

**National
Micro and Small Enterprise
Baseline Survey 1999**

Survey Results

Conducted by

Central Bureau of Statistics (CBS), International Center for Economic Growth
(ICEG), and K-Rep Holdings Ltd

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In 1999, the International Center for Economic Growth (ICEG) organised a national baseline survey of micro and small enterprises in Kenya, in collaboration with the Central Bureau of Statistics (CBS) and K-Rep Holdings Limited. The survey was conducted from March 1999 through October 1999. The primary objectives of the survey were two-fold: first, to update and expand on the information generated in the 1993 and 1995 surveys; and second, to improve the reliability of estimates on the MSE sector's contribution to the Kenyan economy in terms of employment, incomes, and gross domestic product. The results of the survey were presented and discussed at a dissemination workshop launched by the Vice-President Hon. Prof. George Saitoti on October 26, 1999.

According to the 1999 survey, there are about 1.3 million micro and small enterprises in Kenya employing an estimated 2.4 million people. The average income of enterprises surveyed was about KSh 6,000 per month, or 2.5 times higher than the minimum legal monthly wage for general labourers, which in 1999 was KSh 2,363. The share of the MSE sector's contribution to GDP was estimated at 18.4%. In terms of operational problems, the 1999 survey found that access to markets (34%) was the main constraint facing the micro entrepreneurs, followed by capital (18%). Other pronounced constraints identified by the survey were inadequate business support services, poor roads and transport, shortage of raw materials, interference from authorities, poor security, lack of work site, lack of skilled personnel, and power interruptions and inaccessibility. The survey findings further suggest that policy and programme attention or priority should increasingly target rural-based enterprises, which account for 65.6% of total MSEs.

The 1999 National Micro and Small Enterprises Baseline Survey was a fully collaborative effort between the following institutions: the Central Bureau of Statistics, the International Center for Economic Growth, and K-Rep Holdings on the implementation side; and the British Department for International Development, the United States Agency for International Development, and the United Nations Development Programme on the funding side. A number of individuals contributed significantly to the survey, among them six field supervisors from CBS, thirty enumerators, six data entry personnel, including Sam Kipruto, who gave generously of his time for data analysis. I would also like to acknowledge the useful ideas contributed by Catherine Masinde of DFID, Zachary Ratemo of USAID, Isaiah Onyango, then of the Ministry of Planning and National Development, during the design of the survey, and Jasper Mani, Director of CBS, who effectively chaired meetings of the survey Steering Committee. Finally, on behalf of the survey sponsors, I wish to express special thanks to the principal technical team comprising of Aleke Dondo (K-Rep), Boniface Makau (K-Rep), Sam Oyombe (CBS), Prof.

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Andrew Mullei
Director, Africa Program
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CHAPTER ONE

Introduction and Methodology**1.1 Background**

Kenya is often noted as the country where the study of micro and small enterprises (MSEs) was first born under the rubric of informal sector some 27 years ago (ILO 1972). More will be said later about how official national statistics attempt to explain gaps in national accounts by employing the concept of informal sector to present a complete picture. Although studies of limited scope and objectives have taken place over the years, it was only in the 1990s that nation-wide studies with a focus on generating baseline surveys started to be implemented in the country.

The first national baseline survey of MSEs in Kenya was conducted in October 1993 by Development Alternatives Inc. (DAI, based in the United States of America) in collaboration with the Kenya Rural Enterprise Programme (K-REP) and the Central Bureau of Statistics (CBS) as a buy-in project of the GEMINI study series funded by USAID. The findings from this study underscored the important role that MSEs play in Kenya's development process, particularly in the context of generating employment and income opportunities for the majority of poor people throughout the country. This survey was followed by a second MSE baseline survey carried out in May 1995 under the same institutional arrangements as in 1993. The 1993 MSE baseline survey revealed that there were approximately 910 000 MSEs employing up to 2 million people. The second MSE baseline survey estimated the size of the MSE sector at 708 000 enterprises employing up to 1.2 million people.

Despite the differences, both the 1993 and 1995 MSE baseline surveys remain the most authoritative and basic source of information on the MSE sector in Kenya to date. Indeed, it is clear from both studies that the MSE sector provides employment for substantially more people than does the formal sector. Similar surveys conducted in Botswana, Lesotho, Malawi, Eritrea, Swaziland, and Zimbabwe underscore the importance of the MSE sector, especially in employment creation and income generation for the bulk of low-income workers. In Zimbabwe, for instance, a baseline survey conducted by McPherson et al. in 1998 found that there were some 860 000 MSEs outside agriculture and primary production employing approximately 1.65 million persons, and a further 420 000 enterprises in agriculture and mining employing an additional 2.2 million persons.

While most of the general conclusions of the 1993 and 1995 MSE baseline surveys are likely to remain valid today, the need was felt to update and

expand the information generated from both surveys and correct for any gaps in order to improve the reliability of estimates on the sector's contribution to the Kenyan economy in terms of employment and incomes. It is against this background that the 1999 National MSE Baseline Survey was conceived and implemented. The administrative and statistical approaches of the different studies and a comparative examination of their findings will be fully discussed later in the report.

1.2 Survey Objectives

At the international level, the measurement of the size of the MSE sector within the total labour force, and especially the non-agricultural labour force, as well as its contribution to gross domestic product (GDP) and the generation of income have become major issues, not only because of their usefulness in the design of policies and programs addressing poverty alleviation and eradication, but also because the dynamics of microenterprises and the so-called "intermediary sector" is a matter of concern for policy-makers who face increasing unemployment rates among the young school leavers and graduates who are confronted with a dramatic increase in international competition through labour costs. Another major issue arising from the past two decades of reflections and measurements in this field is the dramatic underestimation of the role of women in the national economies and the necessary efforts to fill such a gap.

In this context, the need arises for labour force data and national accounts to be more accurate and meet the needs of users. All the more so now that the creation of regional economic unions across the continent makes it necessary to produce statistics that are comparable at both regional and international levels. Many African countries have therefore embarked on the revision of their national accounts on the basis of recent improvements in their labour force statistics and MSE sector surveys. Consequently, the primary objective of the 1999 National MSE Baseline Survey was to update and expand the information generated from both the 1993 and 1995 surveys and, improve the reliability of estimates on the sector's contribution to the Kenyan economy in terms of employment, incomes and GDP.

The first specific objective was to measure the size and magnitude of the sector by estimating the total number of micro and small enterprises in the country. Estimates of the overall magnitude of the MSE sector become critical in analysing the structure of the MSE sector in Kenya in order to understand the various distribution aspects of type of activity, rural-urban distribution, enterprise size and gender composition. This information is important for the appropriate design of policy instruments as well as in targeting various support interventions for the sector.

One of the most important challenges facing Kenya concerns creation of employment opportunities. Given the declining capacity of the agricultural sector to absorb the new labour force, the shrinking public sector as well as a marked slow-down in economic activity, the MSE sector provides the most opportunities for the absorption of this increasing labour force. The 1999

National MSE Baseline Survey attempts to measure the contribution of the MSE sector to employment by analysing the composition and structural variations of sector employment

In addition, the survey assesses the contribution of the sector to income and analyses production dynamics through an estimation of wages, entrepreneurs income value added and accounts by activity size, gender distribution etc This assessment is particularly useful considering the prominent role attributed to the sector in terms of income generation for the poor (poverty alleviation) The measurement of value added should establish the extent to which the sector generates profits for re-investment, while an estimation of wages informs about the cost of labour, and by implication, the sector's competitiveness

The 1999 survey also assesses the overall size and contribution of the MSE sector to the national economy by conducting a macroeconomic estimation of the total labour force and contribution to GDP The survey analyses issues of entrepreneurship and business characteristics in the context of demand and supply of business support services including credit, infrastructure (water, electricity, roads and telephone), training, and technology Finally, the 1999 survey assesses business constraints, business entry and closures and conclusions

1 3 Organisation of the Report

The principal aim of this report is to present the findings of the National MSE Baseline Survey 1999 in a format accessible to all interested in the subject of MSE development It is hoped that the report will advance understanding of the structure composition and dynamics of employment creation and enterprise development in Kenya

Chapter 1 on introduction and methodology summarises the survey objectives and foreshadows the major variables of analysis The chapter discusses the methodology applied in organising and executing the project and provides definitions of concepts underlying the scope and coverage of the survey (see also Annex I) It outlines what constitutes an MSE activity from the perspective of the 1999 survey

Chapter 2 discusses the magnitude and structure of the micro and small enterprise sector in Kenya focusing on the distribution of enterprises by such variables as activity sector size, gender characteristics and rural-urban location Chapter 3 deals with the structure of employment in MSEs in Kenya The employment generated by MSEs is further analysed and characterised by activity status size gender ownership skills and education as well as by rural-urban distributions Changes in employment and structural variations within the MSE sector are also discussed Chapter 4 discusses the trends of employment in MSEs and the informal sector in the context of the total labour force Such variables as wages accruing, entrepreneurs income value added and accounts are estimated Gaps and overlaps between MSEs and the informal sector are also discussed Chapter 5 estimates the macroeconomic contribution of the MSE sector to the

national economy. Issues relating to the size and structure of the labour force as well as contribution to GDP are examined. Chapter 6 examines business and entrepreneur profiles and dynamics. It analyses business characteristics of MSEs from the perspective of capital and technological issues. Chapter 7 focuses on the demand and supply of business support services as well as constraints to access. Chapter 8 explores secular changes and growth of workers within MSEs in Kenya over the last four years (1995–1999). The characteristics of closed enterprises are also discussed. Chapter 9 offers a conclusion by way of summarising problems and constraints.

1.4 Survey Methodology

1.4.1 Type of Survey

The 1993 and 1995 surveys essentially focussed on enterprises and did not collect data on the households per se. The National MSE Baseline Survey 1999 can be referred to as an *enterprise survey* given that the enterprise was the variable used as the unit of analysis and for the precision criteria. However, the survey used household samples as a basis for determining and identifying those economic units that were to be interviewed in detail. Accordingly, the 1999 National MSE Baseline Survey belongs to the category of *mixed surveys* which have been recommended at the international level for capturing the variety of small-scale economic units (establishment-based, home-based, street-based, mobile, multiple jobs) in the context of household approach. The 1999 survey kept the original approach of those two previous surveys while coming nearer to mixed survey by collecting basic information on households and thus reconciling the results of the enterprise survey and overall data on labour force captured through the households – an exercise in macroeconomics that could not be attempted in the previous surveys. Consequently, the 1999 National MSE Baseline Survey, by its very design, was able to provide an overview of the labour force and its main components, including the MSE sector. Thus, the first stage of the survey is not a complete household survey although households are sampled in order to identify those members of the selected households who operate a micro or small enterprise.

1.4.2 Selection of Clusters

The 1999 National MSE Baseline Survey covered all economic activities performed by household members, whether main or secondary and whether as dependent or own-account workers. Where the main activity was identified as agriculture (or fishing, or forestry), no more information was collected on this activity; rather, the focus was on the non-agricultural activities undertaken by farmers in parallel or off-season and the complete set of questionnaires was administered. Where the main economic activity was non-agricultural and the member own-account or employer, then the full questionnaire was administered to this activity as well as to the other secondary activities undertaken by the individual. Similarly, where the

individual was a dependent worker (employee unpaid family worker or apprentice) then the emphasis was put on the secondary activity performed on an own-account basis thus being also subject to full coverage in the survey questionnaires

The coverage of the survey was national and the sampling procedure (see below) was intended to ensure an appropriate representation of urban and rural areas. This approach varied slightly from the 1993 and 1995 surveys in that more rural areas were included and the rural stratum was further sub-stratified into four agro-ecological zones considered necessary to make the sample more representative (see Annex I)

1.4.3 Sample Design

The usual sampling procedure in Kenya consists of a randomised selection of clusters corresponding to enumeration areas (or a division of them) within the master sample with a probability equivalent to the size in number of households in the selected clusters: all households are interviewed. The sample for the 1999 survey was based on the National Sample Survey and Evaluation Programme (NASSEP) III sampling frame of the Central Bureau of Statistics developed from the 1989 Population and Housing Census. The NASSEP III sampling frame is a two-stage stratified cluster sample design with individual districts forming the strata.

In the creation of the NASSEP III sampling frame the first stage of sampling involved selection of enumeration areas (EAs) from the 1989 population census within the stratum forming the primary sampling units (PSUs). This master sample corresponds to the task of one single enumerator during the population census. For sampling purposes the EAs are split into several clusters of approximately 100 households. The master sample is made of 1 300 clusters and the 146 selected clusters for the 1999 National MSE Baseline Survey represent 11.2% of the master sample.

While planning for the sample selection for the 1999 survey consideration was given to combining the features of the previous two surveys (see Annex V) with provisions for possible modification to formulate a sampling scheme that would provide accurate estimates of the characteristics of the MSEs in the country. From the objectives of this survey it was expected that the clusters covered in the 1993 MSE survey would be included (for follow up purposes) as well as the industrial and commercial areas of the major towns for a more appropriate coverage of small and medium enterprises. However it was finally decided not to follow these orientations because sample selection would not then meet the statistical requirements of randomisation: it was then decided to do a fresh random sample to avoid problems of coherence aggregation at national level and respondent fatigue.

1.5 Stratification

Usually the selection of clusters (or EAs) is based on a preliminary stratification to distinguish the several strata in the country. The need for

stratification arises from the diverse economic and demographic characteristics in the various parts of the country. The grouping of identical units into one stratum results in a homogeneous set, the strata differing from each other as much as possible. This results in increased precision of the estimates of the characteristics of the population as the variance is substantially reduced.

1.5.1 The Basis of Stratification

The 1999 survey design was the stratified cluster sample. The country was divided into four main strata based on demographic and economic characteristics of the areas to provide relatively homogeneous blocks of units for sampling purposes. The first stratum comprised Nairobi and Mombasa which were considered to be similar, being the two largest cities and both having international airports. The second stratum included towns with population exceeding 10,000 in the 1989 census. The third stratum was formed of small (rural) towns with population between 2,000 and 10,000 while the fourth stratum was made up of rural areas.

The city of Nairobi with a projected population of 2,164,000 in 1999 was observed to have a diverse population. In areas classified as low income there was a large concentration of small businesses as opposed to those inhabited by high income earners. The demographic and economic characteristics within these areas were observed to exhibit high variation which it was felt could affect the precision of estimates for the characteristics of the study.

The fourth stratum in 1993 accounted for about 80% of the MSEs in the country. Since it covered a wide area, it was felt that the rural areas stratum could display degrees of variability that could be exploited to minimise its adverse effect through further stratification. To reduce the amount of variation and hence keep the standard error low, it was decided that the stratum should be stratified using a suitable variable. Agro-ecological zones were adopted as criteria for sub-stratifying the fourth stratum. Consequently, both Nairobi and the fourth stratum were sub-stratified. Nairobi became high income, middle income, and low income areas. The rural stratum became zones of maize/tea/coffee, sugarcane, other farming patterns (e.g. wheat, cashew, nuts, coconuts, fishing), and pastoral farming.

1.5.2 Sample Size Determination and Allocation of Clusters

The sample size for the units to be covered in the survey was statistically determined based on a precision of 5% and a confidence level of 95%. The results of the 1993 survey relating to the number of households with MSEs were used to estimate the sample size in each stratum. The third stratum was treated differently from the other three since there were no established CBS clusters in the rural towns. The survey teams used area maps of the towns to create and sample EAs on the ground. The EA to be surveyed was randomly selected. In Nairobi and Mombasa, it was necessary to perform a quick count of clusters which had been non-operational and were not

updated in 1996 to establish the cluster sizes before the survey could be carried out

The proportions of households with enterprises in the strata obtained in the 1993 survey (cf Table 1 1) were applied to arrive at the number of households to be covered Table 1 2 gives the derived number of households and clusters for the 1999 survey

Table 1 1 Proportion of Households with Non-agricultural (non-primary) Businesses

Stratum	1993	1995	1999	
			Main	All
1 Nairobi Mombasa	22 3	16 2	25 6	28 4
2 Cities over 10 000	34 6	30 5	28 8	32 0
3 Cities 2 000–10 000	59 4	57 3	37 0	41 6
4 Rural areas	23 1	16 0	14 6	16 3
Total	24 6	17 7	22 9	25 5

Sources K Rep 1993 National MSE Baseline Survey 1993 1995 1999 GEMINI 1995

Table 1 2 Estimated Sample Size of the 1999 Survey

Stratum	Proportion of households with enterprises (p)	Estimated number of households (n)	Estimated number of clusters	Actual number of households
1 Nairobi Mombasa	0 223	5 392	54	4,051
2 Cities over 10 000	0 346	2 876	29	2,463
3 Cities 2 000–10 000	0 594	1,033	10	971
4 Rural areas	0 231	5 107	53	4,742
Total	–	14,408	146	12 227

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

A total number of 14 408 households was estimated as shown in Table 1 2 using the assumption of a household size of five Considering a mean cluster size of 100 households 144 clusters were to be selected for the survey This exceeded the 1993 survey by 33 clusters but only 1 500 households (12 862 households were interviewed in 1993)

The sample revealed some specific characteristics of households For example about 73% are headed by males The average household size is about 4 2 people which favourably compares to 4 3 found by the Kenya Demographic and Health Survey (KDHS) of 1998 The average age of the household head is 39 years Among the sampled households there is no difference in the average age between male-headed and female-headed households, however urban household heads seem younger on average (36 years) compared to the rural household heads (44 years)

Out of the total number of sampled household heads 38% were found to be engaged in some kind of non-primary activity (i.e., not dealing with farming, fishing or forestry). The non-primary activities include both main MSEs and those operated as secondary activities. In terms of just the secondary MSEs, it was shown that about 26% of those without main MSE activities and 16% of those with main MSE activities had secondary MSE activities.

1.5.3 Coverage of the Clusters

The design of the MSE surveys required a complete enumeration of the selected clusters. The teams therefore interviewed all the members of households within the survey sites. Where the household members were absent, three call-backs were made in order to carry out the interviews. Table 1.3 gives the number of selected clusters in each stratum for each of the MSE baseline surveys.

Table 1.3 Distribution of Clusters by Stratum in the Three MSE Baseline Surveys

Stratum	Total no. of clusters in stratum	1993 1995 1999 No. of selected clusters in the sample			Coverage
Stratum 1	170	22	12	54	31.8
Nairobi	120	17	—	39	32.5
Mombasa	50	5	—	15	30.0
Stratum 2					
Cities over 10,000	200	29	19	29	14.5
Stratum 3					
Cities 2,000–10,000	*	14	11	10	100.0*
Stratum 4 Rural Areas	926	35	12	53	5.7
Substratum 4 Maize	—	—	—	10	—
Substratum 5 Tea/Coffee	—	—	—	13	—
Substratum 6 Sugarcane	—	—	—	7	—
Substratum 7 Other crops	—	—	—	15	—
Substratum 8 Pastoral	—	—	—	8	—
Total	1,300*	100**	54	146	11.2

In stratum 3 the master sample comprises only three clusters; consequently the additional clusters had to be created in the field.

This figure does not include the 1993 fifth stratum for commercial and industrial areas.

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

The decision to increase the sample size for rural areas was taken on the ground that nearly 80% of the blown-up population of enterprises are rural-based according to the 1993 survey, so it was decided to stratify the rural stratum with more emphasis on agro-ecological determinants of economic activities. A further sub-stratification for Nairobi and Mombasa was similarly decided upon. On the other hand, the fifth stratum was decided against mainly because of the impossibility of finding a realistic and scientific procedure for extrapolation which would be consistent with the sampling of households.

It should be noted that in some arid and semi-arid districts which did not have NASSEP clusters new clusters were created in the third stratum where the master sample only comprised three clusters. It should also be noted that due to insecurity or cost considerations the replacement of some clusters was decided in the field. It is the case for Elgeyo Marakwet and Narok (migration of Maasai) in Rift Valley Province, Kitui in Eastern Province and Lamu (cost consideration) in Coast Province. By province the sample is distributed as indicated in Table 1.4.

Table 1.4 Distribution of Selected Clusters by Region in the 1999 Survey

Administrative area	Total no of clusters in stratum	No selected clusters in sample	Population projection 1999 (in '000s)	% of total population
Nairobi	120	41	2,154	7.1
Central	177	12	3,983	13.1
Mombasa	(50)	(15)	(625)	(2.1)
Coast	162	23	2,453	8.0
Eastern	168	14	5,104	16.7
North Eastern	14	1	726	2.4
Nyanza	197	16	5,189	17.0
Rift Valley	344	29	7,273	23.9
Western	108	10	3,582	11.8
TOTAL	1,300	146	30,473	100.0

Source: National MSE Baseline Survey 1999 (CBS, K. Rep. and ICEG)

1.6 Extrapolation

Extrapolation consisted of attributing the average values of the various variables found for the households in a given cluster, weighted by the number of households in the cluster to the other clusters in the enumeration area, then to the other EAs in the stratum. At national level the results for each stratum were added up to obtain the average according to the weight of each stratum.

Given the variability of household size across the country, the number of households was determined by the household size found in the survey (rather than by the household size in the master sample or in the latest available household survey). In this respect, the 1999 survey introduced a considerable improvement in the procedure by collecting data on households, thus allowing household size measured by the survey.

For each stratum and substratum, the projected population for 1999 was obtained by using both the data of the 1989 population census as published in volumes 1 and 2 of the CBS and the population projections in Analytical Report Vol. III. Results: the distribution of the population by urban and rural areas in the various districts was used to project the urban and rural population in 1999 and to aggregate by stratum for medium size towns as well as for rural towns. Once the 1999 population was established by

stratum, a household size had to be attributed to each stratum on the basis of survey results

The results of the 1999 National MSE Baseline Survey are consistent with the results of the 1998 Demographic and Health Survey which gives an average household size of 4.3 for the whole country and 4.6 for rural areas (Table 1.5)

Table 1.5 Basic Information for Extrapolating the 1999 Survey Results

Stratum	Projected population	Household size	Household size 1998 DHS
Stratum 1	2,789,000		
Nairobi high income	296,000	4.33	
Nairobi, middle income	1,009,000	3.42	
Nairobi low income	859,000	4.48	
Mombasa	625,000	4.0	
Stratum 2 Cities over 10,000	1,774,000	3.79	
Stratum 3 Cities 2,000–10,000	608,000	3.64	
Stratum 4 Rural areas	23,477,000		4.6
Substratum 4 Maize	4,012,000	5.23	
Substratum 5 Tea/Coffee	6,048,000	4.28	
Substratum 6 Sugarcane	3,955,000	5.06	
Substratum 7 Other crops	7,298,000	4.80	
Substratum 8 Pastoral	2,164,000	5.62	
Total	28,648,000	4.21	4.3

The remaining gap between the projection for all strata (28,648,000) and the total projection for the whole country by CBS (30,473,000) may easily be explained by the exclusion of arid and semi-arid lands in the sample (accounting for approximately 3% of the total population) and by the fact that the CBS projections based on the 1989 figures did not incorporate the impact of AIDS.

In the 1999 survey there are two levels of extrapolation involved. The first and most fundamental one is to estimate, from the sample survey, the total number (the population) of MSEs in Kenya. The second is to extrapolate (attribute) characteristics of sample MSEs to the corresponding larger or parent group in the population.

With respect to the first level of extrapolation, the forecasted national population was given by the CBS and minor adjustments were made to account for areas not considered in the sampling approach (see above) and to other demographic factors that may have influenced the size of the population. To find the total number of households in the country, the population size for each stratum or substratum was divided by the corresponding average household size obtained from the sample households. The total number of households in each sampling unit was then multiplied by the proportion of households in the sample with MSEs. The sum of the

products of such figures then gave the total number of MSEs in each stratum and by extension in the country

In the second level of extrapolation one weighting scheme uses a weight (an extrapolation coefficient) to convert sample characteristics of MSEs in a stratum as a group and make it attributable to the population of MSEs in each stratum the extrapolation coefficient or the weighting variable here is the result or number obtained by dividing the total number of MSEs (from the first extrapolation) in a stratum by the total number of MSEs in the country

On the basis of the estimated number of households (N) in the various strata the number of businesses per household (r) and the observed number of businesses (b) in each stratum the expected number of businesses within the stratum (B) is given by

$$B = N \times r$$

and the extrapolation coefficient is given by

$$e = B/b$$

1 6 1 Replacement of Clusters

Difficulties experienced in the field in some districts necessitated replacement of clusters This applied to cluster No 0826 in Marakwet district which was replaced with cluster No 0836 Also in Kitui district cluster No 321 was replaced by cluster No 326 This arose from risks associated with banditry in these areas In Narok district the District Statistical Officer advised that the selected clusters (i.e Nos 0778 and 0795) were not operational and a re-selection was performed randomly to provide Nos 0783 and 0791 In Lamu district selected cluster No 0213 was on a different island and cost implications could not allow the survey team to access it, as a result it was replaced by cluster No 0215

In Nairobi there was high non-response in the clusters of the high income density areas This was particularly marked in Spring Valley Muthangari and Runda It was also found that the cluster in Muthaiga covered a population which was not initially targeted for this area i.e workers at Muthaiga Country Club Similarly the team which covered Spring Valley could not access the desired respondents They interviewed workers of the owners of the homes in the area Further random selection was made to replace these clusters i.e Nos 1089 and 1090 with Nos 1098 and 1083 in Kileleshwa and South C respectively to sustain the estimated sample size for the substratum However the data collected for Muthaiga and Spring Valley were re-located to the low income substratum This increased the total number of enumerated clusters from the planned 144 to 146

1 6 2 Limitations Experienced

Some arid and semi-arid districts were not covered due to problems related

to security and cost Wajir, Mandera and Samburu districts would have required special arrangements to be covered due to security risks Turkana was also not covered due to logistical difficulties None of the clusters in Marsabit and Kwale districts both rural and urban, came up in the random selection of the clusters

It was felt that the number of MSEs in the areas not covered are expected to be insignificant and do not seriously influence estimates of characteristics of MSEs in this survey

1 7 Concepts and Definitions

This section attempts to explain concepts and terms used in the questionnaire which were meant to be understood uniformly and used consistently during the training data collection and analysis stages It has been observed that some of the usual concepts of labour force defined at the international level are not always used in their common meaning and may be misleading when interpreted in a comparative perspective For instance the concept of *unemployed* used in the analysis of the Welfare Monitoring Survey II (1998) comprise unpaid family workers, the elderly or incapacitated which prevents calculation of the real unemployment rate To this end, the main concepts and definitions of *labour force* used in the survey and in the analysis are reviewed (Further definitions appear in Annex II)

1 7 1 Micro and Small Enterprises (MSEs)

Micro and small enterprises as defined in this survey include businesses employing up to 50 workers *Employment* here does not necessarily mean salaried workers with wages it refers to people working in the enterprise whether they are paid or not The survey made a distinction between microenterprises—business enterprises employing up to ten workers and including the working owner—and small enterprises—those enterprises employing more than ten and up to 50 workers The term *micro and small enterprise* therefore covers a range of establishments including informal sector activities which employ one or more persons and enterprises in the formal sector employing up to 50 persons Whatever the site (home street, mobile unit) an MSE may be undertaken as a main activity or as a secondary activity and may be permanent temporary casual, or seasonal

A second criterion of defining MSEs is based on enterprises that are essentially non-primary businesses i.e., non-farm business activities excluding agricultural production, animal husbandry, fishing, hunting gathering forestry

A third criterion of MSEs includes farm-based business activities that involve some form of processing before marketing Thus, if household members process their farm products and sell them from the farm from the roadside or at a market or if households are involved in buying and selling farm-based commodities all these activities are considered MSEs Thus, a farmer who goes to the market to sell roasted maize (a form of processing) at the market-place or on the roadside is operating an MSE

1 7 2 *Business/Enterprise/Firm/Establishment*

The terms *business enterprise firm* and *establishment* are used interchangeably to refer to an economic unit producing goods or providing services. Examples include factories banks kiosks taxis hawkers home-based own-account workers etc. As noted above farm holdings are excluded from this survey.

1 7 3 *The Informal Sector*

The definition of the phrase *informal sector* has changed over time. This evolution is discussed (see shaded section). Given the extensive use of the concept of informal sector in the developing world, it is necessary to provide the internationally agreed definition in order that the results of the survey also address this terminology.

