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RESERVE

THE ROLE OF THE INFORMAL SECTOR IN
THE DEVELOPMENT OF SMALL AND INTERMEDIATE
SIZE CITIES* THE INFORMAL SECTOR IN NAKURU

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ABSTRACT

The Informal Sector in Nakuru plays a significant role in the economy of the town by way of revenue generation to the Municipal Council and also by way of employment generation. However, the role of the Informal sector, particularly with respect to employment generation, should not be over-estimated especially when we take into account the growth pattern of this sector. The growth pattern of the sector reflects horizontal expansion accompanied by little, if any, vertical growth. In spite of our misgivings with respect to the employment potential of the informal sector in Nakuru, we emphasize that there is a "social" role of the informal sector which is not always easy to quantify. Taking this into account, the sector perhaps plays a more important role than would seem at first glance.

1. Introduction*

The role of the informal sector in most urban centres is of doubtless contribution as far as employment and income generation are concerned. However, both of these variables, though easily quantifiable, are rarely known at all because this sector generally exists outside the government statistics. Besides, some of the informal sector activities are risky from the enumerators' and the respondents' points of view. In some cases, some of the informal sector activities are often socially inadmissible and morally degrading. For example wheel-cart pushing, shoe shining, not to mention prostitution, are activities that have been branded as "dirty". They nevertheless ease pressure on the existing formal sector by offering some kind of alternative means of livelihood. Here we simply need to note that the expansion of formal wage employment has not provided adequate earning opportunities for the existing-adult population. For example in Nakuru the government, through the Kenya Industrial Estates, has started an estate composed of 25 factory sheds which, if fully utilized, are capable of creating 650 employment opportunities. Metal, paper, wood and food processing together with tailoring have been established through the Kenya Industrial Estates. However, a large part of the labour force is still unemployed. We should note here that a significant proportion classified as unemployed are engaged in the informal sector, though practising, often without government protection and encouragement. Though information is lacking, the number engaged in the informal sector is due to lack of jobs in the formal sector has been increasing rapidly. This is probably the largest group which operates tea kiosks, shines shoes, serves as "matatu" turn boys, newspaper vendors, and street hawkers of other goods. While it is difficult to determine accurately their exact earnings it is likely that the groups in town tend to make more money than those in the rural areas.

* For background, see Working Paper 416.

Shoe-shine boys and matatu turn boys are school drop-outs from law class squatter workers or runaway kids (from home) who want to be independent and earn their own livelihood. Some of them when they grow up become proud owners of food kiosks. Some become drivers and other get some kind of employment. Some inevitably fall to crime.

The importance of the informal sector is, however, underlined by the government when it noted in the National Development Plan 1978/83 that according to the National Survey, the informal sector in the urban areas should absorb 195,000 people by 1983 from 140,000 - a growth rate of 4.9 per cent i.e. eleven thousand places are to be created each year. It is against this expectation that we examine how far Nakuru has gone towards the achievement of this targeted rate.

2. Secondary Data

In Nakuru, we note that the informal sector undertakings were not recorded in the Primary subsector, mainly because this is mostly a traditional sector related to mining, quarrying, agriculture and forestry. Thus there is no possibility of conducting primary informal activities in that land is held by individuals with valid title deeds. There is of course the additional problems of scarcity of land and the Municipal by-laws which may restrain activities like quarrying. Furthermore, mining would be mineral and land specific and this falls exclusively in the ambit of the Ministry of Natural Resources.

Table 1 shows that in 1979 the manufacturing sector had one hundred enterprises employing 277 persons in the informal sector compared to 32 formal enterprises engaging 5748 persons. The employment per enterprise in the informal sector is therefore small, no doubt reflecting the smallness of the enterprises. The table also shows that construction has a per enterprise employment of ten persons. We are therefore tempted to conclude that employment is a function of the capital outlay.

Table 1 Size of the Formal and Informal Sectors by Nature of Activities in 1979: Nakuru Town

Nature of Activities	Total		Formal Sector		Informal Sector ¹	
	Number of Establishments	Employment	Number of Formal Establishments Employing	Employment	Number of Informal Establishments Employing	Employment
PRIMARY	10	62	10	53	N/A ²	9
SECONDARY						
Manufacturing Industry	182	6025	82	5748	100	277
Construction	40	1636	37	1605	3	31
TERTIARY						
Trade & Commerce	961	5253	310	3315	651	1938
Services	299	7437	111	6671	188	766
Others (Electricity & Water)	4	470		469	N/A	1
Total	554	20883		17861	942	3021

¹According to Central Bureau of Statistics Informal Sector Survey is confined to open air activities together with activities carried out in Market Stalls and temporary premises. They further say that most of the activities associated with informal sector are "foot lose" in the sense that they do not have permanent address or work place. These figures include self-employed and unpaid family workers.

NA: Not applicable or not available.

This is because, loosely speaking, construction is a capital intensive industry. In the formal sector construction, the figure stands at 43.38 compared with a figure of 70.10 persons in manufacturing. The somewhat paradoxical observation in the informal sector's construction industry can perhaps be explained by labour intensity to go with the huge capital outlay so that capital-labour ratio goes down. Given this situation the above conclusion can be amended to read that employment in the informal sector is a function of capital outlay i.e. capital using technologies are more labour intensive so that they can exploit labour more extensively given its cheapness.

In the tertiary sub-sector, the informal sector has 651 in trade and commerce and has engaged 1938 persons giving an average employment figure per unit of 2.98 while the counter figure in the formal sector stands at 10.69. As for the services industry, the unit mean for the two sectors was 4.07 and 60.10 for the informal and formal sectors respectively. Given the definition applied by the Central Bureau of Statistics these figures need to be interpreted with caution. In short the informal sector provided 14.47 per cent of total employment in Nakuru town in 1979. However, the average employment figure per firm was 3.21 persons. Given these observations from secondary data, we now turn to our own survey data. First we discuss data which does not present any functional relationships before turning to the more "solid" data, i.e. to the extent, as already pointed out, that one can talk of "solid" data from the informal sector.

3. The Baseline Survey

The enumeration exercise revealed that 1682 informal establishments are currently operating in Nakuru town.- The distribution of these enterprises by the type of activity is presented in Table 3.2.

Table 2. Distribution of Enterprises by Type of Activity

Type of Activity	Number	Percentage of the total
Manufacturing	187	11.11
Trade and Commerce	1043	61.95
Services	452	26.87
Total	1682	100.00

We can see from table 2 that manufacturing is not significant. This suggests that economic sophistication plays a role in the determination of employment potential. Thus there is a possibility that a positive correlation exists between the degree of economic sophistication and the size of the informal sector. Essentially, we expect interdependence between the two sectors and given that the formal sector is the bigger of the two, its share of income is an important variable in shaping the informal sector.

The services sector ranks second, but this excludes house servants and squatters. This sector includes a big proportion of matatus which provide the transport services to commuters. Trade and Commerce heads the list because of its "simple" nature and besides it does not call for much skill. Furthermore it is also possible to venture into the business with very small amounts of investment as will be shown later in the chapter. We note in advance that most of the businesses in this category are single-owner, single-operated businesses. Table 3 presents the distribution of enterprises by sex, and type of business.

