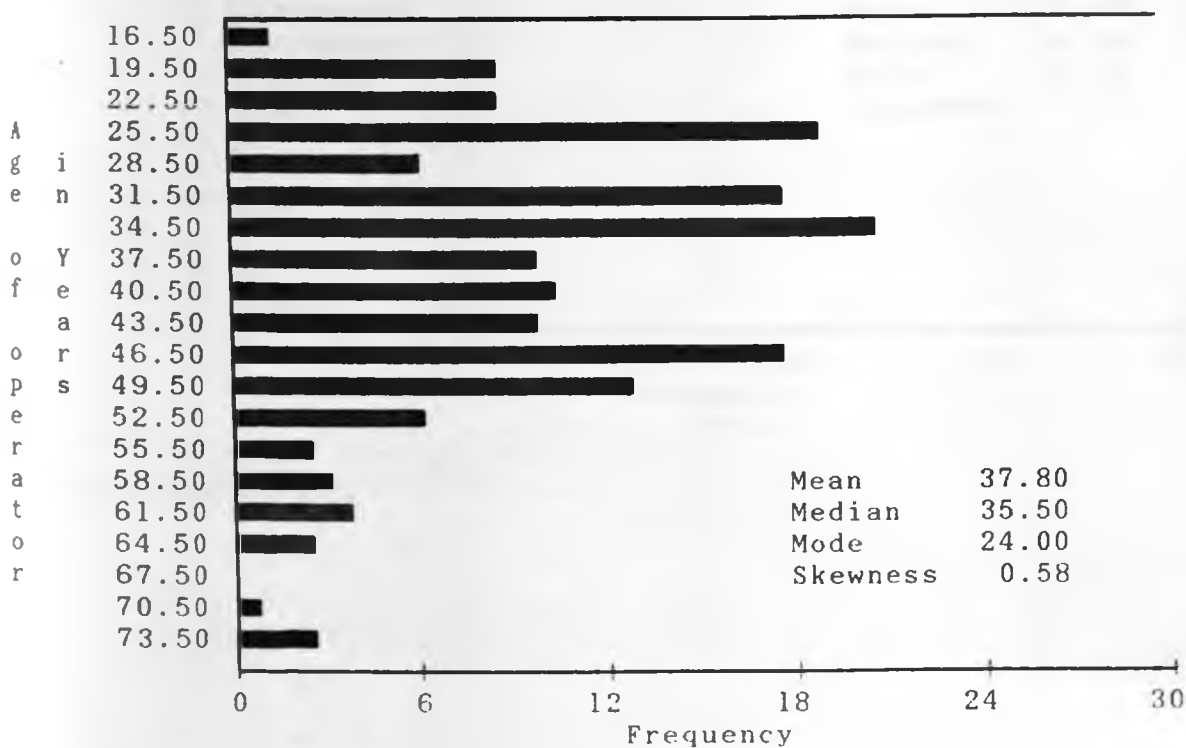
Whole Sector (AOO)

Source: Field data.

Service Sub-sector (A00)
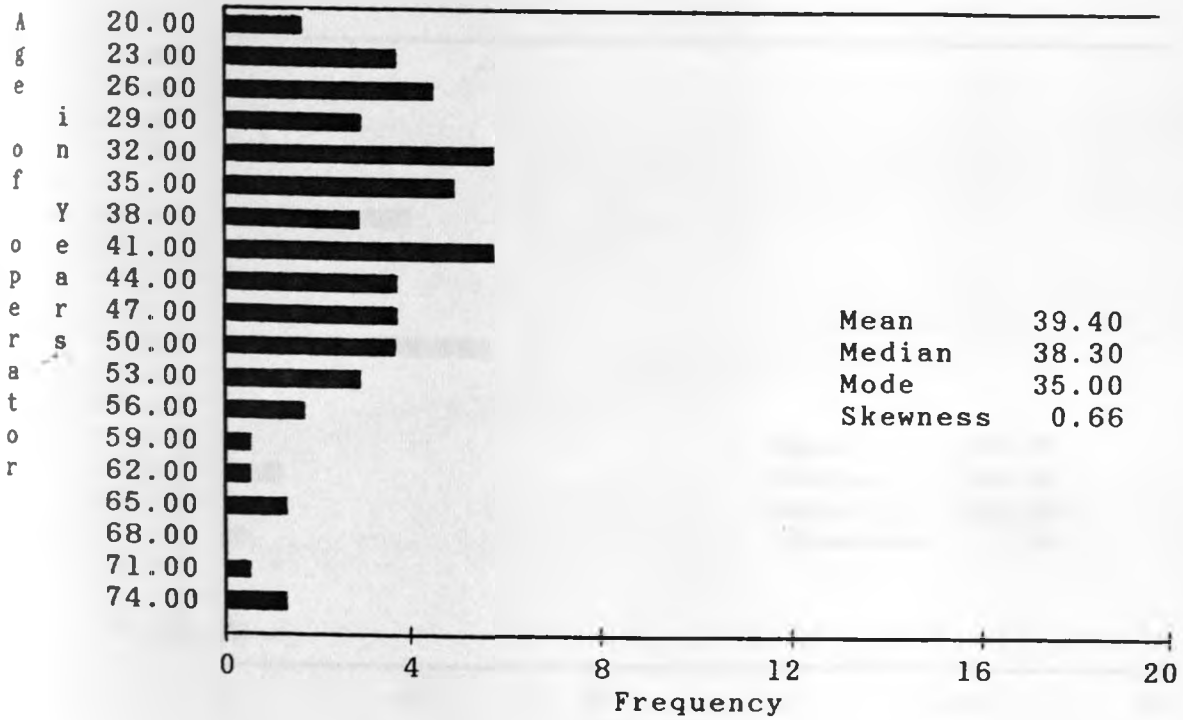
Age				Mean	39.40
in Years				Median	38.30
of operator				Mode	35.00
				Skewness	0.66

Source: Field data.

Manufacturing Sub-sector (A00)

			Mean	38.60
Median	36.80
Mode	48.00
Skewness	0.66

Trade Sub-sector (A00)

			Mean	33.00
Median	31.10
Mode	32.00
Skewness	0.49
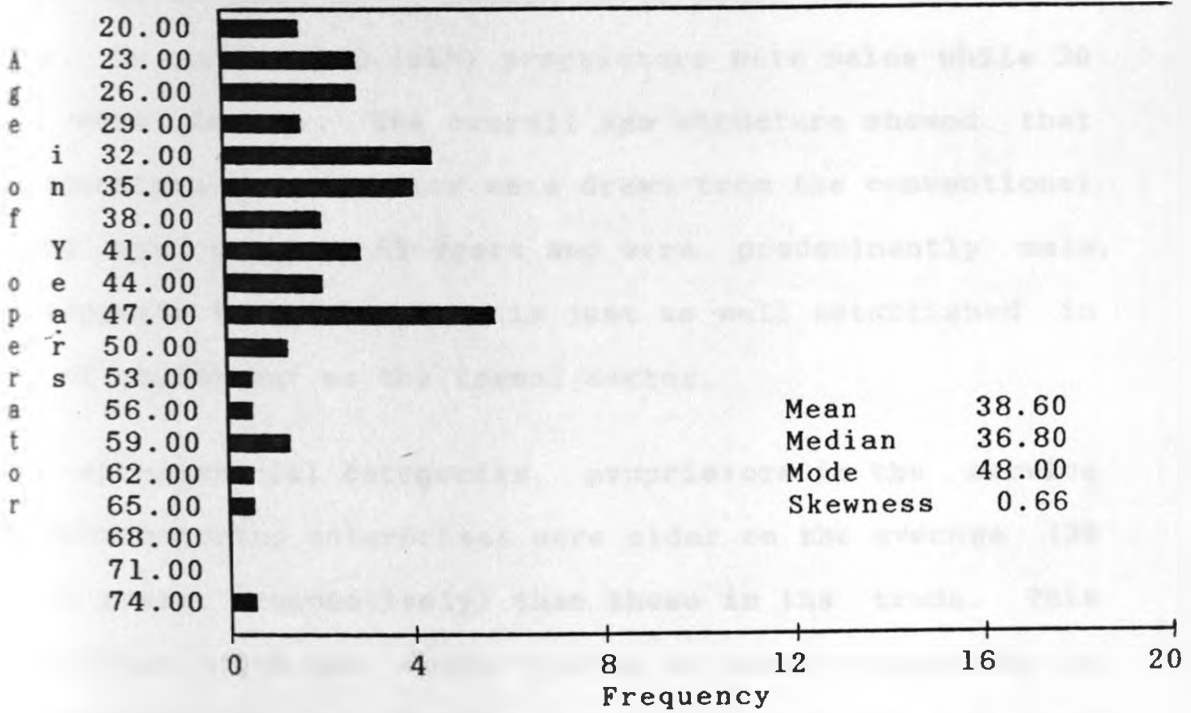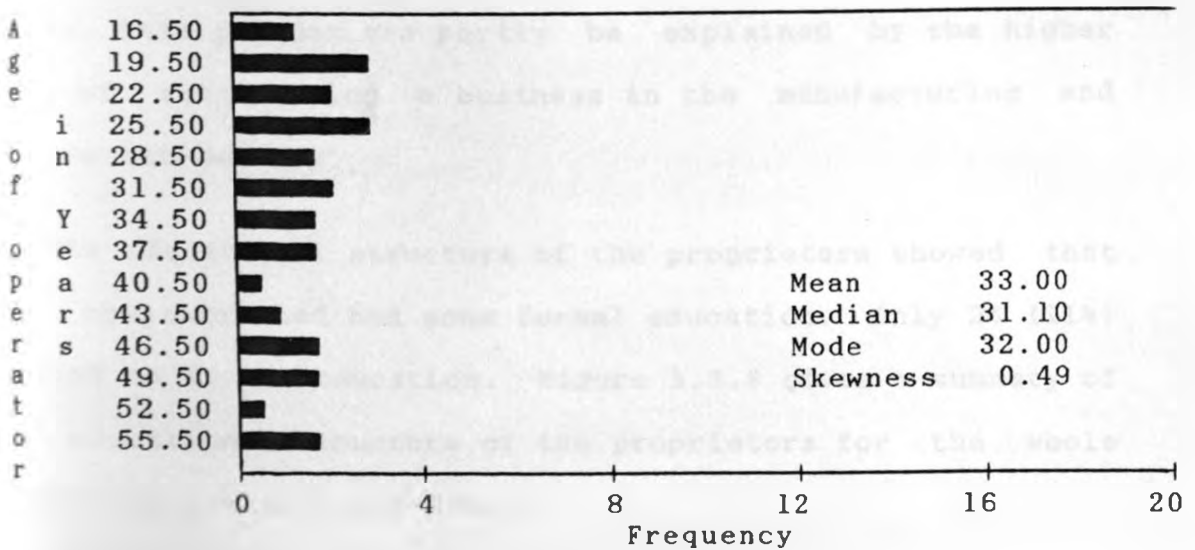
Source: Field data.

The ages of the proprietors ranged from 15 to 75 years, with a mean of 38 years and a median of 35 years for the whole sector. By gender, 170 (81%) proprietors were males while 30 (19%) were females. The overall age structure showed that most operators in the sector were drawn from the conventional working age of 15 to 59 years and were predominantly male. This suggests that the sector is just as well established in terms of employment as the formal sector.

By sub-sectorial categories, proprietors in the service and manufacturing enterprises were older on the average (39 and 38 years, respectively) than those in the trade. This corresponded with the above finding of older enterprises in the service and manufacturing activities and suggested that more young proprietors are drawn into the trade than into the other activities, yet business profits are higher in the latter. This paradox can partly be explained by the higher cost of establishing a business in the manufacturing and service sub-sectors.

The educational structure of the proprietors showed that most operators had had some formal education. Only 24 (11%) had had no formal education. Figure 3.3.8 gives a summary of the educational structure of the proprietors for the whole sector and for each sub-sector.

Figure 3.3.8: Years of Education (YOE)

Whole Sector (YOE)
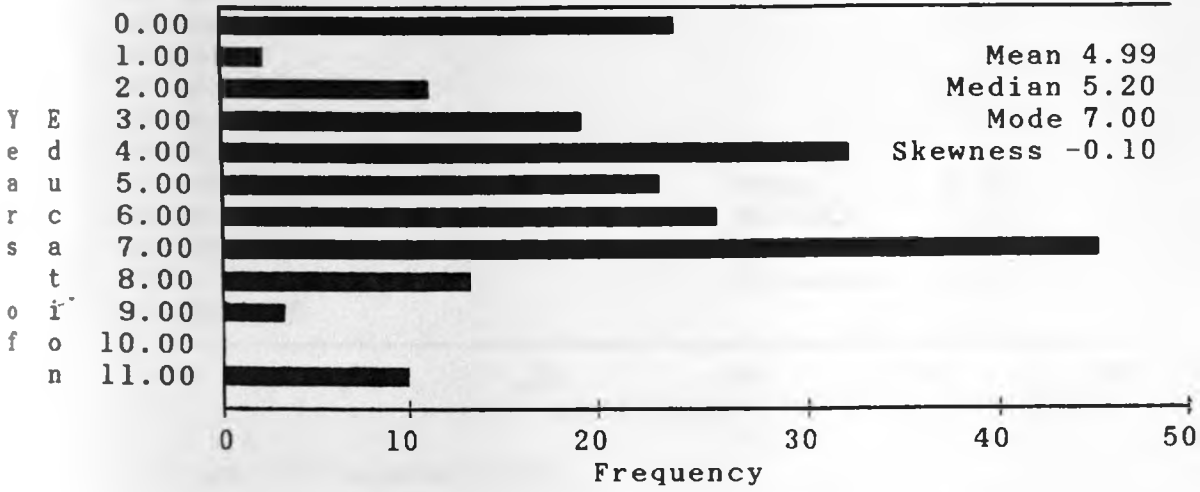
Service Sub-sector (YOE)
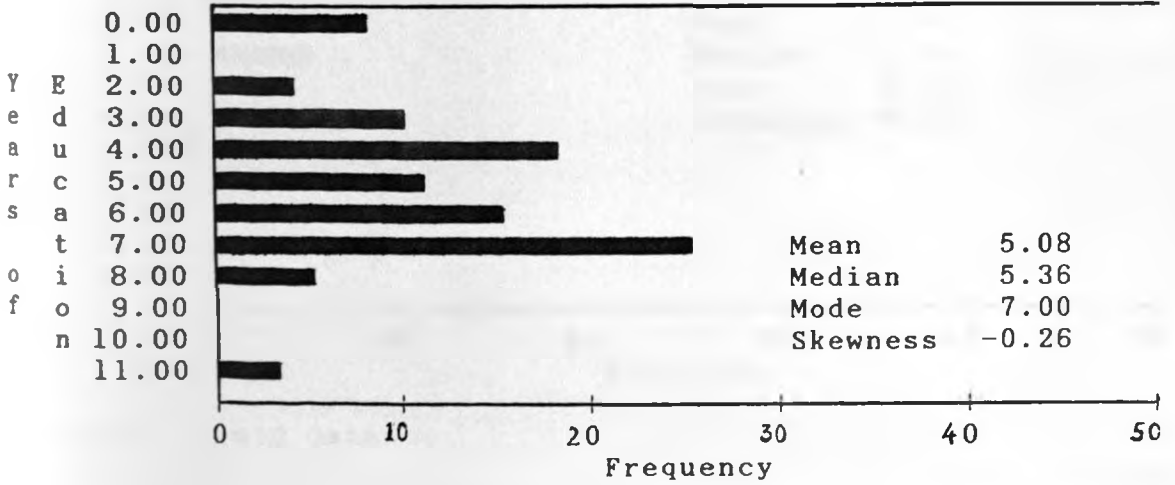
Source: Field data.

Manufacturing Sub-sector (YOE)

	Mean	5.88
	Median	6.08
	Mode	7.00
	Skewness	-0.01

Trade Sub-sector (YOE)

	Mean	3.41
	Median	3.50
	Mode	0.00
	Skewness	-0.29
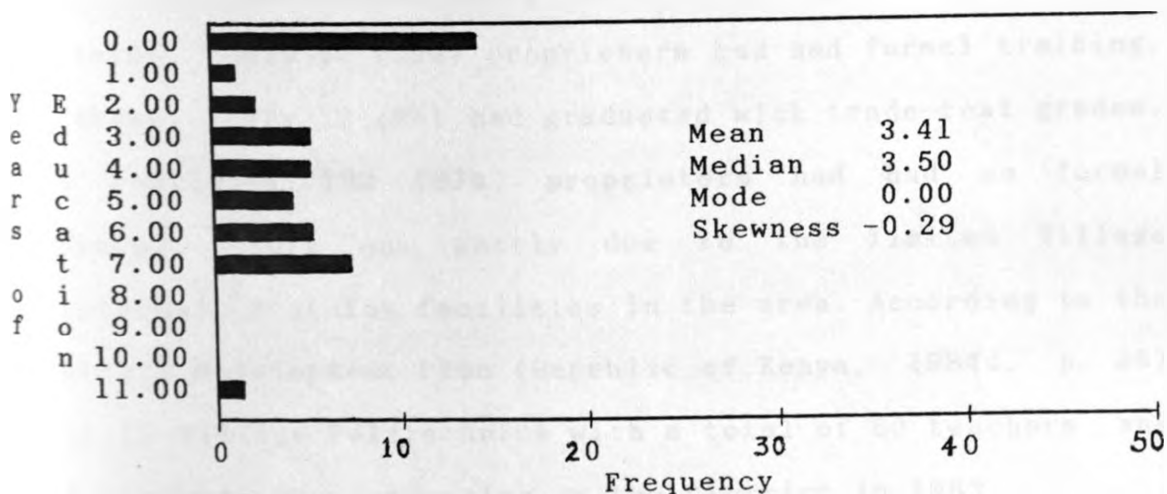
Source: Field data.

The mean and the median years of formal education were 4.9 and 5.2, respectively, with a maximum of 11 years (Fourth Form) and a negative skewness of -0.1. That the majority of the operators had had more years of education than the sample average suggested that the sector drew its operators

progressively with education. By sub-sectorial categories, proprietors in the manufacturing and service activities had had more years of education on the average than those in the trade, indicating that most school-leavers from higher levels of learning were absorbed in the former. This was possibly due to the higher profits in the two sub-sectors, compared with the trade. It might also have been due to the higher educational requirement for the activities which, in turn, might explain why the average age of operators in the two sub-sectors were higher.

On the other hand, most operators had not had any formal training. Only 27 (13%) proprietors had had formal training. Of these, only 17 (8%) had graduated with trade-test grades. The remaining 183 (87%) proprietors had had no formal training. This was partly due to the limited Village Polytechnic training facilities in the area. According to the District Development Plan (Republic of Kenya, 1984d, p. 25) only 11 Village Polytechnics with a total of 60 teachers and 606 students were operating in the District in 1983.

Table 3.1.7 shows the Divisional distribution and utilization of the Village Polytechnics in the District. It can be seen from the table that all the Divisions had only two Polytechnics each, except Nyakach Division which had five. Furthermore, some of these Polytechnics lacked tools and equipment and were seriously underutilized while others

Table 3.1.7: Distribution and Utilization of Village Polytechnics in Kisumu District, 1983.

Division	Number of Village Polytech-nics	Number of Teachers	Number of Students	Students per Teacher	Number of Courses	Students per Course
Nyando	2	13	173	13.3	12	14.4
Maseno	2	10	114	11.4	9	12.7
Muhoroni	2	11	148	13.4	10	14.8
Nyakach	5	26	171	6.6	21	8.1

Source: Republic of Kenya, 1984d, p. 25.

such as Ahero Polytechnic were heavily utilized and could put more facilities to good use (Republic of Kenya, 1984d, p. 25).

