

SECTORAL ACTIVITIES PROGRAMME

Working Paper

**Informal labour in the construction industry in Kenya:
A case study of Nairobi**

Winnie V. Mitullah¹
and
Isabella Njeri Wachira²

Working papers are preliminary documents circulated
to stimulate discussion and obtain comments

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¹ Institute of Development Studies, University of Nairobi.

² Department of Building Economics and Management, University of Nairobi.

Foreword

It is now widely recognized that construction activity plays a vital role in the process of economic growth and development, both through its products (infrastructure, buildings) and through the employment created in the process of construction itself. The development of an efficient construction industry is an objective of policy in most countries. However, the focus of research and technical assistance to date has largely been upon the enterprises that comprise the sector – the contractors, subcontractors and consultants. Little attention has been paid to the labour force, about which often very little is known.

This paper makes a start in redressing this imbalance. It presents the findings of a study of construction labour in Nairobi, Kenya. This is one of four studies of construction labour in various towns and cities in the developing world that were commissioned by the ILO in the year 2000. The focus of all of the studies is ‘informal labour’ in the construction sector.

“Informal labour” is defined to include all construction workers who are employed on a casual or temporary basis without any proper form of contract, as well as those who work for themselves either alone or in small groups. The terms and conditions of employment are not regulated in any way and hence the workers have no protection from the law against dismissal and no social protection against sickness, old age or incapacity to work.

In some low-income countries the vast majority of construction labourers have always been employed informally. In others, the number of such workers has increased dramatically in the past few decades, as competitive pressures have forced contractors to shed their directly employed labour force in favour of ‘outsourcing’ their labour requirements. Most labour is now engaged through subcontractors and other intermediaries. Subcontractors who are themselves employed for short periods of time, invariably employ workers on a short-term, often daily, basis. They generally avoid issuing the workers with written contracts and registering them with relevant authorities, in order to avoid the on-costs associated with employing labour. Indeed, the evasion of these additional costs is often the motivation for outsourcing in the first place.

The studies provide a basis from which to assess the implications of the outsourcing of labour in the construction sector in low-income countries and to propose measures that promote good labour practice. It is hoped that they will stimulate further research on construction labour in other countries and towns, so that labour issues take centre stage in research into the construction industry and the requirements for its development.

Cleopatra Doumbia-Henry,
Officer in Charge,
Sectoral Activities Department,
ILO Geneva,
September 2003.

Preface

This paper presents the findings of a study of construction workers in Nairobi, Kenya. The field work was undertaken in Kayole, a low income settlement being developed through the informal construction system on the outskirts of the city.

The study is the result of collaboration between researchers from different disciplines, working in two separate departments at the University of Nairobi. The principal researchers were Dr. Winnie Mitullah, a political scientist at the Institute of Development Studies and Isabella Njeri Wachira, a quantity surveyor from the Department of Building Economics and Management. Ms. Jill Wells, construction specialist in the Sectoral Activities Department of the ILO, Geneva, provided guidance throughout the research process and also edited the report.

This is one of four studies of construction labour in various towns and cities in the developing world that were commissioned by the ILO in the year 2000. Other studies were undertaken simultaneously in two other towns in sub-Saharan Africa, Cape Town (South Africa) and Kumasi (Ghana) and in Nepal. They are published as separate working papers.

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1. Introduction

1.1. Introduction to the study

The construction sector is an important sector of the economy and contributes significantly to GDP. The United Nations Environment Programme has noted that about one-tenth of the global economy is dedicated to constructing and operating homes and offices (UNEP, 1996). UNEP further observes that the industry consumes one-sixth to one half of the world's wood, minerals, water and energy. The industry generates employment and income for a significant percentage of the population, and covers a wide variety of technologies and practices on different scales. Activities include industrial processes, which transform raw materials and generate both finished products and waste.

This report describes a study of workers in the building subsector of the construction industry in Nairobi, the capital city of Kenya. There is both a formal and an informal system of building in Kenya. The study focuses on workers in the informal system. The subject of study is the individual worker rather than the enterprise. Such individuals work in the informal construction industry as employees, as self-employed workers or as owners of small enterprises employing other workers.