Table .3 Distribution of Ownership/Operation of Businesses by
Type of Activity and Sex

Type of Activity	Number of Enterprises Owned/Operated by Sex		Total	Percentage of the total
	Male	Female		
Manufacturing	175	12	187	11.11
Trade & Commerce	582	461	1043	61.95
Services	451	1	452	26.87
Total	1032	474	1682	100.00

Out of 187 enterprises in manufacturing, women managed or owned 12 enterprises. The figure shot up to 461 i.e. 44.20 per cent in trade and commerce. This may support our earlier assertion on the "pettiness" and "littleness" of investment capital in trade and commerce because traditionally women are not propertied and as such do not have sources for large investments. This fact is propped up further by the realization that no female respondent in the sample survey owned any business in the services sector. This sector, as pointed earlier, is unduly dominated by matatus which require heavy capital expenditure. In the entire universe, women comprised a meagre 28.18 per cent.

How about employment? Table 4 shows the distribution of enterprises on the basis of employment.

Table 4 Distribution of Enterprises on the basis of
Employment i.e. Number of People Engaged

Number of Employees	Number of Establishments	Percentage
1 person	1155	68.67
2 persons	416	24.73
3 persons	49	3.0
4 persons	19	1.13
5 persons	19	1.13
6 persons	5) 1.55
7 persons	5	
8 persons	2	
9 persons	12	
Total	1682	

Out of 1682 enterprises, 1155 i.e. 68.67 per cent are one-man enterprises which supports the argument that employment potential can in most cases be viewed on the basis of new (more) enterprises rather than on the basis of expansion of the existing enterprises. In this respect none of the respondents had more than one firm i.e. no enterprise was or had another branch elsewhere. It is equally possible that most of the operators (who in most cases are the owners) started the activity because they had no other alternative in the formal wage market. As indicated in Table 4 two employees comes in a poor second with 24.73 per cent and as pointed earlier, this figure owes a lot to the matatus. Enterprises with three employees formed 3 per cent of the universe while 4 and 5 employees per enterprise constituted 1.13 per cent each. Enterprises engaging 6 and above persons added a

were 1.55 per cent. However, the initial survey further revealed that 5 enterprises had trainees while 21 enterprises had both trainees and employees. In short then, 31.45 per cent of the enterprises had more than one person engaged.

From the foregoing, it emerges that the number of people engaged in the informal sector activities were 2474 giving an average of 1.53 persons per enterprise. However, in most enterprises there was one respondent at the time of the base line survey and a different one at the time of administering the questionnaire. In addition, we noticed that use of family labour is prevalent in the informal sector - in fact most of the businesses were a family affair. As regards matatus, one generally encountered a driver and a "turn boy", plus some other people who help in organising the commuters and in loading their luggage. (They are referred to as manambas - these are actually the turn boys while the other "turn boys" are actually the conductors). We can therefore conclude that matatus in general engage more than two people per vehicle even when overlooking the owner. In general, therefore, other than in trades like shoe shining where one operator seems to be the norm, we can with little reservation double the number of people engaged in each enterprise which would push our mean figure to 2.94 persons per enterprise. Besides, under estimation of enterprises can not be strictly ruled out. For instance all informal sector activities which are illicit by their very nature e.g. brewing of local liquor, prostitution, drug trafficking etc. were neither enumerated nor sampled out. Nonetheless, given this low average figure, it is permissible to point out that potential for growth (in terms of employment resulting from division of labour within the firm) in the informal sector activities (i.e. those with nine persons and less) is generally low. Furthermore these businesses are usually family affairs and

such the driving force behind them is not always the traditional profit maximization motive. In addition to, and some times in place of profit maximization, a host of other considerations are involved as will be shown elsewhere in the report.

Finally, we should say something about the open air market in Nakuru as an important aspect of the informal sector in the town. This market is a typical market in an african setting. The study of this market is, however, very problematic in that it is virtually impossible to justifiably sample the actors in this market in that people involved are not always the same and besides nobody has any definite location i.e. definition of location depends on the commodity one is selling in a particular day. Secondly the operators are not likely to be residents of Nakuru town. Most of them come from the near-by suburbs while others come from as far as Naivasha (about 75 kilometres from Nakuru town). A third problem is that this market deals specifically with perishable agricultural commodities. This means that attendants acquire rights to use it on a daily basis. They therefore pay a market cess on a daily basis.

The market, though not as organised as the "municipal markets" which we included in both surveys generates both income and employment to both the operators and the municipal council. Interviews with the Market Inspector revealed that individuals are charged Ksh. 5 per day and that on average the market generates Ksh. 1750 per day to the municipality, i.e. taking an average figure of number of people attending the market to be 350 per day. There are some bigger units which come to the market such as lorry owners and mini-lorries (pick-ups). On average two lorries per week come to the market yielding Kshs. 240 plus two pick-ups per week which yield Kshs. 80. There is also an additional Kshs. 120 from big market entrepreneurs who provide goods in bulk. This group generates

Kshs. 440 per week giving a total monthly income of kshs. 1760. The big operators are likely to engage 30 persons (if we assume a low average of three persons per vehicle though most of them usually engaged four to five people, and accept an average of 4 vehicles plus those who supply the bulk of tomatoes, vegetables and potatoes). This raises our employment figure to 380. The market per se generates a monthly income of kshs. 55000. When we add the big operators' income of kshs. 1760 we get a total figure of roughly kshs. 56760 per month which yields Kf 34056 per annum to the municipal treasury and consumes next to nothing from the municipal council. We note, in this respect, that the more "unorganised" the informal activities are in Nakuru the more likely that they will pay more in terms of "charges" per year. Thus a single attendant to the market pays Kshs. 1825 per year while licensed kiosk operator pays Kshs. 200 per annum. This may be due to the volatility and lack of bargaining power of the "unorganised" activities.

4. Sample Survey: Frequency Discussion

Our sample size was 5.08 per cent of the universe. As earlier noted, it was systematically stratified and randomly selected on the basis of activity. Some of the major activities are thus accorded eminence because of their contribution (absolute number) to the universe. They will nonetheless be discussed together with their sectors though we shall then mention them on their own where necessary in order to help substantiate peculiar observations.

As far as identification was concerned we observed that 11.76 per cent of our sample had formal names for their businesses. The rest had no formal names for their businesses which suggests the fragmentary nature of the businesses. We, however, noted that 96.5 per cent had a permanent work place or location. This figure is

perhaps a bit high given the common tendency to assume that informal sector enterprises are largely itinerant. Regarding postal address, 72.94 per cent reported having a postal address. This would imply that a definition of informal sector constructed on the basis of "No postal address" (as done by the Central Bureau of Statistics in Kenya) would leave quite a sizeable proportion which inevitably is informal as will be revealed later in the analysis. However, in saying this we should keep in mind that virtually every respondent will claim to have a way and means of receiving his mail regardless of whether that "Box" serves him alone or the whole town. So in the real sense, the business may not own its own postal address as it does not exist by any legal name. Rather the entrepreneur derives some utility from claiming that he has a post-office box. After all he can receive his mail from a friend's post office box!