In spite of the scarcity in formal training facilities, most of the proprietors had undergone apprenticeship. One hundred and sixty-four (78%) proprietors had trained as apprentices in the informal or the formal sector before establishing businesses of their own. Figure 3.3.9 gives a summary of the duration of their training in months.

Figure 3.3.9: Period of Apprenticeship (PAPP)

Whole Sector (PAPP)
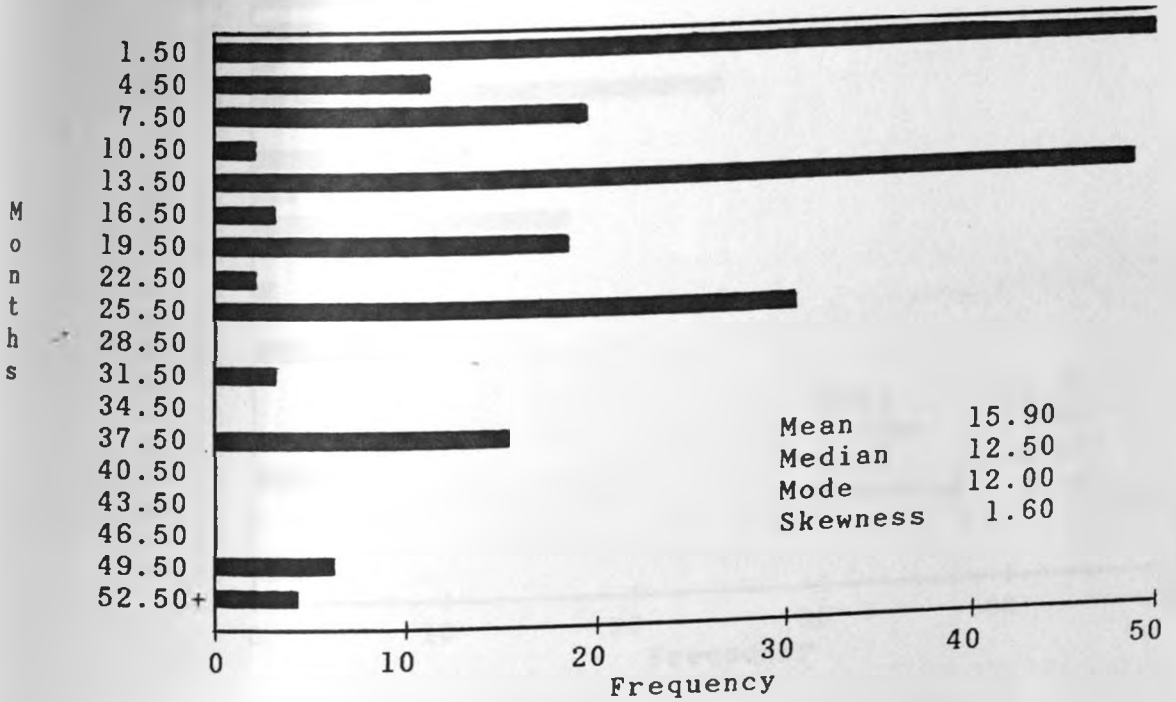
Source: Field data.

Service Sub-sector (PAPP)

Mean	17.60
Median	14.50
Mode	12.00
Skewness	1.20

Manufacturing Sub-sector (PAPP)

Mean	18.30
Median	13.00
Mode	12.00
Skewness	2.80
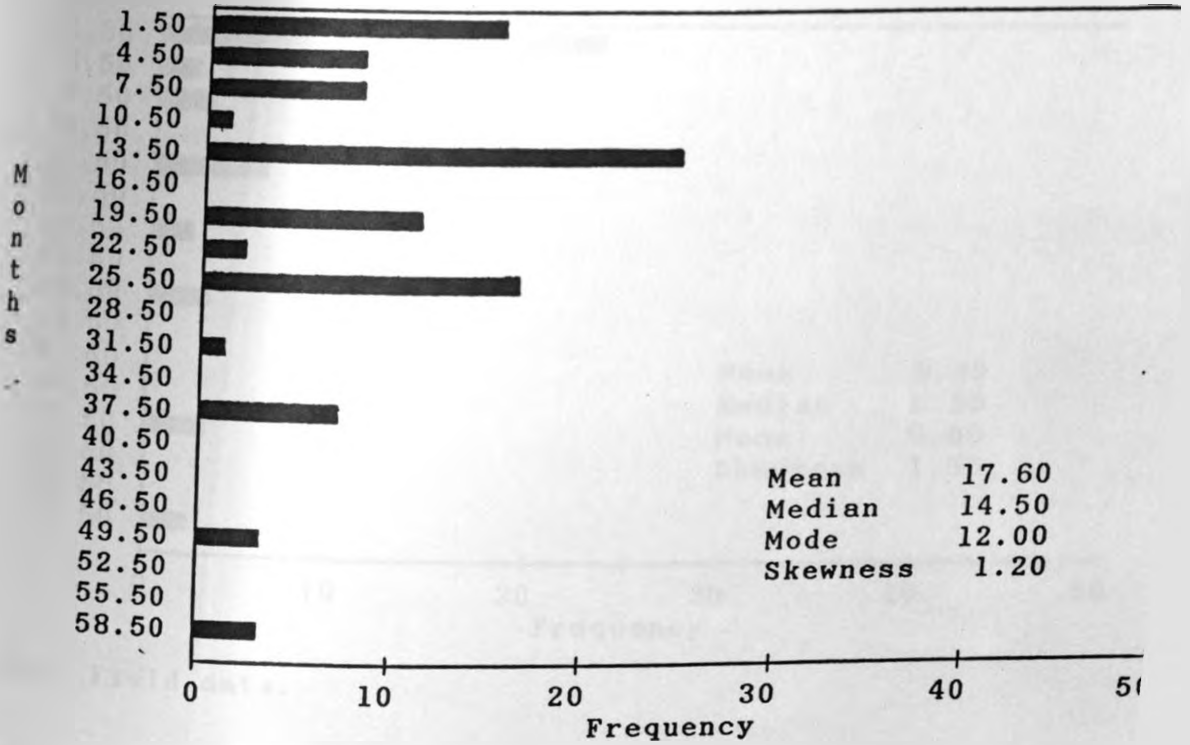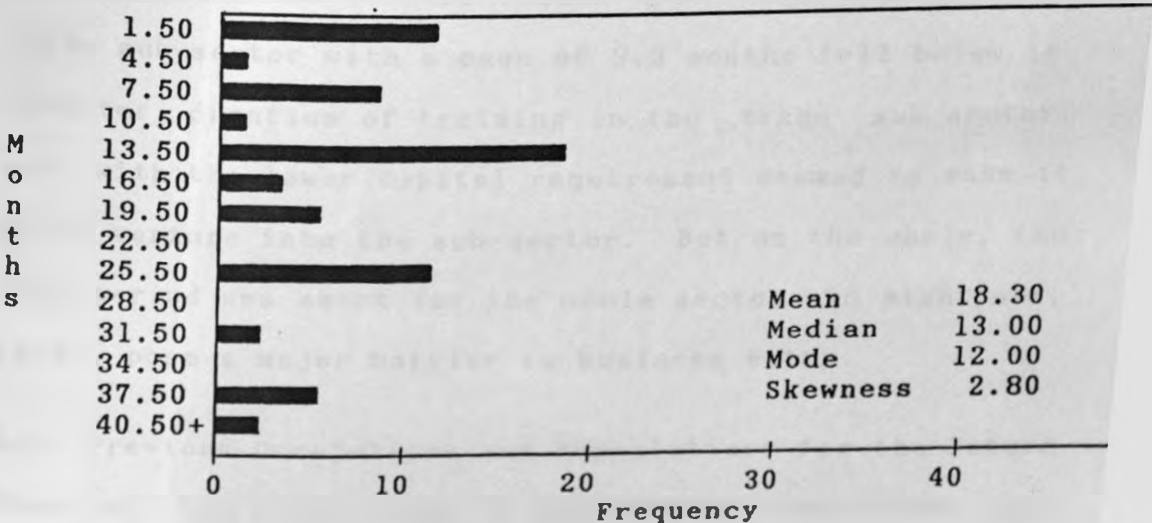
Source: Field data.

Trade Sub-sector (PAPP)
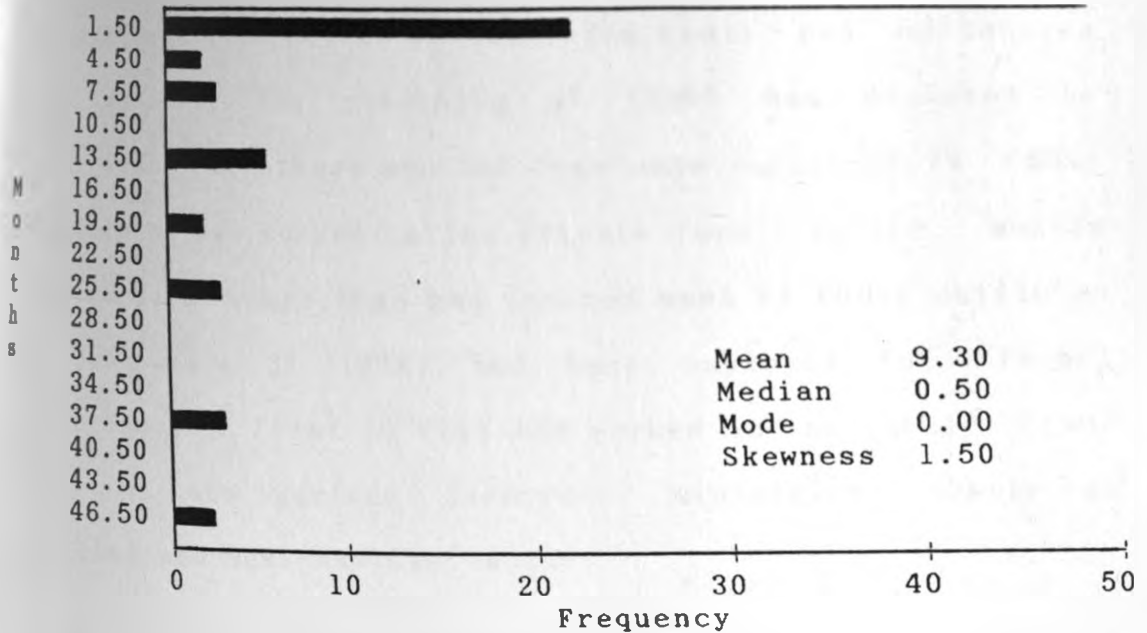
Source: Field data.

The average period of apprenticeship for the whole sector was 16 months while the median was 12.5 months. The service and manufacturing sub-sectors ranked above this average while the trade sub-sector with a mean of 9.3 months fell below it. The shorter duration of training in the trade sub-sector, coupled with the lower capital requirement seemed to make it easier to venture into the sub-sector. But on the whole, the training period was short for the whole sector and might not, by itself, pose a major barrier to business entry.

xiv) Previous Occupations and Expectations for the Future
    Many of the proprietors in the informal sector had not only learned their various trades as apprentices but had also

worked as paid employees in the formal and the informal sectors. One hundred and twenty (51%) proprietors had worked as wage employees before establishing their own businesses while most of the remaining 97 (49%) had assisted as apprentices. Of those who had been wage employees 79 (66%) proprietors had worked in the private formal sector, mostly in Asian firms where they had learned most of their skills on the job while 31 (26%) had been employed in informal enterprises. A final 10 (8%) had worked in the public formal sector in the various government ministries, mostly as unskilled and semi-skilled labour.

Previous occupations had important relations with present ones. They had provided the skills and the initial capital for most proprietors. Some proprietors had used the savings from previous employments to purchase machine tools, intermediate goods and other goods of trade while others had obtained their initial capital from farming.

Most of the proprietors looked to the future of their businesses with optimism. They expressed their commitment to their trades with a view to expanding them. This suggested that the activities in the sector were productive or had the potential to be so. The generally higher profits compared to wages in parts of the formal and agricultural sectors were another indication of their productivity.

In conclusion, it is clear from this chapter that the informal sector is an essential part of the economy of Kisumu District. While the agricultural sector provides the basic means of livelihood, its capacity is severely limited by the physical and human conditions. Similarly, the formal sector is small and is unlikely to expand rapidly enough to employ the expanding population. The informal sector is, thus, a vital means of bridging the resultant economic gap. Its employment potential appears large, particularly because the enterprises; i) are close to the rural population, ii) require low initial capital investment, iii) have sufficient demand for their products, iv) are profitable, v) employ operators from the conventional working-age population, vi) employ operators with high population pressure on land and unemployed school-leavers. In the next chapter, the role of the sector is examined further with regard to the specific problems of population pressure on the land and the rural-to-urban migration of school-leavers.

CHAPTER FOUR

POPULATION PRESSURE AND MIGRANT SCHOOL-LEAVER PROBLEMS

The place of the informal sector in the economy and its internal characteristics have been highlighted in the last chapter to provide a background for understanding the roles of the sector in the context of the specific objectives of the study. In this chapter, the role of the informal sector is examined to find out whether it can be relied upon to relieve extreme population pressure on the land and to reduce the rapid rural-to-urban migration of school-leavers in the District.

4.1. Population Pressure on Farm Land

The last chapter showed that the land potential for agriculture and, hence, the population carrying-capacity of the land is generally low in the District due to unfavourable rainfall and soil conditions. A detailed analysis of the agro-ecological conditions will now be made with the view to establishing a common basis for comparing the land pressure indices for different parts of the District. It is important that the land pressure indices be related to the agro-ecological potential of a given area so that the true population pressure on agriculture can be well understood for different areas.

Kisumu District is divisible into five agro-ecological zones, namely, the Marginal Cotton Zone, the Cotton Zone, the Marginal Sugar-cane Zone, the Sugar-cane Zone, the Marginal Coffee Zone and the Coffee-Tea Zone (See Figure 4.1). The first three zones cover most of the agricultural land in the District and provide a broad basis for understanding the population carrying-capacity of the land in the area. The Marginal Cotton Zone and the Cotton Zone proper both lie in the Kano Plain and cover the administrative locations of North-East Kano; West Kano; South-East Kano; North Nyakach; part of West Nyakach; Kisumu Municipality; parts of East Kisumo; West Kisumo; East Seme; and West Seme. They constitute 60%-70% of the District's agricultural land. Their levels of agricultural productivity are basically similar. The main difference between them appears to be in the amount of rainfall and the drainage of the soils which tends to be more favourable in the Cotton Zone proper. The similarity in the levels of agricultural productivity was implied by Ominde (1963), D'Costa and Ominde (1973), Odenyo and D'Costa (1979) and the Ministry of Agriculture and the German Agricultural Team (1982) and confirmed by empirical studies by the author (Bowa, 1983) in the southern part of the Kano Plain and by Obara (1983) in the Kano Plain.

The Ministry of Agriculture and the German Agricultural Team (1982, pp. 179-196), for example, found that the Vertisols in the Kano Plain are heavy and repeatedly flooded

34°30'E

35°E

0°

KISUMO · KISUMO

EAST

MIWANI

CHEMELIL

EAST

Kibos

• Masogo

• Kombewa

WEST

KISUMU

NORTH-EAST

Chemelil •

Tamu

WEST

SEME

• Nyamasaria

MUNICIPALITY

KANO

MUHORONI

SEME

WEST

• Rabuor

Akado

KANO

• Ahero

SOUTH-EAST

Awasi

KANO

KORU

Lake Victoria

NORTH

KEY
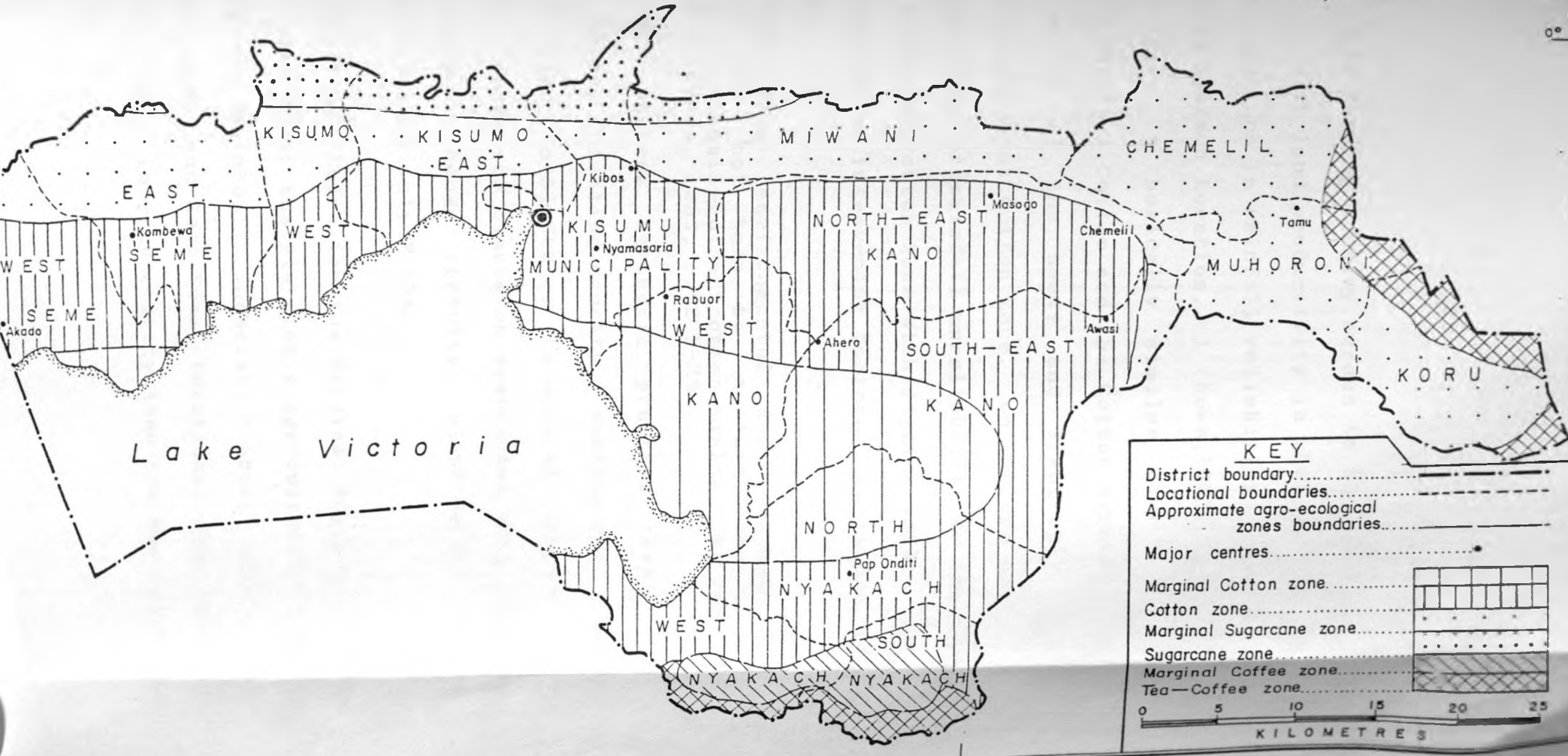
District boundary...........................
Locational boundaries...................
Approximate agro-ecological
        zones boundaries.........

Major centres..............................

Pap Onditi
    •

NYAKACH

Marginal Cotton zone...............

Cotton zone...............................
Marginal Sugarcane zone.........