Such an umbrella definition of informal sector is easy to reconcile with the definition of MSEs presented above: the criteria of registration is not

International Definition of the Informal Sector

Emerging from more than two decades of surveys, the main features or characteristics of MSEs and informal sector economic units are: ease of entry; small scale of the activity; self-employment, with a high proportion of family workers and apprentices; little capital and equipment, labour intensive technologies; low skills, low level of organisation with little access to organised markets, formal credit, education and training or services and amenities; cheap provision of goods and services or provision of goods and services otherwise unavailable; low productivity and low incomes according to some analysts or on the contrary incomes that are notably higher than in the public sector, especially during the recent period and in the context of structural adjustment policies, for other observers (Charmes 1997).

Although most MSE activities are legal, they rarely comply with official and administrative requirements. More specifically, as they often go unregistered they do not pay relevant taxes, not only or not mostly out of a desire or willingness to escape and to remain concealed, but more likely because of the inability of governments to enforce the often inadequate regulations. Informal sector activities are often tolerated as a kind of recognition that the laws are inadequate. Furthermore, they have become a means for many countries to cope with population growth, rural-urban migrations, economic crises, poverty and indebtedness.

In addition, many formal wage-earners are engaged in small business operations held as additional jobs (secondary activities) in order to compensate declining net wages. Thus one cannot consider that there is a perfect dichotomy between participants in both the MSE and informal sector on the one hand and people who receive wages and salaries from government public and private modern sectors (often called *the protected sector*), on the other.

The complexity and looseness of the concept explain why it has not been possible until now to reach an international agreement on a definition to satisfy the variety of analytical purposes adopted by data users. For this reason labour statisticians have decided to distinguish the several definitions that may vary according to the need of users at the tabulation stage from the one single statistical definition for the purpose of data collection (ILO 1993)

The underlying umbrella concept encompasses the various parts of the economy that are insufficiently reflected in official statistics. It refers to the specifics of the varying scopes used for the relevant surveys. It is simple and uses one single criterion or a small number of operational criteria yet it is broad enough to cover as large a universe as is conceptually compatible with the notion of informal sector activities.

For statistical purposes, the informal sector is regarded as a group of production units which form a part within the system of national accounts (SNA) of the household sector as unincorporated enterprises owned by households. Household-based enterprises are distinguished from corporations and quasi-corporations on the basis of their legal status and the type of accounts they hold. Accordingly household enterprises are not constituted as separate legal entities independently of the household or of household members that own them and no complete set of accounts is available which could permit a clear distinction between the production activities of the enterprises and the other activities of their owners.

MSE and informal sector activities are defined irrespective of the kind of workplace, extent of fixed capital assets, duration of the activity of the enterprise and operation as main or secondary activities. Informally self-owned enterprises employ family workers and workers on an occasional basis. For operational purposes and depending on national circumstances this segment comprises either all self-owned enterprises or only those which are not registered under specific forms of national legislation (factories or commercial acts, tax or social security laws, professional groups, regulatory or similar acts, laws or regulations established by national legislative bodies). Enterprises of informal employers employ one or more workers on a continuous basis and comply with one or several criteria. Size of the establishment is below a specified level of employment (defined on the basis of minimum size requirements embodied in relevant national legislation or other empirical or statistical practices, the choice of the upper size limit taking account of the coverage of statistical enquiries in order to avoid an overlap). There may be non-registration of the enterprise or its workers.

For practical purposes MSE and informal sector activities are restricted to non-agricultural activities. Professionals and domestic workers are included as far as they comply with the definitional characteristics or criteria. Home-based workers are included if they are own-account or sub-contracting with other MSE sector units. Non-marketed production is excluded.

The value of this definition resides in the fact that it leans on existing practices for estimating informal employment at a national or macroeconomic level (Charmes 1997, ILO 1993).

applicable in a compelling way in the informal sector definition. Employment size is also flexible, although the cut-off point of 50 workers is probably higher than in most national practices. Therefore the overlap between the two concepts is almost complete with the exception of small enterprises which are in many countries beyond the limits of the informal sector. However, there are probably few small enterprises with low employment generated given that household enterprise "mixed" surveys are not adapted to capture them, or it is precisely for that reason that the 1993 survey included industrial and commercial areas.

1.7.4 Employment

Employment here means the total number of people working in an enterprise and who may or may not be paid salaries or wages. Thus, such employment includes any owner/operator and family members working in the business, apprentices, and regular hired (and fully paid) workers.

1.7.5 Work

The concept of *work* covers all persons undertaking economic activities for pay, profit, or family gain. The concept of *economic activity* as described from the fourth revision (1993) of the SNA includes all market production and certain types of non-market production, namely the production of primary products for own consumption, processing of primary commodities for own consumption by the producers of these items, production of fixed assets for own use, and the production for own consumption of other commodities. There may be difficulty with the term *work*. In many local languages when a person is asked "Do you work?", it may mean "Are you employed by someone else for pay?" This misunderstanding was avoided for the concept of work is broader than paid employment.

1.7.6 Labour Force

The labour force is the economically active population. The first criterion is the working age. Working age is different from the legal age as it is supposed to capture the concrete reality and not what should be. In Kenya, the 1989 Population Census and the 1994 Welfare Monitoring Survey used the working age of 10 and above, and the results were provided for 10 and above as well as 15 and above or 15 to 64. The 1999 MSE Baseline Survey deliberately chose a very low working age of 5 and above in order to capture children's work.

1.7.7 Concepts of National Accounts

The main concepts to be used are value added and gross available income or gross operating surplus. All of them refer to the individual entrepreneurs that are a subsector of the household institutional sector in the SNA (of 1993). Among the individual entrepreneurs, the 1993 SNA recommends

distinguishing the informal sector as defined by the 15th International Conference of Labour Statisticians (1993) (see list below)

Gross value added is the balance between the total of sales (minus the variations of stocks) and the intermediate consumption (including raw materials and other operating costs at the exception of financial costs) It comprises of wages and salaries payments to social security funds, and production-related taxes The balance is the *gross available income* or *gross operating surplus*

Uses		Resources	
Purchases of inputs and other raw materials	(F13)	Total sales	(GO4)
Purchases of business wares and goods for resale	(F12)	Minus	(G06–G05)
		(Stocks at end of month –	
		Stocks at beginning of month)	
Electricity	(F06)		
Water	(F07)		
Telephone	(F08)		
Transport	(F14)		
Rent	(F04)		
Repairs, maintenance	(F15)		
Insurance	(F09)		
Other operating costs	(F17)		
Balance Gross Value Added		Gross Value Added	
Salaries and wages	(F11)		
NSSF/Health insurance	(F05)		
Licenses and taxes	(F16)		
Balance Gross available income			

Note The balance is obtained by subtracting the various uses or expenditures from the corresponding *resources*

CHAPTER TWO

Magnitude and Structure of the Micro and Small Enterprise Sector

The 1999 National MSE Baseline Survey used a household approach to study MSEs and their relationship to household members. Studies in other countries typically used the enterprise or firm as the unit of study. In this study, the main activity of the individual member of the household was identified. If the main activity (on the basis of incomes) happened to be an MSE, then it was identified as the main activity and information was collected for it. If there were other MSE activities carried out by the same household member, these were identified as secondary and documented accordingly. Such detailed information was also collected for MSE activities operated by farmers whose main occupation was farming. However, for household members whose main activities were farming, any MSE activities, if they existed, were listed as secondary activities. This approach makes it possible to list more than one secondary activity for a household member. Other than to note their existence within the household, non-MSE activities (such as farming and fishing) were not included in the detailed set of questionnaires describing the characteristics, performance, and constraints of a non-primary or MSE activity.

2.1 Magnitude of the MSE Sector

The 1999 National MSE Baseline Survey found that there are about 1.3 million MSEs country-wide, employing some 2.3 million people. The study shows that about 26% of the total households in the country are involved in some kind of non-primary (e.g., non-farm) business activity. Such activities include both main activities (in terms of income source) and secondary activities such as those carried out by farmers whose main or primary activity may be farming. The national results are shown in Table 2.1. Here *employment* simply means people working and not necessarily for salary or wage payment. The table shows the generally small size (1.8) of MSEs.

The total number of enterprises per 1,000 residents of the population works out to about 43 MSEs. This compares with the following totals for other African countries: 37 for Botswana (Daniels and Fisseha 1992), 64 for Lesotho (Daniels and Fisseha 1991), 66 for Zambia (Milimo and Fisseha 1985), 83 for Niger (Daniels and Fisseha 1990), and 78 for Zimbabwe (McPherson 1991). Kenya's total is somewhat low except when compared with Eritrea's total of 20.

Table 2 1 Total Number of MSEs and Their Employment

Stratum	% of nat'l pop	MSEs		Workers		Mean
		Number	%	Number	%	
Nairobi and Mombasa	9.7	204,280	15.8	394,838	16.9	2.0
Other major towns	6.2	157,533	12.2	279,133	11.8	1.8
Rural towns	2.1	81,320	6.3	135,349	5.6	1.6
Rural areas	82.0	845,879	65.6	1,551,930	65.7	1.8
Total	100.0	1,289,012	100.0	2,361,250	100.0	1.8

Source: National MSE Baseline Survey 1999 (CBS, K Rep, and ICEG)

As is the case with many developing countries which have a relatively larger proportion of their population in the rural areas, almost two-thirds (66%) of the Kenyan MSEs are in the urban strata (consisting of the first three strata of Table 2 1). The corresponding percentages for other African countries are as follows: 69 for Botswana, 73 for Zimbabwe, 77 for Swaziland, and 80 for Lesotho (one exception is Eritrea where about 60% of MSEs are found in the urban area).

Compared with their percentage of the national population, the four strata contribute differently to the number of MSEs in the country which was established at 1,289,012 enterprises. Thus, although the Nairobi and Mombasa stratum accounts for about 10% of the population, it accounts for about 16% of the total number of MSEs and 17% of their total employment. By contrast, the corresponding percentages for the rural areas are both about 66% (see Table 2 1). While the density of MSEs is higher in the urban areas, the aggregate or relative number of MSEs is higher in the rural areas.

The total number of workers shown in Table 2 1 refers to the total employed (i.e. including part-time and casual workers) in the MSE sector. Regular workers consist of the owner or owners and family members (if any of these two groups work in the enterprise), hired persons (including fully paid working family members), and apprentices. The numbers for both part-time and casual workers have been normalised so that they reflect full-time equivalent labour units. More will be said later on this and other employment characteristics of MSEs.

In addition to the locational differences among MSEs, there are other differences, internal or external to the businesses. Some of these internal differences include the characteristics or behaviour of the owners. Other parts of the report go into detail on many characteristics of the business or the owner. What is pointed out here besides locational differences is the sex of the owners of MSEs. Table 2 2 shows that the ownership of Kenyan MSEs is almost equally divided at the national level between men and women. Men account for about 52% and women for 48%. When the analysis is done by location of enterprise, however, some differences emerge. Women own 52% of the MSEs in the urban areas compared to 48% for their male counterparts. In the rural areas, however, men own proportionately more MSEs (54%) compared to their female counterparts (46%). For both men and women, more of their MSEs are found in the rural areas. Thus, while about two-thirds (68.2%) of the MSEs owned by men proprietors are in the rural

areas the corresponding share of MSEs owned by women is 62.8%. Table 2.2 actually deals with the sex of the respondents, however, given that close to 70% of all the MSEs in Kenya are one-person operations (there is no one else working in the business) and that many of the remaining respondents were owners of bigger MSEs, the proportions shown for the sex of the respondents is not different in any significant way from the proportions belonging to the actual owners.

Table 2.2 Sex Distribution of Respondents (or Owners) of MSEs

Locations	Men			Women			Total No
	No	Col%	Row%	No	Col%	Row%	
Urban	213,262	31.8	48.3	227,886	37.2	51.7	441,148
Rural	457,465	68.2	54.3	384,961	62.8	45.7	842,427
Total	670,727	100.0	52.3	612,848	100.0	47.7	1,283,575

The slight difference of this total from the one shown in Table 2.1 is due to some missing observations for the 'sex of respondent' variable.

Source: National MSE Baseline Survey 1999 (CBS K Rep ICEG)

The average size of the MSEs is 1.8 workers at the national level. Urban MSEs do not seem to be comparatively larger than their rural counterparts with the exception of the first stratum.

A large proportion of both men and women owners operate the MSEs on own-account basis. That is, the owner is the only worker there and does not employ anybody else. Furthermore, 92% and 97% respectively, of men and women are own-account operators of Kenyan MSEs. The average sizes of the businesses owned by men and women (i.e. non-own-account proprietors) are 4.8 and 3.4 respectively. The corresponding averages for the number of regular workers are respectively 4.6 and 3.4. Thus, the average number of workers for women employers is smaller by about 35% for regular workers and 41% for total employment. At the larger end of employment, however, some women own businesses larger than those MSEs owned by men. The larger enterprises tend to be hotels, bars, restaurants, and other types of catering.

2.2 Sectoral Distribution

Tables 2.3a and 2.3b show the sectoral distribution of MSEs when disaggregated by location and sex of owner. Looking first at the four major economic sectors (namely manufacturing, trade, services, and construction), one observes that close to two-thirds of all the enterprises are in the trade sector. This means that a large proportion of MSEs are involved in buying and selling of commodities.

The dominance of trade over the other sectors is not uncommon in many developing countries, though in some other countries manufacturing sometimes dominates the scene due to relatively easier access to raw materials.

Table 2 3a Sectoral and Urban-Rural Distribution of MSEs

Sector	Urban			Rural			Total	
	No	Col %	Row %	No	Col %	Row %	No	%
Manufacturing	45 019	10.2	26.1	127,745	15.1	73.9	172,764	13.4
Trade	273,738	61.5	33.1	552,410	65.0	66.9	826,149	64.1
Bars/Hotels/ Restaurants	24 888	5.9	32.5	51,789	6.5	67.5	76,677	6.0
Services	92,937	21.0	48.6	98 398	11.6	51.4	191,335	14.8
Construction	6 551	1.5	29.7	15,537	1.8	70.3	22,087	1.7
Total	443 133	100.0	34.4	845 879	100.0	65.6	1,289,012	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

particularly in the rural areas. Of the remaining Kenyan MSEs, both manufacturing and services have about equal shares (13 and 15% respectively). Construction accounts for less than 2% of the total. The listing of construction as a separate sector has to do with the nature of its activity rather than with the weight of its importance in the MSE scene, sometimes it is listed with manufacturing on the assumption that it produces "structures".

Looking at the locational distribution of all the sectors (Table 2 3a), a large share of the enterprises are in the rural areas. Thus, about 74% of manufacturing, 67% of trade, and 70% of construction MSEs are found in the rural area; it is only in services that the MSEs activities are divided almost equally between urban and rural locations.

Table 2 3b gives the distribution of the sectors by the sex of the owners. Although the dispersal of men owners among the sectors is not significantly higher, it is conspicuous that the prevalence of women is almost exclusively in trade. 75% of all the enterprises owned by women are in trade. The 1999 survey seems to indicate that income from MSEs is greater in trade than in manufacturing. Perhaps that could be the reason why trade activities dominate the MSE sector. However, if income was the main reason why women are in trade, it is not clear why men also do not take advantage of that situation. As it is, the relative participation of women in trade is higher by 20 percentage points (86 to 66%). The real reason may be the relatively less demand (usually) both for initial investment capital and prior training compared to activities in manufacturing. Trade also involves a quick turn around from purchase of goods to sales revenue.

While a more targeted sector by sector income study might be very useful, a more diversified study of what may be preventing entrepreneurs from being attracted to the other two sectors (i.e. manufacturing and construction) might be more helpful to inform policy initiatives. Such studies might also reveal some additional reasons why both manufacturing and services are not showing large shares (since men are also inordinately attracted in large numbers to the trade sector).

In this study, the findings consistently show that as the size of enterprise increases, the dominance of trade decreases. Thus, at the own-account (one-

Table 2 3b Sectoral Distribution of MSEs by Sex of Owner

Sector	Men			Women			Total No
	No	Col%	Row%	No	Col%	Row%	
Manufacturing	113 522	16 9	65 7	59 242	9 7	34 3	172 764
Trade	369 534	55 2	44 7	457,756	74 7	55 3	825 851
Bars/Hotels/ Restaurants	36 214	5 4	48 1	39 024	6 3	51 9	76 677
Services	131 096	19 5	70 4	55 099	9 0	29 6	186 195
Construction	20 361	3 0	92 2	1,726	3	7 8	22 087
Total	670 727	100 0	52 3	612 848	100 0	47 7	1 283 575

The slight difference of the total for both sexes from the one shown in Table 2 1 is due to some missing observations for the 'sex of respondent' variable

Source: National MSE Baseline Survey 1999 (CBS K Rep ICEG)

person MSE unit) level trade accounts for 72%. The corresponding share for those enterprises in the size groups 3–5 and 6–10 show the corresponding percentages to be 51 and 48% respectively. This may be supportive evidence of the investment constraint which steers women (and some men) to petty trade activities.

2 3 Industrial Distribution

Tables 2 4a and 2 4b show further disaggregation of the MSE units by the International Standard of Industrial Classification or ISIC grouping.

Table 2 4a One-Digit ISIC Grouping of MSEs by Location

Category	Urban			Rural			Total No
	No	Col%	Row%	No	Col%	Row%	
Manufacturing	44 455	10 5	26 9	120 840	15 1	73 1	165 295
Water works supply	1 158	3	100 0	—	—	—	1 158
Construction	6,551	1 5	29 7	15 537	1 9	70 3	22 087
Trade	298 345	70 1	33 7	586 937	73 4	66 3	885 282
Transport	13 257	3 1	65 8	6 905	9	34 2	20,162
Financial agents	11 976	2 8	69 8	5 179	6	30 2	17 155
Other services	49 649	11 7	43 7	63 873	8 0	56 3	113 522
Total	443 133	100 0	34 4	845,879	100 0	65 6	1 289 012

Source: National MSE Baseline Survey 1999 (CBS K Rep ICEG)

Table 2 4b shows that the main disaggregation takes place in the service group. Thus the group has been broken down to water works/supply, transport, financial agents (i.e. auctioning, brokerage, real estate, etc.) and other services (e.g. repairs, entertainment, auditing and accounting, computer, secretarial, legal).

Tables 2 5a and 2 5b provide more detailed grouping by showing industries at the ISIC two-digit level. In Table 2 5a the distribution of MSEs both within and between urban and rural areas is shown. For example, it is clear from the table that the dominance of trade in the MSE sector is due to

Table 2 4b One-Digit ISIC Grouping of MSEs by Sex of Owner

Category	Men			Women			Total No
	No	Col%	Row%	No	Col%	Row%	
Manufacturing	101,179	17.2	65.7	52,904	9.4	34.3	165,295
Water works, supply	877	1	75.7	281	0	24.3	1,158
Construction	17,792	3.0	91.2	1,726	3	8.8	22,087
Trade	386,463	65.7	44.3	484,981	86.2	55.7	885,282
Transport	14,101	2.4	100.0	—	—	—	20,162
Financial agents	10,311	1.8	92.4	843	1	7.6	17,155
Other services	57,488	9.8	72.5	21,794	3.9	27.5	113,522
Total	588,211	100.0	51.1	563,373	100.0	48.9	1,289,012

Source: National MSE Baseline Survey 1999 (CBS K Rep ICEG)

retailing and not due to wholesale dealing. In both urban and rural locations, retail activities account for about two-thirds of all MSEs found there. After retail, the urban areas have a high concentration of repair services while the rural areas show increased presence of bars/hotels/restaurants in the services area. In the manufacturing sector, the production of textiles, cordage, leather, etc. seem to be important both in the urban and rural areas.

Comparing the relative prevalence of MSEs between the urban and rural locations, the latter account for at least half of the activities in 10 of the 16 groupings listed in Table 2 5a, and in five cases, the rural areas account for

Table 2 5a Two-Digit ISIC Grouping of Urban/Rural MSEs

ISIC grouping	No	Total workers	%	%urban	%rural
Food and beverage manufacture	35,653	80,795	3.4	28.9	71.1
Textiles and leather	63,216	87,597	3.7	40.8	59.2
Wood based manufacture	43,450	96,431	4.1	16.7	83.3
Paper and paper products	579	11,255	0.5	100.0	—
Earthenware manufacture	10,922	28,735	1.2	2.0	98.0
Hardware manufacture	10,096	25,268	1.1	38.5	61.5
Other manufacturing	10,039	13,783	0.6	12.2	87.8
Construction	17,227	34,657	1.5	46.8	53.2
Wholesale trade	40,587	65,594	2.8	44.7	55.3
Retail	845,010	1,471,298	62.3	27.3	72.7
Bars/Hotels/Restaurants	85,851	185,252	7.8	44.0	56.0
Passenger car service	17,265	32,139	1.4	73.1	26.9
Real estate	18,605	34,764	1.5	75.1	24.9
Professional services	11,332	36,434	1.5	66.8	33.2
Entertainment	3,414	9,613	0.4	82.0	18.0
Repair and other services	74,766	147,584	6.3	68.2	31.8
Total	1,289,012	2,361,250	100.0	34.3	65.7

Source: National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Note: Any discrepancy from the retail total provided in Table 2 5a is due to some missing data for some observations and due to rounding errors in the database.

two-thirds or more of the enterprises. The urban areas account for over two-thirds in paper products, real estate, public transportation, entertainment, professional and other services. They account for about half of the enterprises in construction, wholesale trade, and hotels/restaurants.

The dominance in numbers is not in itself enough to gauge the overall value of a group. Production, income, and employment levels must also be evaluated. Although done in higher aggregation, some aspects of these are provided later in this report (see Annex III).

The approach in Table 2.5b is analogous to Table 2.5a except the distribution or comparison of MSEs concerns men and women owners. As in the locational distribution, the most prevalent MSEs within the gender-mediated classification are still the same for women: the dominant categories are textile/clothing/leather as well as bars/hotels/restaurants; for men, they are repair services, bars/hotels/restaurants, and wood-based manufacturing.

Table 2.5b Two-Digit ISIC Grouping of MSEs by Sex of Owner

ISIC grouping	Men				Women				Total			
	No	MSEs	Col%	Row%	No	MSEs	Col%	Row%	No	MSEs	Col%	
Food and beverage manufacture	22	115	3.8	84.7	4	009	7	15.3	35	913	3.0	
Textiles and leather	19	821	3.4	32.7	40	833	7.3	67.3	61	794	5.1	
Wood based manufacture	37	685	6.4	94.9	2	024	4	5.1	39	709	3.3	
Earthenware manufacture	10	639	1.8	100.0	—	—	—	—	10	920	9	
Hardware manufacture	8	070	1.4	96.4	298	—	1	3.6	8	368	7	
Other manufacturing	2	569	4	32.0	5	460	1.0	68.0	8	029	7	
Special trade contractors	3	143	5	64.5	1	726	3	35.5	6	595	5	
Construction	14	649	2.5	100.0	—	—	—	—	15	492	1.3	
Retail	350	248	59.9	44.0	445	957	79.4	56.0	808	605	66.6	
Bars/Hotels/Restaurants	36	214	6.2	48.1	39	024	6.9	51.9	76	677	6.3	
Passenger car service	13	820	2.4	100.0	—	—	—	—	19	319	1.6	
Real estate	10	311	1.8	92.4	843	—	2	7.6	17	155	1.4	
Other services	6	036	1.0	60.3	3	978	7	39.7	36	186	3.0	
Entertainment	1	406	2	44.9	1	726	3	55.1	3	711	3	
Repair	47	763	8.2	75.1	15	809	2.8	24.9	66	450	5.5	
Total	588	211	100.0	51.1	563	373	100.0	48.9	1	289	012	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep, and ICEG)

Table 2.6a and Table 2.6b go further and describe four-digit ISIC groups for the most dominant MSE activities—retail, repair, and services. These can be compared with Table 2.4 and Table 2.5 which describe the distribution of MSE workers in the different two-digit ISIC categories by location and sex of owners.

Table 2 6a Composition of MSE Retail Activity

	No of enterprises	No of workers	Mean income/ month (Ksh)
Food drink and tobacco	72 865	88,874	4,578
Butcheries	13,863	28 646	9 652
Oil and petrol	563	564	9 015
Textiles, soft furnishings clothing, shoes	22,916	53,329	7 592
Building materials and timber	8,627	13,827	13 601
Photographic and pharma ceutical goods	843	844	4 467
General retail trade	253,057	542 035	4,973
Livestock	28,786	42 918	9,298
Agricultural produce	235,586	354 520	4 197
Paraffin and charcoal	22,232	48,471	3 229
Domestic hardware	8 884	11 705	11,693
Machinery tools	562	844	18,000
Ready made garments	5,097	7 913	14 928
Second hand garments	60 102	103,961	5 256
Shoes and leather goods	5,987	6 835	5,291
Art and artifacts	860	861	3,934
Baskets (e g <i>krondos</i>)	298	298	1,500
Newspapers/Magazines	3,711	6,677	5 902
General kiosks and groceries	98 451	155,017	3,028
Stationery and bookstores	1,720	3,161	8 137
Total	845 010	1,471,298	4,995

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Table 2 6b Distribution of Repair and Service Activity

	No of enterprises	No of workers	Mean income/ month (Ksh)
Repair of footwear other leather goods	5 457	5,461	2 791
Electrical repair	4,028	5 771	2,091
Repair of motor vehicles and motor cycles	4 633	13,726	16 656
Watch clock and jewelry repair	845	1,970	17 814
Repair of bicycles	8 944	12,102	3 677
Other repair N E C	8 944	12,765	1,667
Laundry laundry services cleaning and dying	9,532	16 849	5 655
Barber and beauty shops	22,659	51 355	4 347
Photographic studios, commercial photography	4,011	4 594	6,091
Hunting and tourist guide services	1 727	1,728	–
Personal services N E C (e g , toilet and bath facilities)	281	1,406	100,000
Other miscellaneous personal services	860	861	21,602
Other services N E C	2,846	18,997	57,041
Total	74,766	147,584	7 354

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

CHAPTER THREE

Employment in the Micro and Small Enterprise Sector

The design of the questionnaire for the 1999 National Baseline MSE Survey was especially geared towards capturing the magnitude of MSE employment and output as well as the contributions to national employment and gross domestic product (GDP). Comparisons over time are consequently possible and useful to assess the trends of these macroeconomic aggregates and to fill the gaps in the methods of estimation. In this regard, the 1999 survey provides new understanding of the national economy and of the impact of macroeconomic policies.

3.1 Total Employment

As already shown, the total number of regular workers (consisting of owner-operators, family members, hired workers, and apprentices) is a little over 2.2 million. If unadjusted part-time and casual workers are added, the total employment increases to 2.4 million, an increase of about 9.8%. However, when part-time workers and casual workers are standardised by converting them to full-time equivalent labour units, the total employment declines to 2.3 million or a decrease of about 4.4%.

Table 3.1a shows the distribution of the raw numbers of the total employment consisting of regular workers and non-regular workers. The regular workers group consists of owners who work in the business, their unpaid family members, regular hired workers, and apprentices, and non-regular workers consist of part-time and casual workers. Corresponding to the raw numbers in Table 3.1a, Table 3.1b shows the corresponding percentages. Thus, Table 3.1a shows total employment, and owners who work in MSEs, while corresponding percentages for the various groups are shown in Table 3.1b.