Informal sector activities are thought to be part time i.e. they do not operate all the time. However, our findings suggest the contrary because 96.5 per cent of all the sample enterprises operated all the time. Regarding ownership of tools and equipment, 94.2 per cent of the respondents owned all the tools. Here we note that it was just in kiosks where we had the biggest number (4 out of 19) of respondents who did not own all the tools. Another interesting observation is that 82.35, 10.59 and 7.06 per cent of the respondents claimed that their equipments were partly modern, modern and old respectively in that order of descending importance. This may suggest that they are not new in the business, that is, their equipments have depreciated, or that even though not old in business, they expect to be there for some time. Alternatively and more likely, it may

suggest that they did not have resources to buy new equipment and were thus relegated into the second-hand market where the formal sector disposes the near obsolete technology - an area which requires further examination. Table .5 summarises the data discussed above.

Table .5 Identification Features

Type of Activity	No.	Enter-prise Has Name	Enter-prise Has Perma-nent Loca-tion	Enter-prise Has Post-al Ad-dress	Enter-prise Opera-tes Full Time	Entre-preuer Owns Tools	Nature of Equipment
<u>Manufac-turing</u>							
Tailoring	3	0	3	2	3	3	3P
Shoe-Making	3	1	3	3	3	3	3P
<u>Trade & Commerce</u>							
Kiosks	19	0	19	16	19	15	19P
Fruit & Ve-getable Sel-ling	14	0	14	11	12	14	10P; 4M
Charcoal selling	3	1	3	3	3	3	2P; 1Ø
Cloth selling	5	0	5	4	5	5	4P; 1Ø
<u>Services</u>							
Transpor-tation (ma-tatus)	13	0	13	5	13	13	5M; 7P; 1Ø
Others	25	8	22	18	24	24	22P; 3Ø
Total	85	10	82	62	82	80	70P; 9M; 6Ø

P: partly modern

M: modern

Ø: old

A question that students of the formal-informal sector usually debate concerns the type of relationship that exists between the two sectors. We contend that the two are interdependent but assuming an input-output table, we would like to know the value of their technical coefficients so that we can safely say who is favoured by the terms of trade ensuing between them. To put it differently, is the relationship benign or exploitative? Tables 2.6 and 7 roughly depict the type of relationship that exists between the 2 sectors. We note, for example that at the macro-level, the informal sector purchased 47.76 per cent of their input requirements from the formal sector while the high income group (in this case usually synonymous with the formal sector) consumed 16.75 per cent of the informal sector goods and services. At the sub-sectoral level, the manufacturing sector is the worst hit with tailoring, in particular suffering the most. Tailoring acquires 80 per cent of inputs from the formal sector and sells nothing to the high income group formal sector. Thus the bulk of the output 79.3 per cent is sold to the low income group and area. We note too that their product is complementary and substitutable to what is sold by cloth sellers and this is where the low income group excels - consuming 75.4 per cent while the middle income claims a 24.6 per cent share. As for cloth sellers, their main supplier is the informal sector which accounts for 75.7 per cent of their total inputs. Cloth selling is thus an informal sector activity per excellence.

In general, the informal sector consumes 44.10 per cent from itself in terms of inputs and sells 30.64 per cent to itself for final use purposes. This shows a bit of symmetry as the figure is not as skewed as in the case of formal versus informal sectors. But while the informal sector acquires 8.34 per cent of her inputs from the household sector, she sells 52.60 per cent

Table .6 Sources of Informal Sector Inputs

	NO.	FORMAL	% OF TOTAL	INFORMAL	%	HOUSE HOLD	%
<u>Manufacturing</u>							
Tailoring	3	600	80.0	150	20.0	0	0
Shoe Making	3	1100	52.34	1000	47.88	0	0
<u>Trade & Commerce</u>							
Kiosks	19	2560	24.48	7105	67.96	790	7.56
Fruit & Vegetable selling	14	0	0	6060	77.89	1720	22.11
Charcoal Selling	3	0	0	17200	100.0	0	0
Cloth selling	5	3000	14.6	15600	75.7	2000	9.7
<u>Services</u>							
Transportation (matatus)	13	95,300	78.6	26,000	21.4	0	0
Others	25	20,650	26.20	41076	52.12	17080	21.67
Total	85	123210.00	47.76	114191.00	44.10	21590.00	8.34

Table 7 Final Use of Informal Sector Output

	No.	HIGH Income Group	%	MEDIUM Income Group	%	LOW income Group	%
<u>Manufacturing</u>							
Tailoring	3	0	0	600	20.7	2300	79.3
Shoe-making	3	0	0	520	82.54	110	17.46
<u>Trade & Commerce</u>							
Kiosks	13	740	4.96	6425	43.06	7755	51.98
Fruit & Vegetable selling	14	2942	22.81	5127	39.76	4827	37.43
Charcoal Selling	3	3600	15.0	4500	18.8	15900	66.3
Cloth selling	5	3000	8.2	9050	24.6	27750	75.4
<u>Services</u>							
Transportation (matatus)	13	2500	29.7	4062	48.3	1842	21.9
Others	25	16735	23.02	23722.50	32.64	32226.50	44.34
Total	85	29517	16.75	54006.50	30.64	92710.50	52.61

of her output to the household (low income) sector. It would then appear that the informal sector caters for the poor and medium (83.24 per cent of the output goes to these two groups) income groups. The most symmetrical category is that one of "others" which buys 26.20 and sells 23.02 per cent.

A look at consumption of transportation services is interesting. The high income group which is expected to be owning personal means of transportation consumed 29.7 per cent of services while the middle income group who are mainly the workers with no personal means of transportation consumed 48.3 per cent. The low income group does not travel much and if they do, they either walk or use other means (bicycles) of transportation. Thus they utilized 21.9 per cent worth of transport services. However, an evaluation of acquisition of transportation inputs is heavily lopsided towards the formal sector with the household/low income group contributing zero per cent. The informal sector contributes a smallish 21.4 per cent while the formal sector contributes the bulk of the inputs with a 78.6 per cent contribution. This is to be expected. The informal sector makes neither cars nor spare parts.

Fruit and vegetable selling together with charcoal selling are the only two sub-sectors which buy nothing from the formal sector and yet end up selling 22.81 and 15.0 per cent respectively to the high income group, a finding which can be explained by the fact that the two sub-sectors are rural-oriented and as such in-road by the formal sector is rather difficult. In contrast, tailoring and shoe making buy 80.0 and 52.34 per cent respectively, from the formal sector and sell nothing to the high income group. In a sense, this more than ever-compensates the charcoal-vegetable and fruit selling deficit.

In summary, given that the informal sector buys 47.76, 44.10 and 8.34 per cent from formal, informal and household sectors

respectively while selling 16.75, 30.64 and 52.60 per cent to high, medium and low (taking high income as a proxy for formal sector and medium income and household as proxies for informal sector) income groups respectively, we suggest that the relationship between the sectors definitely seems asymmetrical more so as regards the household sector. Here the informal sector enjoys better terms of trade. Other than that, the relationship between the formal and informal sectors seems exploitative especially if we restrict ourselves to the terms of trade between the informal sector and the high income group. We should note however that the informal sector serves herself and the household sector to the tune of 83.25 per cent, while buying from herself to the tune of 52.44 per cent. However, we reiterate that she buys 47.76 per cent of her requirements from the formal sector. Now, if we split the remaining 52.24 per cent, of the formal sector sales between the formal and the household sector, assuming the distribution is 50:50 (i.e. 26.12 per sector), this would mean that the formal sector depends (73.88 i.e. 47.76 plus 26.12) crucially on the other two sectors and thus cannot survive without them. However, even if the formal sector is left together with the household sector, the two are less likely to survive than the informal sector together with the household sector. The latter two can easily survive and operate at 83.25 per cent of the output level assuming no substantive excess capacity at the present level of operation.