The aim of the study was to gain a better understanding of the terms and conditions of informal employment for construction workers in Nairobi in order to suggest how working conditions might be improved and employment security ensured. Specific objectives were to examine employment relationships in the informal sector and assess the mobility of construction workers between formally and informally contracted construction sites. Workers were questioned on the terms of their employment, working conditions, skills and training, safety and health, work history, mobility and aspirations.

The report is organized into five chapters. The remainder of this chapter provides an overview of the Kenyan economy. Chapter 2 reviews the construction industry in Kenya, discussing informal construction, the characteristics of the sector and policies relating to it. The third chapter provides a brief introduction to the study area and outlines the methodology used in gathering information. Chapter 4 presents the empirical findings and is divided into four subsections: the socio-economic background of construction workers, the nature and dynamics of employment, working conditions and associational life of construction workers. The last chapter presents the conclusions and recommendations.

1.2. Overview of the Kenyan economy

Most African countries have experienced poor economic growth, especially since the beginning of the 1980s. In Kenya, the economy has experienced four discernable phases of mixed performance since independence: a rapid growth phase from 1963 to 1973, an era of external shocks from 1974 to 1979 characterized by the oil price shocks and a coffee boom, a period of stabilization in the 1980s and an era of liberalization and reduced donor inflows from 1990 to the present (ROK, 2002). The drought experienced during the early 1980s, world recession and the international debt crisis negatively affected economic performance in Kenya. In spite of the slight improvement of economic performance during the late 1980s, the economy took a downward trend during the 1990s.

While the commencement of macroeconomic stabilization measures in the late 1980s was aimed at improving economic performance, problems of declining donor funds, poor governance, bad weather, inadequate infrastructure, depressed investments, declining

tourism activities, and poor performance of the manufacturing sector reduced the GDP growth to 2.5 per cent between 1990 and 1995 and to 2 per cent between 1995 and 2000. The situation has continued to deteriorate with the year 2000 recording a negative GDP growth rate of -0.3 per cent. The recession has affected all sectors of the economy with agriculture and manufacturing, the major contributors to GDP, recording negative growth rates of -2.4 per cent and -1.5 per cent respectively in the year 2000 (ROK, Economic Surveys 2001; ROK/UNDP, 2001).

The depressing economic performance is reflected in increasing levels of poverty. It is estimated that 52 per cent of the population in the country as a whole are living on a maximum of \$1 per day, and in some regions the rate is as high as 60-62 per cent. Poverty is not confined to the rural areas. Some urban centres with large populations, like Nairobi and Kisumu, have very high rates, 62 per cent and 50 per cent respectively.

The increasing poverty is paralleled by high rates of unemployment due to the disproportionate growth in the labour force and limited opportunities for employment in the modern sector of the economy. The current Development Plan notes that between 1997 and 2001 modern sector employment in Kenya grew by 1.8 per annum while the labour force was growing at a rate of 3.5 per cent (ROK, 2002). Impediments to the growth of employment in the modern sector include: increased competition for Kenyan producers and high investment and production costs which have led to a contraction of the manufacturing sector. Another factor is rationalization of the public sector.

The current Development Plan (2002-08) aims at achieving an annual GDP growth rate of 4 per cent per annum. This target is ambitious but is still below the required growth rate of 6.6 per cent per annum needed to reduce the proportion of Kenyans living below the 6.6 per cent growth required to halve the proportion of Kenyans living below the poverty line by the year 2015 (ROK, 2001).

The Kenya Government attributes the growth shortfall in the 1990s to a number of external factors, such as anticipated adverse developments in world economy and changing priorities in external donor support and foreign direct investment in favour of the newly emerging economies (ROK, 2002). Consequently, the Government expects to achieve the 4 per cent GDP growth through the exploitation of regional cooperation initiatives, preferential market opportunities and the production and marketing of strategic commodities for which the country has a competitive advantage. Small-scale enterprises, including those within the construction sector, are viewed as an effective option for addressing problems of poverty, unemployment and industrial regeneration in the country.