Table 3.1a Distribution of MSE Employment Types

Stratum	Regular Workers					Non-regular workers		Total
	Proprietors	Family	Hired	Apprentices	Total	Part time	Casual	
Nairobi and Mombasa	223 668	30 347	106 495	5 620	366 130	1 405	27 303	394 838
Other major towns	183 144	23 824	47 647	6 254	260 869	744	17 520	279 133
Rural towns	95 720	10 165	12 424	1 412	119 721	282	12 800	135,349
Rural areas	1 177 326	179 534	105 303	39 705	1 501 868	863	49 199	1 551 930
Total	1 679 858	243 870	271 869	52 991	2 248 588	3 294	107 129	2 361 250

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

3 1b To arrive at the numbers given in Table 3 1a, adjustments were made on the raw numbers for part-time and casual workers Part-time totals were discounted by half and the casual by the fraction of a year that they do not work

The sum of the regular workers and the non-regular workers gives the total employment working in the MSE sector Among the non-regular workers, casual workers account for a lion's share of 97% From Table 3 1b it is clear that the non-regular workers account for only 4 7% of the total employment Within each of the four strata, however the share of non-regular workers among the total MSE employment varies from location to location Thus, in Nairobi and Mombasa they account for about 7% In the remaining three strata the corresponding percentages are 6 6 for other major towns, 10 for rural towns and 3 3 for rural areas If the casual workers shown in Tables 3 1a and 3 1b are excluded in the computation the share of working owner/proprietors in the first stratum (Nairobi and Mombasa), for example, would account for 60 4% of all the regular workers

Table 3 1b Percentage Distribution of MSE Employment Types

Stratum	Working proprietors	Family members	Hired regulars	Apprentices	Part-time	Casual
Nairobi and Mombasa	56 6	7 7	26 9	1 4	0 4	7 0
Other major towns	65 5	8 5	17 1	2 2	0 3	6 4
Rural towns	71 9	7 6	9 3	1 1	0 2	9 8
Rural areas	75 9	11 6	6 8	2 6	0 1	3 2
Total	71 3	10 3	11 6	2 2	0 1	4 5

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Nationally a little less than three-fourths of the total employment (or 75% of just the regular employment) in the MSE group is accounted for by owners working in their enterprises (see Table 3 1b) This is slightly higher than what is found in Botswana (with 52%) Swaziland (66%), or Zimbabwe (69%) it is however less than the 86% found in Lesotho The regular hired group of workers is of special interest as they are workers with wages and a closer investigation of the firms that employ them may have implications for what is needed to create such paid jobs Nationally only about 12% of the total number of regular workers are hired workers and two-thirds of these are found in the urban areas Nairobi and Mombasa alone account for about 43% of such workers

From the point of view of training future skilled MSE workers (and even entrepreneurs) the important group of workers are the apprentices In Kenya the percentage of apprentices in the total regular employment seems about the same general magnitude as in other countries Thus 1 2 for Lesotho 1 6 for Zimbabwe 2 0 for Eritrea and 5 4 for Botswana are not that different from Kenya's 2 5%

3 2 Distribution of Regular Workers

Table 3 2 shows how the *regular* employment of MSEs is distributed within each two-digit ISIC group. Except for real estate, wood-based fabrication, and the Other services group, the proportion of the total employment accounted for by owner operators is generally very high. In real estate, entertainment, and hardware groups, a high proportion of the workers are hired workers. Finally, the group that employs the highest number of apprentices is the wood-based group.

Table 3 2 Percentage Distribution of MSE Workers in Two Digit ISIC Groups

Group	Working owners	Unpaid family members	Hired workers	Apprentices
Food and beverage manufacturing	72	9	19	—
Textiles and leather production	77	14	8	1
Wood-based fabrication	49	10	14	27
Hardware production	59	—	31	10
Other manufacturing	59	37	??	—
Construction	73	8	14	5
Special trade contractors*	89	11	—	—
Retail	81	11	7	1
Bars, hotels, and restaurants	68	9	23	—
Transport	78	10	12	—
Real estate	47	1	52	—
Entertainment	64	2	34	—
Repair services	67	5	20	8
Other services**	48	27	24	1
Total	75	11	12	2

* Special trade contractors include electrical fitters, plumbers, painters, etc.

* Other services include entertainment, hairdressing, laundry, garbage collection, etc.

Source: National MSE Baseline Survey 1999 (CBS, K Rep, ICEG)

When the distribution of the different workers is compared between the owners of the MSEs, one finds that in MSEs owned by women, about 86% of the workers are the owner operators, and only 4% of their workers are hired. The corresponding percentages for MSEs owned by men are 68 and 17. Apprentices employed by women and men, on the other hand, are about the same: 2.2 and 2.9%.

Table 3 3 Percentage Distribution of Workers by Gender of Owners

Owners	Working owners	Unpaid family workers	Hired workers	Apprentices
Men	68	12	17	3
Women	86	8	4	2
Total	75	11	12	2

Source: National MSE Baseline Survey 1999 (CBS, K Rep, ICEG)

3 3 Employment Size of Micro and Small Enterprises

As already indicated, the average size of MSEs in Kenya is about 1.8 this corresponds with 1.8 for Botswana and Eritrea 1.9 for Lesotho and 2.1 for Zimbabwe. In the aggregate, there does not seem to be much difference between urban and rural localities with respect to average size of enterprises although MSEs in the rural towns and rural areas seem to be somewhat smaller. This may have to do with duration since the age of an enterprise is positively related (positive correlation) with its size.

Table 3.4 shows the distribution of MSEs of different employment size. At the national level about 70% are one-person units. The size distribution of the MSEs among the different strata is very similar. The only difference seems to be rural MSEs in the 6-10 size group where they seem to constitute a higher proportion than in the other strata. The data seem to indicate that this is due to a number of enterprises in the bar, hotel, restaurant group as well as in the entertainment businesses, perhaps catering to the tourist market. There are no MSEs in the rural towns and rural areas strata with employment above 15 people. Similarly, there are no MSEs in the other major towns stratum employing above 25 people.

Table 3.4 Percentage Distribution of MSE Sizes

Size (persons)	Nairobi and Mombasa	Other major towns	Rural towns	Rural areas	Total %
1	68.6	73.5	74.4	69.50	70.1
2	16.9	14.1	18.5	18.8	17.9
3-5	11.5	9.3	5.0	8.2	8.7
6-10	1.4	1.9	1.7	3.1	2.6
11-15	0.9	0.8	0.4	0.4	0.5
16-25	0.3	0.4	—	—	0.1
26-50	0.4	—	—	—	0.1
Total	100.0	100.0	100.0	100.0	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

In this survey the micro group of enterprises are those whose total employment falls below 11. They account for about 99.3% of the total employment nationally which in turn means that there are about 9,000 enterprises that are of the small size category employing over ten people. If the size range 1-5 is considered micro in nature (as opposed to the 1-10 range used in this report), then almost 97% of MSEs in Kenya are micro and the number in the small size category would rise to about 42,500 enterprises. Needless to say this is not unique to the Kenyan situation. In fact, the corresponding percentages for the same size category (1 to 5) are 97 in Botswana and Zimbabwe and 98 in Eritrea and Lesotho (the issue of regional comparison is discussed in Section 3.6).

Regarding the distribution of workers in different sized MSEs owned by men and women for one-person units, there are 496,380 people working in MSEs owned by men. This number accounts for about 35% of the workers found

in all the MSEs owned by men. Furthermore, this aggregate number represents about 50% of all MSE workers in the one-person units (i.e. including those owned by women). Thus, there is also about the same number of workers in the one-person units owned by women.

Table 3.5 displays the urban-rural distribution of the MSEs in addition to the distribution of sex characteristics among the owners. Thus, about 60% of total MSE employment is generated by MSEs owned by men. The corresponding percentage for women is 40.

Table 3.5 Percentage Distribution of Total MSE Employment by Location and Sex

	Men			Women			Total		
	No	Col%	Row%	No	Col%	Row%	No	Col%	Row%
Urban	470,380	33.3	58.1	338,940	35.8	41.9	809,320	34.3	100.0
Rural	944,270	66.7	60.8	607,660	64.2	39.2	1,551,930	65.7	100.0
Total	1,414,650	100	59.9	946,600	100	40.1	2,361,250	100.0	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep, ICEG)

Table 3.6 provides information on the sectoral distribution of MSEs employment. Trade is again the most dominant sector here, accounting for about two-thirds of the total employment found among the MSEs. Both manufacturing and services (after grouping) account for about the same share. Interestingly enough, close to three-fourths of the MSEs employment in trade is found in the rural areas.

Table 3.6 Distribution of Total MSE Employment by Location and Economic Sector

One digit ISIC	Urban			Rural			Country	
	Total workers	% urban	%	Total workers	% rural	%	Total workers	% MSEs
Manufacturing	92,465	11.5	27.0	249,738	16.1	73.0	342,203	14.5
Trade	417,725	51.8	28.4	1,052,886	67.8	71.6	1,470,611	62.4
Bars, hotels, restaurants	81,334	10.1	44.0	103,280	6.7	56.0	184,614	7.8
Construction	17,720	2.2	41.2	25,246	1.6	58.8	42,966	1.8
Transport	25,161	3.1	67.6	12,049	0.8	32.4	37,210	1.6
Real estate agencies	34,134	4.2	71.2	13,770	0.9	28.8	47,904	2.0
Professional services	140,781	17.5	59.7	94,960	6.1	40.3	235,741	10.0
Total	809,320	100.0	34.2	1,551,930	100.0	65.8	2,361,250	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep, and ICEG)

Table 3.7 depicts the raw number of regular workers in the two-digit ISIC MSEs. Since the one-digit presentation is much less obvious in its message, Tables 3.4 and 2.5 are more informative regarding subdivision at the two-digit level. The two tables reveal that not only is trade the most dominant type of activity but that retailing activity is the most dominant trade activity.

particularly in the rural localities. The dominance exists in MSEs owned by men as well as in those owned by women, but the relative dominance of retail MSEs owned by women is much higher than is the case with MSEs owned by men.

Table 3 7 Two-Digit ISIC Grouping of Regular MSE Workers

Two-digit ISIC	Working owners	Family workers	Hired workers	Apprentices	Total
Food and beverages	49,334	6,603	14,046	0	69,983
Textiles and leather	66,232	11,792	6,964	1,721	86,709
Wood based	47,141	7,187	5,454	21,594	81,376
Paper and paper products	586	1,191	9,474	0	11,251
Chemical	853	0	0	0	853
Earthenware	11,044	10,358	0	1,726	23,128
Hardware	16,018	0	6,620	2,037	24,675
Other	7,552	3,734	0	0	11,286
Construction	18,557	843	4,647	1,726	25,773
Wholesale	45,780	6,629	6,076	0	58,485
Retail*	1,173,191	163,307	99,656	16,695	1,452,848
Hotels/restaurants	100,532	16,963	52,681	0	170,176
Transport	18,041	580	3,422	0	22,043
Real estate	19,158	1,141	10,811	0	31,110
Professional services	11,870	7,216	11,185	0	30,271
Entertainment	4,882	281	4,496	0	9,659
Repair services**	82,062	5,483	24,817	7,492	119,854
Other services	7 026	562	11,521	0	19,109
Total	1,679,858	243,870	271,869	52,991	2,248,588

Retail is further detailed into specific activities in Table 2 6a

** The repair and services subsector is described in Table 2 6b

Source: National MSE Baseline Survey 1999 (CBS K Rep ICEG)

3 4 Distribution of Men and Women in MSE Employment

Table 3 8a and Table 3 8b show the distribution of men and women in MSEs employment in Kenya both among the four strata and between men and women owners of such enterprises. The important and interesting part of Table 3 8a is the row percentages which show how the total employment (which includes working owners) is divided between men and women for each stratum. Thus, in Nairobi and Mombasa about 54% of the total MSE workers are men. Generally, the strata percentages of men workers average about 53% the only exception being the rural towns stratum. The national average of men working in MSEs is about 53%. It is only in the rural towns where women seem to form the higher percentage (55.8).

Table 3 8b indicates a pattern of men workers tending to work in MSEs owned by men, women steering towards MSEs owned by women. There is a clear pattern, as almost 80% of the men work in MSEs owned by men, and 68% of the women work in MSEs owned by women. Whether this is by preference of owners, workers or both, it cannot be said for sure, however, there is the possibility of trade or work segregation by gender. The more

traditional an MSE activity is, perhaps the more gender mediated segregation of workers exist

It should be noted that due to missing observations from some cells, the national male-female distribution of owners is slightly different here from that given in Table 2 4

Table 3 8a Percentage Distribution of Men and Women in MSE Employment

Stratum	Male workers	Female workers
Nairobi and Mombasa	53 8	46 2
Major towns	52 3	47 7
Rural towns	44 2	55 8
Rural areas	53 0	47 0
Total	52 6	47 4

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Table 3 8b Percentage Distribution of Male and Female Workers Among Gender of MSE Owners

Owner	Male workers	Female workers	Country
Male	79 6	32 1	57 1
Female	20 4	67 9	42 9
Total	100 0	100 0	100 0

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

3 5 International Comparisons

In the following group of tables, some basic variables of Kenyan MSEs are compared with those from a number of other African countries. These key variables include number of workers, age of MSEs, and percentage of women owners.

Looking at Table 3 9a, one observes that about 70% of Kenyan MSEs are one-person operations, that is, there is only one person working in the enterprise. This is a slightly higher proportion than the one-person units in the other countries. Otherwise, they do not seem to display any unusual or atypical tendencies. The Kenyan percentage is the same as that of Zimbabwe.

In Table 3 9b, the focus interest is on the age of the MSEs. Kenyan MSEs seem to be among the youngest, after those in Botswana. This is shown clearly when one compares the different countries having enterprises over 10 years old. Kenya has the second lowest percentage of enterprises in the 10 years or over age range.

Table 3 9c shows the percentage of women owning MSEs in the different

countries From the table Kenya's MSEs have the second lowest percentage (48) of MSEs owned by women Only Eritrea with 43% has a lower share of women owning MSEs Much higher percentages are shown for Swaziland Botswana and Lesotho Such percentages from southern Africa may be due to male household members going to South Africa as migrant workers

Table 3 9a Percentage Distribution of MSE Sizes in Select African Countries

Country	1-person	2-person	3-5	6-10	>11
Botswana	66	16	13	5	5
Eritrea	58	25	14	3	3
Kenya	70	18	9	2	1
Lesotho	80	11	7	1	1
Niger*	64	25	10	1	1
Swaziland	68	—	—	—	—
Zimbabwe	70	15	12	2	1

* The study in Niger covers only two regions which account for a third of the national population

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Table 3 9b A Comparison of MSEs by Age of Enterprise

Country	1 year or less	1-2	2-4	4-10	Over 10 years
Botswana	37	10	10	27	14
Eritrea	< ————— 36 ————— >			38 ————— >	27
Kenya	16	20	< ————— 46 ————— >		17
Lesotho	< ————— 43 ————— >			36	21
Niger	< ————— 13 ————— >			36	51
Swaziland	< ————— 24 ————— >		< ————— 75 ————— >		
Zimbabwe	11	19	10	34	26

Source National MSE Baseline Survey 1999 (CBS K Rep ICEG)

Table 3 9c Percentage Distribution of MSEs Owned by Women in Select African Countries

Country	Urban	Rural	Total
Botswana	—	—	76
Eritrea	60	40	43
Kenya	52	46	48
Lesotho	76	71	72
Niger	44	63	56
Swaziland	79	87	84
Zimbabwe	76	62	67

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

CHAPTER FOUR

Estimates of Micro and Small Enterprises in the Total Labour Force

4.1 Total Labour Force and Micro and Small Enterprises

For policy analysis purposes it is important to discuss employment in MSEs within the context of total labour force and measure the sector's contribution to the national accounts. The design of the 1999 National Baseline MSE Survey provides new and reliable results which are useful to achieve these aims.

The household section of the MSE survey allows for an assessment of the magnitude of the labour force and its trends across the past decade (Table 4.1). From 8,558,880 in 1989, the labour force increased to 13,146,757 in 1999, with an average annual growth rate of 5%. The share of women in the total labour force remained quite stable at a high level by African standards (47.9% in 1989 and 46.7% in 1999). In the same years, the share of the rural labour force was 81.5% and 81.0% respectively.

Table 4.1 Magnitude and Total Labour Force in Kenya, 1989–1999

	1989	1999
Total labour force	8,558,880	13,146,757
Annual growth rate		5%
Urban unemployment	14.8%	14.6%
National unemployment	7.9%	8.5%
Women	47.9%	46.7%

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

Approximately 60% of those employed are in agriculture (primary production), 6.6% in industries, 9% in trade, and 24.6% in services (Table 4.2).

Table 4.2 Structure of the Labour Force in Kenya, 1999

Sector	Women		Men		Both	% of total labour force
	Number	%	Number	%		
Agriculture	4,173,071	60.9	3,503,515	58.5	7,676,587	59.8
Industries	143,069	2.0	703,362	11.7	846,431	6.6
Trade	539,586	7.9	613,645	10.3	1,153,231	9.0
Services	2,000,145	29.2	1,165,213	19.5	3,165,358	24.6
Total	6,855,871	100.0	5,985,735	100.0	12,841,607	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

Table 4 3 presents the total population employed in MSEs outside agriculture. It is necessary to take into account only the main MSE owners because the secondary MSE owners are already counted in the total labour force. Employment in the MSE sector is then 1,881,010 regular workers or nearly 15% of total employment in the country and 36.4% of total non-agricultural employment. MSEs represent 100% of employment in trade (which means that there is an overlap between the formal sector and the MSE sector), 35.4% of the employment in industries, and 12.9% of the employment in services (a low percentage due to the influence of the public and administrative sectors).

Table 4 3 Non-agricultural MSE Labour Force

Sectors	Women		Men		Both		% of MSEs
	Total employed	Employed in MSEs	Total employed	Employed in MSEs	Total employed	Employed in MSEs	
Agriculture	4 173 071	—	3,503,515	—	7,676,587	—	—
Industries	143 069	63 372	703,362	236,668	846 431	300,040	35.4
Trade	539 586	594 932	613,645	577,382	1,153 231	1,172,314	101.7*
Services	2 000,145	132 271	1 165,213	276,385	3 165,358	408,656	12.9
Total	6 855 871	790 575	5 985 735	1 090,435	12,841,607	1,881 010	14.6
Total non agricultural	2 682 800	790 575	2 482,220	1 090,435	5,165 020	1 881,010	36.4

* Such a discrepancy is due to rounding off errors as one cannot expect to obtain equal figures from the households and from the enterprises in a sample survey.

Source: National MSE Baseline Survey 1999 (CBS, K Rep and ICEG)

In the 1999 survey, SEs with more than ten workers employ only 5% of total MSE workers. On this basis, an analysis of the total non-agricultural employment sector and the microenterprise (ME) sector (excluding small enterprises) leads to a residual balance amounting to more than 3.4 million. This balance comprises of the modern sector (public, administrative, and private) which CBS follows up in its annual Economic Survey, in 1999, employment in the non-agricultural modern sector is estimated at 1,468,400, a figure that still leaves a balance of 1.9 million invisible workers. Most of these unclassified workers are women in services (75%). Such a result calls for further investigations and improvements in the measurement of the various components of the labour force, including the modern sector. In many countries, home-based work has increased as a means for firms (MSEs or non-MSEs) to sub-contract and escape legal, fiscal and social duties (as those workers are not registered or declared). Although it is generally agreed that this form of employment is not very developed in Kenya, it can also be emphasised that knowledge of such structures in the labour force has still to be improved.

4.2 Informal Sector and MSEs: Gaps and Overlaps

Although the 1999 survey focused on MSEs, it is also necessary to consider the informal sector because at both national and international levels and for macroeconomic analyses of labour force and GDP, the concept of *informal sector* is consistently and widely accepted. Also, comparative data are now available for many countries. The two concepts are compatible provided they exclude incorporated firms from their scope, and reconcile the microenterprises employing up to ten persons. The question might then be raised as to whether some of the microenterprises should be counted in the formal sector.

Three arguments can be presented in this respect: the incorporated microenterprises are not included in the definition used for MSEs; the international definition of *informal sector* is very flexible such that professionals, for instance, may or may not be included, depending on national circumstances and practices. Thirdly, in a sample the size of the 1999 National MSE Baseline Survey, the probability is low that professionals or formal microenterprises are significantly represented and it can easily be taken as negligible at the extrapolation stage.

In 1993, the 15th International Conference of Labour Statisticians adopted an international definition of the *informal sector* in order to improve the measurement of the labour force. In the same year, the fourth revision of the System of National Accounts included the definition of informal sector as a major component for the measurement of production in the household sector. The recommended operational criteria take into consideration legal status, type of accounts, and number of workers, or registration. While most of these criteria are included in the definition of informal sector by the annual Economic Survey, the 1999 National MSE Baseline Survey defines the informal sector differently.

In this respect, the concept of MSE is theoretically broader than the concept of informal sector and the survey results inform of the importance of this gap: no more than 154 267 workers are employed in small enterprises (SEs) with ten or more workers and this is 5% of total MSE employment. Practically, the MSE sector as measured by the 1999 survey is actually smaller than the informal sector for several reasons. To begin with, it is usual in an enterprise survey and especially when the interviewer does not administer the questionnaire on the worksite, that owners underestimate the number of their employees (paid, unpaid and non-permanent, casual and part-time workers). Secondly, domestic servants are included in the international definition of informal sector, but these do not constitute MSEs in Kenya. Also, home-based workers have not been recorded as MSEs (and they are not actually MSEs) but they may or may not have been declared by the MSEs or formal firms which hire or sub-contract them. Consequently, this unobserved component of the labour force is referred to as the *informal-unclassified* component or the *invisible* workers.

Table 4 4 Total Non agricultural Employment, Employment in MEs (excluding SEs), and Residual Balance

Sectors	Women		Men		Both		Residual Balance		
	Total employed	Employed in MEs	Total employed	Employed in MEs	Total employed	Employed in MEs	Women	Men	Both
Industries	143 069	81 191	703 362	204 514	846 431	285 705	61 878	498 848	560 726
Trade	539 586	541 126	613 645	547 202	1 153 231	1 088 463	1 540	66 443	67 983
Services	2 000 145	118 081	1 165 213	234 494	3 165 358	352 575	1 882 064	930 719	2 812 783
Total non agricultural	2 682 800	740 533	2 482 220	986 210	5 165 020	1 726 743	1 945 482	1 496 010	3 441 492

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Table 4 5 Components of the Residual Balance

Sectors	Residual Balance			Modern Sector			Unclassified		
	Women	Men	Both	Women	Men	Both	Women	Men	Both
Industries	61 878	498 848	560 726	53 200	321 400	374 600	8 678	177 448	186 126
Trade	1 540	66 443	67 983	401 000	692 800	1 093 800	1 482 604	304 362	1 786 966
Services	1 882 064	930 719	2 812 783						
Total non agricultural	1 945 482	1 496 010	3 441 492	454 200	1 014 200	1 468 400	1 491 282	481 810	1 973 092

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

This issue is important for the measurement of GDP because the national accounts and especially the accounts of the informal sector, have to be settled on the labour force. In other words, invisible workers are part of an extended definition of the informal sector which would include workers not declared by their employers.

It is generally assumed that the incomes from MSEs and especially from microenterprises (70% of which are one-person enterprises) are very low and that the potential for earning a living, for investment and for growth is weak. The results of the 1999 National MSE Baseline Survey give a more balanced view: on average the micro and small entrepreneur generates a gross income (which includes own remuneration) of Ksh 6 008 per month (Table 4 6). The legal monthly minimum salary for a general labourer amounted to Ksh 2 363 in 1999; hence the entrepreneur's income is 2.5 times higher than minimum wage and compared to GDP per capita (Ksh 1,003 in 1998, equivalent to Ksh 1 672 per month), it is 3.6 times higher. The lowest average income is observed in trade and the highest in services. The average woman's income is less than a man's; the ratio being only 57%.

Even the salaries paid by MSE entrepreneurs to their hired workers are not as low as expected and assumed by economic analysts and researchers: the average wage amounts to Ksh 6 496 (Table 4 7) representing 2.7 times the minimum salary (4.5 times in urban areas and 0.8 time in rural areas). The average MSE wage is lowest in manufacturing (2.2 times the minimum salary) and highest in services (5.6 times).

Table 4 6 Average Monthly Income of MSE Entrepreneurs (Ksh)

	Manufacturing	Trade	Services	Mean
Women	3 634	3 455	12,872	4 344
Men	5,507	5 519	17 523	7,627
Both	4,869	4,370	15 730	6 008
In multiples of the minimum salary				
Women	1 5	1 5	5 4	1 8
Men	2 3	2 3	7 4	3 2
Both	2 1	1 8	6 7	2 5

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Table 4 7 Average MSE Monthly Salaries (Ksh)

Manufacturing	Construction	Trade	Services	Urban	Rural	Mean
3,771	5,192	7 852	13,130	10 973	1 845	6 496
In multiples of the minimum salary						
1 6	2 2	3 3	5 6	4 6	0 8	2 7

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

CHAPTER FIVE

Estimates in Gross Domestic Product

The National MSE Baseline Survey 1999 had, as one of its main objectives, the compilation of simplified accounts for the MSEs. Such accounts refer to the incomes of the entrepreneurs, their operating expenditures, including purchase of raw material and payment of wages and taxes. These accounts have been duly adjusted for seasonal variations. The balance between revenues and operating expenditures results in value added, while the balance between value added and wages and taxes gives the entrepreneur's gross income (or operating surplus) (see Table 5.1).

At the aggregate level GDP is obtained by summing up all value added generated by the economic units, but at the individual level these accounting procedures highlight the income earned by the micro and small entrepreneurs.

Coming to the estimation of the contribution of MSEs to GDP, a gross estimate is generated by simply applying the value added per worker in MSEs to the total number of workers in MSEs. According to this procedure, the contribution of MSEs would represent 18.9% of the current GDP in 1998 (and 25.5% of non-agricultural GDP).

In order to improve the procedure, two separate estimates have been generated. One on the basis of the results of MSEs owned as a main activity and a second one which considers secondary owners. The contribution of the MSE sector then drops to 18.4% of GDP and to 25.0% of non-agricultural GDP. This estimate still leaves the issue of the invisible labour force. If the unclassified labour force were taken into account, say on the assumption of a value added per head (which would be one-quarter of the average from the survey), then the contribution of the MSE sector (the informal sector in a broad sense) would come to 30.2% of the total GDP.

The exercise in Table 5.2 is tentative and does not present definitive answers. The invisible labour force may well have been taken into account in the output generated by those enterprises which have not declared them. Part of the MSE sector may also have been accounted for in the current national accounts. If we assume that the MSE-informal sector is already taken into account in the current GDP at a level comparable with that in other African countries (Table 5.3), then it becomes possible to measure the underestimation of the GDP. However, if we assume that no account has been taken of the sector, then the current GDP should be enlarged by the exact size of the measured MSE sector, and then this sector would represent only 18 to 23% of such GDP.

Table 5 1 Simplified Monthly Accounts for Main and Secondary MSE Owners (In '000 Ksh for revenue and expenditures, In Ksh for value added per enterprise and per worker)

	Manufacturing	Construction	Trade	Services	Total
REVENUE	6,031,127	250,593	24,287,502	6,771,101	37,340,323
REVENUE + Stock variation	6,211,582	254,461	26,275,880	7,225,621	39,967,545
Raw materials	1,098,168	35,041	2,321,913	1,036,196	4,491,318
Purchases for resale	3,513,167	114,034	16,659,662	1,571,826	21 858,690
Rent of premises	81,231	6,742	326,053	191,100	605,126
Electricity	8,286	1,008	109,396	98,331	217,022
Water	3,616	—	50,424	46,038	100,078
Telephone	9,518	253	47,359	82,430	139,559
Insurance	339	—	20,398	117,504	138,240
Transport	181,855	6,050	1,155,825	232,458	1,576,189
Repairs/Maintenance	50,343	1,535	361,056	312,281	725,215
Other costs	119,160	1,412	381,743	151 955	654,269
VALUE ADDED	1,145,900	88,386	4,842 051	3,385,501	9,461,838
Salaries and Wages	297,837	75,937	527,524	550,016	1 451,314
NSSF	—	357	30,424	6,332	37,114
Licences and Taxes	71,227	705	532,198	112,244	716,374
GROSS INCOME	776 836	11,388	3,751,905	2,716,908	7 257,037
No of enterprises	159 553	16,949	858 596	172,717	1 207,815
No of workers	307,289	34,217	1,435,319	355 502	2,132 327
Mean size of enterprise	1 9	2 0	1 7	2 1	1 8
VALUE ADDED per entrepreneur	7 182	5 215	5 639	19 601	7 834
VALUE ADDED per worker	3 729	2 583	3 374	9 523	4 437
GROSS INCOME per enterprise	4 869	0 672	4 370	15 730	6 008
Stocks at start	917,741	45 865	15,250 377	1,977,461	18 191,444
Stocks at end	737,286	41,997	13,261,999	1 522 941	15 564 222
Stock variations	180,455	-3,868	1,988,378	454 520	2,627 222

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Table 5 2 MSE and Informal Sector Shares of GDP, According to Various Definitions

Definition of MSE sector	Value added (in Ksh million)	% of current GDP	% of non- agricultural GDP
Gross estimate	113 532	18 9	25 5
MSE sector, main owners	97,725	16 2	22 0
MSE sector, main and secondary owners	111,011	18 4	25 0
MSE sector main and secondary + informal unclassified	181 857	30 2	40 9

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Table 5 3 Informal Sector as a Share of Non-agricultural GDP and Total Employment in Various Developing Countries

Country	Year	% non-agric employ	% non-agric GDP	% total employment	% total GDP
Tunisia	1995	48.7	22.9	37.8	20.3
Morocco	1986	—	30.7	—	24.9
Benin	1993	92.8	42.7	41.0	27.3
Burkina Faso	1992	77.0	36.2	8.6	24.5
Chad	1993	74.2	44.7	11.5	31.0
Ghana	1988		58.3		31.4
Kenya	1999	71.6	25.0	28.8	18.4
Mali	1989	78.6	41.7	13.3	23.0
Mauritania	1989	75.3	14.4	—	10.2
Mozambique	1994	73.5	44.8	7.6	38.9
Niger	1995	—	58.5	27.2	37.6
Senegal	1991	76.0	40.9	—	33.0
Tanzania	1991	—	43.1	19.6	21.5
Sub Saharan Africa*		78.2	42.5	18.4	27.8
South Africa	1995	18.9	7.2	16.6	6.9
Korea	1995	—	16.9	—	15.9
Philippines	1996	65.1	—	—	28.2
India	1990–91	88.2	48.1	34.4	32.4
Non weighted arithmetic mean (without South Africa)					

Source: Charmes 1998, National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Consequently the third estimate in Table 5.2 (18.4% of GDP) is the most refined and is therefore adopted by the 1999 National MSE Baseline Survey as the most reliable estimate of the MSE sector's contribution to GDP, given that information on the invisible labour force is still unverified.