As regards personal information on the respondents, we found out that 82.35 per cent of our respondents were owners of the businesses they were managing with employees or employed managers occurring in bigger numbers in transportation where only 2 out of 13 of the respondents were owners. 43 out of 85 respondents were migrants who left their home districts in order

to look for a job but on failing to get formal employment got absorbed into the informal sector. However, some of the respondents (mostly women) migrated on marriage and work both as house wives and business entrepreneurs. Of all the respondents, only one of them resided in a high income area while the majority (58.82 per cent) resided in middle income (of questionable status). We think they tend towards low income estates*. However, a good proportion (51.76 per cent) had their homes in low income areas.

Though generally felt that the informal sector is transitory and a springboard into the formal sector, none of the respondents had changed his/her occupation in the six months preceding the survey. We note however that their present occupation has not always been their occupation with some having been casual workers in the informal sector or household sector i.e. in primary production, house boys, bar waiters or employed to perform various tasks in the informal sector. But once they got into their present occupations they have not gone out of it. Thus the mean number of years of operation is 3.75 years. What then drives them into the informal sector? Table .8 presents the respondents driving forces. Usually the respondents gave more than one reason.

* The respondents could be living in "servants quarters" or shanties in middle income areas. Therefore, their houses are not middle income as such. However, it is unlikely that those living in low income areas would be residing in high or medium income houses.

Table .8 Selection and Evaluation Criteria

CRITERIA/REASON FOR SELECTION	No. of Reasons	Evaluation of Job Potential	Availability of Inputs	Disposal of Output	Selection of Area
1. Past Acquaintance with the activity	13(12.38)	0	0	0	0
2. Observation	36(33.49)	16(18.82)	38(44.71)	0	0
3. Advice from Friends/Relatives	23(21.9)	17(20.0)	20	0	1
4. Appraisal	0	30(35.3)	0	0	0
5. Availability of Space	0	0	0	0	22(25.8)
6. Demand Considerations	0	0	0	32(37.65)	44(51.76)
7. Trial and Error	0	22(25.88)	14	26(30.59)	0
8. Administration	0	0	0	0	5
9. Others	33(31.43)	0	13	27(31.76)	13
Total	105	85	85	85	85

We note from Table 8 that of all the respondents' 105 reasons for selection of the activity, 12.38 per cent had something to do with past acquaintance with the activity either while attending a course related to this particular activity or having assisted, in one way or another, in a relative's business or having been employed in a similar activity. However, 33.49 per cent of the reasons were related to observations. i.e. personal observation by the entrepreneur of the trends of the activity. This may be by way of observing achievements of the

people they had seen in similar activities for some time, leading to the conclusion that the business was "profitable". 21.90 per cent of the reasons were related to advice from friends and/or relatives to get into the business. Needless to say it is highly likely that most of the advisers had similar types of businesses in the town or elsewhere. 31.43 per cent of the reasons belonged to the category of "others" considerations for going into the business. This category would include such reasons as lack of other alternative, having training in that particular type of activity, being in town with a relative and having failed to acquire a formal job etc. Others claimed that they wanted the independence of self-employment while still others were compelled into the particular business by the need to dispose farm surpluses. This is especially true of fruit and vegetable sellers. There were a few respondents who claimed to have inherited the businesses.

As far as the occupational potential is concerned, 35.30 per cent of respondents did some form of appraisal with the search for profit being the driving factor. We note, however, that 22 out of 85 respondents (25.88 per cent) decided to try their luck i.e. they did not in any way assess the potential of the activity. 20.0 per cent of the respondents were advised by friends and relatives while 18.82 per cent did some form of personal observations. We can therefore argue that about 74.12 per cent of the sample assessed the occupational potential of the particular activities they undertook. How about the knowledge that their products would be demanded and sold at reasonable prices? The largest group of respondents (37.65 per cent) cited demand factors - mostly large population and lack of competition from the existing establishments at the time of setting up the

business. 30.59 per cent of the respondents started by experimenting while 31.76 per cent had made other considerations like centrality of the location and shortage of supply. Location of the business was mostly dictated by demand factors. Thus 51.76 per cent of the respondents reported taking demand into consideration, while availability of space attracted half this figure. Other considerations, such as being near the respondents' residential area and ability to have safe storage were factors behind selection of the location while heirs had little choice. 38 out of 85 respondents (44.71 per cent) had surveyed the market in connection with the availability of inputs. In summary then, the entrepreneurs possess a fair measure of business rationality.

. Informal sector activities are thought to be prone to all types of problems, and this was confirmed by the survey. Both at the time of setting up the business and at the time of the survey, only two respondents reported that they never experienced any problem. These are likely to be the heirs. However, and rather astonishingly, insecurity of land tenure both now and then was cited only 3 and 2 times respectively out of 308 and 244 problems experienced now and at the beginning. Transportation too has not been a major bottleneck occurring 9 out of 308 reasons at the initial period and 10 out of 244 reasons at the time of the survey. Capital emerged as the main constraint. 72 out of 308 problems (23.38 per cent) at the time of commencement and 24.59 per cent of the problems at the time of the survey were related to capital. Lack of demand has also emerged as a constant constraint constituting 16.39 per cent of the problems at the time of the study compared with 20.12 per cent at the time of initiation. Increased realisation by the government that the informal sector plays a positive role is reflected by the fall in administrative

harassment from 7.8 per cent to 3.7 per cent between the time of setting up and the time of the survey. An almost double figure indicating excessive competition as a constraint between the two periods seems to indicate two underlying features. First, some sort of appraisal must have been initially undertaken resulting in the conclusion that competition could not have deterred optimal or near optimal performance and second, horizontal growth has taken place at the expense of vertical growth thus leading to lowered consideration for profitability. Thus the need to be a "businessman" i.e. to be self-employed plus lack of alternative employment due to low employment growth rates both in the formal and informal sectors in the wake of rapid population growth and with it a fast growing labour force, has led to increased number of enterprises as opposed to number of people engaged in the different firms.

The "others" constraints constituted 7.14 per cent of the initial problems and 8.20 per cent of the present problems. This composite category was dominated by factors related to nature, namely rain, sunshine and dust. Some respondents cited theft and storage as other constituent problems of "others". This underlies the fact that a good portion of the business are carried out in the open i.e. from no structures at all. This is especially true of those suffering from natural problems.

As far as sources of investment funds are concerned, 67 per cent of the respondents financed their businesses from their own savings. This implies that the initial capital investment is generally low since these people are generally poor. It may equally reflect lack of knowledge or ignorance as far as sources of credit facilities are concerned. However, the extent of initial self-financing may be as a result of lack of security to offer as

collateral. Slightly below 6 per cent of our respondents had loans from formal institutions compared to 16.5 per cent who had acquired loans from friends and relatives. We note here that some of the respondents could be deterred from borrowing by the traditional fear of the unknown. Thus they would hate to lose their formal securities even if they had securities, should business not perform successfully as anticipated. They, therefore would prefer to borrow, if borrow they must, from "informal" friends, rather than formal institutions. In this connection 8 per cent of the respondents had augmented their own savings with borrowed funds from acquaintances.