WEST

SOUTH

Sugarcane zone.........................
Marginal Coffee zone...............

NYAKACH NYAKACH

Tea—Coffee zone.....................

0   5   10   15   20   25

KILOMETRES

SOURCE. District Dev. Plan and Min. of Agri. and Ger. Agri. Team

and, hence, make farming a heavy burden in the entire area. This tends to unify land productivity in the two zones in spite of the difference in rainfall reliability. In my case study in North Nyakach Location, I (Bowa,1983) found that farm productivity is basically similar over an area traversing the Marginal Cotton and the Cotton agro-ecological zones. The nature of the heavy and frequently flooded Vertisols in the Marginal Cotton Zone, on the one hand, and the curtailing effect of rainfall unreliability on the better drained areas of the Cotton Zone with lighter soils, on the other, were the major intervening factors. Similarly, Obara concluded that,

'most postulated environmental and agronomic influences do not help to explain spatial variations in small-holder cotton yields in the Kano Plain' (Obara, 1983, p. 292-293).

He noted that whereas agronomic practice relating to spraying, picking, planting density, weeding and monetary return contributed to 51.60% of the spatial variations in cotton yields, manganese dimension associated with manganese contents, cation exchange capacity, planting density and farmer's age explained only 8.53%.

Beyond the Kano Plain lies the Marginal Sugar-cane Zone which covers 25%-30% of the District's agricultural land. It consists of Koru; Muhoroni; Chemelil; Miwani; parts of East Kisumo, West Seme and East Seme Locations. The Zone is substantially higher in productivity than the Kano Plain due

to higher rainfall amounts and reliability as well as better drainage. On the highland margins above this zone lies the Sugar-cane Zone proper, the Marginal Coffee Zone and the Coffee-Tea Zones. Traces of these zones cover parts of Koru, Muhoroni, Miwani, Kisumu Municipality, East Kisumo, West Kisumo, South Nyakach and West Nyakach Locations. The zones have high agricultural potential but cover only 10% of the District.

The distribution of the service centres in the sample was found to correspond closely to the agro-ecological zones. All the service centres, with the exception of Chemelil and Tamu lay in the Marginal Cotton and the Cotton Zones of the Kano Plain with similar potentials for agricultural production. The land holdings of the informal sector operators in these two zones, therefore, possessed similar real potential for agriculture, particularly because the land-holdings also lay close to the service centres. Thus, the population pressure indices relating to the informal operators in these zones were comparable since they were drawn from agro-ecological zones with similar agricultural potentials. Chemelil and Tamu were exceptions. They both lay in the Marginal Sugar-cane Zone where the underlying real agricultural potential was higher than in the Kano Plain. Nevertheless, the low population density in the area allowed the true effect of the higher agricultural potential in this

zone, relative to those of the Kano Plain, to be incorporated in the population pressure indices. For example, while a family of eight in the Kano Plain would have a high population pressure index of 1.25 because the size of the land-holding was small, say, 10 hectares, it would have a low index of 2.5 in the Marginal Sugarcane Zone where the land-holding was larger, say, 20 hectares. Figure 4.2.1 shows the distribution of population pressure on land in hectares per person for the administrative locations of Kisumu District.

The low population pressure in the areas of Chemelil and Tamu stems from the recent population settlement in the Sugar Belt. Until the time of independence, the Belt was a Scheduled Area reserved for European and Asian farmers only (Obara, 1976, pp. 3, 83). Consequently, it was an area of low population density. Today the low densities persist because many of the sugar-cane farms are medium to large scale and are owned by only a few families as compared with the long-settled high density areas of the rest of the District. In 1983, for example, the mean land-holding per person in Muhoroni and Chemelil locations were 0.77 hectares and 0.73 hectares, respectively. For the whole District, the mean land-holding was only 0.46 hectares. The low population densities in this zone implied low land pressure on the proprietor's farm unit and, hence, made the land pressure indices assume low pressure values that incorporated the true effect of higher real agricultural potential of the Zone

FIG. 4.2.1: KISUMU DISTRICT: PER CAPITA LAND AVAILABILITY FOR THE POPULATION
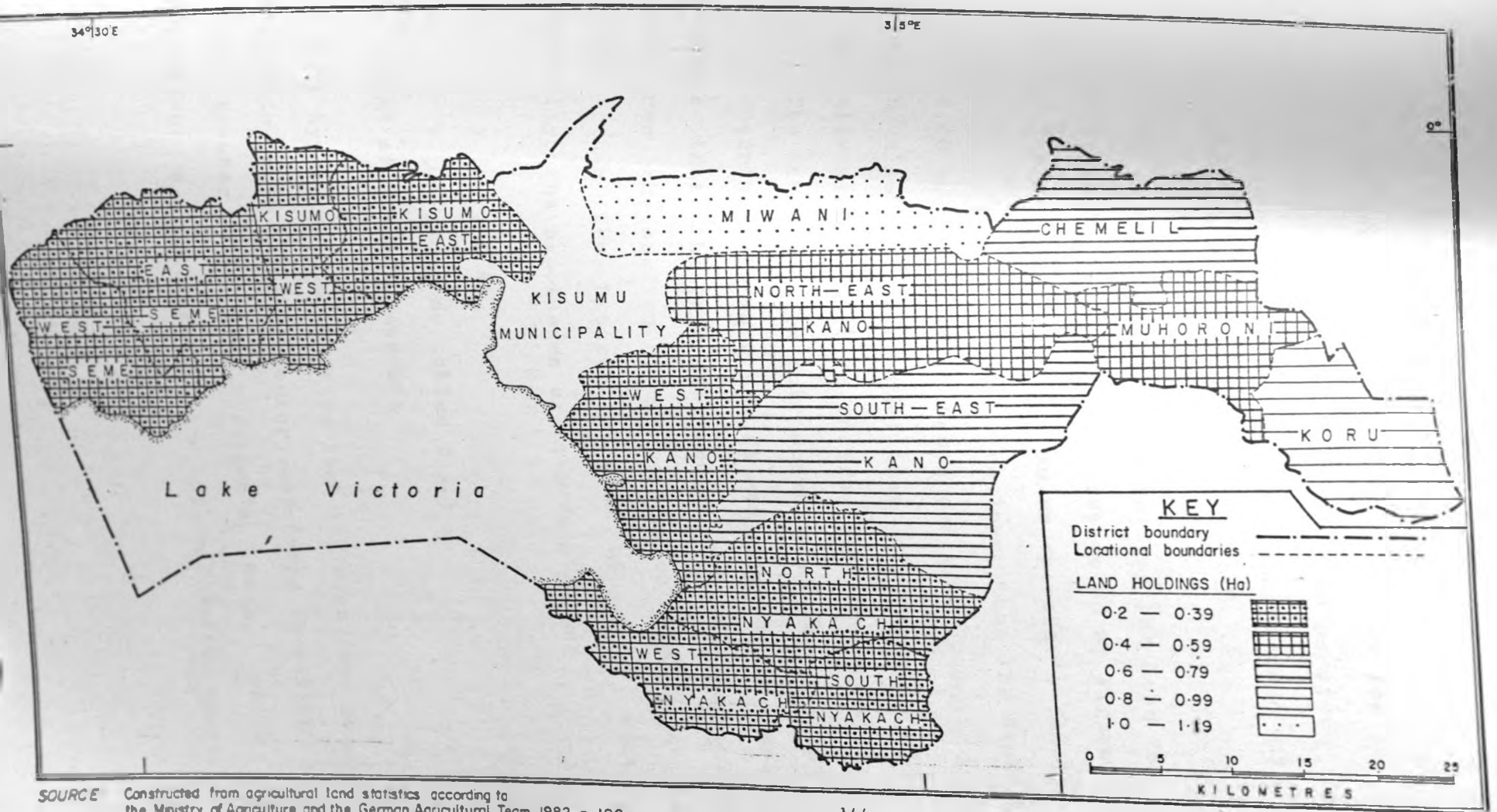
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relative to the Kano Plain. In this way, the low population density restored comparability of the land pressure indices obtained for operators in the Marginal Sugar-cane with those in the Marginal Cotton and Cotton Zones.

The indices showing the land holding per head for each informal operator's farm unit is illustrated by Figure 3.3.6, p. 124). The mean land-holding in an operator's family was 0.34 hectares. This appeared to be lower than the District's mean of 0.46 hectares. The strong positive skewness on the bar graph also suggested that this discrepancy could be statistically significant. To verify this, the means test was applied. The test has been introduced in chapter two and will now be described to show how it was applied to test the hypothesis that the informal sector absorbs participants mainly from the section of the population with higher land pressure than the District's mean of 0.46 hectares. Symbolically, the hypotheses are represented as:

$H_0 : \bar{X} \geqslant \mu = 0.46$

$H_1 : \bar{X} < \mu$ (i.e one tailed test)

Level of significance=95%

The null hypothesis, H_0, states that the mean land holding per capita in an informal sector operator's family is equal to or greater than the District's mean, while the alternative, H_1, states that the informal sector operators'

mean is less than the District's mean. The latter hypothesis is directional and implied a one tailed t-test. The level of significance was set at 95%.

The t-test statistic was then computed as follows;

$$t_{N-1} = \frac{\bar{x} - \mu}{\hat{\sigma} / \sqrt{N}}$$

where,

$\bar{x}$ = sample mean land holding per person
μ = District's mean land holding per person
$\hat{\sigma}$ = sample standard deviation
N = size of the sample
$N-1$ = number of degrees of freedom appended to the t to accommodate the estimate in the numerator($\bar{x}$) and the estimate in the denominator($\hat{\sigma}$)

Hence,

$$t_{(210-1)} = \frac{0.34 - 0.46}{0.33 / \sqrt{210}}$$

$$= - 6$$

The computed t-probability value, −6, was then compared with the critical t—value at the 95% probability level. The tabulated critical t—value for 209 degrees of freedom was obtained as 1.65 at this level of probability. This was greater than the computed probability of −6. Hence the null hypothesis was rejected. Even at 99% level of probability, the null hypothesis would still be rejected because the computed probability would still be less than the new critical value of −2.33.

Thus, there was enough statistical evidence that the informal sector selectively employs people with higher pressure on farm land than average. The sector is, hence, a vital means of promoting rural development by providing additional income to those with smaller than average plots of farm land. Furthermore, it constitutes the main means of livelihood for the landless.

In the next section, an analysis of the educational attributes of the informal operators is presented to show the ability of the sector to employ school-leavers most likely to migrate to the major urban centres to look for work.

4.2. Education and Employment in the Informal Sector

The employment difficulties facing school-leavers in Kisumu District is a reflection of the countrywide problem which has evolved over a long period, starting at the time of independence in 1963. At that time there was a high demand for educated manpower to fill positions previously occupied by the colonial personnel. Expansion of school education was undertaken as a response to this demand. With the passage of time most of these positions were filled by school graduates. It then became clear that future manpower supplies would exceed the original demand for education. Between 1964/65 and 1974/75, the numbers of primary school-leavers not offered Form 1 places rose from 84,400 to 142,500. Meanwhile many

low-ranking jobs previously open to primary school-leavers, such as government office messenger, had passed to secondary school-leavers.

By the mid 1960s secondary school leavers (Form 4) were experiencing increasing difficulties in finding employment, and almost as rapidly as students progressed through the education system so the level of education at which jobs were scarce was also rising (Kinyanjui, 1974). By the early 1970s, many university graduates in the Arts subjects were not acquiring the jobs they had hoped for, with the result that a number were being absorbed into secondary school teaching (Lockhart, 1981, pp. 279-281). Degree level training programmes for secondary school teaching were also over-enrolled, relative to the requirements of secondary schools. Meanwhile, non-university trained secondary school teachers were being moved to primary schools. By mid 1970s even more categories of graduates in the Science subjects, particularly biologists, were not able to obtain the jobs they had expected.

As a result of these increasing job procurement difficulties, many concerned persons began to advocate technical education (National Committee on Educational Objectives and Policies, 1976). However, by the mid 1970s, there was evidence that this sector was not exempt from the employment problem either. A survey conducted by the

Technical Education Section of the Ministry of Education to follow up the performance of the 1974 secondary technical school-leavers suggested that by August 1975, 58% of the respondents were still looking for work after the annual intakes of craft apprentices by the Department of Industrial Training (Kenya, Ministry of Education, 1975). Though the survey has been criticised for having been unscientific since for a number of reasons it was bound to exaggerate the degree of unemployment, Lockhart (1981) has pointed out that the study did draw attention to a genuine and growing problem. Similarly, a survey of the former trainees of Village Polytechnics who completed courses in 1971 indicated that 35% of the males and 56% of the females had failed to secure employment within six months of completing their courses (Court, 1974, p. 223).

Today, Kenya's economy is becoming even less able to create new job opportunities in agriculture or industry at a rate fast enough to cope with the expansion of the labour force. There is a glaring disparity between the numbers of educated entrants on the labour market and the numbers of new jobs becoming available. Edgren (1976) reported that while the formal sector was generating about 40,000 jobs a year by 1976, the education system was releasing about 200,000 school-leavers into the market. By 1979, this had risen to 56,000 educated entrants per year (National Development Plan, 1979-83).

The location of employment for school-leavers during this period has added an important geographical dimension to the employment problem. It has been mentioned that in the 1960s economic activities were concentrated in the two major towns of Nairobi and Mombasa. These towns consequently became the foci of employment. As a result most school-leavers seeking employment were attracted to the centres. Kinyanjui (1974), for example, found that 50% of Kenyan school-leavers were living in Nairobi in 1974 at a time when the town accounted for only 5% of the national population. Even when jobs became scarce, this migration trend continued, though with an increasing number of terminal urban centres, especially with the launching of the decentralisation programme in 1974.

In Kisumu District, the migration pattern was similar to the national one, with the rest of the District being a source of migrant school-leavers seeking employment in Kisumu Town and in other major urban centres throughout the country. Kabagambe (1975) reported a large number of such migrants in Kisumu Town while the inter-District population migration statistics also show that all the districts of Nyanza and Western Province experience heavy net migration losses (Republic of Kenya, p. 59). An analysis of migrants by educational status has further shown that internal migration in Kenya is selective of the more educated sections of the population (ibid, p. 60). The World Bank (1980, p. 35)

similarly reported that in Kenya education has a
statistically significant positive effect on outmigration
from districts to major urban centres of 10,000 residents or
more. Arising from the migration pattern are serious socio-
economic problems in the rural and urban areas. Frank (1971)
and Todaro (1971) submitted that the phenomenon causes
unemployment in the urban centres often in excess of 10% and
depresses earnings in small-scale sectors. Furthermore, it
leads to other social ills such as the creation of urban
slums and pollution (Hance, 1970). Meanwhile, the loss of the
better educated manpower embodies a substantial capital
transfer to urban areas. Given that in many rural areas
education represents a considerable proportion of total rural
investment, such a transfer represents a great impediment to
rural development (Byerlee, 1974; Essang and Mabawonku,
1974). That most of the migrants end up jobless in the towns
represents a loss to the national economy too.

The objective of this section then is to find out whether
the rural informal sector provides a solution by selectively
employing the potential migrants. Before testing the
hypotheses, a look at the structure of education in the
District will provide additional insight into the nature of
the problem. Table 4.1 shows the educational structure of the
District for males and females of all ages. It is apparent
that the bulk of the population has low levels of formal
education or none at all. Only a small proportion has

Table 4.1:
Kisumu District Population by Sex, Five year age-group and Twelve Years of Education

Male

Age	None	Std.1-4	Std.5-7	Form 1-4
0- 4	42,705	0	0	0
5- 9	10,783	23,467	115	0
10-14	1,112	19,068	9,772	501
15-19	1,283	4,328	14,261	5,976
20-24	2,094	2,579	7,616	7,096
25-29	2,409	2,434	6,523	4,515
30-34	2,492	2,178	5,781	2,830
35-39	2,579	2,038	3,419	1,201
40-44	3,051	2,123	2,726	762
45-49	3,617	2,033	1,806	494
50-54	3,653	1,656	1,052	246
55+	12,460	3,345	1,266	225
Total	88,238	65,249	54,337	23,846

Female

Age	None	Std.1-4	Std.5-7	Form 1-4
0- 4	43,531	0	0	0
5- 9	11,381	23,293	129	0
10-14	1,779	18,139	9,356	584
15-19	4,632	5,056	13,118	5,254
20-24	7,672	3,587	7,538	3,859
25-29	8,231	2,846	4,777	1,549
30-34	7,771	1,987	2,361	506
35-39	7,426	1,589	1,138	222
40-44	7,338	1,229	720	107
45-49	7,561	989	375	53
50-54	6,277	597	155	28
55+	13,631	762	190	45
Total	127,230	60,074	39,857	12,207

Male and Female

Age	None	Std.1-4	Std.5-7	Form 1-4
0- 4	86,236	0	0	0
5- 9	22,164	46,760	244	0
10-14	2,891	37,207	19,128	1,085
15-19	5,915	9,384	27,379	11,230
20-24	9,766	6,166	15,154	10,955
25-29	10,640	5,280	11,300	6,064
30-34	10,263	4,165	8,142	3,336
35-39	10,005	3,627	4,557	1,423
40-44	10,389	3,352	3,446	869
45-49	11,178	3,022	2,181	547
50-54	9,930	2,253	1,207	274
55+	26,091	4,107	1,456	270
Total	215,468	125,323	94,194	36,053

acquired higher levels of education. Even when the population in the infant age group, say, 0-4 years is omitted, the overall trend remains largely unchanged. However, to make an accurate comparison between the educational structure of the informal sector operators and that of the District and test the hypothesis of the study, only the population aged 15 and above in the 0-11 years range of education was considered. This was because the informal operators in the sample all fell within these limits. Furthermore, the comparison was made separately for each gender to cater for the gender differences in education as recorded in the District census and in the sample.

Figures 4.2.2 and 4.2.3 illustrate the educational structures of the population and of the sample aged 15 and above with upto 11 years of education.

Figure 4.2.2: Educational Structure of the District.
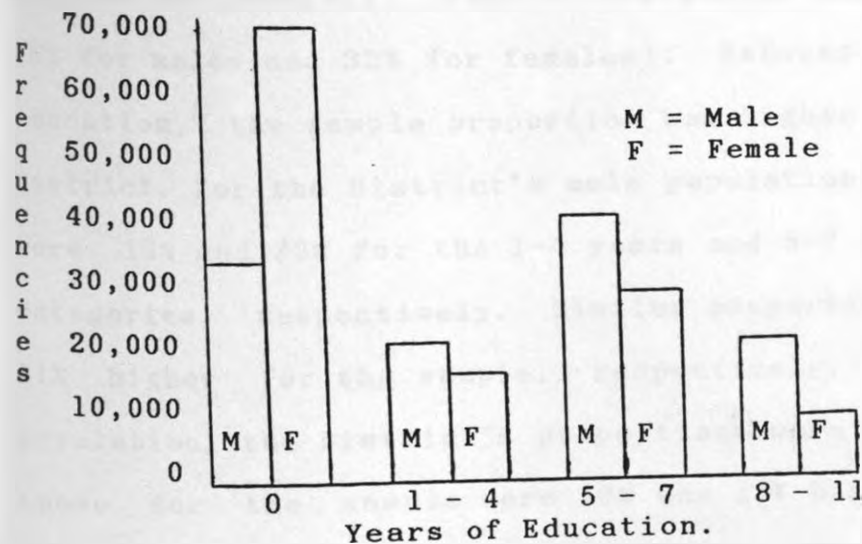
Source: Population Census, 1979.