The methodology used to compute GDP has to be clarified and improved just as national accounts need a new momentum in order to address the issues raised by the estimation of the contribution of a few challenging sectors. For example, subsistence agriculture, the MSE sector and the non-recorded, invisible labour force seem to be increasing their share to GDP and not decreasing as rapidly as generally assumed. The results of the National MSE Baseline Survey 1999 should give an impetus to the pursuit of such an objective.

CHAPTER SIX

Entrepreneur and Business Profiles

6.1 Age of Entrepreneurs

The 1999 National MSE Baseline Survey estimated the national mean age of entrepreneurs to be 35 years with men entrepreneurs being slightly older than the women at 36 and 33 years respectively. The mean age of entrepreneurs in the urban areas is 35 for men and 33 for women while in the rural areas the respective ages are 36 and 34. Thus rural and urban MSE entrepreneurs by gender are virtually not statistically different.

Analysing the age factor further by age groups, it is observed that most (83%) of the entrepreneurs are in the age bracket 16 to 45 years. Notably, the formal sector retiring group (56 years and above) do not seem to have made a major impact on the MSE sector. The participation of this group is, however, indicated to be slightly higher in rural areas than in the urban areas.

The policy implications of the age of entrepreneurs has not received as much attention in the literature as other attributes. However, the age of the entrepreneur could have a bearing on the dynamism of the enterprise as age has a bearing on experience, health and drive of the entrepreneur. Shimooka (1996) investigated the correlation between the need for skills and certain situational variables in Kenya which included age, firm size and length of time in business. However, there was no statistically significant correlation between these variables.

6.2 Formal Education

A summary of the distribution of the profiles on education is shown in Table 6.1. The table shows that more than half of all the entrepreneurs in the country have education up to primary school level. The next largest group is the secondary level category. This group is almost two-thirds the primary level group.

An examination of the education profiles further indicates noticeable differences by gender and urban/rural areas. In urban areas, the balance between men with primary and secondary education is evenly distributed (42.7% to 47.4%) while the gap between the women is bigger (51.6% to 37.4%). These disparities are more magnified in rural areas where 55.6% of the men have primary education and 35.5% have secondary education. Likewise, in the rural areas, 61.1% of the women have primary education and 20.2% have

secondary Overall, the men entrepreneurs have higher levels of education than the women entrepreneurs Furthermore, about 10% of all the entrepreneurs have no formal education, that is 13.7% of the women and 6.8% of the men

The 1993 survey only addressed the issue of technical training levels of the entrepreneurs and did not address regular academic schooling background However, this was addressed in the 1995 survey Table 6.1 gives a comparison between 1995 and 1999 and shows that the MSE entrepreneur is today more literate and educated than the MSE entrepreneur of 1995 This could be attributed to the rising levels of unemployment among secondary school and university graduates who eventually end up in the sector as an action of last resort However, the pattern of distribution of the levels of entrepreneur education in the two periods is still quite similar, with a concentration at the primary school level followed by secondary school level Shimooka (1996) obtained similar levels of distribution with 47.0% primary, 59.0% secondary and 1.0% with no education at all However, the sample was based on urban areas where K-Rep has lending programmes which perhaps explains the higher education levels recorded in the results

Table 6.1 Levels of Education Attained by Entrepreneurs (%)

Education	1995	1999
None	20.4	10.6
Primary	55.3	54.4
Secondary	23.2	33.1
Higher	1.2	1.8

Source: National MSE Baseline Survey 1999 (CBS, K-Rep and ICEG)

Education is expected to have an important bearing on the performance of MSEs The relationship between levels of revenue, membership in business associations and education was analysed Table 6.2 on gross revenue by level of education exhibits the relationship between these two variables The highest proportion of entrepreneurs with the highest levels of revenue was found in the postgraduate group while the highest proportion of those with the lowest revenues was found among those with no education

Table 6.2 Gross Monthly Revenue Returns by Level of Education (%)

Ksh	None	Nursery	Primary	Secondary	U/grad	P/grad	Other
Below 2,000	23.2	65.3	19.6	10.1	4.4	—	31.3
2,001–5,000	24.5	12.1	21.5	17.3	4.0	—	24.0
5,001–10,000	21.4	17.1	22.1	22.4	4.4	—	—
10,001–20,000	19.9	—	17.4	20.7	20.6	10.4	20.5
20,001–50,000	4.7	5.6	12.7	17.6	4.1	9.6	3.8
50,000+	6.4	—	6.7	11.9	62.6	80.0	20.5

Source: National MSE Baseline Survey 1999 (CBS, K-Rep and ICEG)

Another parameter investigated in relation to education levels is the type of organisation to which MSE entrepreneurs belong. This relationship is shown in Table 6.3. Looking at the two most important frequencies for each educational group, it is clear that most entrepreneurs (76.3%) are not members of any of the indicated associations. However, looking further at the distribution of the remaining who are members of any of the associations, we find that the most popular associations are merry-go-rounds but mainly among those who either have no education or those who have gone up to secondary school. For university level entrepreneurs, the most popular association was 'other business association'.

Table 6.3 Education Level and Membership in Support Groups (%)

Education	None	MSE assoc	Other business	Merry -go-round	Women's assoc	Other
None	79.6	3.5	0.3	6.4	8.7	1.5
Nursery	84.7	—	—	15.3	—	—
Primary	75.3	3.3	1.9	12.3	6.5	0.7
Secondary	77.3	3.3	4.0	9.8	5.4	2
U/graduate	65.5	6.4	15.3	6.4	—	6.4
P/graduate	60.0	—	40.0	—	—	—
Other	72.3	—	—	3.4	24.2	—
Total	76.3	3.3	2.6	10.7	6.4	0.6

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

Membership in a business association is useful in that it brings one into possible business contacts, protection and promotion of business interests and the potential for financial as well as non-financial assistance. That may explain the preponderance of most entrepreneurs in merry-go-rounds.

Other business organisations to which most graduate entrepreneurs belong probably represent higher level business organisations which provide avenues for advancement.

Various other cross-tabulations can be made on the relationship between education and other variables. In 1995, cross-tabulations were made on level of education and access to non-financial assistance, level of education and receipt of credit, and level of education and start-up capital. Shimooka (1996) also examined the relationship between the level of education of the entrepreneurs and access to business training. All these studies have confirmed education as an important attribute in business performance and in accessing resources and facilities for the business. This implies that with the rising education level of the MSE entrepreneur as demonstrated above, we may expect an increase in the demand for more and better supporting services to the MSE sector.

6.3 Training

The level of entrepreneurship development was further investigated in terms of the type of training the entrepreneurs had received outside academic

schooling in terms of management technical training marketing and counseling From the results presented in Table 6 4, it can be seen that training which is an important aspect of entrepreneurship, is seriously lacking in the MSEs On the whole 85% of the entrepreneurs have not received such training The usual disparities between urban and rural areas and between men and women also exist, although they are not very pronounced These disparities in lack of training are at the level of 84 3% for urban areas and 85 6% for rural areas, and 86 9% for women and 83 4% for men For those who have received training, the most common is technical in both urban and rural areas and for both women and men

Table 6 4 Type of First Training Received by Entrepreneurs by Gender and Location, 1995-1999 (%)

Training	Urban			Rural			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
None	79 6	88 4	84 3	85 2	86 0	85 6	83 4	86 9	85 1
Management	2 3	1 1	1 7	0 0	1 1	0 5	0 8	1 1	0 9
Technical	11 7	6 1	8 7	7 9	8 4	8 1	9 1	7 5	8 3
Marketing	0 5	0 5	0 5	1 0	0 6	0 8	0 8	0 5	0 7
Informal	2 3	1 1	1 6	1 0	2 2	1 6	1 4	1 8	1 6
Consultancy	0 5	0 4	0 5	1 5	1 1	1 3	1 2	0 9	1 0
Counseling	1 8	1 7	1 7	2 5	0 6	1 6	2 2	1 0	1 6
Other	1 2	0 7	1 0	1 0	—	0 5	1 1	0 3	0 7
Total	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

The issue of training was investigated further by looking at the training required for the employees of MSEs as well as for the owners of the enterprises Such data are presented respectively in Tables 6 5 and 6 6 About half the respondents indicated that there was no need for training of their employees while about a quarter indicated that they required management training for their employees A much lower percentage indicated that they required training in technical fields followed by marketing This pattern of national demand for training for employees was similarly reflected among rural and urban areas and among the genders except in the case of marketing which commanded a higher priority among women than technical training and vice versa for men

Table 6 5 Type of Training Required for Employees of MSEs by Gender and Location

Training	Urban (%)			Rural (%)			Total (%)		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
None	52 9	55 4	54 2	49 8	52 4	51 0	50 8	53 6	52 1
Management	23 3	18 0	20 5	28 1	19 5	24 1	26 5	18 9	22 8
Technical	12 6	9 9	11 2	10 4	9 2	9 9	11 1	9 5	10 3
Marketing	8 1	11 9	10 1	8 1	11 4	9 6	8 1	11 6	9 8
Don't know	2 0	3 6	2 9	1 4	5 4	3 2	1 6	4 7	3 1
Other	1 2	1 2	1 2	2 3	2 2	2 2	1 9	1 8	1 8
Total	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Table 6 6 reveals the type of training required by the owners of enterprises there is a greater demand for management training of owners (23 1%) than any other type of training However there are sectoral differences which reflect greater demand in technical training than in management in the sectors of manufacturing and construction The table also shows that more than half (52 3%) of the entrepreneurs do not feel the need for training at all

Table 6 6 Type of Training Required by MSE Owners According to Activity (%)

Economic activity	None	Manage- ment	Technical	Market- ing	Don't know	Other
Manufacturing	47 5	15 1	25 3	7 2	3 5	1 4
Electricity, water	23 5	53 0	23 5	—	—	—
Construction	74 3	2 9	12 2	—	1 3	9 2
Trade	54 0	24 3	6 1	10 8	3 2	1 6
Transportation communication	42 6	23 4	25 9	4 8	3 3	—
Financial services	61 5	32 0	3 3	3 3	—	—
Other services	40 6	27 5	21 2	9 3	0 9	0 6
Mean	52 3	23 1	10 3	9 8	2 9	1 6

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Table 6 7 examines the relationship between the possession of professional/vocational certificates and the revenue of MSEs and can be compared with the formal/academic qualifications in Table 6 2 It is apparent from both Tables 6 2 and 6 7 that education and possession of vocational certificates have an important relationship with levels of income However the relationship appears weaker in the case of vocational certificates than in the case of formal education

Table 6 7 Monthly Revenue by Vocational/Professional Certificate (%)

Ksh	None	Trade test	Ord diploma	Higher N D	CPA/ CPS	Cert	Other	Total
Below 2 000	17 0	16 3	10 2	6 7	2 7	16 4	20 0	16 6
2,001–5,000	20 9	17 9	26 5	—	18 6	19 1	21 4	20 5
5 001–10 000	22 6	19 5	10 3	49 0	—	21 0	11 0	21 6
10,001 20,000	19 0	22 6	11 7	—	24 2	17 0	35 0	19 1
20 001 50,000	12 3	14 6	16 8	6 2	27 6	16 0	1 9	13 0
50,000+	8 2	9 0	24 6	38 1	26 9	10 4	10 7	9 3
Total	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

In recent times there has been a substantial research focus on the issues of training It has been observed that the supply of training has so far been based to a certain extent on what the trainers think is required rather than the established needs of the entrepreneurs Tables 6 4, 6 5 and 6 6 tend to confirm this finding Table 6 4 shows that there has hitherto been a bias in

favour of the supply of technical training while Tables 6 5 and 6 6 point to management training as the more important preference by the entrepreneurs. Another important finding from these studies is that training within the small business sector forms the greater part of their training opportunities as compared to training from public institutions (Shimooka 1996, Daniels et al 1995)

Furthermore, Table 6 8 indicates that those who indicated having taken some training were mainly self-sponsored. This has implication in terms of entrepreneurs' willingness to attend courses and is discussed further below.

Table 6 8 Sources of Sponsorship for Training for MSE Entrepreneurs

Sources of sponsorship	%
Self	66.6
NGO	3.2
Government	7.1
Private business institution	9.2
Church	5.5
Other	8.4
Total	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep, and ICEG)

6 4 Business Capital

The pattern of capital investments was investigated on the basis of sectoral considerations. The mean initial capital used to start a business was Ksh 40,500 while the mean amount of additional capital injected into each business was Ksh 24,300. Table 6 9 shows further details of the start-up capital for 1995 and 1999. There has been an upward trend in the nominal amounts of start-up capital since 1993. In 1993, the percentage of MSEs starting with Ksh 10,000 or less was 89%, in 1995 this was 88.4%, and in 1999 this was 81.2%. However, for all the years, the amount of start-up capital is indicated to be quite small for most MSEs.

Table 6 9 Start-up and Additional Capital for MSEs (%)

Amount (Ksh)	Start-up capital		Additional capital
	1995	1999	
1-1 000*	62.5	38.8	27.9
1,001-5 000	19.6	31.3	27.7
5 001-10,000	6.3	11.1	10.9
10 001-20 000	4.3	8.7	7.9
20 001-50,000	3.8	5.5	4.1
50 001-100 000	2.4	2.4	2.9
100 001-500 000	0.9	1.8	3.2
500 001+	0.1	0.4	3
Total	100.0	100.0	100.0

* The starting bracket for start up capital in 1995 was Ksh 0-1 000 while in 1999 it was Ksh 1-1 000

Source: National MSE Baseline Survey 1999 (CBS, K Rep, and ICEG)

The main source of start-up capital as well as additional capital was overwhelmingly family or own funds, being 90.4% for start-up capital and 80.0% for additional capital as seen in Table 6.10. This finding is similar to that observed in 1993 and 1995 as well as in other studies (Oketch et al 1991). Thus there is much need for financial support to MSEs.

Table 6.10 Main Source of Start up and Additional Capital (%)

Source	Start-up capital	Additional capital
Family/own funds	90.4	80.0
Family/friends loan	5.4	7.8
Money lender	0.7	0.1
Bank	0.6	1.3
Non bank credit institution	0.3	1.0
Rotating credit society	0.8	1.6
Government loan	0.2	0.8
NGOs	0.1	1.3
Cooperatives	1.0	1.6
Trade credits	0.1	0.3
Other	0.3	4.3
Total	100.0	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

6.5 Technology

Technology was investigated in terms of ownership or use of machines, these machines are operated by electricity, fuel, human power, or animal power. Most MSEs (93.1%) do not own machines, the machines owned or used are human-powered. This situation was analysed further according to economic activity (see Table 6.11). It can be seen from Table 6.11 that most of the machines are found in the trade sector.

Table 6.11 Proportion of Economic Activity by Types of Machine Power (%)

Economic activity	Electricity	Fuel	Human-powered	Animal-powered
Manufacturing	16.6	15.2	10.1	-
Construction	1.2		2.1	
Trade	51.5	61.7	77.3	91.7
Transportation communication	1.2	11.3	1.1	
Finance	2.5	4.5	1.1	2.7
Other services	27.1	7.3	8.4	5.5
Total	100.0	100.0	100.0	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

To follow up the technology issue further, human skill in MSEs was taken as another proxy for technology. The results as shown in Table 6.12 reveal a high percentage of workers in MSEs who lack skills. As with education, the percentage of men with skills is larger than that of women.

Table 6 12 Proportion (%) of MSEs with Skilled and Semi-Skilled Workers by Gender and Size of Enterprise (%)

No of workers	Skilled men	Skilled women	Semi-skilled men	Semi-skilled women
0	90.5	93.8	89.1	91.1
1	7.3	5.0	8.5	7.4
2	1.3	0.7	1.4	1.3
3	0.4	0.2	0.5	0.1
4+	0.5	0.3	0.5	0.0
Total	100.0	100.0	100.0	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

In summary, the use of machines is relatively low, and for those MSEs which have them, the predominant machines are human-powered, likewise the skilled human resource levels are low in the sector. The conclusion is that technological levels in MSEs are very low and in drastic need of relevant supporting policies.

6.6 Inter-Firm Linkages and Networks

Inter-firm linkages were analysed in terms of main sources of inputs, main buyers of MSE products and services, and subcontracting. Tables 6.13–6.16 make it clear that linkages between MSEs and non-MSEs, be they government or the private sector, are very weak. The only significant links are with other MSEs and individuals. It is only in the utilities sector (water and electricity) where there are linkages with non-MSEs in the supply of inputs for the MSEs, the reason being that these are controlled by large monopolies.

Table 6 13 Main Source of Inputs for MSEs by Activity (%)

Activity	MSEs	Non-MSEs	Far-mers	Direct imports	Indivi-duals	Govt	Other
Manufacturing	45.7	8.1	10.0	0.2	28.9	–	7.7
Water, electricity	26.0	74.0	–	–	–	–	–
Construction	46.8	4.3	2.1	–	32.1	–	14.7
Commerce, trade	51.6	6.4	13.9	0.8	26.1	0.3	1.0
Transportation, communication	42.6	11.6	3.1	–	39.9	2.8	–
Finance	49.9	15	–	3.1	15.7	–	15.9
Education, health	47.5	5.5	3.5	1.9	38.1	0.4	3.1
Total	50.3	6.8	12.3	0.8	27.3	0.3	2.3

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

From Tables 6.15 and 6.16, it is evident that subcontracting, a practice that could greatly boost the MSE sector, is very weak.

Table 6 14 Main Buyers of MSE Products and Services by Activity (%)

Activity	MSEs	Non-MSEs	Farmers	Individuals	Govt	Others
Manufacturing	12.1	0.2	5.7	79.8	—	2.2
Water, electricity	—	—	—	100.0	—	—
Construction	15.1	—	11.2	69.9	1.9	1.9
Commerce, trade	6.8	0.8	2.2	88.2	0.6	1.3
Transportation	5.0	4.8	—	90.2	—	—
Finance	21.8	1.7	3.0	67.0	—	5.5
Education, health	2.9	2.3	—	91.2	0.4	3.1
Total	7.5	0.9	2.6	86.8	0.5	1.6

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

Table 6 15 Subcontracting of MSE Inputs by Activity (%)

Activity	Sub-contractees				
	None	MSEs	Non-MSEs	Farmers	Govt
Manufacturing	94.7	4.7	0.4	—	0.2
Water, electricity	100.0	—	—	—	—
Construction	96.2	3.8	—	—	—
Commerce, trade	95.9	2.1	0.5	0.7	0.7
Transportation	94.2	5.8	—	—	—
Finance	86.0	8.5	5.5	—	—
Education, health	98.6	0.9	0.5	—	—
Total	95.8	2.5	0.6	0.5	0.6

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

Table 6 16 Subcontracting of MSE Products and Services by Activity (%)

Activity	Sub-contractors				
	None	MSEs	Non-MSEs	Farmers	Govt
Manufacturing	94.6	3.3	2.1	—	—
Water, electricity	100.0	—	—	—	—
Construction	77.6	14.9	—	—	1.9
Commerce, trade	94.5	2.9	—	0.4	0.4
Transportation	91.4	8.6	—	—	—
Finance	85.8	5.7	8.5	—	—
Education, health	95.0	0.9	4.1	—	—
Total	9.4	3.1	2.1	0.3	0.4

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

6.7 Reason for Starting a Small Business

Asked why they went into micro and small businesses, 32.7% said that they had no other alternative while 21.8% said that they were attracted by the prospects for better incomes. Another 13.7% said that they preferred self-employment. However, asked further why they chose the particular activity within the MSEs, the prospect for better income commanded higher priority. High demand for the products and the fact of being skilled in the particular activity also came up high in this respect. The two considerations are presented in Table 6 17.

Table 6 17 Reasons for Starting Small Businesses and Specific Activities (%)

Answer	Reason for starting MSE	Reason for choice
Skilled in the activity	6 6	14 6
Family has worked in this activity	3 9	6 9
Advised by others	2 9	5 2
Availability of capital required	7 1	9 6
High demand/ready market	5 7	17 3
Advertisements	0 2	0 1
No other alternative	32 7	18 4
Better income	26 0	21 8
Prefer self employment	13 7	4 1
Other	0 8	2 0
Total	100 0	100 0

Source National MSE Baseline Survey 1999 (CBS K Rep, and ICEG)

Thus, Kenyans are going into MSEs for want of better alternatives and for higher incomes. As the economy continues to register weak signs of growth and high levels of unemployment, these reasons for the start of MSEs will continue to be even more compelling. The prospect for markets in specific activities significantly affects the choice of the particular activity taken up. This signals the need to have supporting policies for the marketing of MSE activities including subcontracting, level playing field in competition with imports, fairs to promote products, etc.

6 8 Business Records and Bank Accounts

It was found that 64 1% of the respondents said that they do not keep any business records while 77 0% said that they do not maintain bank accounts. Among those who kept some business records, the most common type of records were books of purchases and sales only. These formed 25 0% of the respondents. The policy implications here are that MSEs need to be educated and encouraged to keep records and bank accounts to enhance their creditworthiness, increase their efficiency and boost their saving capabilities. Microfinance institutions can do a great deal in this area.

6 9 Marketing and Promotion of MSE Products and Services

The promotion of MSE products through facilities such as the electronic media, print media, trade exhibitions, posters/fliers/brochures, and private or public marketing bodies was found to be minimal. Almost half (49 2%) said that they had not done anything to promote their products/services while 42 2% said that the quality of their services and products as well as customer satisfaction was the main method of promotion of their goods and services. This latter group hence could be interpreted to be no different from the former which said that they did no promotion at all.

Turning to sources of market information, the same pattern emerges as regards the promotion of MSE products and services. The same facilities (i.e., media, information pamphlets, and marketing bodies) were investigated as sources of market information, and 62.7% said that they had no specific source of market information while 32.7% said that they relied on clientele satisfaction and quality of products as the main ways of expanding their markets.

The promotion of markets can be quite expensive and time-consuming. This perhaps partially explains why most MSEs do not go into such undertakings. There is therefore need to look further into these issues and assist in cheaper ways of promoting products and providing marketing information even if on a group basis. The *jua kali* exhibitions which have been regularly organised by the Government in conjunction with BAT is an example of such assistance to the sector. However, much more needs to be done beyond such exhibitions to enhance their MSE impact.

6.10 Business Registration and Licensing

Only 11.7% of the businesses were registered and 39.4% were operating with a license, mainly from Local Authorities. This means that 88.3% and 60.6% of the businesses were operating without registration or any license, respectively. This is a well known characteristic of microenterprises and is the source of many problems for them, especially from Local Authorities. Licensing modalities which do not pose bureaucratic or major financial burden on MSEs should be worked out. Licensing should mainly be aimed at the orderly and safe conduct of business as well as environmentally acceptable practices. Beyond that, free operations and competition should be left to prosper without hindrance.

CHAPTER SEVEN

Micro and Small Enterprise Access to Support Services

There are 260 organisations—private and public national and international—with support programmes for MSEs in Kenya. The goal of these organisations is to raise the levels of income and welfare of poor people by promoting MSEs and to generate the much-needed employment by providing a variety of assistance programmes.

The Government of Kenya has set up specialised institutions and programmes to provide credit training and technical assistance to MSEs. There are also NGOs and business associations with credit schemes for MSEs. In addition, there are multilateral and bilateral donor organisations with MSE development programmes operating in Kenya. Some of these organisations focus exclusively on enterprise development while others conduct a variety of activities in addition to MSE support programmes. These organisations vary considerably in size, visibility, effectiveness, and the efficiency with which they pursue their goals.

In an attempt to learn about the scope of these organisations, the survey asked about the different types of assistance received by the MSE operators while in business. The operators cited both formal assistance of either a financial or non-financial nature as well as informal assistance from family and friends. In general, there is considerable support for MSEs in Kenya. However, as the data from the survey show, relatively few MSEs receive such support.

7.1 Demand and Supply of Credit

Several studies on the MSE sector in Kenya have identified access to credit as a major problem affecting the growth of MSEs. Other studies concluded that while credit in the banking sector grew steadily in the past, little of this credit reached the MSE sector (Kuru 1991, Tomecko and Aleke Dondo 1992, Parker and Torres 1993, Daniels et al. 1995, Oketch et al. 1995). The 1993 Baseline Survey showed that only 9% of the MSEs had accessed credit and that only 4% of this credit was obtained from formal financial institutions (NGOs, commercial banks, SACCOs, etc). The survey noted that the bulk of MSE credit (69.1%) came from informal savings and credit associations, mostly rotating saving and credit associations (ROSCAs), friends and relatives. The 1995 Baseline Survey showed that 10.8% of the MSEs had accessed credit; of these, only 3.4% received credit from formal sources.