Out of the sample, 78.82 per cent of the respondents had dependents or other members of their families staying with them and only 44.70 of them had other income earners which implies that 55.30 per cent of the respondents had to feed their dependents solely and entirely. This might account for the low percentage of those who remitted something outside the town - 10.59 per cent remitted something i.e. income outside town. The mean remittance was roughly Kshs. 74 per month which constitutes 0.06 per cent of the mean income figure in transportation (which has the highest mean) and 5.55 per cent in shoe making (which has the lowest mean) and 0.03 per cent of the sample mean. ~~This~~ This mean of Ksh 8316* is the revenue mean. It is therefore true that the informal sector actors find themselves marginal and thus unable to remit funds outside the town. In addition a belief exists that it is those with formal jobs who should assist those who are not in the towns. It is also possible that most self-employed persons do not view themselves as being employed and therefore have little reason, if any, to remit money outside the town. How about contribution to the municipality then?

*The legal minimum wage in the formal sector in Nakuru is Ksh. 482 per month.

94.12 percent of the respondents contended that they contributed towards the municipality by providing essential services and hiring labour. Slightly more than half (50.59 per cent) felt that they utilized the council's services in their businesses. And of all the enterprises, 98.82 paid some kind of levy to the municipal treasury thus contributing to the much needed revenue by the municipal council. The municipality collects Kshs 46 per month from each enterprise which amounts to K£ 46423 per annum, excluding the market which earns the council K£ 34,056 for a total of K£ 80,479. This is not a small contribution from the informal sector, given for example the 1982 municipal revenue of K£ 2933,409.

Not surprisingly, 65 per cent of our respondents felt that the growth of the informal sector had some effect on their performance. Most of them noted that this had the adverse effects of reducing the number of customers and thereby adversely affecting the level of their incomes. Some of the respondents who acknowledged the increase in the informal sector enterprises welcomed their debut arguing that they increased competition leading to efficiency; besides, some of the informal activities depend on the others for the supply of their inputs and would therefore stand to gain from lower prices resulting from increased competition. This view notwithstanding, it seems that increased number of enterprises reinforces the earlier observation of "excessive competition" at the time of the survey, which in turn seems to reinforce the popular view of "ease of entry" into the informal sector industry.

Having looked at non-functional relationships, we now turn to the functional relationships. In looking at these relationships we once again would like to urge the reader to keep in mind the data shortcomings mentioned earlier.

5. Sample Survey: Functional Relationships

The behaviour of the informal sector both in terms of employment and/or income generation is influenced by a number of factors both economic and non-economic - in fact social factors seem to be more prevalent in explaining the observed behaviour. In other words the informal sector, though to some extent be having according to the expected economic norms, largely deviates from behavioural characteristics of the factors prevailing over economically quantifiable factors. While at first sight it might appear difficult to grasp the "informal sector rationale", it is not completely so on a second glance in that what is in the books is generally for societies or sectors "in the light" as it were while the informal sector is generally an "underground" economy. A study of this economy at this stage would therefore appear a pioneering work especially if its dynamics are to be captured. Government policies both monetary and fiscal may find way into this sector not directly but rather indirectly. Thus factors such as rate of interest and income tax manipulations, eventually find their effect in the informal sector but how and when? While such variables have direct and in most cases strong and quantifiable impacts (may be after a lag) on the formal economy, it is difficult to ascertain their likely effect on the informal sector. However, we suspect that the effects of such measures will most probably end up being spill-overs to this sector. What we are therefore pointing out is that while for example the rate of interest may be an important consideration in deciding whether to invest or not in the formal sector, it is not an important factor in determining investments undertaken in the subterranean economy. But one thing we are sure of is that while investment leads to employment in the formal sector it does so as well in the disadvantaged sector. The only question is how much employment does it create?

In other words, what is the marginal impact of an extra shilling spent on investment on employment? From our study, changes in employment as a function of changes in investment among other factors yields the following results:

$$X_2 = -0.0117 + 0.0256X_6 + 0.0001X_{12}$$

(0.911) (5.982)

$$R^2 = 0.308$$

$$DF = 82$$

Where

X_2 is changes in employment

X_6 is number of years of formal education

X_{12} is changes in investment

DF is degree of freedom

The figures in the parentheses are t-values.

We note that a change in investment is an important variable and in fact it is the only variable which is statistically significant from zero in determining changes in employment. We note that the fit ($R^2 = 0.308$) is rather poor which suggests a misspecification of the function, a problem we must contend with given what we pointed out earlier on, namely that performances in the informal sector are perhaps best explained by social factors. We further note that though a positive relationship between levels of formal education and changes in employment i.e. labour absorption, exists, education of the investor is not an important variable in explaining informal sector employment. However, we know that education is an important factor (human capital component) in increasing ones probability towards formal sector job acquisition. Stated differently, productivity is seen to increase with levels of formal education and training (may be on the job and/or experience) in the formal sector and hence employment would

increase with these two.

As far as informal sector is concerned, level of experience in the job market has a negative impact i.e. employment as a function of levels of experience among other variables yields a negative coefficient for the parameter estimate. However, the value of the parameter estimate is not statistically different from zero at 95 per cent level of confidence.

$$X_1 = 0.2992 + 0.0187X_3 - 0.0163X_4 + 0.0532X_6 + 2.1698X_7$$

(1.636) (-0.479) (1.218) (5.692)

$$R^2 = 0.304$$

$$DF = 80$$

- X_1 : employment (number) in the informal sector
- X_3 : Age in years of the respondent
- X_4 : Experience in the business in years
- X_6 : level of formal education in years
- X_7 : level of informal education i.e. a dummy variable which takes a value of 1 if the respondents had any other training and zero in all other cases

DF and the figures in the parentheses are as defined earlier and will be defined in the same way throughout this report.

Here, we suspect serious multicollinearity between age and experience leading to the negative impact of the parameter estimate for experience because from the Correlation Matrix (Appendix 2), the correlation between employment and level of experience ($r_{X_1 X_4} = 0.033$) is positive. We note that age and level of formal education have the expected signs (positive) though statistically insignificant. Though not unexpected, the level of informal sector training is an important factor in influencing employment i.e. it shifts the employment function by 2.17 persons in an employment education space. We would expect that as one gets training in his/her field of operation, the more

he/she is likely to require an assistant thereby increasing employment. The only fear is that our function explains just 31 per cent of the variation. We suspect that social factors need to be incorporated so as to capture the part of the unexplained variation.

Change in employment can also be seen as a function of experience and changes in revenue i.e. more capital will require more labour to complement it. We at the same time expect changes in employment to be affected by the level of formal education i.e. both in the formal and informal sectors. Whereas this is true from our findings, the non-significance of the level of formal education leads to the conclusion that formal education is not necessary in acquiring informal sector employment; after all those with remarkable levels are already engaged in the formal sector. This observation is supported by the fact that the mean for level of formal education is 7.45 years. These are therefore primary school leavers or drop-outs who though aspiring to white collar jobs find their chances of getting them completely remote because formal jobs require higher education than they have. The relationship between these variables is presented below.

$$X_2 = -0.0250 + 0.0191X_6 + 0.0001X_{13}$$

(0.593) (3.701)

$$R^2 = 0.378$$

$$DF = 82$$

X_{13} : changes in revenue and the other figures are as defined earlier on.