Figure 4.2.3: Educational Structure of the Sample.
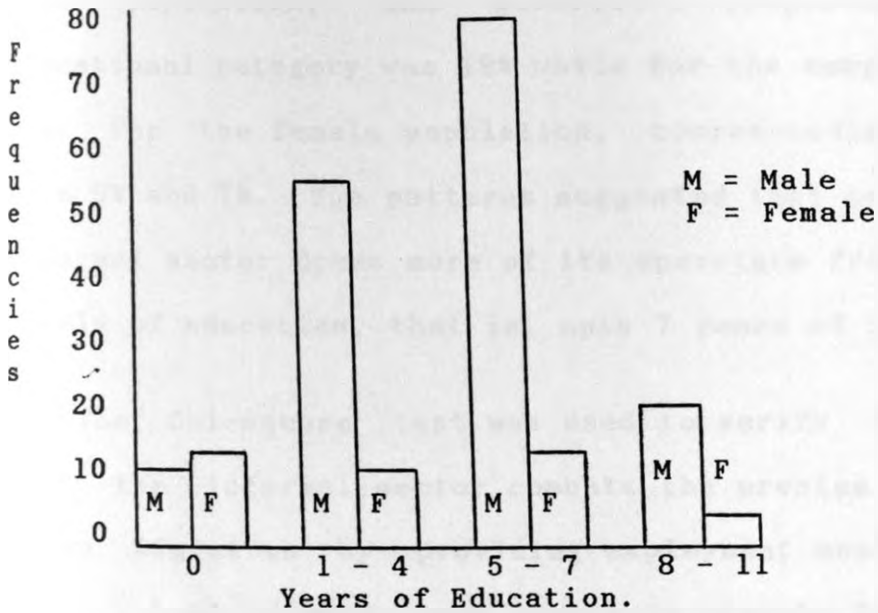
Source: Field data.

A comparison between the two distributions reveals some striking differences. While the proportion of the District's population with no education ranked very high (24% for males and 54% for females), that of the sample was about 20% lower (6% for males and 32% for females). Between 1 and 7 years of education, the sample proportion was higher than that of the District. For the District's male population, the proportions were 18% and 36% for the 1-4 years and 5-7 years educational categories, respectively. Similar proportions were 14% and 11% higher for the sample, respectively. For the female population, the District's proportions were 14% and 23% while those for the sample were 10% and 13% higher for the two educational categories, respectively. This trend changed in

the range of 8-11 years of education, with the District's proportions being higher than those of the sample. For the male population, the District's proportion in this educational category was 19% while for the sample it was only 14%. For the female population, corresponding proportions were 9% and 7%. The patterns suggested that on the whole the informal sector draws more of its operators from intermediate levels of education, that is, upto 7 years of schooling.

The Chi-square test was used to verify the hypothesis that the informal sector combats the problem of rural-to-urban migration by providing employment mostly to higher level school-leavers, most likely to migrate to urban centres to look for work. The test has been introduced in chapter two and will now be described to show how it was applied to verify this hypothesis. Specifically, the purpose of the X^2 test was to compare the observed distribution of the years of education (YOE) for the informal sector operators with that expected, based on the District population's educational distribution, in order to decide whether or not the two are different.

The quantities used in the X^2 model were:

$$X^2 = \sum_{i=1}^{n} \frac{(O_i - E_i)^2}{E_i}$$

where,

X^2 = Chi-square statistic

O_i = observed (sample/computed) frequency of informal operators in the ith education range.

E_i = District census population size in the ith educational range.

The test required that the observed be equal to the expected number of informal sector operators in each education range if their educational distribution was the same as that of the District population. E_i was defined as follows;

$$E_i = N \cdot \frac{DIST_i}{\sum_{i=1}^{n} DIST_i}$$

where, N = the number of informal sector operators in the sample.

$DIST_i$ = the number of people over 15 years in the ith education range.

This gave the frequencies to be expected if chance alone determined the occurrences, given the existing educational structure of the District.

Table 4.2 shows the expected and observed frequencies for the male and female components separately.

Table 4.2: Male and Female Population Proportions

YOE	MALE N=169			FEMALE N=41		
	DISTRICT(%)	E_i	O_i	DISTRICT(%)	E_i	O_i
0	27	46	11	54	22	13
1-4	18	30	55	14	6	10
5-7	36	61	80	23	9	15
8-11	19	32	23	9	4	3

Source: Field data and Republic of Kenya, 1981.

These quantities were then used in the X^2 test. This was done in two stages. First, the X^2 probability was computed to decide whether the observed frequencies are significantly different from the expected ones. Second, the actual discrepancies, $O_i - E_i$, were examined to establish the nature of the discrepancies.

Specifically, the first part tested the following hypotheses:

H_0 : the structure of education of the informal sector operators is similar to that of the District population.

H_1 : the structure of education of the informal sector operators is different from that of the District population

Level of probability=95%

For the male population;

$$X^2 = 55.91$$

The critical value of X^2 with 3 degrees of freedom was obtained as 7.82. This was less than the computed X^2 of 55.91. Hence, H_0 was rejected.

For the female population;

$$\chi^2 = 8.27$$

The critical χ^2 for this was 5.99. This was less than 8.27 for 3 degrees of freedom and so H_0 was rejected.

Having established the significance of the discrepancies, the actual differences were then examined. Table 4.2 shows the observed and expected frequencies and the actual discrepancies between them.

Table 4.3: The $O_i - E_i$ Frequencies

YOE	MALE			FEMALE		
	O_i	E_i	$O_i - E_i$	O_i	E_i	$O_i - E_i$
0	11	42	-31	13	22	-9
1-4	55	30	25	10	6	4
5-7	80	61	19	15	9	6
8-11	23	32	-9	3	4	-1

Source: Field data and Republic of Kenya, 1981.

It can be seen from the Table that the discrepancies are negative for the lower limits of the frequency scales and positive for the 1-7 years range. This means that the informal sector employment is selective of school leavers with 1-7 years of education. There is less preference for informal employment for those with 8-11 years of education and far much less for those with no education. In relation to the objective of the study, the results showed that the informal sector mainly combats the rural-to-urban migration of primary school-leavers. This has important implications

for rural and urban development. To the rural area, it represents the utilization of manpower which would have been lost to the urban area, with reduced rate of population pressure on farm land. Similarly, urban centres are relieved by the reduction in the influx of migrants whose arrival often means increased pressure on amenities. However, the results also showed that the sector does not tackle the migration of secondary school-leavers adequately, indicating the need to raise its absorption capacity for this category of labour. Secondary school-leavers are becoming increasingly jobless and prone to migration in search for work. For the population with no education, it can be assumed that the majority is absorbed in the farming sector since they are least migrant.

In summary, the analyses in this chapter show that the rural informal sector contributes to rural development in two important ways. It selectively employs the rural population with high pressure on the land and potential migrant school-leavers. However, the capacity of the sector to employ secondary school-leavers is low and needs to be expanded. In the next chapter, the condition of business incomes are examined to evaluate the performance of the sector and its prospects for evolutionary growth in the District.

CHAPTER FIVE

THE CURRENT POTENTIAL AND FUTURE GROWTH OF THE INFORMAL
SECTOR IN KISUMU DISTRICT

The role of the informal sector has been examined with
regard to the problems of population pressure on the land and
the rural-to-urban migration of school-leavers. In this
chapter the profitability of the enterprises is assessed to
evaluate the economic performance and growth of the sector.
The nature of economic growth, in turn, affects the
contribution of the sector in relieving the problems already
examined. While profitability is not the only criterion for
evaluating the role of the informal sector in development, it
is of great significance in determining the economic
viability of the sector. For this reason the issue has
occupied the attention of many studies in Kenya and outside.
Some have concluded that the sector is economically unviable
because it is exploited by the formal sector while others
have submitted that only a small portion of the sector with
relatively high levels of capital investment (i.e the
intermediate sector) is viable. Still others have maintained
that most of the sector is economically viable. Nevertheless,
the findings on business profits in chapter three support
the latter position. While the profits are higher than the
wages of the unskilled and semi-skilled wage employees in the
formal sector on the average, they are much higher than the
wages payable to farm labourers in the agricultural sector.

In this chapter, an attempt is made to resolve the controversy on economic viability further for the case of Kisumu District. The profits in the sector are examined to show their responsiveness to various business-influencing factors and, hence, their expected trends (of growth or otherwise) for the future. This might help in making realistic policies for the sector. Studies have indicated that the informal sector will assume either an involutionary growth (retarded form) under policies of restriction and disincentives or an evolutionary one under policies of public support and incentives. These prognostications suggest that policies of support will enhance the economic viability of the sector and increase its ability to combat land pressure and rural-to-urban migration as well as provide a decent standard of living for the participants.

The way in which profits in the informal sector respond to the business-influencing factors is focal to discovering whether the growth pattern is evolutionary or involutionary (as already defined in chapter 1) since profit is a product of a combination of the prevailing business conditions. Several factors that might influence the business conditions were selected for the study. They consisted of years of education (YOE), period of apprenticeship (PAPP), initial and present values of capital (IVC, PVC), number of customers served in a week (NOCW), age of business (AOB), population

pressure on farm land (POFL) and age of operator (AOO).

i) Education and Apprenticeship

Though the informal sector is characterised as requiring no elaborate formal schooling or training for its participants some formal education and training would enhance the skills of the participants and predispose them to better performance in business. The role of education and training in economic development is well documented in economic development texts (Todaro, 1977, p. 276; World Bank, 1974, p. 3-48; Ward, 1974). Here it will suffice to note that they are a means by which people become more economically productive through the acquisition of knowledge and basic skills as well as the motivation to achieve desired goals. Consequently, it was expected that productivity (profits) in the informal sector would be a positive function of the years of education and the duration of apprenticeship. Thus, operators who had had more years of education and apprenticeship were expected to make larger profits in their business activities.

ii) Present and Initial Values of Capital

Capital can also be expected to have a positive effect on productivity. The concept of diminishing returns is helpful in the understanding of the effects of capital on output. If

ever-increasing amounts of a variable factor (for example, labour) is applied to fixed amounts of other factors (for example, capital, land, materials), then beyond some limit the additional or marginal product of the variable factor declines (Todaro, 1977, p. 72; Lipsey, 1979, pp. 213-214, 217, 218). Since labour is abundant while capital is scarce in the informal sector, enterprises with low levels of capital were expected to underemploy labour and experience diminishing returns. Hence, profits in the informal enterprises were expected to vary positively with the level of capital employed. Thus, the value of capital reflected in the physical working conditions (measured by the size of rent on the working space), the value of machine tools and of circulating capital used would positively influence the level of profits accruing to the businesses. Although it is really the present values of capital which were expected to have a direct bearing on production and profits, the influence of the IVC was also considered to find out whether they had any lasting effects on the current levels of business performance.

iii) Number of Customers served in a Week

The number of customers served was used to estimate the level of demand. The latter was, in turn, assumed to be functionally linked to the income levels through its interaction with supply. When demand exceeds supply, prices

rise and vice versa, all other things being equal (Lipsey, 1977, pp. 77-100). Such high prices imply high profits for the businesses affected and vice versa. Thus, in the analysis to follow, the levels of profits accruing to the informal enterprises were expected to relate positively with the number of customers served in a week.

iv) Age of Business

The age of an enterprise can influence its current levels of production if it affects the level of capital and the number of customers served. Long-established businesses might have accumulated large stocks of capital, won a large share of the market and established a steady supply of inputs and so on. Conversely, young businesses might be at a disadvantage with regard to these factors. The age of an enterprise was, therefore, expected to have a positive influence on business incomes.

v) Pressure on Farm land

The problem of population pressure on farm land was viewed as a 'push factor', forcing the people affected to look for complementary incomes in the informal sector. The vigour with which such incomes were pursued was assumed to follow the 'satisficer' concept of returns. The concept states that producers will make strenuous efforts only to

attain satisfactory levels of output. Beyond that level, most producers will prefer leisure (Cox, et al, 1969). If this concept explained the commitment of the informal operators adequately, then pressure on the land would relate positively to business performance. More effort would be spent to produce more to fill the larger gap left by the low farm outputs on holdings with high land pressure.

vi) Age of Operator

It was difficult to conceptualize the effect that the age of an operator might have on the profit of his business. However, the influence of the factor was tested along with the others to verify its impact on the performance of the enterprises.

Specifically, the purpose of this section is to establish:

a) which factors have a significant relationship to the profits of business.

b) how much of the variance in business profits can be explained individually and collectively by the above factors

c) an equation for estimating the economic performance of the the sector.

The null hypothesis in this chapter states that none of the business-influencing factors has a significant influence

on the profits earned by the business. If they do, their total explanatory power is low and cannot, therefore, generate an equation for estimating the economic performance of the informal sector effectively. The alternative hypothesis states the converse that the independent variables have a significant influence and a strong explanatory power over the business profits and can generate an effective equation.

Correlation and regression analyses were used to answer these questions for the whole sector together and for each sub-sector separately. The former was performed to check for multi-collinearity among the independent variables. Multi-collinearity occurs when the residuals are correlated and, hence, it is implied when the independent variables themselves are highly correlated (Johnston, 1980, p. 74). It is a statistical problem which biases the estimates of partial regression coefficients and often makes them difficult to interpret in a multivariate regression model. For example, when independent variables X1 and X2 are strongly correlated, their joint power to estimate the dependent variable Y may be high, say, R=0.8. But there can be no certainty about their separate powers to estimate Y. In such a case the variation in Y can be estimated but the relationship cannot be understood (Johnston, 1980, p. 76).

Tables 5.1, 5.2, 5.3 and 5.4 summarize the intercorrelations that were obtained between the independent variables, namely,

Age of operator (AOO),
Age of business (AOB),
Number of customers served in a week (NOCW),
Years of education (YOE),
Population pressure on farm land (POFL),
Present value of capital (PVC),
Initial value of capital (IVC), and
Period of apprenticeship (PAPP).

Table 5.1: Intercorrelation Matrix (Whole sector)

	AOO	AOB	NOCW	YOE	POFL	PVC	PAPP	IVC
AOO	1	0.52	-0.15	-0.29	-0.01	-0.04	-0.02	0.01
AOB		1	-0.03	-0.19	0.11	0.03	-0.02	-0.18
NOCW			1	-0.10	0.01	-0.10	-0.10	-0.12
YOE				1	-0.01	0.32	0.05	0.33
POFL					1	0.10	0.04	0.05
PVC						1	0.23	0.73
PAPP							1	0.09
IVC								1

Table 5.2: Intercorrelation Matrix (Service sub-sector)

	AOO	AOB	NOCW	YOE	POFL	PVC	PAPP	IVC
AOO	1	0.55	-0.17	-0.49	-0.01	0.19	-0.14	0.06
AOB		1	-0.09	-0.30	0.15	0.11	-0.05	-0.23
NOCW			1	0.12	0.01	-0.11	0.15	-0.14
YOE				1	-0.02	-0.04	0.05	0.02
POFL					1	0.02	0.08	-0.09
PVC						1	0.06	0.62
PAPP							1	-0.11
IVC								1

Table 5.3: Intercorrelation Matrix (Trade sub-sector)

	AOO	AOB	NOCW	YOE	POFL	PVC	PAPP	IVC
AOO	1	0.45	-0.06	-0.32	0.10	0.28	0.08	0.22
AOB		1	0.18	-0.36	0.31	0.28	-0.01	0.14
NOCW			1	-0.01	-0.10	0.29	-0.05	0.08
YOE				1	0.04	-0.08	0.11	-0.01
POFL					1	0.25	0.09	0.27
PVC						1	0.45	0.90
PAPP							1	0.51
IVC								1

Table 5.4: Intercorrelation Matrix (Manufacturing sub-sector)

	AOO	AOB	NOCW	YOE	POFL	PVC	PAPP	IVC
AOO	1	0.47	-0.20	-0.29	0.07	-0.15	-0.04	-0.16
AOB		1	-0.02	-0.14	0.03	-0.02	-0.08	-0.28
NOCW			1	0.08	0.09	0.02	-0.10	-0.09
YOE				1	0.10	0.48	-0.14	0.52
POFL					1	0.25	0.06	0.15
PVC						1	0.31	0.68
PAPP							1	0.07
IVC								1

Table 5.1 shows the intercorrelations for the whole sector while Tables 5.2, 5.3, and 5.4 refer to each of the sub-sectors separately. With one exception, the matrices showed low inter-variable correlation for the whole sector and for each sub-sector. This implied the absence of multicollinearity. The exception was the strong correlation between the IVC and the PVC. For the whole sector their r-coefficient was 0.73 while for the service, manufacturing and trade sub-sectors, it was 0.62, 0.68 and 0.90, respectively. The strong correlation between these variables was due to the overlap in what they were used to measure. The IVC was used

to measure the value of capital at the time the enterprise was established. Its constituents were the value of tools, intermediate goods, trade merchandise, monthly rent for business premise or its equivalent, annual license fee(s), and others. The PVC consisted of similar items but valued at a later date (of the field survey). At this time some of the items that had been purchased at the initial stage, especially the producer goods, were still present. That most of the enterprises had been in operation for only a short while also meant that depreciation was minimal and the overlap in the IVC and PVC values widespread. The values of tools, rent and license fees, for example, had not changed a great deal. Thus, a good part of the value measured under the IVC was also present in the PVC. The variables basically measured the same thing at different times, with the PVC being the more comprehensive. In this case the problem of multi-collinearity was solved by dropping the less comprehensive variable, IVC, without affecting the nature of the relationship between the value of capital and the profit of business.

In addition to the factors already discussed, five dummy variables were examined for their effects on the business profits. These consisted of the value of circulating capital (VCCA), the rank of a service centre (RSC), the intensity of business competition (IBC), the sub-sectorial category of an enterprise (SUB), and the gender of an operator (GEN). Under

the VCCA, enterprises were divided into two groups. One, VCCA(1), consisted of activities that required large circulating capital by value in the form of stocks of components and semi-finished goods. This category was composed of bicycle repair, clothes repair, motor vehicle repair, radio repair, furniture repair, watch repair, metal-goods repair, metal fabrication, tailoring, furniture-making and shoe-making. The other group, VCCA(2), consisted of activities that did not require large circulating capital, namely, shoe repair, shoe shine, barber service, hair-dressing, bus agent, dry-cleaning, plastic-containers repair, spotlight repair, bag-making, yoke-curving, processed food trade, grocery, charcoal trade, unprocessed food, tyre trade and miscellaneous trade.

Categories under the RSC defined the informal enterprises by the rank of the service centre in which they were operating. The purpose was to test whether the service centre hierarchy has an influence on the performance of business. Enterprises in the Urban Centre were given the notation RSC(1) while the others in the Rural Centres, Market Centres and Local Centres had the notations RSC(2), RSC(3) and RSC(4), respectively. The variable IBC defined enterprises by the degree of competition they faced in the businesses. IBC(1), IBC(2) and IBC(3) referred to the enterprises that faced moderate competition, stiff competition and no

competition, respectively. These were based on the proprietors' evaluation of the intensity of competition. Under the SUB categories, enterprises were defined by the sub-sectorial group to which they belonged. SUB(1), SUB(2) and SUB(3) referred to the sevice, manufacturing and trade sub-sectors, respectively. Finally, GEN categorised enterprises under the gender of the proprietor, with GEN(1) representing males and GEN(2), females.