Kenya currently has about 150 organisations with credit programmes for MSEs; of these, 130 are NGOs. These organisations serve all regions of the country, although there are more in the urban areas. Evidence on the supply of credit by these organisations is increasing, but it is difficult to determine precise figures on credit extended to MSEs since commercial banks are under no legal obligation to report them while some microfinance NGOs are reluctant to reveal their portfolios. Lack of this information is a serious handicap in the estimation of credit supply. This notwithstanding, various attempts have been made to estimate the volume of credit

to MSEs In 1991 it was estimated that between 1983 and 1990 organisations offering credit to MSEs had provided loans worth Ksh 2 billion (Aleke Dondo 1991)

More recent estimates of the volume of credit provided to 24 MSEs (Aleke Dondo and Ongile 1994) indicate that the amounts in 1990 1991 and 1992 were Ksh 115 million Ksh 211 million and Ksh 241 million respectively Tomecko and Aleke Dondo (1992) estimated that the outstanding portfolio of organisations providing credit to MSEs in July 1992 was Ksh 1 05 billion Oketch et al (1995) estimated the supply of credit from 50 organisations in 1995 to be Ksh 847 million Although not indicating all organisations providing credit to MSEs these estimates reveal that the credit volume to the sector has been increasing over time

There is a general consensus among MSE development specialists that finance can make an important contribution to MSE development even though there is some controversy as to whether finance is the most pressing need of MSEs The controversy notwithstanding finance to MSEs is probably the only type of sustainable MSE assistance that can be provided currently It is not surprising therefore that more than half (150 out of 260) of the formal organisations with support programmes for MSEs provide credit It is beyond the scope of this survey to establish the degree to which lack of credit constrains MSEs it is clear that the majority of Kenya's MSEs operate without any form of credit

Table 7 1 shows that only 10 4% of MSEs have ever received credit from any source Overall 89 6% of the MSE operators stated that they had never received credit 2 8% reported having received loans from NGOs 2 5% from ROSCAs 1 5% from family and friends and 1 5% from commercial banks In Zimbabwe a similar pattern emerged 89% of MSE operators have never received loans for business purposes 10% received credit from family or friends 1% from formal credit institutions and less than 1% from money lenders

As shown in Table 7 1 roughly the same proportion of MSE operators reported not receiving credit in 1999 as in 1995 but those receiving credit from the various sources were different As compared to earlier years the proportion of loans from formal sources in 1999 was more (5 7% as compared to 3 4% in 1995 and 4% in 1993) This perhaps reflects the increase in numbers of support organisations providing credit to MSEs Of the formal sources NGOs are the most important source of credit This is reflected in the number of NGOs focussing their support on the

Table 7 1 Sources of Credit to MSEs (%)

Source	1993	1995	1999
None (no credit received)	85	89 2	89 6
Formal credit institutions including NGOs	4	3 4	5 7
Cooperatives	—	—	1 2
NGOs	—	—	2 8
Commercial Banks	—	—1 5	—
Government	—	—	0 2
Informal institutions	5	7 4	4 7
ROSCAs	—	5	2 5
Family and friends	—	2	1 5
Money lenders	—	0 1	0 1
Trade credit supplies	—	—	0 6
Total	—	100	100

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

provision of credit to MSEs which has increased from 46 in 1995 (Oketch 1999) to 130 in 1999

The demand for MSE credit in Kenya is the least studied aspect of the sector. To estimate the effective demand for MSE credit, one needs to survey all sources of credit for MSEs and establish all the loans they have been able to make and those that they have rejected due to inability of the entrepreneur to comply with their requirements (other than for reasons of inability of the business to absorb and repay the loans). Most institutions, however, do not maintain records of credit requests they have rejected. Even if one were to obtain such information, the effective demand picture would only emerge if one included latent demand by MSE operators who demand credit but for one reason or another (e.g. self-censorship) do not present themselves for the credit.

Table 7.2 summarises the distribution of the loans required by size. First, about 70% of the loans required do not exceed Ksh 20 000 (US\$ 285) and 96.3% do not exceed Ksh 100 000 (US\$ 1 428). Nonetheless, about 36% of the respondents require loans that exceed Ksh 100 000. There does appear to exist a difference between the size of the loans required by men and women. About 82% of the women entrepreneurs require loans that do not exceed Ksh 20 000 compared to 39.7% of the men. Relatively larger loans are required by men and jointly-owned enterprises than by women.

Table 7.2 Percentage Distribution of the Overall Loan Requirements

Amount Ksh	Men		Women		Jointly-owned		All MSEs	
	No	%	No	%	No	%	No	%
0–1 000	3 519	11.4	2,348	7.2	–	–	5,868	7.5
1 001–5 000	2 026	6.6	10,831	33.0	288	0.9	13 145	16.7
5 001–10 000	1,164	3.8	3 304	10.1	2,333	7.6	6,801	8.7
10 001–20 000	4 379	14.2	10 854	33.1	4 664	15.1	19,897	25.3
20 001–50,000	11 429	37.1	3,497	10.6	4,395	14.3	19,321	24.6
50 001–100 000	4 439	14.4	859	2.6	2 046	6.6	7,344	9.4
100 001–500 000	3 530	11.5	1,145	3.5	1 165	3.8	5,840	7.4
500 000+	303	1.0	–	0.0	–	0.0	303	0.4
Total	30 789	100.0	32,839	100.0	14 891	48.4*	78,519	100.0

* The discrepancy in the total is due to some missing data for some observations

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

7.2 Business Support Services

The second most common ingredient of MSE support is management and technical training. The former emphasises basic business skills and entrepreneurship. Organisations that provide such training do so to complement the specific occupational or artisan skills that their clients already possess. In the case of technical (vocational) training, the emphasis is on equipping workers with practical skills such as carpentry, masonry, tailoring or weaving. Other MSE support includes technical assistance (TA) or business extension, marketing outlets, pre-constructed sheds etc. TA is a broad label that includes assisting MSE operators with routine business practices such as bookkeeping and inventory costing and more specialised techniques of marketing, production and appropriate technology choice. In general, TA is given on a one-to-one basis at the business site. A few organisations provide marketing outlets for their MSE clients' products.

There are many public and private institutions providing technical training. Public sector institutions comprise of three national polytechnics, 17 institutes of technology, 20 technical training institutes, over 600 youth polytechnics, National Youth Service, Christian Industrial Training Centres, YMCA Vocational Training Centres and three industrial training centres. These institutions are a formal, organised response to school leavers, the unemployment problem and lack of skills. The Government and various development organisations established these institutions with a strong vocational bias with the objective of self-employment in the sector.

Non-formal training encompasses all those learning and training activities and strategies which are undertaken outside of established formal training institutions. They are aimed at equipping workers with skills or upgrading workers' skills. Non-formal training is distinguished from vocational training in that it is occupation-linked and production-oriented. It is a specific form of training geared to meet the short-term occupational needs of those who enroll in such programmes.

Training in the MSE sector is carried out largely through the apprenticeship system, particularly in manufacturing and services. In a 1992 study by the World Bank, it was estimated that 40% of all trainees acquire their skills through apprenticeship. It was further reported that most MSE operators have acquired their own skills within the sector.

This type of training has several advantages: it is cost-effective, it provides the best preparation for self-employment, it respects traditional values and hence offers the most appropriate formula for absorbing young rural migrants suddenly brought face-to-face with a modern urban social structure. Moreover, it has already enabled a considerable number of MSE operators to start up their own businesses.

As shown in Table 7.3, only 7% of MSEs have received any form of non-financial assistance in the last four years (1995–1999) despite the increasing number of formal and informal organisations in the country offering all types of non-financial assistance. The 1995 survey also reported that only 7% of MSEs had been reached with some form of non-financial assistance while the 1993 Baseline Survey reported that only 4% had been served. Table 7.3 shows that the rural enterprises have a slightly higher chance of receiving non-financial assistance (7.4%) than their urban-based counterparts (6.3%).

Access to non-financial assistance varies by sector. Of particular note is that 14.4% of the enterprises in the service sector have used non-financial assistance compared to 6.2% in manufacturing, 3.7% in trade activities and 3.4% in construction.

Table 7.3 Percentage Distribution of Non-financial Assistance Received by Urban and Rural Enterprises

Type of Assistance	Urban		Rural		All	
	No	Col%	No	Col%	No	Col%
None	393 802	93.6	730,218	92.8	1,124 020	93.1
Management training	4 618	1.1	13 810	1.8	18 428	1.5
Technical training	6 304	1.5	12 084	1.5	18 388	1.5
Marketing assistance	5,497	1.3	8 631	1.1	14 128	1.2
Materials/Service assistance	7 183	1.7	12 084	1.5	19 267	1.6
Multiple assistance	2 051	0.5	6,905	0.9	8 956	0.7
Other	1 174	0.3	3,453	0.4	4 627	0.3
Total	420 628	100.0	787 186	100.0	1,207 814	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

7 3 Access to Infrastructure

A major constraint facing many MSEs in Kenya is the lack of adequate infrastructure. The term *infrastructure* relates to adequate electrical power, access roads, water and sewerage, and telecommunications. Good infrastructure has the effect of promoting competitive private sector growth by lowering the cost of doing business.

In Kenya, provision of infrastructure is constrained by a public sector that is unable to provide steady and reliable services. From 1968, the Government of Kenya through the Kenya Industrial Estates put up hundreds of sheds for MSEs throughout the country, and these were complete with all required utilities. The National Council of Churches of Kenya made a contribution to the infrastructure issue by developing an industrial area for small-scale enterprises in Nairobi. Other more recent attempts at dealing with this issue include the *nyayo* sheds. These have been a disappointment because they were not planned, were poorly located, and lacked utilities; consequently, their impact has been low. More recently, the GOK put up 600 sheds in five urban areas. Generally, however, MSEs are excluded from the town planning process; therefore, land is seldom zoned exclusively for the needs of MSEs.

Access to utilities is a proxy for the quality of infrastructure available to the entrepreneur. While easy access to utilities is important in all business activities, it is particularly critical in the manufacturing and service sectors where access to utilities may determine the type of technical processes to be used.

Availability of electricity on-site was used to measure the access to electricity. Overall, 50.7% of the MSEs had no access to electricity. As expected, urban MSEs have better access to electricity, with only 43.5% lacking access to electricity compared to 76.6% of the rural MSEs (Table 7.4). There are also differences by gender, with 50.1% of men having access while only 45.3% of the women operating MSEs have access. Of the jointly-owned enterprises, 49.2% have electricity on-site (Table 7.5).

Table 7.4 Access to Electricity by Location (%)

Status	Urban	Rural	All
Have access	56.5	23.4	49.3
No access	43.5	76.6	40.7
Total	100.0	100.0	100.0

Source: National MSE Baseline Survey 1999
(CBS, K Rep. and ICEG)

Table 7.5 Access to Electricity by Type of Ownership (%)

Status	Men	Women	Jointly-owned	All
Have access	50.1	45.3	49.2	49.2
No access	49.9	54.7	50.8	50.8
Total	100.0	100.0	100.0	100.0

Source: National MSE Baseline Survey 1999
(CBS, K Rep. and ICEG)

Survey information on access to telephone services is presented in Tables 7.6 and 7.7. Only 32.4% of all enterprises have access to telephone services. Access to telephone service varies by location and gender: 36.4% of urban MSEs have access while only 18.1% of the rural MSEs have access to telephone services. Gender differences are not very significant, with 33.2% of men having access compared to 30.7% of women and 36% of jointly-owned enterprises.

An efficient and adequate road system is essential for economic development, especially since it facilitates and promotes linkages within an economy. Table 7.8 shows that only 42% of MSE operators have access to a tarmac road while 24.7% have access to murram roads. As expected, urban MSEs have better access to tarmac

Table 7 6 Access to Telephone by Location (%)

Status	Urban	Rural	All
Have access	36 4	18 1	32 4
No access	63 6	81 9	67 2
Total	100 0	100 0	100 0

Source National MSE Baseline Survey 1999
(CBS K Rep and ICEG)

Table 7 7 Access to Telephone by Type of Ownership (%)

Status	Men	Women	Jointly-owned	All
Have access	33 2	30 7	36 0	32 3
No access	66 8	69 3	64 0	67 7
Total	100 0	100 0	100 0	100 0

Source National MSE Baseline Survey 1999
(CBS K Rep and ICEG)

and murram roads with only 28 7% lacking access compared to 42 3% of rural MSEs. As shown in Table 7 9 gender differences also appear only 38 4% of MSEs owned by women have access to tarmac roads compared to 45 2% of MSEs owned by men. From the survey it is clear that while the extent of the tarmac road network in Nairobi and Mombasa is sufficient many roads are in a deplorable state and problems relating to road transport significantly increase the cost of doing business. Respondents were asked to give their impression about the condition of roads (Table 7 10) only 5% thought they were in a good state while 61 1% stated they were in a bad state.

Table 7 8 Access to Roads by Location (%)

Road	Urban	Rural	All
Tarmac	49 9	9 8	42 0
Murram	21 4	40 6	24 7
Earth	21 1	27 9	22 7
Footpaths	7 6	14 4	9 2
Total	100 0	100 0	100 0

Source National MSE Baseline Survey 1999
(CBS K Rep and ICEG)

Table 7 9 Access to Roads by Type of Ownership (%)

Road	Men	Women	Jointly-owned	All
Tarmac	45 2	38 4	45 5	41 9
Murram	23 4	26 7	32 2	26 0
Earth	23 2	23 8	18 8	22 9
Footpaths	8 2	11 1	4 3	9 2
Total	100 0	100 0	100 0	100 0

Source National MSE Baseline Survey 1999
(CBS K Rep and ICEG)

Table 7 10 Observed Condition of Roads (%)

Road condition	Urban	Rural	All
Good	6 1	2 3	5 0
Fair	32 6	36 9	33 9
Bad	61 3	60 8	61 1
Total	100 0	100 0	100 0

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

As shown in Table 7 11 only 16 5% of MSEs have water within the premises while 19 8% have water within the compound. Most MSE operators (63 7%) do not have water on their premises and rely on water bought from vendors often at a cost higher than what was accessible through either of the alternatives. Water shortage was reported as a problem by 79 2% of the enterprises using water on their premises.

As shown in Table 7 12 only 8% of the MSEs are connected to a sewer, another 30 5% have some form of drainage The majority (more than 60%) use open space or rivers and streams to dispose of their effluent and other wastes More than two-thirds (69 5%) of the MSEs use pit latrines As expected urban enterprises have better access to flush latrines than their rural counterparts It is noteworthy that more than 90% of rural MSE operators use pit latrines Table 7 14 shows that the overwhelming majority of MSE operators (78%) rely on either burning or dumping of their solid wastes Only 19 3% have their solid wastes collected by local authorities (16 7%) or collected by a private company (2 6%) Access to solid waste disposal services vary by location Urban areas have better access with 20 2% having their solid wastes collected by local authorities compared to 5 7% for rural MSEs

Table 7 11 Access to Water (%)

	%
In premises	16 5
Within compound	19 8
Less or equal to 500 metres	31 7
More than 500 metres	32 0
Total	100 0

Source National MSE Baseline Survey 1999
(CBS K Rep and ICEG)

Table 7 12 Mode of Liquid Waste Disposal (%)

	Urban	Rural	All
Drainage	32 9	20 7	30 5
Open space	55 6	75 0	59 5
Rivers and streams	1 5	1 8	1 6
Sewer	9 3	2 4	8 0
Other	0 6	0 0	0 5
Total	100 0	100 0	100 0

Source National MSE Baseline Survey 1999
(CBS K Rep and ICEG)

Table 7 13 Type of Toilet Facilities by Location (%)

Facility	Urban	Rural	All
Flush	33 7	6 1	27 1
Pit latrine	62 7	90 9	69 5
Other	3 6	3 0	3 5
Total	100 0	100 0	100 0

Source National MSE Baseline Survey 1999
(CBS K Rep and ICEG)

Table 7 14 Mode of Solid Waste Disposal (%)

Burning, dumping	78 0
Collection by Local Authority	16 6
Collection by private company	2 6

Source National MSE Baseline Survey 1999
(CBS K Rep and ICEG)

To gauge the extent of insecurity of tenure and identify who is most at risk of displacement the survey data distinguished between MSE operators who own their workspace those with a lease and those who consider themselves squatters As shown in Table 7 15 30 1% of all MSE operators own their workplace while 4 1% have a lease to the space One-quarter (25 4%) rent the workspace from which they operate their businesses and 7 8% have temporary occupation licenses Adding these four categories together it can be said that 67 4% of MSE operators have some security of tenure to their workspace as compared to 74% reported in the 1993 Baseline Survey Of the remaining 32 6% 11 8% have free occupation of their workspace while only 2 8% consider themselves as squatters These 14 6% of MSE operators are considered to have "insecure tenure" meaning they could be removed from their workspace at any time The remaining 18% of MSE operators have some other form of agreement most of them operate from traditional markets in the rural and urban areas where they pay a daily fee on market days Security of tenure varies by location Rural MSEs have slightly more security of tenure than their urban

counterparts with 68.6% falling in the secure category compared to 65.2% for urban MSEs. However, the percentage of urban MSEs owning their workspace is very small relative to rural MSEs.

Table 7.15 Distribution of Workplace by Location (%)

Tenure	Urban	Rural	All
Own	11.8	40.1	30.1
Lease	6.1	3.1	4.1
Rent	39.3	17.8	25.4
Temporary occupation license	8.0	7.6	7.8
Free occupation	13.4	11.0	11.8
Squat	5.2	1.4	2.8
Not applicable	15.8	18.8	17.7
Other	0.3	0.2	0.3

Source: National MSE Baseline Survey 1999 (CBS K Rep. and ICEG)

CHAPTER EIGHT

Changes in Micro and Small Enterprise Activities

In this chapter two aspects of changes within the Kenyan MSEs will be briefly discussed. The first is change in the number of workers within an enterprise since the enterprise was acquired. The second change is in the number of MSEs in Kenya over the last four years. This second change will also look at the characteristics of enterprises that closed over the last four years.

8.1 Changes in the Number of Regular Workers

The change in the number of workers is calculated from the time an enterprise was started. It was shown that the average age of the MSEs is 6.0 years and the median (i.e. the value below or above which 50% of the MSEs are found) is 3.3 years. It should be noted that the number of respondents whose gender classification was not identified account for a lion's share of all the respondents. For a very large number of the enterprises either the gender of the owner was not indicated at the time of the visit or the respondent was not the owner but a worker or family member.

Both the average (arithmetic mean) and median ages for MSEs in the rural areas are larger than those for the other strata. For example, the average age of MSEs at the national level is 6.9 years for the rural areas compared to 6.1, 4.9, and 5.4 years respectively for the Nairobi and Mombasa, other major towns, and rural towns strata. It should be remembered that although the average age of the existing enterprises is 6 years, the distribution of their ages range from less than a year to almost 80 years. In fact, almost half of the MSEs are less than 3 years old, three-fourths of them are less than 7 years, and 99% are less than 38 years. However, except at the aggregate level, the growth rate of the number of workers in an enterprise is calculated using an enterprise's actual age and does not depend on the average. During an average life of 6 years, the typical enterprise increased the number of its regular workers by an effective annual (compound) rate of 1.4%. From a statistical analytical point of view, it is safe to conclude that there has been no growth at all.

The fact that the MSEs as a group generally show a positive growth rate indicates that there are some that grew at a very high rate. On the other hand, this may not be the case as an enterprise that started with one person will grow by 100% if it doubles its size within one year. Furthermore, at the very initial stage, practically all firms start with few workers with the intention of increasing the number soon thereafter. A more accurate picture might have been obtained if the "initial" number of workers used was the one that existed say after one year or at least after six months of operation. Such an approach might have accommodated the number that was going to be absorbed initially, whether the enterprise grew or not.

MSEs owned by women and those found in the rural areas performed no less than those owned by men and those found in the urban areas. Looking at the two-digit

ISIC enterprise grouping the groups that seem to have showed some growth are those in the hotel/restaurant business (which actually grew at an annual compound rate of 5) and wood-based manufacturing (which grew at a rate of almost 4). Others which at least did not decline may include construction, retail, repair services and entertainment. However, when extreme (outlying) values that are found beyond 3 standard deviations of distribution of the growth rate are excluded, only wood-based manufacturing seems to maintain its moderate growth level. Those that showed the most decline are in the earthenware group.

Finally, about 3% of the MSEs more than doubled their labour force. However, for every group found within the two-digit ISIC category, at least 50% of them showed no growth at all. About three-fourths (77.1%) of the MSEs showed no growth at all, another 5% actually declined, and 18% showed an increase.

8.2 Patterns of Growth in the Micro and Small Enterprise Sector

As mentioned in Annex I, which addresses the issues raised by the comparisons between the 1993, 1995 and 1999 Baseline Surveys and the reliability of the results from 1999, the differences in methodologies make the comparisons difficult. In particular, it seems that the 1993 and 1995 surveys may have exaggerated the number of establishment-based enterprises which have been enumerated twice (in households and outside households) compared to the home-based and street-based enterprises, which can be enumerated only through the declaration of the individuals. Trends in labour force and employment have been addressed in the preceding section without referring to the 1993 and 1995 surveys; hence we will limit the comparisons to a few characteristics and structures of the MSE sector. Between 1993 and 1999, employment in manufacturing and in services has slightly decreased while it increased in trade and restaurants, a trend observed in most African countries.

Table 8.1 Changes in MSE Employment by Major Economic Activity (%)

Activity	1993	1995	1999
Manufacturing	26.9	34.5	15.6
Trade, hotels and restaurants	64.1	58.6	71.9
Services	14.2	6.8	12.4
Total tertiary	78.3	65.4	84.3
Total employment	2,050,844	1,200,000	2,184,272

Source: K Rep. National Baseline Survey 1993, 1995; CBS; K Rep. ICEG National MSE Baseline Survey 1999.

The bulk of surviving MSEs have the same current size as when they started: 80.3% of one-person enterprises remained this size after several years of existence; 65.1% of two-person, 54.3% of three-person and 49% of four-person and over survived. The larger the size, the greater the risk of dropping in size over the years: 19.8% of two-person enterprises have decreased the number of their workers. The same occurred for 30.4% of three-person enterprises and 51% of enterprises with four or more employees. Conversely, the lower the size at start, the higher the probability of increasing in size: 19.3% for one person against 15.4% for three-person enterprises. The risk of decreasing and the probability for increasing are respectively aggravated or lessened for women owners and for trade businesses.

Table 8 2 Percentage Distribution of Enterprises by Age

Age of enterprise (years)	1993 survey	1995 survey
Less than 2	42.4	38.3
2-5	28.1	27.1
6-10	13.0	14.4
11-20	11.7	11.8
21-30	3.4	5.6
31-50	1.5	1.9
51+	0.0	0.9
Total, all enterprises	100.0	100.0

Source: K Rep. National Baseline Survey, 1993, 1995, CBS, K Rep, ICEG,
National MSE Baseline Survey 1999

8 3 Business Closures

Table 8 3 summarises the number and proportion of closed MSEs over the last four years (i.e. since the last baseline survey). The table shows that there were 11,360 enterprises which closed. Nation-wide, 40.6% of the closed enterprises were in the manufacturing sector and 42.9% were in services. Thus, together the manufacturing and services sectors account for over 80% of the closed enterprises. What is interesting here is that although the trade sector accounts for almost 70% of the total number of existing MSEs in Kenya, they account for only 15% of the closed enterprises.

Within the urban location, the manufacturing sector accounts for 16.3% of all closed MSEs, and the services sector accounts for 60.3%. Within the manufacturing sector, about 20% of the MSEs closed were located in the urban areas; the balance of 80% were found in rural areas. The largest percentage of all closed MSEs is found in the urban areas. Thus, 68.7, 70.1, and 89.9% of the closed enterprises respectively in trade, services, and construction are found in urban areas.

Table 8 3 Distribution of Closed MSEs by Location

Sector	No	Urban		No	Rural		Total	
		Col%	Row%		Col%	Row%	No	Col%
Manufacturing	907	16.3	20.0	3,623	64.8	80.0	4,530	40.6
Trade	1,143	20.5	68.7	522	9.3	31.3	1,665	14.9
Services	3,357	60.3	70.1	1,429	25.6	29.9	4,786	42.9
Construction	164	2.9	89.9	19	0.3	10.1	183	1.6
Total	5,608	100.0	49.4	5,752	100.0	50.6	11,359	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep, and ICEG)

Table 8 4 presents the size distribution of closed MSEs and the gender of their owners. Since some of the respondents did not own any MSEs at the time of the visit, any capable member of a household provided the information. As a result, the number of owners whose gender classification could be explicitly noted is much smaller than in the case of the existing enterprises.

Among the one-person units, men owned 4.3%, women owned 5.9%, and the gender of the rest of the owners (89.8%) was unknown. Also, for MSEs owned by women,

82.6% were one-person units, another 9.6% were two-person units, and the rest were of size group 3–5. None of the closed MSEs with more than five regular workers at the time of closure had been owned by women.

It can be concluded then that when all the closed MSEs are combined, almost three-quarters of them (71.7%) were one-person units, and less than 2% had more than six workers. It is clear that the smaller the enterprise, the greater the incidence of closure. Since proportionately more women are concentrated among the smaller MSEs, there is greater likelihood that they will experience business closure. This is reinforced by the fact that no enterprise with a regular labour force greater than 15 is reported closed.

Table 8.4 Size of MSEs at Time of Closure by Gender of Owner

Owners Statistical variables		1-person	2	3–5	6–10	11–15	Total
Men	No	2,384	1,133	474	34	12	4,045
	Row%	59.1	28.1	11.8	8	3	100.0
	Col%	32.4	57.7	58.2	52.3	17.0	39.3
Women	No	4,746	512	257	19	52	5,585
	Row%	85.0	9.2	4.6	3	9	100.0
	Col%	64.5	26.1	31.5	29.2	74.3	54.3
Jointly owned	No	233	319	84	12	6	655
	Row%	35.6	48.7	12.9	1.8	9	100.0
	Col%	3.2	16.3	10.4	18.5	8.7	6.4
Total	No	7,375	1,964	816	64	70	11,341
	Row%	71.7	19.1	7.9	6	7	100.0

Source: National MSE Baseline Survey 1999 (CBS, K Rep. and ICEG)

The rate of business closure within the different strata, enterprise sizes, business sectors, and gender of owners has been briefly noted. It seems that the impact of business closure is proportionate to the contribution of each group to the total number of MSEs in the country. Over 90% of all the closures occur in four enterprise groups: retail, hotels and restaurants, different kinds of personal services, and cloth and leather-based manufactured items. These four groups dominate the number of enterprises closed at each of the four strata. They account for about 84% of the total number of MSEs. This may indicate that the cause or problem of business closure is much more comprehensive than specific to a given enterprise or activity.

Tables 8.5 and 8.6 present some basic facts about the closed MSEs and the people who run them. The tables show that a typical closed MSE existed for only 4.2 years and had an average (arithmetic mean) of 1.5 workers. However, at the time the enterprise closed, the number of its regular workers had declined by about 12% from the number of workers it started with (namely, 1.7) as well as from the highest number it ever employed (1.7 workers as well). Since the average size of the existing MSEs is about 1.8 workers, it is clear that enterprises that closed down were, on the average, small.