Income/output is a function of labour and capital. Using a Cobb-Douglas formulation, we can say that capital - labour ratio is a function of average product of labour so that

$$\log (K/L) = 6.4059 + 0.2319 \log (Y/L) \\ (3.712)$$

$$r = 0.38$$

$$DF = 83$$

K: Capital proxied by investment

L: Labour = employment

Y: Income/output proxied by revenue

The constant elasticity of substitution for labour is 0.23. This means that for every unit of production, capital and labour will be substituted at 77.23. This observation has far reaching conclusion in that the informal sector is capital intensive. In Kenya, capital is exempted from many duties and taxes. Furthermore, depreciation allowances tend to make capital more attractive compared to labour such that it is always profitable to operate with relatively new capital and dispose the relatively old capital elsewhere (recall that 82.35 per cent of our respondents claimed that their tools and equipment were partly modern). This "elsewhere" is most likely in productions which for all intents and purposes are likely to be informal by definition. The end-use cost of these machines and equipments (capital) is less likely to be expensive compared to new and old and given that what matters in production is relative factor prices, the price of capital of necessity is cheaper than the cost of labour in view of the low labour productivity resulting from low levels of education and training which culminates in the observed behaviour. In fact the average product of labour is a significant determinant of the capital-labour ratio.

Low labour component per unit of output can equally explain the low mean employment figure of 1.5 notwithstanding the size of the establishments. This might as well explain the apparent paradox of capital intensity discussed earlier in the chapter and below.

A similar formulation on a linear form, however, yields a slightly different result:

$$X_{10} = 5439.57 + 0.0726X_8 + 847.87X_1$$

(4.96) (1.43)

$$R^2 = 0.33$$

$$DF = 82$$

The outcome of the above equation reinforces the earlier observations that capital is the single most important variable in determining output and that labour is of secondary importance. We emphasize that care should be taken in interpreting the parameter estimates of the factors because the likely multicollinearity between employment and investment is likely to distort them. However, from Appendix 2, the correlation coefficient between the two is not high ($r_{x_1 x_8} = 0.43$). We need note further the poor correlation between income and employment given by $r_{x_1 x_{10}} = 0.36$ compared with $r_{x_8 x_{10}} = 0.56$. We can safely conclude therefore, that income/output is to a high extent determined by the capital component. This is contrary to many findings or feelings that the informal sector is a labour using sector and that capital-labour ratio is very low thereby leading to low average products of labour. Relative factor shares are dependent on the production techniques which are in turn dependent on the type of technology prevailing at a particular point in time and which together with other factors (mostly national development goals pitted against the constraints) determine the relative factor prices. In this case, average product of labour is likely to be high as a result of high capital productivity.

Recalling the assertion that neither investment nor income is purely a function of economic variables, an obviously expected relationship was that average wage rate is a function of

average investment; this expectation is not realisable from our data.

$$X_{15} = 5089.14 + 0.0882X_{14} \\ (3.071)^{-1.4}$$

$$R^2 = 0.319$$

$$DF = 83$$

X_{15} : average wage rate in Kshs.

X_{14} : captial-labour ratio

Though statistically significant, the variation explained is very low. This tells us that we need actually to restate the model. This fact is further supported by the type of responses we got from our respondents as to why they chose the particular type of activity, none had done any appraisal. (Table 3.8 column 1). When queried further on the determination of the demand for their products, about 37.65 per cent cited demand considerations. No wonder our functions are only explaining roughly 33 per cent of the variations.

A composite function relating incomes to levels of investment, levels of education both formal and informal and finally labour component i.e a modification of the linear Cobb-Douglas formulation so as to incorporate the human capital component had the following results:

$$X_{10} = 6108.11 + 0.0698X_8 - 107.22X_6 - 1196.79X_7 + 1069.35X_1 \\ (4.36) \quad (-.46) \quad (-.43) \quad (1.40)$$

$$R^2 = 0.332$$

$$DF = 80$$

The equation has the level of investment as the only statistically important parameter and the expected positive correlation.

Otherwise a serious multicollinearity problem is underlined by the negative sign of the parameter estimate of the measure of human capital namely informal levels of education which displays a

positive correlation coefficient from the correlation matrix given by $r_{x_6 x_{10}} = 0.015$. We note that income falls with increases in the level of formal education. This may be due to the fact that higher levels of education leads to poor interaction between the entrepreneur and the consumers resulting in communication breakdown. In other words the entrepreneur is too aloof to intermingle and hence does not know the needs of his customers and thus a negative association between increased education and income comes to exist. The other possibility, which is much more likely at macro level, is that high levels of formal education leads to shifts from informal to formal sector or at the traditional versus modern sector considerations, leads to migration i.e. at the national level, it leads to rural-urban migration. Though raising the average product of labour in the sector of out-migration in the short-run, in the long-run, it leads to under-development in the affected areas because the educated tend to be young, energetic and innovative.

3.5 Conclusion

We can therefore tentatively conclude that growth in the informal sector is mainly of the mushrooming type where the number of firms increase and expand horizontally while vertical growth and integration tends to remain stagnated. In other words, growth of the informal sector is largely exogeneous to the industry and thus variable instruments to influence their growth are hard to enumerate.

As regards technology, though of intermediate type, the informal sector appears to be capital intensive - a fact which is dependent on the formal-informal sector relationship. Besides, to the extent that the relationship between formal and informal sector

is exploitative, the domination and some characteristics of the former are likely to have been pushed into this latter economy.

The single important factor in explaining performance of the informal sector both in terms of income and employment is the level of investment. And as noted, generally, migrants are the well-educated who eventually lead to falling incomes in the region of out-migration i.e. vent for surplus best explains the observed behaviour.

We note further that factors that affect the growth and hence the dynamics of the informal sector like the respondents' background, possibility of acquiring a formal job etc were omitted in this (functional) analysis and should in future be incorporated.

Given the foregoing, we expect government policies both monetary and fiscal to affect the informal sector indirectly i.e. implicitly the government has handy variables as far as the informal sector is concerned but the problem is how long it would take for the policy instruments to be effective.

In summary, we can say that the determinants of the growth of the informal sector are largely exogeneous. The type of technology used is a curious mixture of autonomy and dependence. The performance of this sector therefore is largely dependent on the general state of the technology, the socio-economic background of the entrepreneurs and the state of health and requirements of the formal sector.

7: Summary of Main Conclusions

From this study, a number of conclusions can be arrived at. Here we present only the main conclusions with the hope that other minor findings have been grasped from the report.

1 A major contention by many scholars and researchers is that the informal sector activities are net-users of municipal facilities. From our study, we found out that almost all (98.82 per cent of the sampled enterprises) informal sector activities pay some kind of levy to the municipal council while only 50.59 per cent reported using municipal facilities at their places of work. Though the data should be interpreted with caution, it is evident that as far as Npkuru town is concerned, the informal sector activities are net producers of services i.e. revenue to the municipal kit. Furthermore, the data seems to permit the conclusion that informal sector activities in Nakuru, though "young" in years have become somewhat formalized in their relation to the municipal government.