All the variables were examined by partial correlation analysis using a stepwise multiple linear regression procedure to select those with a significant individual relation to business profits. The GLIM (Generalised Linear Interactive Modelling; Baker, 1978) computer package was used for the computations. Preliminary computer runs produced scattergrams which showed curvilinear rather than linear relationships between the business-influencing factors and business profits. A number of transformations were then tried on the data until scattergrams were produced which indicated linear relationships. These final scattergrams were obtained under natural logarithmic transformation of business profits and the untransformed values of the independent variables, except for the whole sector. In the latter case, NOCW and PVC were also transformed into the natural logarithms. Each of the scattergrams were further examined to identify and remove scatter-points that lay too far from the main region of concentration. These points (outliers) were examined and

found to represent enterprises in which business profits appeared to have been overstated or understated, relative to the quantities given for the independent variables. Their presence in the regression model, therefore, obscured the general pattern of the scatter-points, reduced the goodness of fit of the least squares line and biased the regression coefficients. For these reasons, 12, 9, 7 and 6 outliers were removed from the models representing respectively, the whole sector, service sub-sector, trade sub-sector and manufacturing sub-sector.

Figures 5.1, 5.2, 5.3 and 5.4 show the factors that were selected as significant at the 95% level of probability for the whole sector and for the sub-sectors, after carrying out data transformations and removing extreme outliers. Equations summarising the relationship between these factors and the business profits are also shown along with the scattergram illustrating the goodness of fit of the least squares line in each case.

Figure 5.1: Significant Factors and Scattergram (Whole sector)

Independent Variable	r^2	F-computed	F-critical
ln NOCW	0.12	31.05	3.84
ln PVC	0.12	27.90	,,
VCCA	0.11	32.41	,,
SUB	0.06	10.17	2.60
RSC	0.06	6.90	,,

ln POBM = 4.31 + 0.29 ln NOCW + 0.15 ln PVC + 0.37 VCCA(1)
            (0.33) (0.04)   (0.04)   (0.13)

            + 0.19 SUB(2) - 0.59 SUB(3) - 0.13 RSC(2)
              (0.11)   (0.14)   (0.12)

            - 0.58 RSC(3) - 0.10 RSC(4)
              (0.13)   (0.11)

                    Scattergram (Whole sector)

```
N       9.20  *
a       9.00  *
t       8.80  *
u   b   8.60  *                                            P
r   u   8.40  *                            P          P      2
a   s   8.20  *                              22  2
l   i   8.00  *                                   P    2   P
    n   7.80  *                      P          P  2P  P  P
l   e   7.60  *                   P      PP      P  P        P
o   s   7.40  *                       P    3P          P
g   s   7.20  *                   P   22 P  P  P      3
        7.00  *                          32  323 22P  P
o   p   6.80  *            P  PPP2PP  2P2PP2P        P
f   e   6.60  *         P   P42PPP222PP2 P
    r   6.40  *      P    23 2P PP4 2    P
p       6.20  *     P     PP  3 2322P3    22P
r   m   6.00  *           2 2P  P22  PP        P
o   o   5.80  *      2PPPPPP2P P 2PPPPP   P
f   n   5.60  *                  P  P
i   t   5.40  *   P       PP  PP     P
t   h   5.20  *      P   P   P
        5.00  *        P  PPP  P  P
o       4.80  *      P    PP
f       4.60  *                                  R² = 0.47
        4.40  *      P                            R  = 0.68
        4.20  *                                   N  = 198
        4.00  *
        *.........*.........*.........*.........*.........*
          4.40      5.20      6.00      6.80      7.60      8.40
```

                    Standardized(Fitted) Values of
                    ln NOCW, ln PVC, VCCA, SUB, RSC.
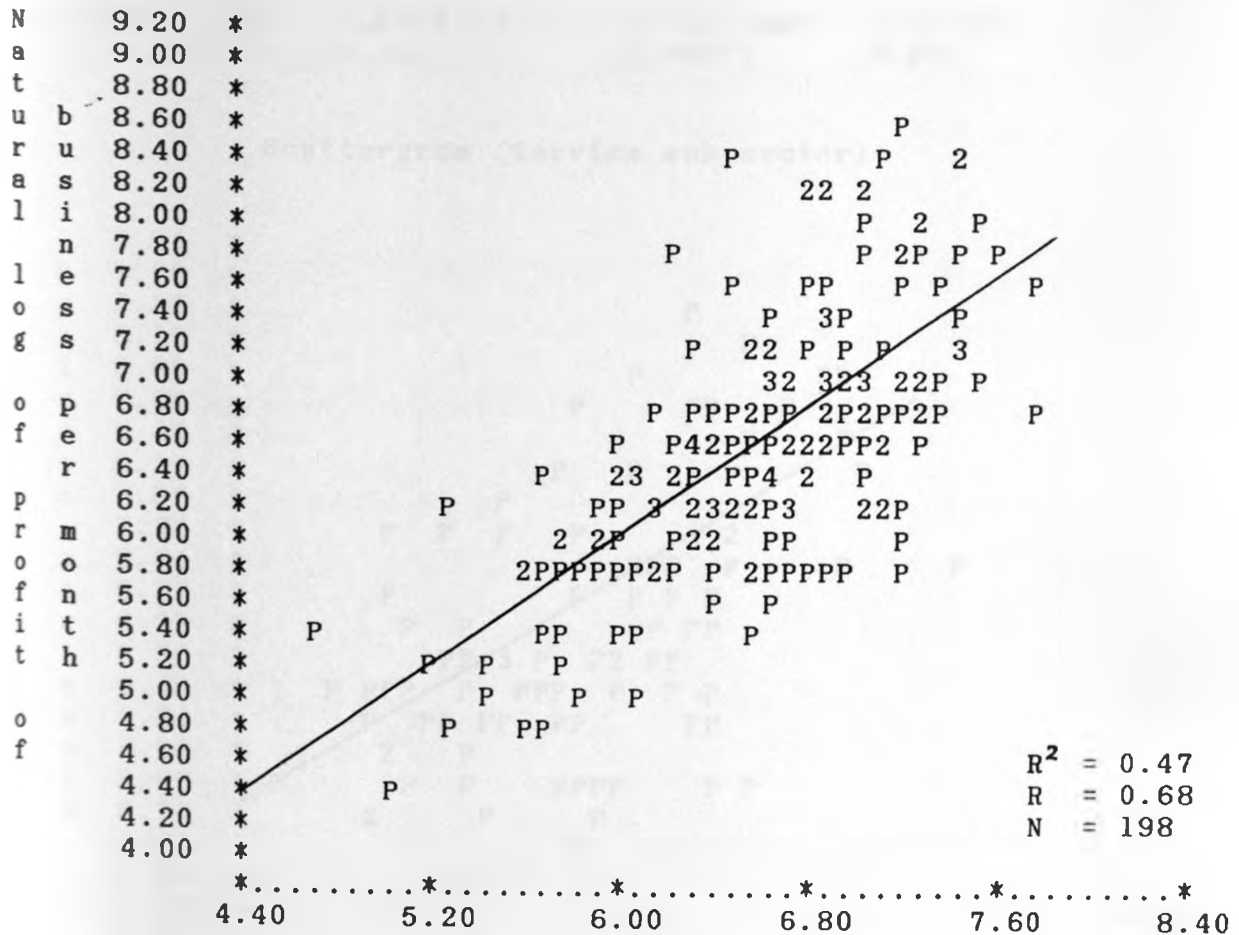
Figure 5.2: Significant Factors and Scattergram
(Service sub-sector)

Independent Variable	r^2	F-computed	F-critical
VCCA	0.12	12.72	3.96
NOCW	0.08	9.76	,,
YOE	0.06	6.20	,,

ln POBM = 5.77 + 0.58 VCCA(1) + 0.002 NOCW + 0.07 YOE
(0.18) (0.13)   (0.0007)   (0.03)

Scattergram (Service sub-sector)

```
N          8.64   *
a    b     8.48   *
t    u     8.32   *                                    P
u    s     8.16   *                                          P
r    i     8.00   *                               P
a    n     7.84   *                                   PP        PP
l    e     7.68   *                           P    PP    P
     s     7.52   *                                      P      P
l    s     7.36   *                      P    P               P
o          7.20   *            P    P    P    P
g    p     7.04   *                              2
     e     6.88   *            P         3PP    P      P      P
o    r     6.72   *              P    P     P  P P
f          6.56   *               P    P    PP PP
     m     6.40   *          P PPP   P  P2 3 P P2 PP
p    o     6.24   *          P  PP PP  PPP P  P P
r    n     6.08   *          2    P    PP        PP
o    t     5.92   * P          P    P    PPPP   P P
f    h     5.76   *        2    P    PPP P
i          5.60   *                  P
t          5.44   *          P    P
           5.28   *
o          5.12   *                                    R² = 0.26
f          4.96   *                                    R  = 0.51
           4.80   *    P                               N  = 92
           4.64   *
           4.48   *
                  *.........*.........*.........*.........*.........*
                5.75     6.25     6.75     7.25     7.75     8.25
```

Standardized(Fitted) Values of
VCCA, NOCW, YOE.
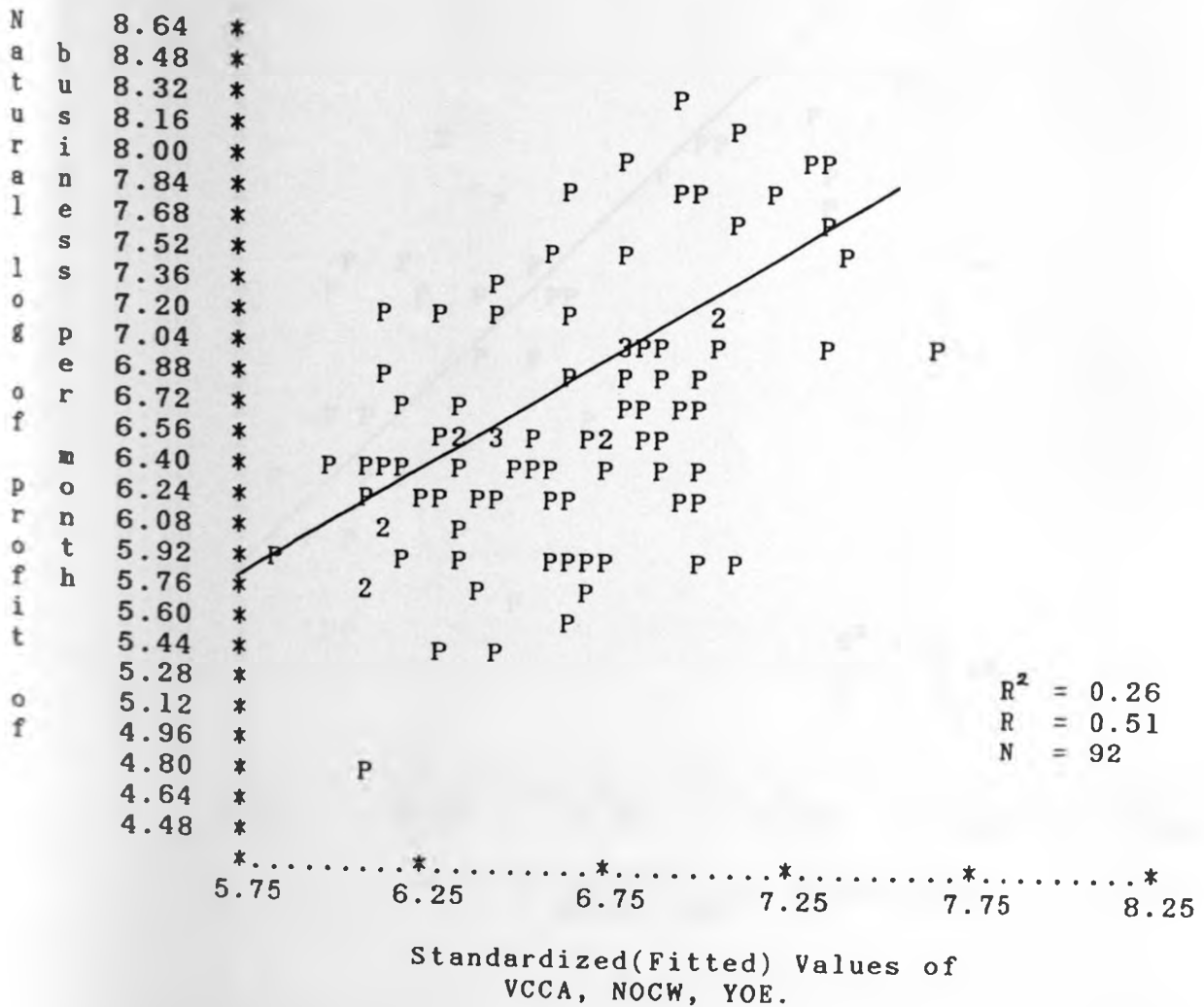
Figure 5.3: Significant Factors and Scattergram
(Trade sub-sector)

Independent Variable	r^2	F-computed	F-critical
NOCW	0.36	22.10	4.08
PVC	0.12	4.60	,,

$$\ln POBM = 5.07 + 0.003 \ NOCW + 0.0003 \ PVC$$
$$(0.16) \ (0.0006) \quad (0.00008)$$

Scattergram (Trade sub-sector)

R² = 0.48
R = 0.69
N = 35

Standardized(Fitted) Values of
NOCW, PVC.
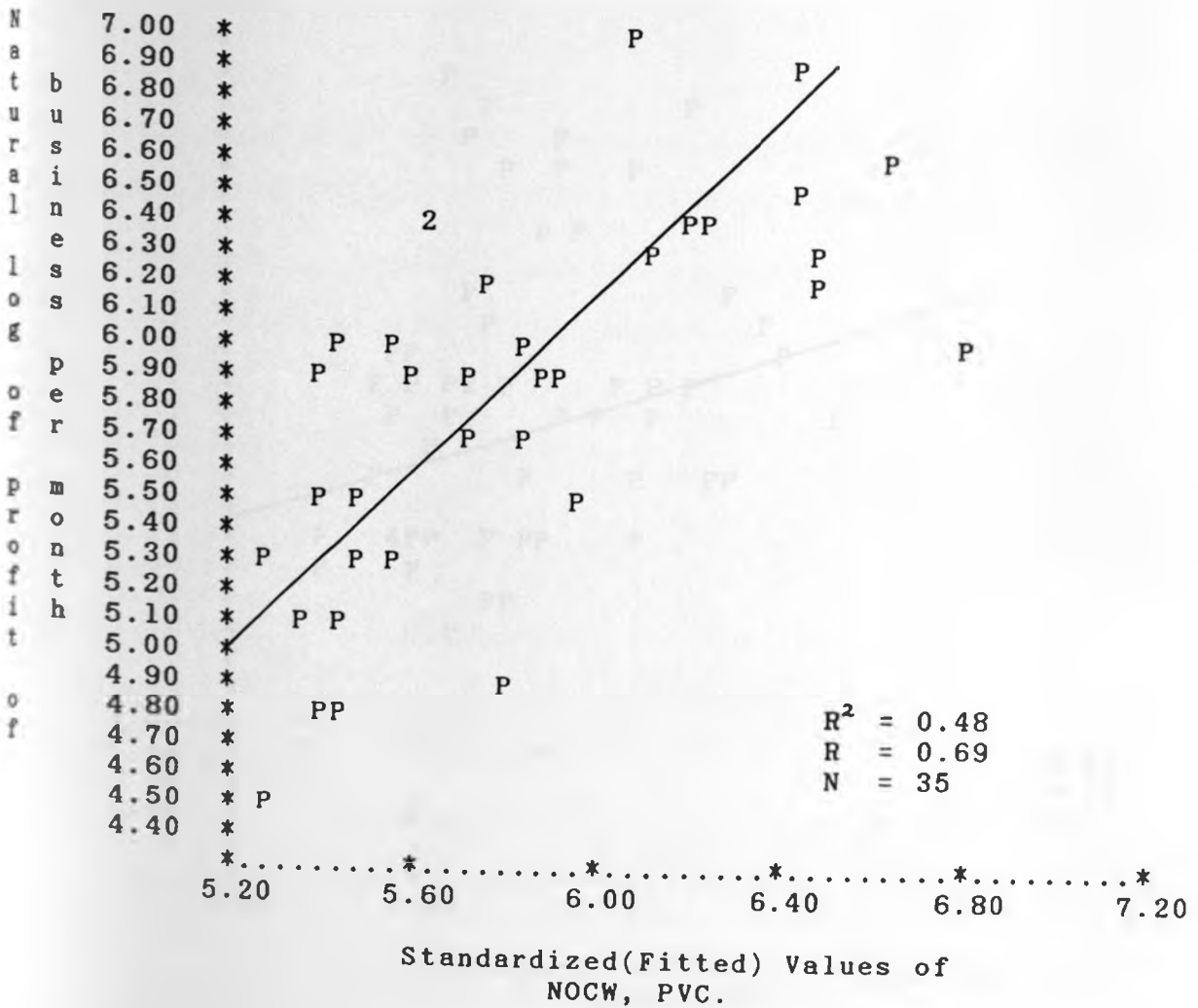
In each of the equations, the positive partial regression slopes (B_i-parameters) for the independent non-dummy variables (NOCW, PVC, YOE) indicated an increase in the business profits with greater values of the business-influencing factors. Furthermore, the logarithmic form of some of the variables in the equations showed that the initial rise in the values of the business-influencing factors causes a more rapid rise in the business profits than do subsequent ones. This was possibly due to diminishing returns imposed by capital scarcity. For the dummy variables (VCCA, SUB, RSC), the B_i-parameters were used to show whether the regression line for the specific dummy (variable) category lay on, above or below the line of least squares. For example, the parameter 0.37 for VCCA(1) in the equation representing the whole sector indicated that the profits accruing to the informal activities requiring higher values of circulating capital were higher than the average (represented by the Y-intercept value of 4.31) by 0.37. On the other hand, the standard errors (S.E.) of the regression parameters (in parentheses), like the partial correlation coefficients, indicated whether the regression slope (B_i) of an individual variable was really different from zero. In other words, whether the th variable really influenced the profits. The F-test statistic was used to verify this hypothesis for which significance was obtained when the F ratio (B_i/S.E. of B_i)^2 exceeded 4 (Lehmann, 1979, p. 453).

For the whole sector, the variables which had significant individual effects on the profits of business (ln POBM) were ln NOCW, ln PVC, VCCA, SUB and RSC, with the last three being dummy variables. The natural logarithms of NOCW and PVC had an r^2 value of 0.12 each. In other words, each of them explained 12% of the variance in the profits of business. Similarly, VCCA(1), with $r^2 = 0.11$ explained 11% of the variance while SUB(2 & 3) and RSC(2, 3, & 4) explained 6% of the variance each. These variables together explained 47% of the variance in the business profits for the whole sector. This implied a moderate explanatory power for the variables.

In the service sub-sector, three independent variables were significant. The value of circulating capital (VCCA(1), with an $r^2 = 0.12$, explained 12% of the variance in the business profits while NOCW and YOE accounted for another 8% and 6% of the variance, respectively. The total variance accounted for in the service sub-sector was 26%, implying a low explanatory power for the variables. In the manufacturing sub-sector, the explained proportion of the variance in business profits was again low at 13%, which again implied a very low explanatory power for the factors. The variables that accounted for this were NOCW and PVC, with the former explaining 7% and the latter, 6% of the variance. For the trade sub-sector NOCW and PVC were again the only significant variables. NOCW explained 36% of the variance while PVC accounted for 12%. Together, they accounted for 48% of the

variance. Their explanatory power was, therefore, moderate. The results showed that some of the variables tested have a significant influence on the business profits. The number of customers served (NOCW) has a universal influence on profits for the whole sector and for each of the sub-sectors, indicating normal market operations in the informal sector. The size of the present value of capital (PVC) held by an enterprise also has a positive influence on business profits in all but the service sub-sector. It was evident that in the service sub-sector, business profits depend, not generally on the PVC, but specifically on the turn-over rate of the circulating capital (VCCA1). In practice, this implies that enterprises with costly machine tools such as sewing machines but which lack the finance to purchase business stocks such as cloth fail to make large profits due to underutilized capacity. The problem of idle capacity resulting, not from inadequate consumer demand, but from inadequate circulating capital appeared to be particularly serious in the service sub-sector. The sub-sector also stood alone with regard to education. Its enterprises alone were responsive to the educational status of operators (YOE). This was possibly because the service functions required more school-orientated skills than did manufacturing and trade. A radio repairer, for example, required some schooled knowledge of the functioning of a radio. On the other hand, activities such as metal-goods fabrication, shoe-making, tailoring, and bag-

making in the manufacturing sub-sector and all the retail trade functions were less demanding of formal skills.