Table 8.5 shows that closed MSEs in the rural areas are about the same size as their urban counterparts, but they had, on average, a longer life before closing. Their owners/respondents were slightly older too (32.3 years compared to 36.7). At the stratum level, the average size of the number of regular workers for each closed MSE

is about the same (although those MSEs in Nairobi and Mombasa seem to have larger initial labour force sizes) When it comes to the average life of existence of the closed MSEs and the average current age of the operators there emerge some differences The MSEs tend to live longer and their proprietors tend to be older as one moves from urban to rural areas

Table 8 5 Distribution of Key Variables of Closed MSEs by Gender of Owner and Location

Major variables	Major categories	Average (arithmetic mean)				Respondent age
		Workers at start	Highest no workers	at close	Years MSE existed	
Location	Urban	1 7	1 7	1 5	3 2	32 3
	Rural	1 6	1 7	1 5	5 2	36 7
Stratum	Nairobi and Mombasa	1 9	1 6	1 5	2 9	31 2
	Other major towns	1 6	1 7	1 6	3 4	32 4
	Rural towns	1 5	1 5	1 4	3 5	34 3
	Rural areas	1 6	1 7	1 5	5 2	36 7
	Mean	1 7	1 7	1 5	4 2	34 5
Owner	Men	2 0	2 0	2 0	3 2	36 2
	Women	1 5	1 5	1 3	3 6	33 7
	Unknown	1 7	1 7	1 5	4 3	34 7
Mean		1 7	1 7	1 5	4 2	34 5

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

With respect to the gender of owners men tend to operate larger MSEs at all stages of their existence and tend to be older On the other hand MSEs owned by men seem to have shorter existence Thus the average number of regular workers of a typical male owned MSE at the beginning end and point of highest employment is 2 0 The corresponding averages for MSEs owned by women are 1 5 1 3 and 1 5 respectively But when it comes to duration the average for MSEs owned by men is about 3 2 years compared to 3 6 years for the MSEs owned by women

Table 8 6 compares the above information by relating it to various categories of MSEs namely the two-digit ISIC classification of enterprises (some have been combined) From the table it can be seen that some of the short-lived closed MSEs were in some service areas transport and entertainment with an average existence of 2 years It also seems that when wholesale and retail activities are combined in one enterprise the risk of closure increases substantially rather than if one operates one activity at a time From the average sizes of the enterprises shown in the table this may be particularly true when the enterprise is so small that it cannot afford (does not have the capacity) to deal with large volumes of purchases and sales

From Tables 8 5 and 8 6 it is clear that the main cause of business closure may not be due to the advanced age of the operator or owner The average age of the latter at the national level is 34 5 years among the industrial groups the highest age recorded is 50 years and occurs in the construction group This may suggest that there are a number of younger operators who closed their businesses

Table 8 7 gives MSE owners responses as to why they closed their businesses The table shows responses from respondents differentiated by location and gender Looking at the national level first the two most important reasons seem to be lack of operating funds (mentioned by 37 2% of the respondents) and personal reasons (28 6%) A third mentioned by 10 6% of the respondents is lack of demand since

Table 8 6 Two-Digit ISIC Average Values of Key Variables of Closed MSEs

Two-digit ISIC group	Workers at start	Highest no of workers	Workers at close	Yrs MSE existed	Respondent age
Food, beverage manufacturing	2 8	2 9	2 0	17 5	44 1
Textile/Leather manufacturing	1 2	1 4	1 3	5 7	30 1
Wood based manufacturing	2 1	2 7	2 5	5 9	37 6
Chemical, non-metallic manufacturing	1 6	1 6	1 6	23 2	31 9
Basic metal, hardware manufacturing	1 6	2 0	1 6	6 8	34 0
Other manufacturing	2 0	10 0	5 0	12 0	25 0
Construction	1 4	1 6	1 4	4 1	50 2
Wholesale and retail	1 0	1 0	1 0	2 0	38 0
Wholesale	2 0	2 4	1 9	3 6	38 5
Retail	1 4	1 4	1 3	3 9	34 6
Hotels/Restaurants	2 3	2 9	2 4	3 6	35 9
Land transport	5 0	5 1	3 4	2 5	30 0
Legal, business, real estate	1 3	1 3	1 3	2 0	25 7
Entertainment	1 5	1 5	1 5	2 5	28 5
Repair, domestic, personal services	2 7	3 4	2 1	3 0	29 9
Other services	7 0	9 1	8 5	6 3	36 8
Total	1 7	1 7	1 5	4 2	34 5

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

both shortage of operating funds and lack of adequate demand or revenue reinforce each other it is not surprising that both of these loom large in the responses of the operators These three problems are the same for each gender group as well as for each stratum Personal reasons are usually related to family responsibilities and sickness and may explain why a third of the women gave this reason for business closure compared to only a fifth of the men

There do not seem to be many differences in the various strata as far as the reasons for business closures are concerned The leading reported causes are ranked similar in almost all the strata When it comes to gender however while lack of operating funds is the most critical for both men and women other reasons seem equally important For example men seem to be more affected by changing businesses perhaps they start better and bigger MSEs or perhaps they are more willing to take risk by trying new ventures For women though too much competition may be the most serious cause of business closure In fact lack of customers and too much competition account for 26 8% of the reasons given by women the corresponding response for men is 12 5% Given that it has already been shown that women tend to operate smaller enterprises usually in the retail areas such keen competition is not unexpected

There is another area where closed MSEs owned by women differ from those owned by men While 62% of the men's closed MSEs were found outside (as opposite to inside) the locality or district surveyed the corresponding percentage for women's MSEs is about 54 (the national average is 57%) In other words women may be less mobile in avoiding business closure or searching for new opportunities Lack of skilled workers and problems related to legal issues pertain more to respondents in the urban areas than to those in the rural ones

When one looks at the input sources for the closed MSEs there are no significant differences between strata or gender There is a slight tendency for urban MSEs to acquire supplies from other MSEs while farmers tend to provide the same service

Table 8 7 Reasons Given by Proprietors for Business Closure (%)

Reasons	Stratum				Ownership			
	Nairobi and Mombasa	Other major towns	Rural towns	Rural areas	Men	Women	Jointly- owned	Total
Lack of customers	12.6	9.2	10.4	10.9	9.7	11.5	9.1	10.6
Too much competition	4.9	4.2	5.7	4.3	3.9	5.3	0.9	4.4
Shortage of operating funds	32.7	37.5	25.5	39.8	43.4	32.4	39.5	37.2
Shortage of stock or raw materials	2.9	2.5	2.8	2.4	2.6	2.7	0.9	2.5
Legal/Government interference	6.6	5.0	6.6	2.2	4.8	3.5	2.6	4.0
Personal reasons	27.6	27.9	34.9	28.6	20.3	33.1	41.7	28.6
Got a new job	3.6	3.3		1.7	4.5	1.1	—	2.4
Started another business	2.0	2.5	5.7	9	3.5	0.8	—	1.8
Shortage of skilled workers	6	1.7	—	—	0.5	0.4	1.8	6
Other reasons	6.4	6.2	8.5	9.1	6.8	9.2	3.4	7.9

Source: National MSE Baseline Survey 1999 (CBS, K Rep, and ICEG)

for rural MSEs. At the national level, about 60% of the MSEs get their inputs from other MSEs, while 20% get theirs from individual suppliers; farmers account for 13%.

The next two tables (Tables 8.8 and 8.9) are presented to show any differential impact of worksite location on business closure and how business closure in turn impacts on the different two-digit ISIC groups. This way, it may be possible to tell exactly which groups of enterprises are most affected by closure.

Table 8.8 compares the separate percentage distributions of both existing and closed MSEs among the different worksites. Thus, the first figure indicates that existing MSEs operating from commercial premises account for 12.6% of all existing MSEs. On the other hand, about 10.8% of the closed MSEs operated from commercial sites. By comparing these two sets of percentages, one may obtain some indication of the impact of business location on business closure. The table shows that a large proportion of enterprises operating from commercial premises and markets were closed. For example, among all existing MSEs, about 18% are located in commercial sites; by contrast, about 21% of the closed MSEs were located in such places. The least affected by location were those based in residential areas. For example, while about 18% of the existing MSEs were located in residential areas (i.e. 8.3 plus 10.2%), only 10% of the closed MSEs were located in such places.

It would be interesting to compare the total number of business closures over the last four years (1995–1999) with the number of new enterprises started during the same period. This would be helpful in giving some indication of what is happening to the net change of the number of existing MSEs in the country as a whole and within each ISIC group. A simple comparison is shown in Table 8.9.

The table shows the raw numbers of both new (existing) enterprises established over the last four years and the corresponding number of closed MSEs over the same period. The relative percentage of each ISIC group both within the new and closed MSEs is also separately indicated. By comparing these two proportions, one has an idea as to which ISIC groups are losing more MSEs due to closure. Furthermore, the last column, "Percentage Net Change," shows the net change for each ISIC group over the last four years (Percentage Net Change = [New minus Closed] / [Closed] times 100).

Table 8 8 Percentage Distribution of Impact of Business Closure by Location

Worksite	Nairobi/ Mombasa		Other major towns		Rural towns		Rural areas		National average	
	Exist	Closed	Exist	Closed	Exist	Closed	Exist	Closed	Exist	Closed
Commercial premises	12 6	10 8	25 3	18 3	19 3	19 8	14 4	26 6	17 9	21 4
Industrial site	1 6	1 3	1 0	1 7	0 4	2 8	1 9	1 0	1 4	1 3
Market	4 1	6 8	3 8	9 2	7 1	10 4	3 2	4 5	3 9	6 5
Open market	6 3	7 3	9 5	19 2	11 8	19 8	9 6	13 9	9 1	14 7
Kiosk	15 6	13 0	8 7	11 3	9 6	14 2	11 3	9 2	11 2	10 7
Open ground with stand	10 2	10 8	11 5	9 2	15 0	12 3	6 9	7 8	9 8	8 9
Open ground without stand	14 6	23 2	15 6	10 0	13 2	6 6	11 0	10 3	13 4	12 0
Jua kali shed	1 1		0 6	1 3	0 7	0 9	0 2	1 2	0 6	1 0
Mobile	9 1	8 1	11 7	11 7	13 6	11 3	16 5	13 8	13 2	12 1
Building site and roads	0 9	2 0	0 6	1 3	0 4	0 9	0 4	1 0	0 6	1 2
Residential with special outfit	12 3	6 4	5 7	2 5	1 8		9 9	3 3	8 3	3 3
Residential without special outfit	10 5	9 8	5 9	4 6	6 4	0 9	14 5	7 6	10 2	6 7
Other	1 2	0 6	0 2		0 7		0 2		0 5	0 1

Source: National MSE Baseline Survey 1999 (CBS, K Rep and ICEG)

Looking at the last column of Table 8 9 then it is clear that in wholesale no new enterprises were created to replace those that closed. In retail on the other hand 7 896 new ones were started but 8 673 were closed or a net loss of 9%. Specific activities that seem to have made substantial net gains include personal services, metal-based activities, land transport, wood-based activities, non-metallic activities (such as earthenware) and garment and leather goods activities.

As far as disposing of the closed MSEs is concerned, most of them were abandoned as they dealt with services or small retail activities. Such was the disposal of 70% of the MSEs. This is particularly true for many closed MSEs owned or operated by women. Another 21% were sold to individuals and 5% were taken over by other existing MSEs.

It does not seem that a lot of tools exchanged hands after the MSEs closed since many of the activities were either in services or small-scale retail. To the extent that tools and equipment were used in the closed MSEs, about a fifth were sold with the businesses, another fifth went to family members (or friends) and 3% were used to start new businesses. Looking at gender, men tended to sell their tools and equipment with the business or take them to new businesses. Because women seem to have less opportunity to go on to other businesses, they tended to give their tools to family members and friends.

Table 8 10 shows current activities or employment of those proprietors who closed their MSEs. At the bottom of the table it shows that about 57% are (or claimed) to be unemployed, another 18% are working (employed) for someone else, about 14% are running new (replacement) businesses, and less than 1% are retired. Most of the unemployed are women. For example, about 47% of the men said that they are unemployed, and the corresponding percentage for women is 65%. On the other hand, there are relatively more wage workers among men than among women.

Table 8 9 New and Closed MSEs in the Two-Digit ISIC Categories (1995–1999)

Two-digit ISIC group*	Col%	New MSEs		Closed MSEs		% net change
		No	Row%	No	Row%	
Food beverage manufacturing	3 0	257	2 3	208	1 8	23 6
Textile cloth and leather manufacturing	5 1	525	4 7	326	2 9	61 0
Wood based items manufacturing	3 3	284	2 6	146	1 3	94 5
Chemical and non metallic manufacturing	0 9	40	0 4	23	0 2	73 9
Basic metal and hardware manufacturing	0 7	56	0 5	22	0 2	154 5
Other manufacturing	0 7	31	0 3	19	0 2	63 2
Special and general contractors	1 8	63	0 6	73	0 6	13 7
Wholesale and retail	–	–	–	12	0 1	100 0
Wholesale	0 1	–	–	189	1 7	-100 0
Retail	66 5	7,896	71 1	8 673	76 5	9 0
Hotels and restaurants	6 3	687	6 2	954	8 4	28 0
Land transport and communication	1 6	273	2 5	129	1 1	111 6
Legal business, real estate, etc services	3 0	99	40 9	3	0 0	3,200 0
Repairs domestic personal etc services	3 6	563	5 1	491	4 3	14 7
Other services	3 4	325	425 0	71	0 75	357 7
Total	93 7	11,451	100 0	11,341	100 0	1 0

Some groups have been combined

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Table 8 10 Current Activities/Employment of Operators of Closed MSEs

Gender and stratum	Statistical variables	Another MSE	Employed for wages	Retired	Unem-ployed	Other	Total
Men	No	611	996	47	1,872	434	4,045
	Row%	15 4	25 2	1 2	47 3	11 0	100 0
	Col%	45 9	57 5	64 6	33 6	39 6	39 3
Women	No	617	597	26	3,403	580	5,585
	Row%	11 8	11 4	5	65 2	11 1	100 0
	Col%	46 4	34 4	35 4	61 0	52 9	54 3
Jointly owned	No	103	140		303	83	655
	Row%	16 3	22 2		48 2	13 2	100 0
	Col%	7 7	8 1		5 4	7 6	6 4
Nairobi and Mombasa	No	271	479	2	802	30	1,759
	Row%	17 1	30 2	1	50 6	1 9	100 0
	Col%	20 4	27 7	2 8	14 4	2 8	15 5
Other major towns	No	595	619		1 464	60	3,165
	Row%	21 7	22 6		53 5	2 2	100 0
	Col%	44 7	35 7		26 2	5 4	27 9
Rural towns	No	134	91	6	384	18	683
	Row%	21 2	14 4	1 0	60 6	2 9	100 0
	Col%	10 1	5 3	8 4	6 9	1 7	6 0
Rural areas	No	330	543	65	2,929	989	5 734
	Row%	6 8	11 2	1 3	60 3	20 4	100 0
	Col%	24 8	31 4	88 8	52 5	90 1	50 6
Total	No	1 331	1 733	73	5 579	1,097	11,341
	Row%	13 6	17 7	7	56 9	11 2	100 0
	Col%	100 0	100 0	100 0	100 0	100 0	100 0

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

Looking at the stratum or locational aspect of the matter a certain pattern emerges. More urban proprietors tend to start new MSEs than their rural counterparts; also urban proprietors seem to have more opportunities for wage employment than the rural ones. Finally, a higher proportion of rural operators seem to be unemployed compared to their urban counterparts. When one looks at the aggregate picture about half of all the unemployed proprietors of closed MSEs are in the rural areas, yet close to a third (31.4%) of all those with wage employment are found in the rural areas. Although less than 7% of all proprietors of closed MSEs started new ones, those who did account for almost one-quarter of the national total of those who started new businesses.

CHAPTER NINE

Problems, Constraints, and Conclusions

What are the major problems and constraints faced by MSEs in Kenya? In order to provide answers to this question the survey asked entrepreneurs to report on the constraints facing their businesses and to rank these according to the perceived severity. It should be noted that these problems are the perceptions of the MSE operators interviewed and may not necessarily reflect the actual underlying problems.

While over 88.5% of the respondents reported on at least one problem (the most severe one), about 74% added a second severe constraint, and 48.7% designated a third constraint in their responses. Of the MSE operators interviewed, 11.7% reported having no business problem at the time of the survey.

Table 9.1 reports on the most severe constraints cited by entrepreneurs. Competition and lack of market problems include not having enough customers, having too many competitors, lack of product publicity, and lack of knowledge about what customers want. Lack of credit includes lack of operating funds and lack of collateral for credit. The point is often made that many other types of problems are mistakenly identified as issues of capital, poor management of inventories of raw material procurement or of marketing, all appear as a credit problem. Lack of transport includes problems involving lack of roads, high transport costs, and poor road conditions. Shortage of raw materials inputs includes lack of raw materials or high cost of raw material. Problems such as harassment by local authority officials and troubles in obtaining business licences are included in the category of interference from authorities. Lack of worksites includes problems of unavailable or inadequate business premises or high rent. Labour unavailability and worker dishonesty are typical problems. Lack of electricity includes lack or expense of electricity connection, just as lack of water includes lack or expense of water connection. Other problems include poor health care technology and inadequate access to training.

As shown in Table 9.1, access to markets for MSE products as well as problems involving access to finance constitute the most dominant and severe problems facing most MSEs surveyed in 1999. More than one-third (34.1%) of the enterprise entrepreneurs cited difficulties arising from market saturation or low demand for products. Further analysis shows that market-related problems are most severe in urban settings (61.5%) while 38.5% of the rural MSEs cited the problem.

The second most severe constraint reported in the survey relates to difficulties in accessing credit due to lack of collateral. 18.4% of all surveyed MSEs cited access to credit as a key constraint. Of these, 56.3% were in urban areas and 43.7% in rural areas.

Besides markets and credit, other problems of significance include transport (7.2%), inadequate raw materials/stocks (6.8%), interference from local authorities (6.0%), poor security (3.1%), and lack of worksites (2.5%). Problems also vary by stratum. Location appears to be a major issue determining the nature of problems facing MSEs, and the severity of each of these problems varies according to location of

Table 9 1 Most Severe Constraint(s) Faced by MSE Entrepreneurs (%)

	Urban	Rural	All MSEs
Markets and competition	61.5	38.5	34.1
Lack of credit	56.3	43.7	18.4
Poor roads/transport	34.4	65.6	7.2
Shortage of raw material and stocks	50.6	49.4	6.8
Interference from authorities	80.8	19.2	6.0
Poor security	60.0	40.2	3.1
Lack of worksites	77.7	22.3	2.5
Lack of skilled labour	49.5	50.5	0.6
Power interruptions and inaccessibility to electricity	100		0.6
Poor access to water supply	40.8	59.2	0.5
Other	9.1	7.8	9.1
No problems	11.5	8.0	11.7
Total	—	—	100.0

Source: National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

enterprises. For instance, problems associated with markets, competition, interference from local authorities, lack of worksites, and poor security are predominantly urban, while problems related to accessing infrastructure facilities (water, roads, telephones, etc.) impose constraints for rural-based MSEs.

With respect to constraints grouped together under the residual category 'other', 9.1% of the enterprises cited this as a constraint. The most important issues relate to accidents, bad weather, household responsibilities, and personal health. Most MSEs operate in ways that are closely entwined with the household; thus, any crisis in the household becomes a challenge to the very survival of the enterprise.

In general, there were four problems cited by all categories of enterprises. These relate to markets, finance, transport, and legal/security concerns. It is not surprising that MSE entrepreneurs seem to be more constrained by shortfalls of working capital (18.4%) than by shortages of stock or raw materials (6.8%). These constraints are consistent with problems experienced by MSE entrepreneurs in other countries. For example, reports by McPherson (1991, 1998) show that the four problems most frequently cited by MSE entrepreneurs in Swaziland and Zimbabwe are the same as those presented in Table 9.1.

Problems facing MSEs vary by sector. While access to market opportunities is the most severe problem affecting all sectors, it is most severely experienced by the trade, manufacturing, and construction sectors. While inaccessibility to electricity and poor access to water supply are severe problems for the manufacturing subsector, they are cited less frequently by the other subsectors. Interference from local authorities, insecurity, and lack of space appear to be trade subsector problems. Construction enterprises did not report any problems related to access to electricity, water, or space. The service subsector faces constraints linked to capital and interference from local authorities.

For the most part, the pattern of problems reported in 1999 is quite similar to that reported in the 1993 and 1995 Baseline Surveys. However, the problems of lack of markets and competition appear more acute in 1999 as compared to the situations

Table 9 2 Most Severe Business Problems Reported by MSE Entrepreneurs (%)

	1993	1995	1999
No problems	18	6 6	11 7
Markets	30 1	24 2	34 1
Capital	14 2	32 7	18 4
Inputs	24 7	13 7	6 8
Interference from local authorities	4 8	4 1	6 0
Transport	7	11 2	7 2

Source: National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

in 1993 and 1995. This may be attributed to the economic downturn of 1999 and increased competition due to entry of many operators particularly in the low return MSE activities. Fewer MSE entrepreneurs cite input difficulties (most commonly the high cost of inputs) in 1999 than in 1993 and 1995, and a lesser proportion report lack of capital as their most pressing problem, perhaps reflecting the fact that the problem of markets is more actively felt in 1999 than in 1995.

In order to help meet the job demand of the country and improve the quality of life for the lower income class, the government as well as various development agencies have designed a number of support initiatives targeting MSEs and their contribution to alleviate the twin problems of unemployment and poverty. Thus, in the last seven years, there have been three nation-wide surveys of MSEs in Kenya and a number of similar studies limited in scope and coverage. The 1999 National MSE Baseline Survey attempts to improve the empirical approach both by relating each MSE to each household member and by collecting data that would help estimate the contribution of the MSE group to GDP.

The 1999 National MSE Baseline Survey shows that there are close to 1.3 million MSEs employing approximately 2.4 million people. About two-thirds of the total number of MSEs are in the trade group (wholesale and retail). A grouping of the MSEs into the two-digit ISIC shows that retail trade, wood-based products in manufacturing, repairs in services, and bars, hotels, and restaurants in the catering group dominate the landscape of MSEs in the country. With the exception of the repairs group, the remaining three industries are found in the rural areas.

Not only are almost all of the MSEs of the micro sub-group (i.e. those with total employment of ten people or less), but about two-thirds of them are found in the rural areas. In fact, about 70% of them are one-person enterprise units, i.e. there is only one person working in the enterprise. Hence, about 70% of the total employment in MSEs is accounted for by owners working in the enterprises. The average size is about 1.8, an average that is consistent with many other regional studies of MSE activities.

The distribution of MSEs between male and female owners is about equal: 51% are men and 49% are women. The distribution of all workers (including owner-operators) is also about equal: 53% men, 47% women.

The study also shows that the average income of a typical MSE operator is about Ksh 6,008; women earn less (Ksh 4,344) than men (Ksh 7,627). Furthermore, the contribution of MSEs to the national GDP is estimated to be about 18%.

Regarding MSE access to support services, the demand for such services may vary

by industry location size of enterprise and sex of the operator With respect to financial access the 1999 National MSE Baseline Survey shows that only about 10% ever received credit from any source yet lack of credit is one of the constraints most commonly mentioned This constraint should be seen against the fact that close to 40% of the enterprises require less than Ksh 10 000 and that almost 70% require less than Ksh 20 000 The main formal institution sources of credit were NGOs while the main informal sources were the ROSCAs

Despite the increasing number of formal and informal organisations in the country offering all types of non-financial assistance only 7% of the MSE owners have received any non-financial assistance The most common types of assistance received relate to management and technical training as well as marketing and specialised business services

Access to infrastructure including water roads and sewerage is reportedly very inadequate for industries utilities problems related to electricity and telephone are also mentioned by the larger and more specialised groups of enterprises

The most serious problem mentioned by MSE operators is the lack of adequate market for their individual business Lack of credit being second other serious problems include lack of security and poor cooperation from public authorities shortage of raw materials and problems related to worksite

By way of conclusion and from the facts extracted from the 1999 National MSE Baseline Survey it should be noted that special consideration is needed regarding the following issues

- Given that the majority of MSEs are found in the rural areas business support agencies need to increasingly adjust and supply their services to rural based MSEs
- Given that demand for individual enterprise products or services is reportedly the most serious problem attempts should be made to improve product quality in order to effectively compete both in and outside the country and that possible support intervention could include selective extension services
- Due to complaints about local authorities and insecurity local participant seminars and meetings could be held to emphasise the importance of MSEs to the local economy and their contribution to national GDP and hence the need to create business relationships that would facilitate MSE growth
- Given that macroeconomic concerns impact enormously on the MSE sector the potential of MSEs to generate employment opportunities and incomes can best be realised once policy makers resolve key macroeconomic issues Macroeconomic policies are instrumental in creating the conditions for endogenous growth of micro and small enterprises through their effect on relative prices in the product and factor markets their impact on the perceived risk of investment and their ability to create the necessary human and social capital as well as physical infrastructure to support MSE development In the case of product markets for instance policies affecting prices of agricultural products exchange rates taxation subsidies and land tenure and distribution potentially impact on demand for MSE products and services

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ANNEX I

Comparing the 1993, 1995 and 1999 National MSE Baseline Surveys

Since the publication of the 1995 National MSE Baseline Survey, the inconsistencies in trends and structures of the MSE sector have been a major matter of concern in Kenya both for statisticians and others

As shown on Table AI 1 the number of enterprises and the number of workers in MSEs decreased considerably between 1993 and 1995. Such a result could not be taken as reliable, given the short time between the two surveys (less than 2 years). Two explanations have been suggested. The size of the sample was much smaller in 1995 compared to 1993, giving possible room for statistical bias. Secondly, there were seasonal variations: the 1993 survey was undertaken from September to November while the 1995 survey took place in May and June which means that farmers were more engaged in agricultural activities than they would have been later in the year. The definition of MSEs which excludes agriculture and more generally all primary activities, the effect on the number of enterprises and the employment generated are all of importance. However, none of these explanations have been scientifically or statistically demonstrated.

The results for the 1999 survey have brought new insights for the understanding of the MSE sector and also for the understanding of the effect of methodology upon the results. When comparing the three surveys, several features of the third should be kept in mind which explain why the 1993 and 1995 surveys could have underestimated the number of enterprises and consequently the employment in MSEs and could have overestimated the number of MSEs.

AI 1 Reasons for Underestimation in the Early Surveys

Although the procedure for extrapolation was the same for the three surveys (i.e. come to an estimate of the number of households on the basis of population projections and of an assumption for the mean household size, then allocating an average number of MSEs per household on the basis of survey results) the 1999 survey was the only one to collect information on the sampled households. The 1993 and 1995 surveys assumed the household size to be 6.6, a size which is far higher than the figures coming out of the 1993 and 1998 DHS surveys (4.8 and 4.3, respectively). Even if we take account of the knowledge acquired at the time of the first surveys, the mean household size in the 1989 population census was 4.9 and the 1993 DHS gave a size of 4.8. Such an overestimate of the household size has a very important consequence on the estimated number of households and

enterprises which may make comparison difficult Tables AI 1 and AI 2 attempt to highlight this issue

Table AI 1 presents the respective extrapolated figures for households enterprises and employment for the three surveys As clearly shown the number of estimated households in 1999 is 1.6 times higher than the 1993 figure and the estimated number of enterprises is 1.7 times higher However these results cannot be interpreted in terms of growth of the MSE sector because they are not strictly comparable given the assumptions made on household size In order to make them comparable we have re-calculated

Table AI 1a Estimated National Households by Strata

Stratum	Households					
	1993		1995		1999	
	No	%	No	%	No	%
Nairobi-Mombasa	315,479	8.5	338,267	8.5	711,367	11.7
Cities over 10,000	270,187	7.2	289,703	7.2	468,155	7.7
Cities 2,000–10,000	60,640	1.6	65,020	1.6	166,563	2.8
Rural areas	3,081,612	82.7	3,304,204	82.7	4,867,608	80.0
Total	3,727,018	100	3,997,194	100	6,084,693	100

Sources K REP (1993) National MSE Baseline Survey 1993 1995 GEMINI (1995) CBS K REP
ICEG National MSE Survey 1999

Table AI 1b Estimated National Enterprises by Strata

Stratum	Enterprises					
	1993		1995		1999	
	No	%	No	%	No	%
Nairobi Mombasa	70,411	7.7	54,990	7.8	202,313	15.9
Cities over 10,000	93,528	10.3	88,569	12.5	156,442	12.3
Cities 2,000–10,000	36,007	4.0	37,092	5.2	81,483	6.4
Rural areas	710,509	78.0	527,772	74.5	834,013	65.5
Total	910,455	100	708,423	100	1,274,251	100

Sources K REP (1993) National MSE Baseline Survey 1993 1995 GEMINI (1995) CBS K REP
ICEG National MSE Survey 1999

Table AI 1c Estimated National Employment by Strata

Strata	Employment					
	1993		1995		1999	
	No	%	No	%	No	%
Nairobi Mombasa	161,692	7.9	104,622	8.9	372,256	16.4
Cities over 10,000	212,645	10.4	171,990	14.6	264,387	11.7
Cities 2,000–10,000	84,469	4.1	65,142	5.5	122,225	5.4
Rural areas	1,592,038	77.6	833,476	70.9	1,509,564	66.5
Total	2,050,844	100	1,175,230	100	2,268,432	100

Sources K REP (1993) National MSE Baseline Survey 1993 1995 GEMINI (1995) CBS K REP
ICEG National MSE Survey 1999

National MSE Baseline Survey, 1999

the number of households in 1993 and 1995 using a mean household size of 4.8 for 1993 and 4.6 for 1995, then applied the ratios of number of businesses per household found in the respective surveys. The results of this procedure are shown in Table AI 2. The total number of households has increased by more than 18.7% from 1993 to 1999 and the number of enterprises by more than 32.7% during the same period (giving an average annual growth of 5.4%). However, total employment in MSEs decreased by nearly 20% between the first and third survey, due to lower business size.

Table AI 2a Adjusted Number of Households for the MSE Surveys

Strata	Households					
	1993		1995		1999	
No	%	No	%	No	%	No
Nairobi Mombasa	435,595	8.5	487,484	8.5	711,367	11.7
Cities over 10,000	368,975	7.2	412,927	7.2	468,155	7.7
Cities 2,000-10,000	81,994	1.6	91,762	1.6	166,563	2.8
Rural areas	4,238,084	82.7	474,931	82.7	4,867,608	80.0
Total	5,124,649	100	5,735,104	100	6,084,693	100

Sources: K. REP (1993) National MSE Baseline Survey 1993, 1995; GEMINI (1995); CBS, K. REP, ICEG, National MSE Survey 1999.