2 The contribution of the informal sector towards employment can be seen in the light of the growth potential of this sector. The growth is in turn dependent to a high degree, on social factors like population growth. We note for example that the school enrolment rate at primary school level outstrips the growth rate of secondary schools. This results in primary school drop-outs who can only eke out a living from

the informal sector given their low levels of education. Given this situation the fate of the informal sector would look potentially explosive. In other words, increased emergence of informal sector activities is a logical expectation. Whether this situation translates itself into urban informal sector is of course dependent on a lot of factors some of which are social.

3 In the country the rate of growth of the formal sector in 1984 is expected to be the same as that of 1983 which analogously implies that the informal sector must continue playing the role it has played in the recent past. According to the Kenyan government, this means that the urban informal sector must generate 11,000 or more employment opportunities per year if the employment equation is to remain reasonably stable.

4 In Nakuru, the importance of the informal sector is emphasised when we recall that Nakuru is a capital town of an agriculturally rich region. If the region follows the national trends, and there is no reason to expect otherwise, the number of formally educated persons who, on the other hand, shun rural agricultural activities will increase. This means that rural to urban migration is likely to continue at unabated rate. The majority of these immigrants will in all probability, end up in the informal sector activities in Nakuru.

5 The rate of growth of income (revenue) is appreciably high in this sector. The average number of years of operation

is 3.75 and to the extent that changes in revenue during this period is KSh 2595, we get a mean annual growth rate in income of 12.10 per cent which is quite commendable. During the same period, the mean employment figure grew at a rate of 5 per cent which gives a net per capital growth rate of slightly more than per cent. This is far much higher than the projected growth of rate of GDP of roughly 4 per cent in 1984 and a similar figure for the population growth rate, all leading to a per capital growth rate of nearly zero per cent.

6 The future of the informal sector can be seen in three dimensions namely the attitude of the municipal government, the continued growth of the informal sector and the sophistication of the town economy.

7 Members of the Municipal Council of Nakuru had mixed feelings about the informal sector. Most of the interviewees in the Municipal government underscored the importance of the informal sector in providing employment to the 'unemployables' and the consequent generation of revenue. In the opinion of this group, therefore, there is nothing to stop the informal sector from growing. On the other hand, the "enforcement" personnel and the health department felt that these operators littered the town, but there is nothing wrong in having them. The licensing department noted that there was continued pressure from the formal sector to reduce if not to ban informal sector activities because the latter were driving the former out of business. This outcry has nevertheless, not reduced

the number of licences issued or renewed each year. If anything the licences have continued to increase. All in all, from the municipal council's point of view, the informal sector has a role to play and hence its future is not bleak.

8 The sophistication of the town economy is partly a function of time i.e. it is likely to be positively correlated with time. We have argued elsewhere in this report that there is likely to be a positive correlation between the size of the informal sector and the sophistication of the economy which implies that time can be used as an instrumental variable in explaining the growth (in size) of the informal sector.

9 In summary, the informal sector has a role to play both now and in the future a role which the Nakuru Municipal Council accepts as legitimate.

10 In terms of future research, we emphasize that a model needs to be developed which would incorporate socio-political factors if the dynamics of the informal sector are to be fully understood. Furthermore there is a need to disaggregate the informal sector on the basis of capital intensive and labour intensive activities. For example, we can have activities such as construction, and matatu in the capital intensive category and the rest like fruit and vegetable selling in the labour intensive category. The demarcating line can be drawn on the basis of mean capital-labour ratio. In our study, for example, activities with more than KSh 8048 per person can be treated

as being capital intensive.

11 A comprehensive model and study of the growth of the informal sector, needs time series analysis which should focus on the number of the firms per year over time. Furthermore, for a strong understanding of the linkages, an in-depth study is required to establish who produces what and who are the final use consumers. This would help us in drawing non-pejorative conclusions as regards the dependence between the formal and informal sectors..

12 Finally we see the need in the near future, to look at just a single issue in the Nakuru informal sector. For example it is generally felt that the main constraint in the growth of the informal sector activities is lack of capital and hence the obvious prescription is provision of credit facilities. If this prescription is to be taken seriously such that its effects on the success of the activity can be indentified, research into credit needs and the intended uses for the available credit is a pre-requisite. It is by no means obvious that all the business activities can profitably absorb more capital.

APPENDIX IINFORMAL SECTOR TYPES IN NAKURU:BASELINE SURVEY

<u>TYPE</u>	<u>TOTALS</u>
1 Kiosks	385
2 Vegetable and Fruit Sellers	308
3 Cloth Selling	97
4 Transportation (Matatu)	272
5 Shoemakers (Repairers)	59
6 Tailors (Repairers)	60
7 Charcoal Dealers	58
8 Open Air Garages	43
9 Furniture/Carpentry	38
10 Shoe-Shining	37
11 Rickshaw Pullers	31
12 Fish Mongers	29
13 Watch Repairers	27
14 General Hawkers	23
15 Curios	22
16 Trade and Commerce	13
17 Chicken Sellers	13
18 Tobacco Sellers	12
19 Bicycle Repairers	10
20 Eating Houses	8
21 Utensils	8
22 Sweater Weavers	8
23 Tinsmith	8
24 Miraa Dealers	7

Cont'd		
25	Sack Dealers	67
26	Wholesalers	67
27	Drinks and Buns	6
28	Newspaper Vendors	5
29	Metal Works (Jiko makers)	5
30	Posho Mills	5
31	Groundnut Sellers	5
32	Photographers	5
33	Barbers	4
34	Radio Repairers	4
35	Sandal Sellers	4
36	Car Washing	3
37	Book Sellers	3
38	Dhobi	3
39	Mandazi Sellers	3
40	Photo Framers	3
41	Matress Making	3
42	Blacksmith	3
43	Sign Writers	3
44	Padlock Repairers	3
45	Wood Curving	2
46	Hairdressing	2
47	Potato Selling	2
48	Cushion Makers	2
49	Bakers	2
50	Metal Box Makers	2
51	Green Grocery	2
52	Plumbers	2
53	Cereal Stores	2
54	Soda Selling	2
55	Ice Crean Selling	2
	Total	<u>1682</u>

	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉	X ₁₀	X ₁₁	X ₁₂	X ₁₃	X ₁₄
X ₁	1.000													
X ₂	.801	1.000												
X ₃	.121	.035	1.000											
X ₄	.033	.089	.181	1.000										
X ₅	.106	.057	.179	-.024	1.000									
X ₆	.064	.005	-.373	-.236	.026	1.000								
X ₇	.529	.505	.020	.147	.052	-.018	1.000							
X ₈	.428	.381	.159	.125	.127	-.004	-.066	1.000						
X ₉	.190	-.058	.228	-.068	.253	.167	-.105	.641	1.000					
X ₁₀	.356	.236	.176	.129	.122	-.032	.015	.558	.512	1.000				
X ₁₁	.123	-.040	.191	-.045	.173	.074	-.146	.328	.545	.734	1.000			
X ₁₂	.401	.545	.019	.219	-.043	-.143	.000	.775	.012	.306	-.022	1.000		
X ₁₃	.308	.373	-.029	.237	-.076	-.147	.224	.294	-.072	.322	-.406	.442	1.000	
X ₁₄	.110	-.111	.210	-.082	.278	.175	-.140	.590	.977	.506	.565	-.035	-.102	1.000

APPENDIX 2. (Cont.)