Business profits were also responsive to the sub-sectorial (SUB) and service centre categories (RSC) to which an enterprise belonged as depicted by the equation for the whole sector. Profits were higher in the manufacturing enterprises than in the service and much higher than in the trade. This is represented by the higher regression constant for manufacturing, 4.50 (i.e 4.31+0.19 SUB(2) compared to 4.31 for SUB(1) (service) and 3.72 (i.e 4.31-0.59 SUB(3) for trade. The same observations were made in the preliminary analysis in chapter 3. Similarly, profits were lower in the Rural Centres (4.31-0.13 RSC(2), Market Centres (4.31-0.58 RSC(3) and Local Centres (4.31-0.10 RSC(4) than in the Urban Centres (4.31 RSC(1). This is attributed to the availability of better business conditions in the Urban Centres as compared to the rest of the service centres in the lower hierarchies.

In summary, business profits were found to be influenced by specific factors in varying degrees. The explanatory power of these factors varied from moderate for the whole sector and the trade sub-sector to very low for the service and manufacturing sub-sectors. For the purpose of explanation, only the equations referring to the whole sector and trade sub-sector are considered valid. The other two would give

inadequate explanations for business profits because the proportions of the variance in the POBM they accounted for are too low. Thus, enough evidence was found that profits in the informal sector are responsive to some specific business factors in ways that can allow for evolutionary economic growth. The performance and profits of the enterprises could be raised by improving the level of capital in the form of assets and finance, the conditions of doing business in the lower order service centres and the skills of the operators as will be shown in the next chapter.

It is also clear from the low proportions of the variances accounted for in each of the equations that the factors would only provide a satisfactory explanation for business profits at best. This might be due, partly, to the presence of substantial random variability or to the omission of other factors that might have been responsible for some of the unexplained variance or both. Randomness might have been caused by inaccuracies in the memory of informants, there being no business records in the informal sector enterprises. It might also be that business performance was, in part, responsive to some unquantifiable attributes that were personal to the operators such as politeness, persuasiveness, pleasantness, dependability and so on. Similarly, other problems of business operation which have been discussed in chapter three and in this chapter, namely,

inadequate stocks (particularly in the service sub-sector), inadequate machine tools and skills, legal restrictions and lack of electric power supply were partly responsible for some of the unexplained variance, implying retarded forms of growth in some parts of the sector. In the next chapter, these factors are summarized along with possible solutions.

CHAPTER SIX

SUMMARY OF CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

6.1. SUMMARY OF CONCLUSIONS

This study set out to examine the role of the rural informal sector in combating population pressure on the land and the rural-to-urban migration of school-leavers. It also aimed to investigate the trend of economic growth of the sector with a view to pointing out the measures necessary for improving the performance of the sector. The results have shown that the informal sector is selective with regard to the land ownership and educational status of its participants. The sector has also been shown to have a potential for evolutionary economic growth.

The study revealed that occupations in the sector are undertaken mostly by people facing extreme pressure on farm land or with no land at all. As was shown in chapter three, 74% of the informal operators owned at least some land, albeit of very small size. Furthermore, the X^2 test (in chapter four) showed that the informal sector tended to selectively employ people with higher pressure on farm-land than the average for Kisumu District. On this basis it was concluded that the sector is a vital means of relieving the population pressure on the land.

Further, the informal sector was found to draw labour mainly from the basic levels of education, particularly from Standard One to Standard Seven. Since these basic levels of education represented the major proportion of school-leavers and drop-outs in the District and contributed substantially to rural-urban migration, it was concluded that the sector plays an active role in the reduction of the migration problem in the area. This is because the sector held a good portion of primary school-leavers in the rural area where they were shown to be participating directly in rural development. Beyond primary education, the proportion of the operators employed fell short of the District proportions. This is a matter of special concern because despite their relatively small proportion in the District, secondary school-leavers were typically more likely to migrate to the urban centres to seek 'white collar jobs' (Killick, 1981, p. 131). Thus, while the active role of the sector in combating the migration problem was evident for primary education it required activating at the secondary level of education.

Regarding economic viability, business profits were shown in the study to be only moderately affected by the 'business-influencing' factors, indicating 'retarded' forms of evolutionary growth in the sector. There were a number of causes of this, chief among which was the lack of adequate capital, discussed in chapter three. The problem of inadequate capital partly explained the low, though

significant, explanatory powers of the present value of capital (PVC) and the value of circulating capital (VCCA1) in the equations in chapter five of the study. The problem of inadequate capital specifically referred to the inadequate machine tools and intermediate goods (circulating capital) and the unsuitable business-housing structures. Most businesses were shown to lack the necessary tools and circulating capital with which to raise their levels of output, widen their trading horizons, and raise business incomes and profits. Many businesses were shown to be operating in no structure at all. This posed the problem of unsuitable working conditions such as exposure to wind, dust, scorching heat, rain, theft and so on. Most operators had to seek other places to keep their tools and stock at the end of each day. Such daily movements were shown to be cumbersome and to cause damage and loss to business property and, hence, restricted the level of capital that could be employed. It also reduced the amount of business that could be done since it claimed some of the operator's working time in unproductive tasks. Unfortunately, the problem of inadequate capital was reinforced by lack of external financial support by national as well as other financial institutions.

Other difficulties that were shown to limit business performance were caused by low levels of technical education for business operators, legal restrictions, lack of, or

inaccessibility of electric power supply, and rapid population growth, already discussed.

In summary, undercapitalisation and related problems were shown to be major obstacles to business operations in the informal sector. They were found to be responsible for the vicious circle of retardation to the growth of the businesses affected. For example, businesses with very low capital often lost customers because they lacked the stock to ensure reliable and prompt service on demand. The affected businesses, mainly in the manufacturing sub-sector had to dispose of most of their stock before they were able to purchase new stock to meet new orders. Under such circumstances the loss of business to other competitors within and without the rural informal sector was found to be inevitable.

In spite of these, the rural informal sector was found to play an important role in the economic development of Kisumu District. The spatial distribution of the business activities in concentrated areal units (service centres) on the one hand, and in dispersed but planned service centres (over the whole District) on the other, were shown to have given the sector both a strong economic backing and a broad-based growth-inducing effect in the entire District.

6.2. RECOMMENDATIONS

The   usefulness of the informal sector in the development
aspects considered in this study has been   demonstrated.   The
current   trend of growth and the problems associated with   it
have also   been   examined.   On the bases of the   findings   a
number   of recommendations are made of how to   overcome   such
constraints and ensure an evolutionary growth for the sector.
These·are described below.

6.2.1. Education and Training

The   recruitment   of   school-leavers   into   the   informal
sector   reduces   rural to urban migration and   improves   the
economic performance of the sector. School curricula should,
therefore, be orientated, in part, to preparing school-
leavers to take up careers in the sector. Education planning
in Kenya is committed to promoting school education at   all
levels. But it is equally vital to draw up a plan, especially
under   the new 8:4:4 education system, for eradicating   the
'white   collar' mentality in the students right from primary
school   so that they can recognize the informal sector as   a
respectable economic sector.   In the main body of this study,
it was   shown that recruitment from the secondary level   is
lower   than   expected, indicating the need to reform   the
attitude of the students. To make such a change easy, primary
and secondary schools should organize field classes to   visit

the informal enterprises in the nearby service centres and study the functioning of and prospects in the sector. In this way, students will be enabled to gain proper knowledge of the informal sector, change their perception of the sector as an occupation of last resort, and appreciate it as an alternative and a profitable means of earning a living. This measure, along with others, can have a tremendous impact on productivity as well. The positive relationship between years of education (YOE) and business profit (POBM) is already evident in the sector (Chapter 5).

To make education more useful to future informal sector operators, training in the various skills is essential. It has been shown that most operators in the various trades have undergone some form of training before establishing their own businesses in spite of the limited technical education facilities in the District.

It is recommended that in order to assist the potential entrants into the rural informal sector, the government should build more Village (Youth) Polytechnics in the District and ensure that existing facilities are used efficiently. Since the main cause of underutilization of Village Polytechnics is lack of, or inadequate tools, it is recommended that efforts should be made to ensure that there is an adequate provision of these facilities. Teachers in the Village Polytechnics should be encouraged to instil a sense

of responsibility in the trainees so that the tools and equipment provided are not damaged or stolen. This would prepare the trainees to manage their own enterprises responsibly later on. To enhance research and planning for the sector, simple book-keeping techniques should also be taught as part of the curriculum of the Village Polytechnics. This would enable the operators to assess the performance of their businesses accurately. At present business records are virtually non-existent in the enterprises, making it difficult to know precisely even the key aspects of business flows such as costs, sales and profits, which information is essential for the meaningful planning of the sector.

As a short-term measure to improve the performance of the existing enterprises, short business courses should also be organized for the operators at the Village Polytechnics (during vacations) or in any other convenient centres. This would give the operators an opportunity to learn new ideas that can help them to improve their businesses in many ways.

6.2.2. Financial and other forms of Assistance

It was demonstrated in the main body of the study that lack of adequate capital can inhibit the application of the skills acquired through training. It is, therefore, recommended that a scheme should be devised to provide financial and other forms of assistance to informal

enterprises. The government can provide loans and encourage private financial institutions to do the same. A double-edged method of selecting loan recipients would be to require them to have Village Polytechnic training or its equivalent. While such a selection criterion would encourage operators to seek training, it would also ensure that those who obtain the loans have been taught how to use them responsibly and productively. The government may find it difficult to obtain funds to initiate such a scheme but there is no doubt that once it has been started, subsequent loans would mainly be a recycling of those paid back by preceding borrowers.

Financial assistance to the informal sector can be greatly facilitated by the Informal Sector Promotion Committee[1]. The Committee should be charged with encouraging operators to organize themselves into cooperative societies. Funds would then be channelled through the cooperatives which, in turn, would issue it to the operators that are committed to their work. Cooperatives would do this ably because the personnel running them would be local people with adequate knowledge of the operators. The loans would enable operators to purchase machine tools, circulating capital and to construct suitable structures for housing the business activities. Purchases of inputs from the formal

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[1] This committee was proposed to organize and promote informal sector activities in Kisumu District (see: Republic of Kenya, 1984d, p. 14)

sector would also be made in larger quantities at discounted prices so that a substantial part of the surplus which is currently flowing to that sector can be retained to promote growth in the informal sector. Furthermore, when businesses raise their scales of operation, they would be able to produce and maintain larger quantities of stock so that trade contracts between the informal and the formal sectors would become feasible.

6.2.3. Removal of Legal Restrictions

The problems of acquiring secure business premises, paying license fees and meeting stringent health requirements disrupt the funtioning of the busineses. It is, therefore, imperative to re-orientate the regulations governing them to serve rather than frustrate the sector. It is recommended that the local authorities should provide land for informal activities in the service centres. Operators should also be allowed to put up lockable workshops on such land so that the workplace is made suitable and secure. This would also end the frequent business-interrupting changes in working premises that the operators are presently compelled to make.

The license fee structure should also be reviewed. Whereas license fees are a source of revenue for the local authorities and for the central government, extremely high fees stifle businesses and forces them into evasion. There

are, in fact, many operators who are operating 'illegally' (i.e without licenses) in spite of police supervision. The license fee problem was found to lie mainly in the local authorities component where the fees are considered extremely high in many cases by the operators. The local authorities should, therefore, revise their license fee structure to strike a balance with their clients.

Similarly, excessive health specifications for informal businesses should be removed. This is particularly necessary in the trade sub-sector where dealers in processed and unprocessed foods are forced to meet rigid health specifications at extra costs. This is unneccesary and wasteful on the use of time and fuel. These extra costs are partly responsible for the low business profits in the trade sub-sector. However, care should be taken to prescribe the minimum or basic standards of hygiene that cannot be ignored.

6.2.4. Provision of Infrastructural Facilities

Basic infrastructural facilities should be provided for the service centres as part of the national objective of rural development. The centres are currently lacking many essential services that are required by businesses such as electric power supply. For example, only 5 of the 50 designated service centres in the District studied had electric power supply while 66% of all operators said they

could use the power if it were accessible. Thus, basic facilities that can enhance the informal economic activities directly or otherwise should be provided. These should include electric power (for power and lighting), water, sewerage, police security and others. They would increase agglomeration economies at the centres and induce many informal sector operators that are currently working in the villages to move to the service centres to raise their productivity. Enterprise in Ahero (RSC1) with better infrastructure were, for example, shown to be making higher than average profits as compared to those in the lower order centres (chapter 5).

6.2.5. Population Policy

In keeping with the District's (and national) development objectives in general and the revitalization of business performance in the informal sector in particular, it is recommended that the population policy should be made more effective. Statistics for Kisumu District have shown that there is high population pressure on all scarce resources, especially land. This is, in fact, the major reason why some operators are compelled to join the informal sector even without adequate preparation or personal commitment to the business. The pressure contributes to the poverty levels of business operations in some enterprises and gives rise to

the commonly held stereotype view of the informal sector as the thinly veiled idleness into which those who cannot find wage jobs must fall' (I.L.O., 1972, p. 5).

The government has adopted the soft population policy of 'laissez-faire' in which decisions on family size rest with parents while the government provides population education and birth control facilities. The policy is based on the belief that the rapid rate of population growth will come to be understood by parents as negatively affecting family welfare and the quality of life, and that this will make them favour smaller families (Republic of Kenya, 1979b, 61). But as it has been applied so far, the policy has been slow in reducing the population growth. It is, therefore, recommended that the government should review the population education programmes and other supportive measures that can be employed to make the policy more effective. This would reduce the population-resource imbalance and ease the mounting population pressure on the informal sector as well.

6.3. SUGGESTIONS FOR FURTHER RESEARCH

The study has pointed out a number of avenues for further research into the geographical aspects of the informal sector for economic development. These are reviewed below:-

1. Similar case studies should be conducted in other districts to show the comparative role of the rural informal

sector in other parts of the country. This is essential because studies that have been done in Kenya and elsewhere have mostly dealt with the urban informal component alone.

2. Studies on the possibility of attracting the dispersed village operators at the service centres should be undertaken. The purpose is to enable the enterprises to benefit from the economic advantages of spatial concentration of production.

3. Research into the areal extent and size of demand for the products of the informal sector in the trading zones of the service centres should be carried out. This would indicate the appropriate size of the informal activities to be promoted at service centres of different ranks.

4. Research is also necessary to establish preferred spaces in the service centres so that the provision of land for business establishments already proposed can meet business expectations and avoid the possibility of operators abandoning sites in preference of other unauthorized ones.

5. It has been shown that recruitment of operators beyond primary school education falls short of the expected proportions. Studies should, therefore, be conducted on secondary school-leavers to establish their perception of the informal sector. This would provide a feedback to be used for educating the students on the role of the sector in

development, and for encouraging them to participate in the rural informal sector.

6. Research should also be done on the mobility of the informal businesses into the formal sector to show the extent to which the former can be developed into large scale locally-owned formal enterprises, free from subordination to foreign capital requirements.

APPENDICES

Appendix 1: Recording Schedule for Owner/Operator

RECORDING SCHEDULE   (STRICTLY CONFIDENTIAL)

(Informants are Owner/Operator only)

1.a.Day of the week_____Date_____

b.Name of informant_____Age_____

c.Place of birth, Location_____District_____

2.a.Do you own the business alone or in partnership with others?

 (i)Alone_____.(ii)In partnership_____

 b.If owned in partnership, what is/are the name(s) of the

 partners?

 _____

3. Name and designated rank of Service Centre

 Name_____. Rank_____

4. Type of business structure

 (i)   Wooden_____

 (ii) Shop veranda_____

 (iii) Grass thatched mud-house_____

 (iv) Open air under a tree_____

 (v)   Open air, no shade_____

 (vi) Other temporary structure(specify)_____

 _____

5. Nature of business activity

 Manufacturing:

 (i)   Tailoring(and some repair)_____

(ii)   Metal fabrication_____

(iii) Shoe making (and some repair)_____

(iv)   Furniture making_____

(v)   Pottery_____

(vi)   Miscellaneous(describe)_____

Services:

(i)   Clothes repair_____

(ii)   Shoe Repair_____

(iii) Vehicle Repair_____

(iv)   Bicycle Repair_____

(v)   Shoe Shine_____

(vi)   Barber Service_____

(vii) Miscellaneous(describe)_____

                    _____

Service Trades:

(i)   Unprocessed food_____

(ii)   Hotel and restaurant_____

(iii) Charcoal trade_____

(iv)   Other retail trades(describe)_____

                    _____

6.a. How many paid operators do you employ?_____

b. How many of them are your relatives?_____

c. How many unpaid assistants do you have?_____

d. How many of them are your relatives?_____

a. When did you start the business(year/month)?_____

(Enter the answers to the questions that follow in the
spaces below)

b. With how much capital did you start the business

(excluding money capital)?

(i.e tools and equipment, stock, rental fee per month)

c. What is their current value equivalent in KSh.?

Name of Item	Value then	Current value equivalent
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

d. How much money did you start your business with?
_____

e. How much money worth would this be now?
_____

f. Where did you obtain the initial capital from?
_____

g. How much capital does your business have at present?

Name of Item	Value at current price
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------
-----------------	--------------------

h. How much capital do you have at present in the form of money for running the business?   KSh._____

e. Do you get any external financial support from the following:

(i)   ICDC_____

(ii)   District Trade Development Joint Board_____

(iii) Commercial banks_____

(iv)   Relatives and friends_____

(v)   Other(specify)_____

a. What raw materials or goods of trade do you use?_____

_____

_____

_____

b. Where do you obtain the raw materials/goods of trade?

   (i)   Extract from local sources_____

   (ii)   Receive from other informal sector suppliers_____

   (iii) From formal sector suppliers_____

   (iv)   Other(specify)_____

c. If the raw materials/goods of trade are received from

   other suppliers what is/are the name(s) of the person or

   concern that supplies it?_____

      _____

      _____

a. What is the form of transport used to carry supplies to

   your business site?_____

  b. How often do you obtain supplies?

   (i)   More than once a day_____

   (ii)   Daily delivery_____

   (iii) More than once a week_____

   (v)   Weekly_____

   (vi)   Less than weekly_____

   (vii) Other(specify)_____

1.a. How far do you live from the place of business?_____Km.

b. How long does it take you to get from home to your place of work?

(i)   Same as home_____.(v)   31-40 minutes_____

(ii) 10 minutes_____.(vi) 41-50 minutes_____

(iii) 11-20 minutes_____.(vii) 51-60 minutes_____

(iv) 21-30 minutes_____.(viii) 60+ minutes_____

c. By what means of transport do you come to your place of business from home?_____

11.a. Are there times of the day when business is better?

(i)   Morning_____.(iv) Evening_____

(ii) Noon(11am-1pm)_____.(v) Night(after 6)_____

(iii) Afternoon_____.(i) No fixed pattern_____

b. Are there times of the year when business is better?