Table AI 2b Adjusted Number of Enterprises for the MSE Surveys

Strata	Enterprises					
	1993		1995		1999	
	No	%	No	%	No	%
Nairobi Mombasa	97,138	7.7	78,972	7.8	202,313	15.9
Cities over 10,000	127,665	10.3	125,943	12.5	156,442	12.3
Cities 2,000-10,000	48,704	4.0	95,441	5.2	81,483	6.4
Rural areas	978,997	78.0	778,817	74.5	834,013	65.5
Total	1,252,504	100	1,079,173	100	1,274,251	100

Sources: K. REP (1993) National MSE Baseline Survey 1993, 1995; GEMINI (1995); CBS, K. REP, ICEG, National MSE Survey 1999.

Table AI 2c Adjusted Number of Employment for the MSE Surveys

Strata	Employment					
	1993		1995		1999	
	No	%	No	%	No	%
Nairobi Mombasa	223,068	7.9	150,249	8.9	372,256	16.4
Cities over 10,000	290,259	10.3	244,566	14.4	264,387	11.7
Cities 2,000-10,000	114,255	4.1	167,616	9.9	122,225	5.4
Rural areas	2,193,639	77.8	1,133,305	66.8	1,509,564	66.5
Total	2,821,221	100	1,695,736	100	2,268,432	100

Sources: K. REP (1993) National MSE Baseline Survey 1993, 1995; GEMINI (1995); CBS, K. REP, ICEG, National MSE Survey 1999.

It should be noted that such adjustments by household size leave the reliability of the 1995 results still pending

AI.2 Reasons for Overestimation in the Early Surveys

The main reason for overestimation lies in the method of data collection. In 1999, the interviewers were asked to enumerate, in the selected clusters, not only all the households living in the cluster and their businesses, but also all the businesses that they could find in the cluster. This is the major reason why the total number of businesses could have been overestimated, because there was no way or means to avoid double counting (especially in rural areas where households and their businesses are located in the same cluster) or extra counting (for urban areas where businesses in a given cluster are mainly operated by households living outside the cluster as there is no correspondence between the location of the household and the location where the household operates its businesses). Such an enumeration of households and businesses implies the use of different methods for extrapolating household businesses on the one hand and businesses on the other hand. It should be remembered that in 1993 a major concern in the conception of the survey was to capture the small (and medium) enterprises. In this regard, a fifth stratum had been designed which aimed at covering industrial and commercial areas. The complete enumeration of households and businesses in the clusters probably pursued the same objectives, but it should have been analysed separately.

Another problem which might have some impact on the results arises from the mixing of main and secondary activities in the first two surveys. Consequently, the published results are not directly comparable with the total labour force as from other sources. Nor are they directly useable for national accounts purpose, for the same reasons. The 1999 survey has taken care of this issue and presents the results with a clear distinction between main activities, farmers' secondary activities, and non-farmers' secondary activities.

Even the ratios of the number of businesses per household might be misleading as they have been calculated by the simple division of the total number of businesses (main and secondary) by the number of households. This procedure tends to overestimate the number of concerned households as some of them run several businesses. Automatically, this overestimate is translated into an overestimate of the total number of enterprises because the distribution of households running several businesses is not the same as the distribution of households running a single business.

AI.3 Reliability of Results

The 1999 National MSE Baseline Survey had the largest sample size of the three surveys. Adequate stratification of rural areas has also been an important concern in the sampling methodology (see Chapter 1) given the important weight of these areas in the entire sample of each survey. However, the reliability of the results is an understandable and natural question from the users, especially where trends and comparisons are not

obvious (as noted above) and where data obtained notably differ from the former or from the usually assumed levels. Data on income belong to this category.

It is usually assumed that entrepreneurs' incomes in the informal sector are generally below the minimum wage and barely providing subsistence for surviving. However, data coming from various national surveys in Africa show that income levels in the informal sector, and all the more so in the MSE sector, are often higher than the minimum wage by more than two or several times, and often they are higher than the average salary in the modern sector (Charmes 1998). Results from the National MSE Baseline Survey for 1999 are consistent with these findings, as the average entrepreneur's income is 2.2 times the minimum salary for both main and secondary activities, and 2.6 times for main activities; in services, the average income is even higher than the average salary in the modern sector.

Three questions need to be addressed in this regard: How were income data collected? Has the question of seasonal variations been solved? Does the non-response rate have an impact on the level of income resulting from the survey?

The 1999 survey questionnaire collected information on revenue, value added and income by reconstituting simplified accounts for the enterprise, in conformity with the System of National Accounts (SNA). Recording expenditures in parallel with revenues and income opens the door to the possibility for cross-checking of responses in the field as well as once the questionnaire is being supervised or at data entry where purchases of raw materials or goods cannot exceed the revenues unless stocks at end of year are much higher than at start. Furthermore, extreme values for revenues and incomes were thoroughly examined during data cleaning and appropriately corrected for by returning to the questionnaire and confronting the responses to other information given by the respondent (in particular responses to total sales, net income, and normal returns in section 7 of the questionnaire, giving room to comparisons between indirect and direct responses which proved to be under-estimated by a factor 2 in Tunisian surveys, for example). In addition, the reference to standard deviation and median values has been made as often as possible in the report.

Seasonal variations are referred to as a major issue in MSE surveys in general. In the 1999 survey particularly, they have been treated with special attention as they were supposed to explain the inconsistencies in the results from 1993 and 1995. In the 1999 questionnaire, the reference period is the past month (reduced to the day or the week where applicable and extrapolated to the month by the interviewer). It is asked of the respondent whether the reference period is a good month or a bad or normal month, the number of good, bad, and normal months per year is then recorded as well as an estimation of what is a good month or a bad month compared to a normal month. Taking account of the number of months worked in past year, all expenditures and revenues are then seasonally adjusted. Compared to non-adjusted figures, the seasonally adjusted results are much lower.

The question of non-response must be addressed. The three surveys experienced a rather high non-response rate attributed to respondent

fatigue. In a given cluster, the number of closed households that interviewers could not visit because of successive absence is far from being negligible. All surveys, and not only the MSE surveys, have treated this type of non-response by including these households in the extrapolation procedure as if they presented the same characteristics as the interviewed households. The total number of businesses results from this procedure. But when coming to the detailed questionnaires for MSEs, the total number of questionnaires is less than the extrapolated figure. From more than 1,274,000, the number of businesses decreases to nearly 900,000. Regarding the questions on income and expenditures, it is only 665,855 businesses for which the data are extrapolated. Then the question arises as to whether a figure slightly more than half of the total extrapolated figure is representative of the whole MSE sector. It is true that the surveyed enterprises have a mean size which is higher (2.1) than the average for the whole sector (1.8). Unfortunately, there is no way for asserting that this has no effect on the level of the results. What can be said is that this particular survey has certainly a lower non-response rate for income than others and that the over-estimation effect—if any (for it may happen that the larger the enterprise, the wider its tendency to underestimate its returns)—compensates for the natural tendency of respondents to under-estimate their declaration (for fear of taxation).

The main reason for the high non-response rate lies in the method of interviewing. Households were randomly selected and all members engaged in micro and small businesses for own-account interviewed within the household. At the time of the interviewer's visit, some of these members may have been absent, and someone else may have responded for them—at least for some sections of the MSE questionnaire but certainly not for the sections on revenue, expenditures, and income. Although the interviewer makes repeat appointments with the absent owners, this may fail and actually may be the main reason for the high non-response rate. It also means that these non-responses cannot be assimilated to disguised refusals and consequently they are randomly distributed among high, medium, and low revenue men and women, etc. This is why, in the analysis of the 1999 survey, the 665,855 enterprises are considered representative of the 1,274,000 extrapolated enterprises.

ANNEX II

Further Definitions

Employment

The term *employment* refers to performance of work. This term is used to measure the number of persons employed, including persons at work during a short reference period, and also persons temporarily absent from work but holding a job.

Paid employees

Paid employees are persons working for a public or private employer and who receive remuneration in wages, salary, commission, tips, piece rates or pay in kind. Persons at work are those who, during the reference period, performed some work (i.e., at least one hour) for wage or salary, in cash or in kind. Persons with a job but not at work are those who were temporarily not at work during the reference period (because of illness, leave, training, or bad weather conditions) and have a formal attachment to their job.

Working proprietors

Working employers (proprietors) are those persons who operate their own businesses, or engage independently in some profession or trade, and may hire one or more regular employees. They may operate as sole entrepreneurs or with partner(s) who may or may not be members of the same family or household.

Own-account workers

Own-account workers are those persons who operate their own businesses or engage independently in some profession or trade without hiring any regular employee. They may operate as sole entrepreneurs or with unpaid family workers who are members of the same family or household.

Unpaid family workers

Unpaid family workers or contributing family workers are persons who work without pay in an economic enterprise operated by a relative.

Apprentices

The class of apprentices is included in this survey due to its significance in the local labour market. These are a particular type of trainee. They may be directly engaged in producing goods and services or may simply be learning by observation without actually performing any significant productive tasks.

They may be paid a wage or salary under written or oral contract. Others may be given meals, living quarters or special tuition in compensation for work or as an allowance unrelated to work performed. Still others may not be paid at all and, in some cases, may actually be paying a fee in return for the acquired skill or knowledge.

Working patterns

Depending on their daily or weekly working hours, persons work either on full-time or part-time basis. Further, both full-time and part-time employees work either on regular basis or intermittently. Those who work intermittently include seasonal workers and casual daily labourers.

Full-time workers

Full-time workers are persons who work for all the hours of work and for all the working days, as defined by the employer, except when on leave or otherwise officially away.

Casual workers

Casual workers are those without stable contracts for whom the employing organisation is not responsible for payment of relevant taxes and social security contributions and/or where the contractual relationship is not subject to prevailing labour regulations.

Regular workers

As paid employees, regular workers are those with stable contracts for whom the employing organisation is responsible for payment of relevant taxes and social security contributions and/or where the contractual relationship is subject to prevailing labour regulations. As self-employed persons, regular workers are those who work in their own enterprises on a continuous basis.

Skilled, qualified workers

Skilled workers are those who have served an apprenticeship, practise the trade learned or similar activity, and by reason of their knowledge and vocational capacity are given tasks which are particularly difficult involving varied responsibilities or skills.

Semi-skilled, semi-qualified workers

Semi-skilled workers can only perform their job after several months of instruction or training. They are given simple tasks—mostly specific to the work—which are regularly repeated and require little responsibility.

Unskilled, unqualified workers

Unskilled workers are those with no specific vocational training; they require only brief initiation and work on auxiliary tasks.

Wages and salaries

Wages and salaries include gross wages and salaries relating to a given

period including remuneration for time worked, over-time, piece-work, bonuses remuneration according to the law for hours not worked (particularly holidays sick leave, and maternity) and extra payments for dirty, dangerous or unpleasant work and supplements for night work Wages and salaries also include author royalties and payments to workers giving apprenticeship courses or themselves receiving training Wages and salaries do not include exceptional bonuses, travel expenses cost of special clothing or footwear and social insurance payments Wages and salaries are exclusive of payments to National Social Security Fund as well as to National Health Insurance Fund

Household incomes

Household income consists of all receipts which accrue to the household or its individual members It is the sum of primary income (consisting of income from paid and self employment), property income (consisting of imputed rents of owner-occupied dwellings, interest received and paid, dividends received and net rents and royalties received for the use of buildings, land, copyrights, and patents), current transfers (consisting of social security benefits, pensions and life insurance annuity benefits, alimonies etc), and other benefits received by all the members of the household

Revenue or receipts

Revenue refers to revenue or receipts from sales, fees, commission, interest, and other services rendered including excise duty and sales tax but not rebate or discount in the precise business surveyed It should be noted that in a single business several activities may be undertaken, for example, shoe repairers may sell products and thus have various sources of income

Total or gross income

Total income is that before taxes and other compulsory deduction such as social security contribution Gross income from paid employment is value of wages or salaries plus all associated allowance and benefits before regular deductions are made Gross income from business enterprise consists of total revenue before taxation and depreciation allowance

Expenses

Expenses include operating costs such as payments to hired labour in cash or in kind and other current expenses incurred by the enterprise These include purchase of raw materials fuel tools and equipment, rent and interest payments transport costs, marketing expenses water electricity, telephone licenses and taxes and any other formal or informal expenses in relation to the business

Labour force

The 1999 National MSE Baseline Survey distinguishes between the spontaneously declared labour force and the real labour force Because of misunderstanding of concepts of *work economic activity* and *employment* by the

respondents and eventually by the interviewers who are influenced by their own cultural and social background and despite the training they have received, it frequently occurs in many countries that the labour force captured at first question on economic activity is underestimated particularly for women. This is why in the MSE 1 questionnaire all persons aged 5 and above and having spontaneously declared at question A04 that they were not engaged in any primary (= agricultural) or non-primary activity (= non-agricultural) are asked a second question at A07 in order to check whether or not they should be included in the labour force.

Accordingly, spontaneously declared labour force equals all persons aged 5 and above engaged in primary and non-primary economic activities (codes 1 to 4 at question A04) plus all persons not engaged in such activities (code 5 at A04) and seeking a job (code 5 at A06). The real labour force equals spontaneously declared labour force plus all persons who spontaneously declared themselves as inactive (codes 1 to 4 and 6 at A06) but who finally declared they ran a business (code 1 A07). Among this real labour force some unemployed may not be unemployed but really employed (code 5 at A06 and code 1 at A07).

The working age population comprises the labour force that includes the employed, the unemployed, and the inactive (housewives, students, elderly, incapacitated, and others not at work).

The various components of the working age population and of the labour force can be calculated for different working age limits (5, 10, 15 years). For comparison purposes with the 1989 Population Census and the 1994 Welfare Monitoring Survey, it should be noted that the unemployed have been defined in a very extensive way. According to WMS II, the unpaid family workers as well as persons classified under 'none' or 'not applicable' because of sickness, disability, or old age have been incorporated in the category 'unemployed'. This is a bit confusing for international comparisons because it prevents calculation of the unemployment rate and underestimates the number of persons employed (family workers are employed unless this category is understood as 'housewives') as well as the number of inactive (the elderly, disabled, housewives, students).

The preceding concepts of labour force or economically active and inactive population are not to be confounded with the total number of jobs undertaken by the population or provided by the economy. Seasonality of economic activities and hardship of earning a living often push the people in the labour force to undertake multiple jobs at the same time or at different periods in the year. This phenomenon is called *pluri-activity* and has arisen as a major concern for the comprehension of the functioning of labour markets in the recent period and in many countries. The MSE baseline surveys address this issue. Several categories of pluri-active can be distinguished: pluri-active farmers (or fishermen, etc.), pluri-active employees or dependent workers undertaking an independent job of their own besides their main activity as wage earners or family workers, pluri-active own-account workers or employers.

Contrary to the employed and unemployed population that can be compared to the total labour force or to various other components of the labour force

pluri-activity has to be taken into account in a different way. It cannot be compared directly to the labour force but to the total number of jobs in the economy. For national accounts purposes, this has to be kept in mind because the results of the survey—in terms of output, value added, income, etc.—have to be applied differently to the various components of the labour force, and to the multiple job holders.

Annex III Distribution of MSEs by All-Activity Codes

Activity	Total workers	No of enterprises	Employee mean monthly Income (Ksh)
Slaughtering, preparing, preserving meat	21,596	9,212	12,597 8
Canning and preserving fruits, vegetables	3,656	281	—
Canning, preserving and processing fish	879	580	6,981 1
Grain mill products	27,902	14,089	5,668 7
Bakery products	18,749	8,904	15,438 9
Sugar and jaggery processing	2,250	281	
Coffee processing and packaging	298	298	5,000 0
Malt liquors and malt, beer brewing	281	281	9,000 0
Soft drinks and carbonated water industries	5,184	1,727	3,000 0
Cotton ginneries	298	298	4,500 0
Spinning, weaving and finishing textiles	1,423	860	3,530 2
Made up textile goods (except wearing apparel)	862	861	3,264 0
Knitting and crocheting	9,776	5,191	1,885 5
Cordage, rope and twine	16,395	10,641	848 7
Basket making	1,125	843	390 0
Manufacture textile N E C	281	281	1,500 0
Manufacture wearing apparel (except footwear)	54,286	41,372	2,902 8
Tanneries and leather finishing	281	281	4,600 0
Manufacture footwear (except plastic)	2,870	2,587	5,162 3
Sawmills and other wood mills	2,669	2,290	3,526 4
Charcoal production	579	579	3,514 5
Manufacture wood and cork products N E C	10,649	2,008	2,290 0
Manufacture furniture and fixtures (except metal, plastic)	82,534	38,574	4,859 0
Printing, publishing and allied industries	11,255	579	40,000 0
Manufacture drugs and medicines	281	281	1,200 0
Manufacture plastic products	563	562	35,000 0
Brick/block making	26,495	8,633	2,960 0
Stone mason	2,290	2,289	6,402 1
Manufacture cutlery, hand tools and general hardware	11,210	2,008	10,000 0
Manufacture metal furniture and fixtures	5,550	3,714	5 981 5
Manufacture metal products (knives, keys, stoves, <i>sufunas</i>)	2,636	1,474	2,363 8
Manufacture machinery (except electrical)	894	298	3,000 0
Manufacture electrical machinery and appliances	328	281	—
Ship and boat building and repair	3,456	1,727	6,000 0
Motorcycle and bicycle assembly	1,192	596	12,250 0
Jewelry production	844	562	2,000 0
Wood carving	1,728	1,727	6,000 0
Other manufacturing industries	10,368	6,907	2,333 3
Water works and supply	3,161	1,158	9,320 3
Electrical contractors	2 863	1,422	101,773 2
Plumbers	2,290	2,289	7,736 8
Painters, roof tilers and minor repairs	3,760	2,307	6,102 3
Construction/partitioning buildings	22,300	9,770	6,139 4
All other construction (roads, sewerage, water works)	281	281	3,000 0
Motor vehicles	1,125	281	—
Non electric machinery and appliances	281	281	—
Electric machinery and appliances	298	298	1 000 0

National MSE Baseline Survey, 1999

Activity	Total workers	No of enterprises	Employee mean monthly income (Ksh)
Food drink and tobacco	26,556	19,867	11,758 4
Agricultural produce	10,892	6,609	18,571 3
Textiles soft furnishings, clothing, shoes	2,565	1,141	52,486 4
Building materials, hardware and timber	3,814	2,025	20,682 7
Eng prod , scrap industrial and agricultural chemicals seeds	1,078	580	24,912 4
General wholesale trade	8,606	1,158	47,342 8
Livestock	6,912	5,180	6,666 7
Second hand garments	2,324	2,025	5,705 7
Wholesale trade N E C	1,143	1,142	25,009 1
Food drink and tobacco	88,874	72,865	4,578 4
Butcheries	28,646	13,863	9,652 5
Oil and petrol	564	563	9,014 6
Textiles soft furnishings clothing, shoes	53,329	22 916	7,591 8
Building materials and timber	13,827	8,627	13,600 7
Photographic and pharmaceutical goods	844	843	4,466 7
General retail trade	491,667	217,692	4 936 1
Livestock	42,918	28,786	9,298 3
Agricultural produce	354 520	235,586	4,196 6
Paraffin and charcoal	48,471	22,232	3,229 3
Domestic hardware	11,705	8 884	11,692 7
Machinery tools	844	562	18,000 0
Ready made garments	7,913	5 097	14,927 8
Second hand garments	103,961	60,102	5,256 2
Shoes and leather goods	6,835	5,987	5,291 0
Art and artifacts	861	860	3,934 4
Baskets (<i>kiondos</i>)	298	298	1,500 0
Newspapers/magazines	6,678	3,711	5,902 2
General kiosks and groceries	155,017	98,451	3,028 4
Stationery and bookstores	3,161	1,720	8,136 8
Retail trade N E C	50,368	35,364	5,336 6
Restaurants, cafes and bars	51,071	16,389	11,360 6
Kiosks, other catering and drinking places	94,557	57 972	4,400 2
Hotels rooming houses camps other lodgings	39 624	11,490	17,550 0
Urban, suburban inter urban highway passenger bus/ <i>matatus</i>	7,752	2,567	14,142 5
Other passenger land transport, including taxis	8,218	7,840	3 856 4
Freight transport by road	4,524	1 405	34,333 3
Ox cart donkey cart and hand cart	6,909	3,451	6,892 8
Construction materials transport e g , sand stones	2,904	580	71,330 3
Supporting services to water transport	94	281	20 000 0
Services incidental to transport N E C	281	281	3 000 0
Communications	563	562	15,000 0
Kenya Posts and Telecommunications Corporation administrative services	894	298	10,000 0
Monetary institutions	283	282	500 0
Property companies	2,250	281	270 0
House and state agents	13 642	10,626	8,382 7
Legal services	2,813	843	15,000 0
Accounting auditing and bookkeeping services	3 786	860	113,366 1

Survey Results

Activity	Total workers	No of enterprises	Employee mean monthly income (Ksh)
Engineering, architectural and technical services	1,547	1,405	6 500 0
Advertising services	2 719	579	30,000 0
Business services (except machinery and equipment rental and leasing) N E C	4,269	2,001	34,020 0
Machinery and equipment rental, leasing	3,456	1 727	60 000 0
Government services	894	596	1,300 0
Schools and colleges	6,178	1,721	5,645 6
Daycare centres and nurseries	844	281	4,000 0
Medical, dental and other health services	21,878	6,583	8,690 8
Herbalist	6,358	2 870	13 986 3
Social and related community services N E C	281	281	5,000 0
Motion picture and other entertainment services	5,063	843	8,166 7
Library, museums, botanical and zoological gardens other cultural services N E C	281	281	5 000 0
Other amusement, recreational services N E C	4 269	2 290	2 376 4
Repair footwear and other leather goods	5,461	5,457	2 790 8
Electrical repair shops	5 771	4 028	2 091 0
Repair motor vehicles and motor cycles	13,726	4 633	16 656 2
Watch, clock and jewelry repair	1,970	845	17 814 1
Repair bicycles	12,102	8,944	3,676 7
Other repair N E C	12,765	8 944	1 666 8
Laundries, laundry services and cleaning and dyeing	16,849	9,532	5,654 6
Barber and beauty shops	51,355	22 659	4 346 6
Photographic studios commercial photography	4 594	4,010	6 091 5
Hunting and tourist guide services	1,728	1 727	–
Personal services N E C (toilet and bath facilities)	1,406	281	100 000 0
Other miscellaneous personal services	861	860	21 601 7
Other services N E C	18 997	2,846	57 040 9
Total	2,361,250	1,289,012	–

Source National MSE Baseline Survey 1999 (CBS K Rep and ICEG)

ANNEX IV
Questionnaires

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1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

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MICRO AND SMALL ENTERPRISES (MSE) SURVEY 1999
BASIC HOUSEHOLD PARTICULARS (CONTINUED)

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City/T n/S b-Loc _____

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MICRO AND SMALL ENTERPRISES (MSE) SURVEY 1999
BUSINESS PARTICULARS

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Province _____ District _____

City/Town/Sub-Loc _____ Cluster UARDIC _____

To be answered by owners/co owners of business with employees not exceeding 50 in number

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B10

- 1 = Commercial Premises
 2 = Industrial site
 3 = Market Stall
 4 = Open market
 5 = Kiosk
 6 = Open ground with stand
 7 = Open ground without stand
 8 = Junkal sheds

9= M b i

- 9= M b l
10=B l d g sites and Road works
11=Residential with spec al outfi
12= Residential without spec al outfi
13= Other (spec fy)

B11

- 1= Permanent
2= Temporary
3= No structure/open
4= Vehicle
5= Other (specify)
6= Squatting
7= N/A
8= Other (specify)

B12, B13

- 1=Own
2=Lease
3=Rental
4=Temporary occupation license
5=Free occupation
6= N/A
7= Other (specify)

B14

- 1=Eviction by local authorities
2=Eviction by central government
3=If rented eviction by owner/landlord
4=Expiry of tenancy
5=None

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Date entered

CONFIDENTIAL
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CBS/K-REP/ICEG
MICRO AND SMALL ENTERPRISES (MSE) SURVEY 1999
EMPLOYMENT PARTICULARS

Enumerator _____

| GEOGRAPHIC CODE | | | | CLUSTER NUMBER | | | | OU O |
|-----------------|---|---|---|----------------|---|---|---|------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

Province _____

District _____

Supervisor_____

City/Town/SubLoc _____

Cluster name _____

To be answered by owners /co-owners of business with employees not exceeding 50 in number

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City/Town/Sub-Loc.

Cluster name

To be answered by owners/co-owners of business with employees not exceeding 50 in number

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|--|----|----|----------------------|----|----|-------|--|----|-----|----|-----|---|-----|--------|-----|--------------|-----|--------|-----|------------|-----|--------|-----|--|--|----|-----|---|--|----|-----|--|-----|------|
| HHLD NO | | | HHLD member Serial N | | | Bus N | Number of workers at the start of enterprise | | | | | N umber of Current Workers by Level of Skills
(only fo regular and casual employees) | | | | | | | | | | | | Total amount of salary paid to regular employees for last month excl. statutory deductions | | | | Total amount of wages paid to casual employees for the last month | | | | Main types of training required for your workers:
1=None
2=Management
3=Technical
4=Marketing
5=Other (Specify) | | |
| | | | | | | | | | | | | Skilled | | | | Semi-Skilled | | | | Un-Skilled | | | | | | | | | | | | | | |
| | | | | | | | | | | | | Male | | Female | | Male | | Female | | Male | | Female | | | | | | | | | | | | Male |
| D01 | | | D02 | | | D03 | D04 | | D05 | | D06 | | D07 | | D08 | | D09 | | D10 | | D11 | | D12 | | | | D13 | | | | D14 | | D15 | |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | | | | 33 | | | | 34 | | 35 | | |
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CBS/K-REP/ICEG
MICRO AND SMALL ENTERPRISES (MSE) SURVEY 1999
TRAINING AND SKILLS DEVELOPMENT

[illegible]

District

City/Town/Sub-Loc.

Cluster name

To be answered by owners/co owners of business with employees not exceeding 50 in number

[illegible]

E19 E20
1=None
2=Management
3=Technical
4=Marketing
5=Don't know
6=Other (specify)

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CBS/K-REP/ICEG
MICRO AND SMALL ENTERPRISES (MSE) SURVEY 1999
BUSINESS INCOME AND SEASONAL VARIATIONS

Enumerato _____

S perviso _____

[illegible]

Province _____ District _____
City/Town/Sub-Loc _____ Cluster name _____

To be answered by owners/co-owners of business with employees not exceeding 50 in number

[illegible]

G08
1=None
2=Quarter
3 Half
4=Three quarters
5=All

G09 G10, G11
1=Re-investment
2=Investment in new business
3 Investment in Agriculture
4= Household/family needs
5= Savings
6=Transfers
7 Other (specify)

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Survey Results

CBS/K-REP/ICEG

Province _____ District _____
City/Town/Sub-Loc. _____ Cluster name _____

[illegible]

- H14
- 1 Authority from provincial administration
2= License from Local Authority
3 License from Central Government
4= Operates without license
5= Other (specify)

- H12
1 Family
2 Sole proprietor
3 Partnership
4 Cooperative/group
5 Corporate
6 Other (specify)

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**CBS/K-REP/ICEG
MICRO AND SMALL ENTERPRISES (MSE) SURVEY 1999
ACCESS TO INFRASTRUCTURE**

Enumerate

SUPERVISOR

[illegible]

Provi ce

District

City/T wn/Sub-Loc

Cluster name

To be answered by owners/co-owners of business with employees not exceeding 50 in number

[illegible]

- 104

- 1 In prem sea
2 With compound
3 Less equal to 500 metres
4 More than 500 metres

106. 111 115

- 1 Lack of fund
2 Not interested
3 No service
4-Complicated process
5 N/A
6- Other (specify)

- 107 110 114

- 1 Don't know
2 Inefficient services
3 Waiting for connect o
4=N/A
5=Other (specify

- 118

- 1 Flush to let
2 Pit latrine
3=Other (specify)

- 119

- 1 Burning
2=Dump g
3=Collected by Local A thority
4=Collected by privat company
5=Other (specify)

- 120

- 1 Drainage
2=Open space
3 Rivers and streams
4=Sewer
5 N/A
6=Other (specify)

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Survey Results

CBS/K-REP/ICEG

Superviso

[illegible]

Distrib. t.