Definition of variables

- X₁ : Employment in numbers at time of survey
- X₂ : Change in employment in numbers (Between initiation and time of survey)
- X₃ : Age of the respondent in years
- X₄ : Experience in the business in years
- X₅ : Number of hours worked in a day
- X₆ : Number of years of formal education
- X₇ : Dummy variable for informal sector training
- X₈ : Present Investment in KSh.
- X₉ : Initial Investment in KSh.
- X₁₀ : Present Revenue in KSh.
- X₁₁ : Initial Revenue in KSh.
- X₁₂ : Change in Investment in KSh. (X₈ - X₉)
- X₁₃ : Change in Revenue in KSh. (X₁₀ - X₁₁)
- X₁₄ : Capital - Labour ratio. $\frac{X_{10}}{X_1}$

APPENDIX III

CASE STUDIES

1. J.J.H. MOTORS

The enterprise J. J. H. Motors is an open air garage owned by three partners. The name of the enterprise was derived from the first initials of the partners. At the time of the survey only one of the partners was available for interviewing but his story is fairly typical.

The partner, H. K. Kimani was born in 1949 in a small town called Ruiru which is approximately 200 kilometres from Nakuru. He went to school at the age of 12 and studied up to standard 7. He failed his primary school leaving exam and that was the end of his education. His parents were very poor and he had to work on their neighbours' farms in order to earn extra income for the family. After working as an agricultural labourer for five years he moved to another small town (Linuru) which is about 30 kilometres from Ruiru. In Linuru he worked in a butchery for 2 years. In 1976, he moved to Nakuru to look for a job. He could not find a job. Consequently he became a mechanical welding apprentice in an open air garage and trained for 2 years. After the training he once again started looking for a job but this time not in the formal sector. Rather he preferred to look for a job in the open air garages. ("Jua-Kali" garages, which literally means "hot sun" garages). He secured a job in one of the garages and it was during this time when he met his present partners. When they met, they decided to save in order to establish a Jua Kali garage owned by the three of them.

After about 2 years of saving they found an open air space but to their surprise the space was owned by someone. The owner of the space agreed to rent it for 1,000/- shillings per month which they considered too much but having no choice they agreed to pay the rent. The first step after acquiring the work space was to fence it which they did using rough wood off-cuts. This cost them about 1,200/- shillings which they could ill-afford on top of the rent.

Mr. Kinani estimates that the initial investment was about 6,500 shillings. This included the cost of tools such as the welding machine and spraying machine. Today he estimates that the investment is worth about 20,000/- shillings after about 4 years of operation. Originally they had no employees apart from 4 small spanner boys who were essentially trainees. Today, the business employs 14 people. This number includes 6 trainees who pay "nothing" for their training. Kinani estimates that originally they made about 25/- shillings per person per day. Today the partners make approximately 100/- shillings per day. They also own all the tools on top of that.

Kinani attributes their "success" to good management as a result of good understanding between the partners. They are not entirely happy though. For one thing they feel insecure renting somebody's else plot at what they consider exorbitant rent. For this reason they have asked the Municipal Council to give them a plot of their own. And why not, asks Kinani? "After all, we pay to the Council an average of 70/-

shilling per month for water, electricity etc. In addition we pay tax to the central government."

Note The expansion of the business could also be attributed to availability of spare parts, Kinani's and the partners' original training as apprentices, the relatively large initial investment and low competition in the area of the town where the business is situated. We noted too that they have tried to specialize in servicing Japanese cars though they panel beat other types of car as well.

2 NAKURU JOINERY WORKSHOP

The enterprise is owned by Mr. Christopher Mwai. Mr. Mwai was born in 1949 at a place called Nanyuki which is approximately 100 kilometres from Nakuru. He went to school up to standard seven and then abruptly left school, this time not due to lack of school fees or examination failure, but simply because he had had enough of schooling. After staying at home for 2 years he came to Nakuru to look for employment. He stayed with a brother while looking for a job. After about a year and no job, he was influenced by his brother to join a friend's workshop as a trainee carpenter. The training took a year and he paid 500/- shillings for the training, which was no mean sum under the circumstances. In the meantime he was getting odd jobs here and there which enabled him to save a small amount of cash. After saving about 2,000/- shillings he decided to open his own workshop.

Mr. Mwai's initial investment of 2,000/- shillings enabled him to initially employ two people and rent a small workshop for 350/- shillings per month. He has been working in this workshop for the last 8 years. Over the 8 year period his business has expanded to the extent that he is now the proud owner of an old vehicle worth 15,000/- shillings with which he transports the finished products and the raw-materials. In addition to the vehicle he has bought modern tools, some of which use electricity, which he estimates are worth 30,000/- shillings. His original tools were worth 1,000/- shillings. In all he estimates that his current total investment is about 75,000/- shillings. With the increased production he has now rented one more workshop for which he pays another 350/- shillings per month. One of the workshops is stone-built. The other is made of timber. He obtains all his raw materials and tools from formal establishments in town.

Mr. Mwai now employs 10 people. In addition to the employees he has four children of his own. The family lives in rented house for which he pays 350/- shillings per month. Mr. Mwai's workers are all primary school dropouts but they know the work. They have to. After all he pays them per product and he makes sure the product is of good quality. He estimates that about 2/3 of his products are sold to relatively high income people. The rest is evenly distributed between medium and low income groups. Though Mr. Mwai will not reveal his monthly income he estimates that from the initial weekly production worth 2,000/- shillings his current weekly production is worth about 6,000/- shillings.

In spite of Mr. Mwai's apparent success he comments that his business is not expanding fast enough. He attributes this to excessive competition especially from older bigger and better established workshops. The biggest order he has ever received was for the supply of 20 beds to a lodging house. Otherwise he frequently tenders to supply schools with furniture but according to him the tenders are invariably won by bigger traders who are able to sell their furniture at a lower price. In order to beat the competition and stay in business he sometimes rents his tools to other neighbouring workshops whose tools are not as modern as his.

Mr. Mwai's future plans include trying to obtain a loan in order to expand his business further. He would also like to get a show-room in the town centre to enable him to store more finished products, and attract more customers. At present, however, he cannot afford the high rent for a show-room at the city centre.

Like J. J. H. Motors, Mr. Mwai feels that he is making important contribution to the municipality. He is quick to point out that he pays 820/- shillings per year in license plus the monthly payments for water (30/- shillings) and electricity (100/- shillings). All this in addition to employing 10 people, looking after 4 children and remitting about 300 shillings per month to relatives outside town. "What else could they ask out of one?" What else indeed.

Note: The expansion of the business must be attributed to several factors. One, the business is situated in a part of

of the town where there is demand for the finished products. Two, Mr. Mwai's training. Three, the relatively large initial investment which enabled him to obtain tools. Four, assistance from members of his family. In this connection we note that his father can be described as a "middle peasant". The father owns 20 acres of land, 10 cows, and 30 goats.

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