(i) Yes_____.(ii) No_____.(iii) No fixed pattern_____

(iv) Other(specify)_____.

c. If yes, which time of the year(ploughing, planting, harvesting)

_____

d. How many hours do you operate your business in a day?

(i)   Below 2 hours_____.(ii) 2-4 hours_____

(iii) 5-6 hours_____.(iv) 7-8 hours_____

(v)   9-10 hours_____.(vi) 11-12 hours_____

(vii) Over 12 hours_____.

a. Are there days of the week when your business does not operate?

(i)   Yes_____.(ii)   No_____.

b. If yes, which day(s)?_____

c. Why does your business not operate on those days?_____

_____

d. Do you think there are too many operators competing in a business similar to yours in the trading centre?

(i) Yes, too many___.(ii) Just enough___.(iii) Too few___

(iv) Other(specify)_____

e. Where do you think most of your customers come from?

(i)   From this neighbourhood_____

(ii)   From this neighbourhood and outside_____

(iii) No fixed pattern_____

(iv)   Other(specify)_____

f. Do you sell your goods/services to any formal sector institutions?

(eg. schools, hospitals, building companies, etc.)

(i) Yes_____.(ii) No_____

g. If yes, what proportion of your total sales do such purchases represent in one year?

(i)   Very large_____.(ii) Large_____.(iii) Small____

(iv) Very small_____.

h. How frequent are such purchases?

(i) Very frequent___.(ii) Frequent___.(iii) Infrequent__

(iv) Very infrequent_____.

i. How do most of your customers usually pay you?

  (i) In cash_____.(ii) By credit_____.(iii) By instalment___

j. In which form do most of your customers usually pay you?

  (i) Money_____.(ii) In kind_____.(iii) Other(specify)_____

13.a. How many customers do you serve on :

  (i)   Mondays_____.(ii) Tuesdays_____.(iii) Wednesdays_____

  (iv)   Thursdays___.(v) Fridays_____.(vi) Saturdays_____

  .(vii) Sundays_____.

  b. On the average how many customers do you serve in a day?

    _____

14.a. On the average what is the total daily collection from

    your business? KSh._____

  b. What is your daily average earning after deductions for

    running the business? KSh._____

  c. Does this business earn you enough income for yourself

    and family?

    (i) Yes_____.(ii) No_____.

15.a. What are your other occupations besides this business?

    (i)   Farming_____.(ii)   Fishing_____.

    (iii) Other(specify)_____

  b. Which of the following are your sources of livelihood in

    in decreasing order of dominance?(indicate by ranking-

    1,2,3,4 with '1' being the most dominant)

    (i)   Informal sector business_____

(ii)   Farming_____

(iii) Fishing_____

(iv)   Remittances_____

(v)   Other(specify)_____

16.a. Were you employed before you started this business?

   (i)   Yes_____.No_____.

b. If yes, where were you employed?

   (i)   Public Sector_____.(ii) Private Sector_____.

   (iii) Informal Sector_____.(iii) Other(specify)_____.

c. What was your income per month from that employment?

   KSh_____.

d. Do you still work there?

                 (i) Part time_____.(ii) Full time_____.

e. If you were not employed before, what were you doing?____

   _____

17.a. Did you experience the following problems when you

      started this business? Which of the problems do you

      experience today?

	Problem	Initial stage	Current
(i)	Obtaining premises	_____	_____
ii)	Winning customers	_____	_____
(ii)	Obtaining a license	_____	_____
(iv)	Harassment by 'askaris'	_____	_____
(v)	Obtaining a loan	_____	_____

(vi)   Obtaining working tools   _____   _____

(vii)   Obtaining raw materials

               or goods of trade   _____   _____

(viii) Access to electric power   _____   _____

(ix)   Skilled knowledge in business_____   _____

(x)   Other(specify)   _____   _____

          _____

          _____

18.a. What level of education did you attain before leaving

      school?

      (i)   STD._____.(ii)   FORM_____.

    b. Did you undergo formal technical training? Yes_____.No____.

    c. What grade/level of training did you attain?_____.

    d. Did you undergo apprenticeship? Yes_____.No_____.

    e. If yes, for how long (months/years)?_____.

19.a. What is the size of your family?

      (If not married, address the questions to father's family)

      Wives_____

      Sons_____

      Daughters_____

      Others_____

    b. Are the family members mentioned above all alive?_____

    c. If not, how many have died?_____

    d. Are any of the sons mentioned above married? _____

    e. If yes, how many?_____

f. Are any of your sons who are not married employed?_____

g. If yes, how many?_____

h. Are any of the daughters mentioned above married?_____

i. If yes, how many?_____

j. Are any of your daughters who are not married employed?__

k. If yes, how many?_____

l. Are any of the sons/daughters mentioned above at school?

     ----

m. If yes, how many?_____.

20.a. Do you own a piece of farm land? (i) Yes____.(ii) No____.
    If no, go to 'e'.

b. What is the size of the land (excluding any piece already
    given to self reliant sons)?Acres_____.Hectares_____.

c. Do you have a title deed for the land? Yes____.No_____.

d. Where is your land located? Location_____Clan_____
    (ADDRESS TO THOSE WITH 'NO LAND')

e. Does your father/mother own a piece of farm land?
    Yes____.No____.

f. If yes, what is the size of the land?
    Acres_____.Hectares____.

g. Where is the land located? Location_____Clan_____

h. Is any piece of the land already given to your brothers?
                            Yes._____.No_____.

i. If yes, what size is it? Acres_____.Hectares_____.

1.a. Would you like to continue with your present business or
     would you like to change to another job?
     (i) Continue_____.Change_____.
b. If change is desired, what is/are the causes of your
   dissatisfaction with this business?_____

   _____
c. What were your reasons for starting the business?_____

   _____
d. In which of the following centres do you think you would
   obtain the job you desire?
     (i)   Kisumu_____.(ii)   Maseno_____.(iii)   Ahero_____

     (iv)   Kombewa_____.(v)   Kiboswa_____.(vi)   Sondu_____

     (vii)   Miwani_____.(viii) Chemelil___.(ix)   Muhoroni____

     (x) Awach(Seme)___.(xi) Pawakuche___.(xii) Daraja Mbili___

     (xiii) Kisian_____.(xiv) Otonglo___.(xv)   Rabuor_____

     (xvi)   Chiga_____.(xvii) Kusa_____.(xviii) Kibigori_____

     (xix) Pap-Onditi___.(xx) Awach(Kano)__.(xxi) Awasi_____

     (xxii) Other(specify)_____
e. Do you think the job would be in the formal or informal
   sector?
     (i) Formal_____.(ii) Informal_____.
f. Would you like any of your children to join this business?
     (i) Yes_____.(ii) No_____.
g. If not, what would you like your children to do?_____

   _____

22.a. How many of your relatives are employed in the formal

sector?_____

b. How many are employed in the informal sector?

_____

23.a. Do you have a license for operating this business?

(i) Yes_____.(ii) No_____.

b. If yes, what is the fee charged for it? KSh._____

c. Is the fee, (i) Fair____.(ii) High____.(iii) Too High____

d. What fee would be fair for your business? KSh._____

e. If no license, what is the reason?_____

_____

THANK YOU FOR YOUR HELP AND COOPERATION.

Appendix 2: Recording Schedule for Employees

RECORDING SCHEDULE   (STRICTLY CONFIDENTIAL)

(to be attached to Employer's Recording Schedule)

(Informants are Wage Employees only)

1.a. Day of the week_____Date_____

b. Name(s) of Employer(s)_____

_____

c. Name of informant_____Age_____

d. Place of birth, Location_____District_____

How far do you live from the place of work?_____Km.

How long does it take you to get from home to your place of work?

(i)   Same as home_____.(v)   31-40 minutes_____

(ii) 10 minutes_____.(vi)   41-50 minutes_____

(iii) 11-20 minutes_____.(vii) 51-60 minutes_____

(iv) 21-30 minutes_____.(viii) 60+ minutes_____

c. By what means of transport do you come to your place of work from home?_____

a. How many hours do you work in this business in a day?

(i)   Below 2 hours_____.(ii) 2-4 hours_____

(iii) 5-6 hours_____.(iv) 7-8 hours_____

(v)   9-10 hours_____.(vi) 11-12 hours_____

(vii) Over 12 hours_____.

b. How does your employer pay you

(i)   piece rate wage?_____.(ii) time rate wage?_____

c. After what period of time are you paid?

(i)   Daily_____.(ii) Weekly_____.(iii) Every 2 Weeks_____

(iv) Monthly_____.(v) Other (specify)_____

d. If on piece rate remuneration, what is your average wage per day? KSh._____

e. If on time rate remuneration, what is your wage per time period you have specified? (i) Day_____.(ii) Week_____

(iii) 2 Weeks_____.(iv) Month_____.(v) Other_____

f. Does the employment earn you enough money for yourself and family? (i) Yes_____.(ii) No._____.

What are your other occupations besides this employment?

(i)   Farming_____.(ii)   Fishing_____.

(iii) Other(specify)_____

. Which of the following are your sources of livelihood in

in decreasing order of dominance?(indicate by ranking-

1,2,3,4 with 'l' being the most dominant)

(i)   Informal sector business_____

(ii)   Farming_____

(iii) Fishing_____

(iv)   Remittances_____

(v)   Other(specify)_____

5.a. Were you employed before?

(i)   Yes_____.No_____.

b. If yes, where were you employed?

(i)   Public Sector_____.(ii)   Private Sector_____.

(iii) Informal Sector_____.(iii) Other(specify)_____.

c. What was your income per month from that employment?

KSh_____.

(i) Part time_____.(ii) Full time_____.

e. If you were not employed before, what were you doing?

_____

6.a. What level of education did you attain before leaving

school?

(i)   STD._____.(ii)   FORM_____.

b. Did you undergo formal technical training? Yes____.No_____.

c. What grade/level of training did you attain?_____.

d. Did you undergo apprenticeship? Yes_____.No_____.

e. If yes, for how long (months/years)?_____.

7.a. What is the size of your family?

   (If not married, address the questions to father's family)

   Wives_____

   Sons_____

   Daughters_____

   Others_____

b. Are the family members mentioned above all alive?_____

c. If not, how many have died?_____

d. Are any of the sons mentioned above married?_____

e. If yes, how many?_____

f. Are any of your sons who are not married employed?_____

g. If yes, how many?_____

h. Are any of the daughters mentioned above married?_____

i. If yes, how many?_____

j. Are any of your daughters who are not married employed?___

k. If yes, how many?_____

l. Are any of the sons/daughters mentioned above at school?

   _____

m. If yes, how many?_____.

8.a. Do you own a piece of farm land? (i) Yes_____.(ii) No_____.
   If no, go to 'e'.

 b. What is the size of the land (excluding any piece already
    given to self reliant sons)?Acres_____.Hectares_____.

 c. Do you have a title deed for the land? Yes_____.No_____.

 d. Where is your land located? Location_____Clan_____
    (ADDRESS TO THOSE WITH 'NO LAND')

 e. Does your father/mother own a piece of farm land?
    Yes_____.No_____.

 f. If yes, what is the size of the land?
    Acres_____.Hectares_____.

 g. Where is the land located? Location_____Clan_____

 h. Is any piece of the land already given to your brothers?
    Yes.____.No_____.

 i. If yes, what size is it? Acres_____.Hectares_____.

9.a. Would you like to continue with your present employment or
    would you like to change to another job?
    (i) Continue_____.Change_____.

 b. If change is desired, what is/are the causes of your
    dissatisfaction with this employment?_____
    _____

 c. What were your reasons for taking up this employment?

    _____

d. In which of the following centres do you think you would
obtain the job you desire?

   (i)   Kisumu_____.(ii)   Maseno_____.(iii)   Ahero_____

   (iv)   Kombewa____.(v)   Kiboswa_____.(vi)   Sondu_____

   (vii) Miwani_____.(viii) Chemelil____.(ix)   Muhoroni____

   (x) Awach(Seme)___.(xi) Pawakuche____.(xii) Daraja Mbili___

   (xiii) Kisian_____.(xiv) Otonglo____.(xv)   Rabuor_____

   (xvi) Chiga_____.(xvii) Kusa_____.(xviii) Kibigori_____

   (xix) Pap-Onditi____.(xx) Awach(Kano)___.(xxi) Awasi____

   (xxii) Other(specify)_____

e. Do you think the job would be in the formal or informal
sector?

   (i) Formal_____.(ii) Informal_____.

f. Would you like any of your children to join this business?

   (i) Yes_____.(ii) No_____.

g. If not, what would you like your children to do?_____

_____

10.a. How many of your relatives are employed in the formal
sector?_____

  b. How many are employed in the informal sector?

     _____

        THANK YOU FOR YOUR HELP AND COOPERATION.

Appendix 3: Interview Schedule for Government Officers

PERSONAL INTERVIEW SCHEDULE (STRICTLY CONFIDENTIAL)

(Informants are government officers)

1.a. Date of interview_____

  b. Name of informant_____

  c. Name of occupation_____

  d. Name of Employer_____

2.a. What is the fee charged for licensing the following inform

    sector activities?

    Manufacturing:

    (i)   Tailoring(and some repair)_____

    (ii)   Metal fabrication_____

    (iii) Shoe-making(and some repair)_____

    (iv)   Furniture making_____

    (v)   Pottery_____

    (vi)   Others (describe)_____

           _____

    Services:

    (i)   Clothes repair_____

    (ii)   Shoe Repair_____

    (iii) Vehicle Repair_____

    (iv)   Bicycle Repair_____

    (v)   Shoe Shine_____

    (vi)   Barber Service_____

    (vii) Others (describe)_____

Service Trades:

 (i)   Unprocessed food_____

 (ii)   Hotel and restaurant_____

 (iii) Charcoal trade_____

 (iv)   Other retail trades(describe)_____

        _____

b. Do operators find it difficult or easy to raise the fees?

   _____

   _____

c. If they find it difficult, is license evasion a common

   problem?_____

   _____

d. Do you think the situation could be improved by reducing

   the license fee?_____

   _____

e. Are there some activities that are allowed to operate

   without a license? If so, which ones?_____

   _____

   _____

   _____

3.a. Does the informal sector pose health, sanitation,

   cleanliness, traffic and other such hazards to magnitudes

   of concern?_____

   _____

   _____

b. What possible solutions do you suggest for them?

_____

4.a. Do you think the informal sector businesses could be
improved if better premises of operation were provided?
If so, how could this be done?

_____

_____

_____

b. Do you think the ICDC and District Trade Development
Joint Board meet the loan demands of the informal sector?

_____

_____

_____

c. Which other financial institutions provide loans for the
informal sector?_____

_____

_____

d. What measures do you think would improve the loan programme

_____

_____

THANK YOU FOR YOUR HELP AND COOPERATION.

Appendix 4: Kisumu District 1979 Population by Age and Sex

Age	Male	Female	Total
0 - 4	42,705	43,531	86,236
5 - 9	35,528	35,986	71,514
10 -14	30,971	30,361	61,332
15 -19	26,321	28,594	54,915
20 -24	20,452	25,416	43,868
25 -29	16,514	17,714	34,228
30 -34	13,768	12,820	26,588
35 -39	9,571	10,511	20,082
40 -44	8,900	9,504	18,404
45 -49	8,115	9,059	17,174
50 -54	6,734	7,140	13,874
55 -59	5,280	5,324	10,604
60 -64	4,381	3,931	8,312
65 -69	3,841	2,581	6,422
70 -74	2,249	1,643	3,892
75 +	1,771	1,327	3,098
Age not specified	941	843	1,784
Totals	238,042	244,285	482,327

Source: Republic of Kenya, 1981, p. 207.

Appendix 5:
Population Projection for Kisumu District, 1983-88

Division	Per cent*	1983	1984	1985	1986	1987	1988
Kano	19.2	117,903	121,816	125,881	130,082	134,437	138,953
Nyakach	6.7	41,143	42,509	43,927	45,393	46,913	48,489
Maseno	15.9	97,638	100,879	104,245	107,724	111,331	115,071
Winam	16.2	99,481	102,782	106,212	109,756	113,431	117,242
Muhoroni	10.2	62,636	64,715	66,874	69,106	71,420	73,819
Municip- ality	31.7	194,663	201,124	207,835	214,770	221,961	229,418
Total	100	614,078	634,459	655,632	677,509	700,192	723,716

* Division population in 1983 as per cent of district population.

Source: CBS, Population Projections for Kenya 1980-2000, March, 1983; UNICEF.

Appendix 4: Kisumu District 1979 Population by Age and Sex

Age	Male	Female	Total
0 - 4	42,705	43,531	86,236
5 - 9	35,528	35,986	71,514
10 -14	30,971	30,361	61,332
15 -19	26,321	28,594	54,915
20 -24	20,452	25,416	43,868
25 -29	16,514	17,714	34,228
30 -34	13,768	12,820	26,588
35 -39	9,571	10,511	20,082
40 -44	8,900	9,504	18,404
45 -49	8,115	9,059	17,174
50 -54	6,734	7,140	13,874
55 -59	5,280	5,324	10,604
60 -64	4,381	3,931	8,312
65 -69	3,841	2,581	6,422
70 -74	2,249	1,643	3,892
75 +	1,771	1,327	3,098
Age not specified	941	843	1,784
Totals	238,042	244,285	482,327

Source: Republic of Kenya, 1981, p. 207.

Appendix 5:
Population Projection for Kisumu District, 1983-88

Division	Per cent*	1983	1984	1985	1986	1987	1988
Maseno	19.2	117,903	121,816	125,881	130,082	134,437	138,95
Winam	6.7	41,143	42,509	43,927	45,393	46,913	48,48
Nyakach	15.9	97,638	100,879	104,245	107,724	111,331	115,07
Nyando	16.2	99,481	102,782	106,212	109,756	113,431	117,24
Muhoroni	10.2	62,636	64,715	66,874	69,106	71,420	73,81
Municip- ality	31.7	194,663	201,124	207,835	214,770	221,961	229,41
Total	100	614,078	634,459	655,632	677,509	700,192	723,71

* Division population in 1983 as per cent of district populatior

Source: CBS, Population Projections for Kenya 1980-2000, March, 198
UNICEF.

Appendix 6:

Minimum monthly wage for semi-skilled and unskilled workers in Kenya (Private Formal Sector)

	A	B	C
General labourer--	576	530	324
Miner,Stone Cutter, Turnboy, Waiter, Cook, Logger, Line Cutter------------------------------------	622	552	356
Night Watchman--	643	596	366
Machine Attendant, Saw-Mill Sawyer,Machinist Asst., Asst. Tailor,Mass Production Machinist,Shoe Cutter, Bakery Worker------------------------------------	653	608	492
Machinist, Vehicle Service Worker(Petrol & Service Stations), Laundry Operator, Junior Clerk, Tractor Driver(Light)--------------------------------------	746	698	571
Plywood Machine Operator, Saw-Mill Dresser,Garment, and Dress-Cutter, Shop Assistant, Machine Tool Operator, Printing Machine Operator, Bakery Machine Operator, Dough-Maker, Table Hand Baker or Confect-ioner, Ungraded Artisan, Copy Typist, Driver(Cars & Light Vans)--	778	718	593
Pattern Designer(Draughtsman), Single Hand Baker, Oven Man, General Clerk, Telephone Operator, Recep-tionist, Storekeeper-----------------------------	889	811	691
Tailor, Maintenance Artisan Grade III, Driver(Medi-um sized vahicle)-----------------------------------	979	900	802
Dryer, Crawler Tractor Driver, Salesman, Maintenan-ance Artisan Grade II--------------------------------	1,081	1,008	910
Saw Doctor, Caretaker(buildings)-------------------	1,195	1,117	1,040
Cashier, Driver(Heavy Commercial Vehicle), Mainten-ance Artisan Grade I, Salesman Driver--------------	1,302	1,224	1,148

A = Nairobi Area and Mombasa Municipality.
B = Municipal and Town Councils of Nakuru, Kisumu, Kakamega, Eldoret, Kitale, Nyeri, Embu, Thika, Kisii, Kericho, Bungoma, Kiambu, Muranga, Nanyuki, Nyahururu, Malindi, Naivasha, Masaku.
C = All Other areas

The basic minimum consolidated monthly wages for semi-skilled and unskilled workers in the agricultural industry range from KSh.224 to KSh.564

Appendix 7:

Kisumu County Council Annual License Fees, 1984
(in KSh.)