Cluster nam

102

[illegible]

- J05, J07**
 1 Family/own funds
 2 Family/Friends Loan (N t free)
 3=Money lender
 4 Bank
 5 Non bank credit institutions
 6-R tating Credit Soc ties
 7=Government loan
 8=NGO
 9=Formal /Informal cooperativ
 10=Trad credits
 11=Other (specify)

- J13-J16**
1=MSEs
2=N n MSEs
3 Imported
4 Inherited
5=Own manufacture
6=Acquired with business
7 N/A
8=Other (specify)

- J21-J24
1 Low level of technology
2=Unavailable locally
3 Lack of spare parts
4 High prices
5 Low output
6=High maintenance costs
7=N/A
8=Other (specify)

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Rev 21/05/99

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- K10 - K12**
 1=Relaxing credit conditions
 2=Improvement of Access Roads
 3 Improvement of water supplies
 4 Improvement of electricity supplies
 5=Providing better bus services
 6=Providing enabling environment for fair competition
 7-Relaxing licensing requirement
 8 Assisting market promotion
 9=Reducing access to public tender for MSEs
 10=Reducing business risks associated with security
 11 Review laws for land tenure and tenancy
 12=Other (specify)

- K16, K18
1 Formal/Informal cooperatives
2=Government
3 Bank
4 NGOs
5 Family Friends
6-Money lender
7 Non-Bank Credit institutions
8 Rotating Credit Societies
9=Traditional Sph
10=NA
11=Other

- K17
1=Collateral
2 High Interest rate
3 Lender call g
4=N/A
5=Other (Specify)

E m ra _____

S per v _____

| GEOGRAPHIC CODE | | | | CLUSTER NUMBER | | | | OUO |
|-----------------|--|---|---|----------------|---|---|---|-----|
| 1 | | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

P ce _____ District _____
City/Town/Village _____ Cluster arm _____

[illegible]

- | L04 | L06 | L13 | L14 | L15 | L16 | L17 |
|------------------------|-----------------------------|------------------------|---------------------|-----------------------------------|---------------------------|---------------------------------|
| 1 M 1 only | 1-Commercial Premises | 1 Local ind dual () | 1 MSEs | 1 Too few customers | 1-S ld with bus ness | 1 Runs an ther business |
| 2 Femal nly | 2 Industrial st | 2 MSEs | 2 N MSEs | 2 Too many competent rs | 2=Ga t family/friends | 2 W rks for someone lso/company |
| 3 Mal Mal Partners | 3 Market stall | 3 Non-MSEs | 3 Farmers | 3 Shortag f operating funds | 3 U ed t hart ew bus ness | 2 W rks th g |
| 4 Femal Femal Partners | 4 Op mark t | 4-F rs gn entrepreneur | 4-D rest supports | 4=Sh rag fssod, ct rs ma small | 4=L qualted | 4=Other (specify) |
| 5 Male-Femal Partners | 5 K usk | 5 WA | Indi duals suppl es | 5 L gal problems/Gov interference | 5=Other (specify) | |
| | 6-Open ground th land | 6-Other (specify) | 6=Go emment | 6=Personal reas ns | 6=N/A | |
| | 7=Open ground without sand | | 7=Other (specify) | 7=Got job | | |
| | 8 Jua Kai sheds | | | 8 Started an ther bus es | | |
| | 9=Mob l | | | 9=Sh rag fskilled manpower | | |
| | 10=Build g tes and ro d rks | | | 10= Other (p cify) | | |
| L05 | | | | | | |
| 1 Family | | | | | | |
| 2 S l prop t | | | | | | |
| 3 Partnership | | | | | | |
| 4 Co-operatrvc/Group | | | | | | |
| 5 C spnt | | | | | | |
| 6=Other (sp fv) | | | | | | |

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ANNEX V

The Sample Design

The sample design for the 1993 and 1995 surveys was the stratified cluster design. The country was broken into four strata and then each stratum was further sub-divided into blocks with units of approximately one hundred (100) households. The blocks in this case comprised the cluster and were based on the master sample of the National Sample Survey Evaluation Programme (NASSEP III) of the Central Bureau of Statistics (CBS) developed from the 1989 census.

The need for stratification arose from the diverse demand-and-supply conditions in the various parts of the country. As a consequence, the grouping of identical units into one stratum results in a homogeneous set of groups of units with the strata differing from each other as much as possible. This results in increased precision of the estimates of the characteristics of the population as the variance is substantially reduced.

Within each stratum a random sample of clusters was chosen and then complete enumeration within the clusters was performed. The ideal situation in selecting a sample would be to select units using simple random sampling of the population and then enumerating the selected units. In the case where a large area is covered (such as in the 1999 survey) this process would result in increased costs and take much time as the units of the population would be scattered across a large segment of the population and hence would result in increased transportation costs. By sampling clusters, effort is concentrated in one particular area and it allows coverage of a large sample at less cost even though precision is slightly reduced.

In the 1993 survey, an extra stratum was created to cover the commercial and industrial areas which were not part of the CBS sampling frame. The reason for the creation of the fifth stratum was the need to cover medium-sized enterprises. The creation of the fifth stratum imposed some difficulties related to lack of information on the location of the areas nation-wide and the difficulty of carving out areas (clusters) of equal size to be enumerated. The results from this stratum could not be used in the analysis because it was felt that the sample selection had not met the statistical requirements of randomisation. It is indicated that some lottery type of approach was followed in the selection of the clusters; this should actually have ensured that the selection of the clusters was random. However, there is no indication as to how the sample from this stratum could have been weighted.

AV.1 Review of the 1993 Sample Design

The first stratum was composed mainly of Nairobi and Mombasa, the two largest cities of Kenya, both have access to the outside world through

international airports. In addition, Mombasa has two harbours. It was felt that the two cities had demand and supply conditions that were identical. Nairobi district had 120 clusters listed. From these, 18 clusters were selected and included in the survey. Mombasa had a total of 50 clusters from which five were picked randomly and combined with Nairobi to give a total of 23 clusters for the first stratum. While the 1993 survey indicated that Nairobi had a total of 18 clusters, examination of the computer data file shows that 17 clusters had their data entered and hence only 22 clusters were covered.

First Stratum, 1993

Nairobi

| | | | | | |
|----|--------------|------|----------------|-----------------|------|
| 1 | Kangemi | 1051 | 13 | Gitathuru | 1151 |
| 2 | Mutwini | 1063 | 14 | Marura | 1153 |
| 3 | Silanga | 1074 | 15 | Soweto-Kahawa N | 1159 |
| 4 | South C | 1083 | 16 | Mathare/Ruaraka | 1165 |
| 5 | Parklands | 1085 | 17 | Kasarani Subair | 1167 |
| 6 | Runda Estate | 1093 | Mombasa | | |
| 7 | Kiliman | 1097 | 1 | Majengo ya Musa | 1201 |
| 8 | Pumwani | 1105 | 2 | Siwa la Ng ombe | 1222 |
| 9 | Pumwani | 1110 | 3 | Mwembe Ngoma | 1234 |
| 10 | Makadara | 1114 | 4 | Bomu | 1240 |
| 11 | Makadara | 1118 | 5 | Kwa Hola | 1243 |
| 12 | Dandora | 1137 | | | |

The second stratum was composed mainly of urban areas with population exceeding 10,000 as published in the 1992 Economic Survey. A list of all the clusters in the Master Sample of the CBS falling in these areas was sampled and 30 clusters were selected. It was observed that there was extensive heterogeneity in this stratum and it provided wide coverage of the population.

Second Stratum, 1993

| | | | | | |
|----|-----------|------|----|----------|------|
| 1 | Thika | 1170 | 14 | Garissa | 1273 |
| 2 | Thika | 1171 | 15 | Nyamira | 1277 |
| 3 | Thika | 1174 | 16 | Kisii | 1278 |
| 4 | Muranga | 1181 | 17 | Kisumu | 1284 |
| 5 | Muranga | 1182 | 18 | Kisumu | 1285 |
| 6 | Nyahururu | 1183 | 19 | Homa Bay | 1303 |
| 7 | Nyeri | 1187 | 20 | Narok | 1339 |
| 8 | Kilifi | 1191 | 21 | Kitale | 1345 |
| 9 | Embu | 1253 | 22 | Eldoret | 1349 |
| 10 | Machakos | 1261 | 23 | Eldoret | 1351 |
| 11 | Machakos | 1262 | 24 | Eldoret | 1357 |
| 12 | Marsabit | 1267 | 25 | Eldoret | 1358 |
| 13 | Meru | 1271 | 26 | Busia | 1367 |

The third stratum included towns with population 2 000–10 000. It was, however, noted that of the 15 selected clusters only three were in the sampling frame of the CBS. The other 12 clusters were created on the ground.

Third Stratum, 1993

| | | | | | |
|---|---------------|------|----|----------|------|
| 1 | Lamu | 1197 | 9 | Mwala | 3056 |
| 2 | Muhoroni | 1300 | 10 | Nkubu | 3007 |
| 3 | Ongata Rongai | 1308 | 11 | Awendo | 3008 |
| 4 | Kikuyu | 3001 | 12 | Kehancha | 3009 |
| 5 | Makuyu | 3002 | 13 | Magadi | 3010 |
| 6 | Oi Kalou | 3003 | 14 | Kilgoris | 3011 |
| 7 | Mamburui | 3004 | 15 | Margat | 3012 |
| 8 | Runyenjes | 3005 | | | |

The fourth stratum covered rural areas. A total of 926 rural operational clusters was on the CBS master sample. In the selection of the clusters those which were extremely remote or those with security risks were eliminated. Since non-operating clusters did not have boundaries, it was decided to sample only from the operating clusters; hence a total of 35 clusters was selected.

Fourth Stratum, 1993

| | | | | | |
|----|--------------------|------|----|-----------------------|------|
| 1 | Rural Kiambu | 0012 | 19 | Rural Kisumu | 0528 |
| 2 | Rural Kirinyaga | 0039 | 20 | Rural South Nyanza | 0617 |
| 3 | Rural Murang'a | 0076 | 21 | Rural Kajiado | 0640 |
| 4 | Rural Murang'a | 0077 | 22 | Rural Kajiado | 0644 |
| 5 | Rural Murang'a | 0081 | 23 | Rural Nandi | 0741 |
| 6 | Rural Murang'a | 0087 | 24 | Rural Nandi | 0767 |
| 7 | Rural Kilifi | 0158 | 25 | Rural Nandi | 0768 |
| 8 | Rural Kwale | 0202 | 26 | Rural Narok | 0790 |
| 9 | Rural Taita Taveta | 0217 | 27 | Rural Baringo | 0822 |
| 10 | Rural Embu | 0263 | 28 | Rural Elgeyo Marakwet | 0834 |
| 11 | Rural Embu | 0274 | 29 | Rural Trans Nzoia | 0872 |
| 12 | Rural Meru | 0397 | 30 | Rural Uasin Gishu | 0915 |
| 13 | Rural Meru | 0406 | 31 | Rural Uasin Gisu | 0924 |
| 14 | Rural Meru | 0412 | 32 | Rural West Pokot | 0942 |
| 15 | Rural Kisii | 0458 | 33 | Rural West Pokot | 0950 |
| 16 | Rural Kisii | 0483 | 34 | Rural Busia | 0992 |
| 17 | Rural Nyamira | 0498 | 35 | Rural Kakamega | 1031 |
| 18 | Rural Nyamira | 0512 | | | |

In the fifth stratum, industrial and commercial areas in Nairobi, Mombasa, Thika, Nakuru, Kisumu, and Eldoret were covered. The teams working in these areas identified the boundaries of all commercial and industrial areas of the cities. The areas were then subdivided into small geographically contiguous areas, each of which had a size of 5 square mile from visual examination. Identifiable boundaries such as roads, fences, streams, and any other observable landmarks were used.

A comparison of the list of selected clusters in the report with those on the computer databases shows that strata 1, 2, and 3 were missing one cluster each. Thus the database had a total of 100 clusters instead of 103. The status of the three missing clusters does not feature in the reports.

As indicated in the reports of the two surveys, the sample size for 1995 was reduced to 54, half the size of the 1993 survey.

AV 2 Sample Selection for the 1999 MSE Survey

Planning the sample for the 1999 survey included consideration of the features of the previous two surveys and modification to provide efficient and consistent estimates of the MSEs in the country. Though it was suggested that the industrial and commercial areas of the major towns should be covered in this survey, it was not statistically sound to add this cluster to the existing household clusters because of possible double counting.

It was observed that the 1993 survey had a wider coverage than the 1995 survey and some of the 1993 results could be used to plan the 1999 survey. While the 1995 survey covered more information, there was sacrifice on sample size and possible sampling error. However, this does not mean that the results for 1995 were not reliable.

The previous two surveys provided estimates of households in the strata with enterprises. This information is valuable in that it facilitates the determination of sample size. It is felt that the 1993 survey provided better estimates of the proportion of households with enterprises than the 1995 survey. According to the 1995 survey, the proportion of households operating MSEs had declined from 22.3% to 16.2% in the first stratum, from 34.6% to 30.5% in the second stratum, from 59.4% to 57.3% in the third stratum, and from 23.1% to 16.1% in the fourth stratum. While the declines could have resulted from sampling variation, precision also could be questioned due to reduced sample size in 1995. Consequently, sample size determination in 1999 is based on estimates from the 1993 survey (see Table AV 1).

Table AV 1 Estimated Number of Enterprises by Stratum, 1993

| Stratum | Estimated no of households | % of households with MSEs | Estimated no of enterprises |
|---------|----------------------------|---------------------------|-----------------------------|
| 1 | 315,479 | 22.3 | 70,411 |
| 2 | 270,187 | 34.6 | 93,528 |
| 3 | 60,640 | 59.4 | 36,007 |
| 4 | 3,081,612 | 23.1 | 71,059 |

The sample design used in both the 1993 and 1995 surveys is quite appropriate to the conditions of MSEs in Kenya. The same design was used in the 1999 survey. Disaggregation of data by regions was provided by the data collection instruments.

The recently created districts were not treated individually but were considered as part of the districts from which they were carved. This is mainly

because the NASSEP III sampling frame was originally based on the old administrative boundaries. For similar surveys in future the new districts will feature in the sampling frame to be developed after the 1999 population census. Because there were no NASSEP clusters in some arid and semi-arid districts those districts did not feature in the 1999 selection.

AV 3 Sample Size Determination

In estimating the sample size for this survey a precision of 5% was taken at a confidence level of 95%. The proportion of households with enterprises in the strata in Table AV 1 was applied to arrive at households covered in the survey. While the rigours of mathematical symbolism and manipulations were kept to a minimum some basic ideas are presented to illustrate what was performed to obtain the sample size.

We assumed that a certain characteristic was to be estimated i.e. the number of households with MSEs in the study. Then p was the prior estimate from a previous survey of the proportion of households with MSEs. We tolerated a margin of error d in the estimated proportion and α was a small risk which we accepted as a margin of error. From probability laws

$$\Pr(|p - P| \geq d) = \alpha$$

Where P was the population value of the characteristic being estimated and p the prior estimate from a previous sample survey or other sources, it was assumed that the characteristic to be estimated was normally and randomly distributed within the population. The variance of P was given as

$$\sigma_p = [PQ(N-n)/n(N-1)]^{1/2}$$

Hence $t_\alpha = (p-P)/\sigma_p$

Let $(|p-P|) = d$

Then $d = t_\alpha \sigma_p = t_\alpha [PQ(N-n)/n(N-1)]^{1/2}$

From this it was shown that

$$n = t_\alpha^2 PQ / [(d^2 + (t_\alpha^2 PQ - d^2)/N)]$$

If N was large, a first approximation of n was given by

$$n_0 = t_\alpha^2 pq / d^2$$

Where p was the estimate of the characteristic of interest in the population the value of p was obtained from a previous survey as indicated earlier and $q = (1-p)$. In the case of this survey the estimate was the proportion of the households with MSEs.

To control for relative error r , we substituted rp for d in the formula above and obtained

$$n_0 = t_\alpha^2 pq / (rp)^2$$

If the value of $\frac{n_0}{N}$ was not negligible then

$$n = n_0 / (1 + (n_0 - 1)/N) = n_0 / (1 + (n_0/N)), \quad 1/N = > 0$$

was used to adjust the value of n

Based on the foregoing and the empirical information in Table 1, the values of n for the four strata are as in Table 1.2 (p. 7)

A total of 14,408 households was estimated. Considering a mean cluster size of 100 households, 144 clusters should be covered and exceeds the 1993 coverage by 33 clusters. Even though it was estimated that a total of 144 clusters would be covered, the number was adjusted by six to meet the conditions placed in the proposal of the survey which required that all the clusters covered in the 1993 survey be included in the 1999 survey. This resulted in the adjustment of the number of clusters for the second stratum at 30 and the third stratum at 15, and consequently the total number of clusters covered was 150. In 1993, a total of 18,280 households was covered and provided 5,353 businesses which included business sites and 1,998 closed businesses.

In the design of the MSE surveys, there was some loss of precision since the sample selection within the strata were based on cluster sampling. Normally this can be minimised by keeping the cluster size small and ensuring they are as homogeneous as possible.

AV.4 Selection of the 1999 Clusters

One of the objectives of the 1999 survey was to include all the clusters covered in the 1993 study. Nairobi and Mombasa form the first stratum of 54 clusters, 39 in Nairobi and the remainder in Mombasa. An additional 21 clusters were covered in Nairobi, these were selected randomly using number tables from the NASSEP III master sample frame of the CBS.

The large change in the sample size for Nairobi comes from the possibility that when the 1993 survey was planned, there was no prior information on the distribution of the MSEs in households on which the determination of the sample size could have been based. Also, the margin of error and confidence level adopted for the 1999 survey were stringent, hence the large sample size.

The second stratum required 29 clusters. However, in the 1993 survey, 30 clusters were covered.

In the third stratum, there were to be 10 clusters according to the sample size estimation. However, there were 15 clusters in this stratum. The results from the survey indicated that 60% of the households had MSEs and consequently this stratum would require a smaller sample to achieve precision.

The fourth stratum had an almost identical distribution of households with enterprises as the first stratum, 23.1%. Incidentally, this stratum accounted for the highest proportion of estimated number of enterprises in the country (78%). The coverage in 1993 was 35 clusters which spanned several rural areas and towns. From the estimation of the sample size needed, 51 clusters should have been covered in this stratum. This was 16 clusters over the 1993 coverage. Consequently, a random sample of 16 clusters was drawn from the 926 rural clusters.

First Stratum, 1999**Nairobi**

| | | | | | |
|----|---------------------------|------|----------------|-----------------|------|
| 1 | Kangemi | 1051 | 23 | Kawangware | 1062 |
| 2 | Silanga | 1074 | 24 | Riruta | 1055 |
| 3 | South C | 1083 | 25 | Dandora | 1132 |
| 4 | Parklands | 1085 | 26 | Millmani | 1096 |
| 5 | Runda Estate | 1093 | 27 | Valley Estate | 1089 |
| 6 | Shauri Moyo/
Kamukunji | 1110 | 28 | Kibera | 1075 |
| 7 | Ofafa Jericho | 1114 | 29 | Viwandani | 1122 |
| 8 | Ofafa | 1118 | Mombasa | | |
| 9 | Dandora | 1137 | 1 | Majengo ya Musa | 1201 |
| 10 | Gitathuru Estate | 1151 | 2 | Siwa la Ngombe | 1222 |
| 11 | Mathare 4A | 1165 | 3 | Mwembe Ngoma | 1234 |
| 12 | Mathare North | 1164 | 4 | Bomu | 1240 |
| 13 | Umoja | 1127 | 5 | Kwa Hola | 1243 |
| 14 | Korogocho | 1156 | 6 | Ziwa la Ngombe | 1220 |
| 15 | Majengo | 1102 | 7 | Soweto Bomu | 1239 |
| 16 | Mathare | 1141 | 8 | Stadium Moons | 1203 |
| 17 | Eastleigh North | 1106 | 9 | Mipirani | 1247 |
| 18 | Katwekera | 1068 | 10 | Maweni | 1221 |
| 19 | Kibera | 1073 | 11 | Makupa | 1202 |
| 20 | Nairobi West | 1082 | 12 | Ganjoni | 1208 |
| 21 | Hamza | 1112 | 13 | Magongo | 1238 |
| 22 | Mathare | 1144 | 14 | Bofu | 1228 |
| | | | 15 | Msikiti Nuru | 1244 |

Second Stratum, 1999

| | | | | | |
|----|----------|------|----|-----------|------|
| 1 | Thika | 1170 | 20 | Siaya | 1302 |
| 2 | Thika | 1171 | 21 | Homa Bay | 1303 |
| 3 | Thika | 1174 | 22 | Nanyuki | 1315 |
| 4 | Murang a | 1181 | 23 | Nyahururu | 1183 |
| 5 | Murang a | 1183 | 24 | Narok | 1339 |
| 6 | Nyeri | 1187 | 25 | Kitale | 1345 |
| 7 | Kihifi | 1191 | 26 | Eldoret | 1349 |
| 8 | Embu | 1253 | 27 | Eldoret | 1351 |
| 9 | Machakos | 1261 | 28 | Eldoret | 1357 |
| 10 | Machakos | 1262 | 29 | Eldoret | 1358 |
| 11 | Marsabit | 1267 | 30 | Busia | 1367 |
| 12 | Meru | 1271 | 31 | Nakuru | 1320 |
| 13 | Garissa | 1273 | 32 | Nakuru | 1325 |
| 14 | Kisii | 1278 | 33 | Nakuru | 1327 |
| 15 | Namira | 1277 | 34 | Nakuru | 1332 |
| 16 | Kisumu | 1284 | 35 | Kericho | 1311 |
| 17 | Kisumu | 1285 | 36 | Kerugoya | 1180 |
| 18 | Kisumu | 1295 | 37 | Bungoma | 1363 |
| 19 | Kisumu | 1298 | | | |

The creation of a fifth stratum to secure data on the industrial and commercial areas of the major towns was decided against because there is a high likelihood of double counting in the case of co-owned enterprises, and it was also felt that similar problems experienced in the 1993 survey would be observed in the event of creating this stratum

Third Stratum, 1999

| | | | | | |
|---|---------------|------|----|----------|------|
| 1 | Lamu | 1197 | 9 | Mwala | 3056 |
| 2 | Muhoroni | 1300 | 10 | Nkubu | 3007 |
| 3 | Ongata Rongai | 1308 | 11 | Awendo | 3008 |
| 4 | Kikuyu | 3001 | 12 | Kehancha | 3009 |
| 5 | Makuyu | 3002 | 13 | Magadi | 3010 |
| 6 | Ol Kalou | 3003 | 14 | Kilgoris | 3011 |
| 7 | Mamburui | 3004 | 15 | Marigat | 3012 |
| 8 | Runyenjes | 3005 | | | |

Fourth Stratum, 1999

| | | | | | |
|----|--------------------|------|----|-----------------------|------|
| 1 | Rural Kiambu | 0012 | 28 | Rural Elgeyo Marakwet | 0834 |
| 2 | Rural Kirinyaga | 0039 | 29 | Rural Trans Nzoia | 0872 |
| 3 | Rural Murang'a | 0076 | 30 | Rural Uasin Gishu | 0915 |
| 4 | Rural Murang'a | 0077 | 31 | Rural Uasin Gishu | 0924 |
| 5 | Rural Murang'a | 0081 | 32 | Rural West Pokot | 0942 |
| 6 | Rural Murang'a | 0087 | 33 | Rural West Pokot | 0950 |
| 7 | Rural Kilifi | 0158 | 34 | Rural Busia | 0992 |
| 8 | Rural Kwale | 0202 | 35 | Rural Kakamega | 1031 |
| 9 | Rural Taita Taveta | 0217 | 36 | Rural Machakos | 0347 |
| 10 | Rural Embu | 0263 | 37 | Rural Machakos | 0342 |
| 11 | Rural Embu | 0274 | 38 | Rural Kajiado | 0628 |
| 12 | Rural Meru | 0397 | 39 | Rural Lamu | 0208 |
| 13 | Rural Meru | 0406 | 40 | Rural Kitui | 0319 |
| 14 | Rural Meru | 0412 | 41 | Rural Siaya | 0574 |
| 15 | Rural Kisii | 0458 | 42 | Rural Kirinyaga | 0058 |
| 16 | Rural Kisii | 0483 | 43 | Rural Kiambu | 0013 |
| 17 | Rural Nyamira | 0498 | 44 | Rural Kilifi | 0177 |
| 18 | Rural Nyamira | 0512 | 45 | Rural Kisumu | 0520 |
| 19 | Rural Kisumu | 0528 | 46 | Rural Nandi | 0770 |
| 20 | Rural South Nyanza | 0617 | 47 | Rural Siaya | 0566 |
| 21 | Rural Kajiado | 0640 | 48 | Rural Tana River | 0246 |
| 22 | Rural Kajiado | 0644 | 49 | Rural Kakamega | 1044 |
| 23 | Rural Nandi | 0741 | 50 | Rural Kakamega | 1020 |
| 24 | Rural Nandi | 0767 | 51 | Rural Nakuru | 0705 |
| 25 | Rural Nandi | 0768 | 52 | Rural Bungoma | 0957 |
| 26 | Rural Narok | 0790 | 53 | Rural Kericho | 0637 |
| 27 | Rural Baringo | 0822 | 54 | Rural Kericho | 0646 |

AV 5 Regional Distribution of the Selected Clusters

Nationally there are 1,300 clusters in 37 districts. Taking a sample of 150 clusters gives a representation of 11.5% of the sampling frame. Assuming a mean cluster size of 100 households gives approximately 15 000 households nationally and, further, assuming a mean household size of six persons there will be approximately 90 000 persons in the selected households.

In the second stratum, it will be remembered that the estimated sample size was 29 but was adjusted to 30 (the stratum size of 1993) to avoid leaving out any of the 1993 sample clusters conforming to the requirement in the proposal. Following this requirement, towns that were excluded from this stratum in 1993 for reasons of insecurity arising from land clashes would again be excluded from the 1999 survey. Since the towns Nakuru and Kericho have large populations, their exclusion from the survey would result in a serious underestimate of MSEs. This necessitated some adjustment on the first stratum by a reduction of 10 clusters randomly to cover towns that would otherwise be left out. Nakuru is a major town and has a large component of urban activities. In 1993, only one rural cluster was covered together with industrial and commercial clusters due to problems of insecurity. With the fifth stratum excluded, the urban component of Nakuru district would fail to be covered. In the adjustment, a random allocation of four clusters was made to Nakuru. Likewise, Kericho, Kirinyaga and Bungoma were catered for in the adjustment with three urban and rural clusters in each case. The adjustment had a minor effect on the precision of the survey in the first stratum.

Table AV 2 Grouping of Districts for Implementation of the 1999 Survey

| Region | District | No of clusters | Region | District | No of clusters |
|--------|--------------|----------------|---------------|-----------------|----------------|
| 1 | Mombasa | 15 | 4 | Nakuru | 5 |
| | Kwale | 1 | | Kericho | 3 |
| | Kilifi | | | Baringo | 2 |
| | Taita Taveta | 1 | | West Pokot | 2 |
| | Lamu | 2 | | Narok | 3 |
| | Tana River | 1 | | Total | 15 |
| | Total | 24 | 5 | Kakamega | 3 |
| 2 | Machakos | 5 | | Bungoma | 2 |
| | Nairobi | 29 | | Busia | 2 |
| | Kitui | 1 | | Trans Nzoia | 2 |
| | Garissa | 1 | | Elgeyo Marakwet | 1 |
| | Kajiado | 5 | | Uasin Gishu | 6 |
| | Marsabit | 1 | | Nandi | 4 |
| | Total | 42 | | Total | 20 |
| 3 | Kiambu | 6 | 6 | Kisumu | 7 |
| | Nyeri | 1 | | Kisii | 3 |
| | Murang'a | 7 | | Nyamira | 3 |
| | Kirinyaga | 3 | | Siaya | 3 |
| | Meru | 5 | | South Nyanza | 4 |
| | Embu | 4 | | Total | 20 |
| | Nyandarua | 2 | All districts | | |
| | Laikipia | 1 | | | |
| | Total | 29 | | | 150 |