Trade	UC/RC	MC	LC
Vehicle Repair (Open Air)	1,200	900	900
Welding Workshop	1,000	1,000	1,000
Second-hand Tyres	800	800	800
Scrap Metal Dealer	400	400	400
Radio, Record Player & T.V. Repairer	400	400	400
Retail Trader (Grocer)	350	300	200
Bicycle Repairer	300	200	200
Carpenter	300	300	300
Laundrer	300	250	200
Soda & Mineral Water Dealer	300	300	300
Shoe-Maker and Repairer	300	200	150
Tailor	300	250	200
Tinsmith	300	250	200
Watch Repairer	250	200	200
Hair Dressing	250	250	250
Charcoal Dealer	250	250	250
Metal Crafts	200	200	200
Newspaper Vendor	150	150	150
Rubber Sandle Maker	150	100	100
Charcoal Dealer (Roadside)	100	100	100
Porridge Dealer	100	100	100

Key: UC = Urban Centre   RC = Rural Centre
      MC = Market Centre   LC = Local Centre

Source: Kisumu County Council Annual Report, 1984.

REFERENCES

Awuor, R.O.-1979-<u>Relationship of Kisumu's Industrial Sector to the Resource Hinterland: A case study of Kisumu Cotton Mills</u>, Add. University of Nairobi.

Baker, R. J.-1978-<u>The GLIM system: generalized linear interactive modelling</u>, manual/ Release 3.

Barbara, H.-1978- "Quasi-Formal Employment Structures and Behaviour in the Unorganized Urban Economy, and the Reverse: Some Evidence from South India", <u>World Development</u>, 1978, Vol. 6, No. 9/10, pp. 1077-1086, Pergamon Press, Gt. Britain.

Bienefeld, M.-1974-<u>Notes on the 'Theory of Wages' and on Unequal Exchange</u>, Working Paper No. 19 Brighton: Institute of Development Studies, University of Sussex.

------ -1975- "The informal sector and peripheral capitalism: the case of Tanzania", <u>Bulletin of the Institute of Development Studies</u>, Vol. 6. No. 3 (February 1975), pp. 53-73.

Bienefeld, M. & Godfrey, M.-1975- "Measuring employment and the informal sector: some conceptual and statistical problems", <u>Bulletin of the Institute of Development Studies</u>, Vol. 7, No. 3 (October 1975), pp. 4-10.

Blalock, H. M.-1972-<u>Social Statistics</u>, McGraw-Hill.

Bos, H. C.-1965-<u>The Spatial Dispersion of Economic Activity</u>, Amsterdam: North Holland.

Bose, A. N.-1974-<u>The informal Sector in the Calcutta Metropolitan Economy</u>, WEP Urbanization and Employment Research Programme, Working Paper No. 5 Geneva: I.L.O.

Boudeville, J. R.-1966-<u>Problems of Regional Economic Development Planning</u>, Edinburgh University Press.

Bowa, O.-1983-<u>The Influence of Soils on the Agricultural Land Use Pattern in North Nyakach Location, Kisumu District</u>, Unpublished B.A. Dissertation, University of Nairobi.

Byerlee, D.-1974- "Rural-Urban Migration in Africa: Theory, Policy and Research Implications", <u>International Migration Review</u>, Vol. 8 pp. 543-566.

Child, F.C.-1973- "An Empirical Study of Small-Scale Rural Industry in Kenya", Working Paper No. 127, I.D.S., University of Nairobi.

Christaller, W.-1966-The Central Places of Southern Germany, trans. by C. W. Baskin, Prentice Hall.

Court, D.-1974-"Dilammas of Development: The Village Polytechnic Movement as Shadow System of Education in Kenya" In Court, D. and Ghai, D. (eds)-1974-Education, Society and Development: New Perspectives from Kenya, Oxford University Press, Nairobi.

Cox, K. R. and Colledge, R. G. (eds.)-1969-Behavioural Problems in Geography: a symposium, Evanston, III.: Northwestern University Press

Croxton, F. E.-1959-Elementary Statistics, Dover Publications, New York.

D'Costa, V. and Ominde, S. H.-1973-Soil and Land Use Survey of the Kano Plain, Nyanza Province, Kenya, Occasional Memoir No. 2, 1973, Department of Geography, University of Nairobi.

Darkoh, M. B. K.-1977- "Growth Poles and Growth Centres with special reference to Developing Countries: A Critique", The Journal of Tropical Geography, Vol. 44 (June 1977).

Edgren, G.-1976-"Education and Training for the Labour Market in Kenya", Paper presented to the NCEOP. Nairobi.

Erickson, B. H. & Nosanchuk, T. A.-1977-Understanding Data, McGraw-Hill.

Essang , S. M. & Mabawonku, A. F.-1974- "Determinants and Impact of Rural-Urban Migration: A Case Study of Selected Communities in Western Nigeria", African Rural Employment Paper No. 10, Department of Agricultural Economics, Michigan State University Press.

Frank, C. R.-1971- "The Problem of Urban Unemployment in Africa", Employment and Unemployment Problems of the Near East and South Asia, R. Ridker & H. Lubell, Delhi: Vikas Publications.

Frankenhoff, C. A.-1967- "Elements of an economic model for slums in the process of urban growth", Economic Development and Cultural Change, Vol. 16, No. 1 (October 1967).

Franklin, S. H.-1965- "Systems of Production: Systems of appropriation" in Pacific Viewpoint, Vol. 6 No. 2, pp. 148-149.

Friedmann, J. & Sullivan, F.-1974- "The Absorption of Labour in the Urban Economy: the case of developing countries", Economic Development and Cultural Change, April 1974.

Geertz, C.-1963-Peddlers and princes: Social change and Economic Modernization in Two Indonesian Towns, Chicago, p. 28.

Gerry, C.-1974-Petty Producers and the Urban Economy: A case study of Dakar, WEP Urbanization and Employment Research Programme, Working Paper No. 8 (Geneva: I.L.O.).

------ -1979-Poverty in Employment: A political economy of Petty Community Production in Dakar, Senegal, Leeds University, PhD. Thesis.

Gibb, Sir A. and Partners (Africa)-1956-Kenya Nile Water Resources Survey: 1954-56, Metcalf and Cooper, London.

Hammond, R. & McCullagh, P.-1974-Quantitative Techniques in Geography, Oxford: Clarendon Press.

Hance, W. A.-1970-Population, Migration and Urbanization in Africa, New York: Columbia University Press.

Harmansen, T.-1971-Spatial Organization and Economic Development: The Scope and Task of Spatial Planning, Institute of Development Studies (Mysore).

------ -1972b- "Development poles and related theories: a synoptic review", in N. M. Hansen (ed.), Growth Centres in Regional Economic Development, The Free Press (New York).

Hartz, K.-1973- "Informal income opportunities and urban employment in Ghana" in The Journal of Modern African Studies, Vol. 11, pp. 61-89.

Hirschman, A.-1958-The Strategy of Economic Development, Yale University Press (New Haven, Connecticut).

House, W.J.-1978- "Nairobi's Informal Sector: A reservoir of dynamic entrepreneurs or a residual of surplus labour?", Working Paper No. 347, I.D.S. University of Nairobi.

International Labour Office -1972-Employment, Income and Equality in Kenya, I.L.O., Geneva.

Jactzold, R. and Schmidt, H. -1982-Farm Management Handbook of Kenya, Part A. (Western Kenya), Rassdorf, Germany.

Johnston, R. J.-1978-Multivariate Statistical Analysis in Geography, Longman, London.

Kabagambe, D. M.-1975-The role of Small Scale Industries in Developing Urban Economies: a case study of Kisumu semi-urban areas, University of Nairobi.

Kaplinsky, R. (edit)-1978-Readings on Multinational Corporations in Kenya, Oxford University Press.

Kenya, Ministry of Education, Technical Education Section -1975-1974 Technical School Graduate Follow-up Study: Summary of Findings, Nairobi.

Kenya-1976-Report of the National Committee on Educational Objectives and Policies, Government Printer, Nairobi.

Killick, T.-1981-Papers on the Kenyan Economy, Hinemann, Nairobi. London. Ibadan.

Kinyanjui, K.-1974- "The Distribution of educational resources and opportunities in Kenya", University of Nairobi, IDS Discussion Paper No. 28 (August 1974).

Kitching, G.-1980-Class and Economic Change in Kenya: the making of an African Petite-Bourgeoisie, Yale University Press.

Labini, S.-1966-Oligopolio y Progreso Tecnico (Barcelona: OIKOS, 1966).

Lasuen, J. R.-1971-A Generalization of the Growth Pole Notion, International Geographical Union, Victoria.

Lehmann, D. R.-1979-Market research and analysis, Richard, D. Irwing.

Leys, C.-1975-Underdevelopment in Kenya: The Political Economy of Neo-colonialism, Hinemann, London.

Lipsey, G., Purvis, D. H., Sparks, G. R. & Steiner, P. O.-1979-Economics, Harper & Row, New York.

Lockhart, L.-1981- "The Economics of Nine Years Education for All", Papers on the Kenyan Economy, T. Killick (ed.), Hinemann, Nairobi. London. Ibadan.

Losch, A.-1954-The Economics of Location, New Haven: Yale University Press.

McGee, T. C.-1976- "The Persistence of the Proto-proletariat" in Progress in Geography, Vol. 9, St. Martin's Press, New York.

McGee, T. G.-1974-The Persistence of the Proto Proletariat: Occupational Structures and Planning for the Future of Third World Cities (Los Angeles: University of California, School of Architecture and Urban Planning).

McGee, T.G. & Young, Y. M.-1977-Hawkers in South East Asian Cities: Planning for the bazaar economy, Ottawa, IDRC.

Mills, F. C.-1955-Statistical Methods, Rinehart and Winston.

Misra, R. P., Sundaram, K. V. & Prakasa Rao, V. L. S.-1974-Regional Development Planning in India: A New Strategy, Vikas Publishing House (Delhi).

Myrdal, G.-1957-Economic Theory and Underdeveloped Regions, Methuen and Company Limited (London).

Nun, J.-1969- "Superpoblacion relativa, ejercito industrial de reserva y masa marginal", Revisita Latinoamericana de Sociologia, Vol. 5, No. 2 (1969), pp. 178-236.

Obara, D. A.-1976-Environmental Problems of Smallholder Sugarcane Production in the Nyanza Sugar Belt, Unpublished MSc. Thesis, University of Nairobi.

------ -1983-Environmental and Agronomic Factors Influencing Variation in Smallholder Cotton Yields in the Kano Plain, Kisumu District, Western Kenya, Unpublished PhD. Thesis, University of Nairobi.

Odenyo, V. A. O. and D'Costa, V. P. F. X. -1979-"Soils of the Lake Victoria Basin", Natural Resources and the Development of Lake Victoria Basin of Kenya-Occasional Paper No. 34, 1979, edit. Okidi, C. O.

Ojany, F. F. and Ogendo, R. B. -1973-Kenya: a Study in Physical and Human Geography, Longman, Nairobi.

Ominde, S. H. -1963-Land and Population in the Western Districts of Nyanza Province, Unpublished PhD. Thesis, University of Nairobi.

Oucho, J. O.-1981-Rural Migration and Population Change: A Study of the Kericho Tea Estates Complex in Kenya, Unpublished Ph.D Thesis, University of Nairobi.

Ominde, S. H.-1968-Land and Population Movements in Kenya, Hinemann, London.

Oshima, H. T.-1971- "Labour force explosion and the labour intensive sector in Asian growth", Economic Development and Cultural Change, Vol. 19, No. 2 (January 1971), pp. 161-183.

Perroux, F.-1950- "Economic space, theory and applications", Quarterly Journal of Economics, Vol. 64.

------- -1955- "Note sur la notion des poles de croissance", Economic Appliquee, 1 et 2 (Paris).

Rempel, H.-1974- " An Estimate of Kenya's Labour Force", Working Paper No. 159. I.D.S., University of Nairobi.

Rempel, H. & House, W. J.-1978-The Kenya Employment Problem: An analysis of the Modern Sector Labour Market, Oxford University Press, Nairobi.

Republic of Kenya, Ministry of Finance and Economic Planning -1970-Kenya Population Census, 1969, Government Printer, Nairobi, pp. 71-117.

Republic of Kenya, Ministry of Finance and Planning -1983- Statistical Abstract, Government Printer, Nairobi.

------ -1984-Kisumu District Development Plan, 1984-88, Government Printer, Nairobi.

------ -1984-Siaya District Development Plan, 1984-88, Government Printer, Nairobi.

------ -1984-South Nyanza District Development Plan, 1984-88, Government Printer, Nairobi.

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

------ -1984-Kericho District Development Plan, 1984-88, Government Printer, Nairobi.

------ -1984-Nandi District Development Plan, 1984-88, Government Printer, Nairobi.

------ -1984-Kakamega District Development Plan, 1984-88, Government Printer, Nairobi.

------ -1984-<u>Bungoma</u> <u>District</u> <u>Development</u> <u>Plan,</u> <u>1984-88</u>,
    Government Printer, Nairobi.

------ -1984-<u>Busia</u> <u>District</u> <u>Development</u> <u>Plan,</u> <u>1984-88</u>,
    Government Printer, Nairobi.

Republic of Kenya, Ministry of Lands and Settlement -1979-
    <u>Nyanza</u> <u>Province</u> <u>Regional</u> <u>Physical</u> <u>Development</u> <u>Plan</u>,
    Government Printer, Nairobi, pp. v-1

Republic of Kenya, Ministry of Planning -1979-<u>Development</u>
    <u>Plan,</u> <u>1979-83</u>, Government Printer, Nairobi.

------ -1984-<u>Development</u> <u>Plan,</u> <u>1984-88</u>, Government Printer,
    Nairobi.

Richardson, H. W. & Richardson, M.-1975- "The Relevance of
    Growth Centre Strategies to Latin America", <u>Economic</u>
    <u>Geography</u>, Vol. 51, No. 2 (April 1975).

Santos, M.-1970-<u>Le</u> <u>Villes</u> <u>du</u> <u>Tiers</u> <u>Monde</u> (Paris: Editions M-T.
    Genin).

------ -1976-<u>The</u> <u>Shared</u> <u>Space:</u> <u>The</u> <u>Two</u> <u>Circuits</u> <u>of</u> <u>the</u> <u>Urban</u>
    <u>Economy</u> <u>and</u> <u>Their</u> <u>Repercussions</u> <u>on</u> <u>the</u> <u>Organization</u> <u>of</u>
    <u>Space</u> <u>in</u> <u>the</u> <u>Third</u> <u>World</u>, Methuen, London.

Saggerson, E. P.-1952-<u>Geology</u> <u>of</u> <u>Kisumu</u> <u>District</u>, Report No.
    21, Government Printer, Nairobi.

Sethuraman, S.V. -1975- "Urbanization and employment: a case
    study of Djakarta", <u>International</u> <u>Labour</u> <u>Review</u>, Vol.
    112, Nos. 2-3 (August-September 1975), pp. 191-206.

Snedcor, G. W. & Cochran, W. G.-1972-<u>Statistical</u> <u>Methods</u>, The
    Iowa State University Press.

Souza, P. & Tokman, V.-1976- "The informal urban sector in
    Latin America", <u>International</u> <u>Labour</u> <u>Review</u>, Vol. 114,
    No.3 (November- December 1976), pp. 355-365.

Standing, G.-1977-"Urban Workers and Patterns of Employment",
    Kanappan (ed.), <u>Studies</u> <u>in</u> <u>Urban</u> <u>Labour</u> <u>Market</u>
    <u>Behaviour</u> <u>in</u> <u>Developing</u> <u>Countries</u>, I.I.L.S., Geneva.

Steel, W. F.-1976-"Empirical Measurement of the Relative Size
    and Productivity of the Intermediate Sector: Some
    Estimates from Ghana", <u>Manpower</u> <u>and</u> <u>Unemployment</u>
    <u>Research</u>. Vol. 9, No. 1 (April, 1976).

------ -1977-Small Scale Employment and Production in Developing Countries: Evidence from Ghana, New York, Praeger.

Stewart, F.-1981- "Kenya. Strategies for Development", T. Killick (ed.) Papers on the Kenyan Economy, Hinemann, Nairobi. London. Ibadan.

Todaro, M. P.-1977-Economics for a Developing World, Longman, London.

------ -1981- "Education and National Economic Development in Kenya", T. Killick (ed.) Papers on the Kenyan Economy, Hinemann, Nairobi. London. Ibadan.

Tokman, V. E.-1978- "An Exploration into the Nature of Informal-Formal Sector Relationships", World Development, 1978, Vol. 6. No. 9/10, pp. 1065-1075, Pergamon Press, Gt. Britain.

Ward, F. C. (ed.)-1974-Education and Development Reconsidered: The Bellagio Conference Papers, New York, Praeger.

Weeks, J.-1971- "An exploration into the nature of the problem of urban imbalance in Africa", Conference on Urban Employment in Africa (Institute of Development Studies, University of Sussex, 12-16 September 1971), mimeo.

World Bank -1972-Population planning: sector working sector, Washington.

World Bank -1974-Population Policies and Economic Development, Baltimore, Johns Hopkins University Press.

------ -1980-Kenya: Population and Development, Washington, D.C., U.S.A.

SELECTED BIBLIOGRAPHY

Bromley, R. (ed.)-1979-The Urban Informal Sector: Critical Perspectives on Employment and Housing Policies, Pergamon Press.

Car, M. N.-1976-Economically Appropriate Technologies for Developing Countries, I.T. Publications, Ltd. London.

Daiwan, R. K. & Livingstone, D.-1976-Alternative Development Strategies and Appropriate Technology: Science Policy for an Equitable World Order, Pergamon, New York.

Dunn, P. D.-1978-Appropriate Technology: Technology with a Human Face, Macmillan, London.

Fearn, H.-1955-"The African Trader", East African Institute of Social Research, Kampala, Uganda.

----- -1961-An African Economy: A Study of the economic development of the Nyanza Province of Kenya, 1930-1953, Oxford University Press, London.

McRobie, G.-1981-Small is Possible: a Guide for the Perplexed, Abacus

Owens, E. & Shaw, P.-1972-Development Reconsidered, D.C. Heath, Massachusetts.

Ramesh, J. & Weiss, C. (eds.)-1979-Mobilising Technology for World Development, Praeger, New York.

Schumacher, E. F.-1973-Small is Beautiful: A Study of Economics as if People Mattered, Blond Briggs.

Stewart, F.-1978-Technology and Underdevelopment, Mcmillan, London.

World Bank -1983-Kenya: Growth and Structural Change, Vol. I, Washington, D.C., U.S.A.

------ -1983-Kenya: Growth and Structural Change, Vol. II, Washington, D.C., U.S.A.