The poor economic performance has not reduced urban growth. Most urban centres have continued to grow as many citizens seek economic opportunities away from the rural areas. Most find some form of employment within the informal economy. A significant number find their way into the informal building industry. The following chapter reviews the construction industry and conceptualizes informal construction in Kenya.

2. Review of the construction industry in Kenya

2.1. Recent developments in the construction industry

The volume and composition of construction output in Kenya has seen significant changes since the 1980s. The contribution of the construction industry to GDP declined from 6.5 per cent in 1980 to 4.9 per cent in 1990 to 4 per cent in 1999. This is mainly a reflection of the decline in public sector investment in construction and the harsh economic conditions prevailing in the country. This decline in construction output is expected to continue until the economy recovers.

The composition of construction output has also changed. Under the Structural Adjustment Programmes (SAPs) which began in the late 1980s government development expenditure was heavily curtailed as part of the austerity measures required by the donors (ROK, Economic Survey 2000). Investment in buildings was particularly affected, as evidenced by the numerous stalled projects that have remained unfinished for over ten years. The public sector is no longer a major client in the building subsector. Repairs and maintenance have also been affected, with very minimal public works tenders being awarded for these tasks.

Private sector clients now predominate in the building construction market. By 1999, the private sector accounted for more than 90 per cent of building construction output as reflected in table 1. It can be seen that investment in private residential building was twice as important, in value terms, as non-residential buildings. Financial sector funding to private construction continued to grow steadily particularly from 1995 to reach an all time high of K£M 918.15 in 1999.¹ This growth would have been higher had interest rates not risen sharply as the economy slowed down during the 1990s (ROK, Economic Survey, 2000).

However, the public sector has continued to dominate investment in the engineering subsector and for civil engineering projects such as roads the Government is the only investor. Investment in road construction and maintenance has continued to increase with the creation of the Road Levy Fund, which requires the payment of about 10 per cent of the fuel pump price to the fund. Funding for roads was further accelerated in 1995 when the IMF and World Bank set aside funds for repair of roads destroyed by the El Nino rains (ROK, Economic Survey, 1996).

It is clear from the above that if any change is to be brought about in the building construction industry the private sector will have to play a leading role. This is a major shift from the past where the public sector was the biggest and most important client in both subsectors of the industry.

Private sector clients are very diverse and in Kenya they mainly invest in construction through the informal system. This has shifted the focus of the industry to informal construction, which has generated an interest in studying how the informal system operates and its role in economic development and poverty reduction. The following section provides an overview of the informal sector of the economy, and in particular, the informal construction industry.

¹ 1K£ = Kshs.20 and 1US\$ = Kshs.78.

Table 2.1. Breakdown of construction output in Kenya

Year	Output KEM		Breakdown of construction output KEM				
			Residential		Non-residential		Engineering
	Private	Public	Public	Private	Public	Private	Roads
1980	26.24	75.11	7.55	20.91	13.30	5.33	53.565
1981	49.95	74.31	3.72	27.19	0.93	22.76	68.94
1982	39.87	87.51	5.00	32.71	4.49	7.16	78.00
1983	28.25	97.57	9.05	15.46	15.90	12.79	72.62
1984	11.08	86.04	12.59	7.53	2.04	3.55	71.41
1985	26.57	72.37	0.33	10.66	0.76	15.91	71.28
1986	21.80	69.35	2.97	16.83	0.82	4.97	65.56
1987	33.49	65.94	1.65	18.01	0.79	15.48	63.50
1988	40.74	92.52	2.31	27.10	0.81	13.64	89.40
1989	40.38	131.58	1.98	26.13	0.80	14.25	128.80
1990	66.02	122.47	2.97	39.02	1.60	27.00	117.90
1991	63.52	115.49	2.89	40.90	1.10	22.62	111.50
1992	62.78	112.28	2.73	43.65	1.05	19.13	108.50
1993	50.50	140.50	2.46	35.92	0.94	14.58	137.10
1994	56.97	214.26	2.21	38.41	0.85	18.56	211.20
1995	66.21	380.31	2.19	46.03	0.82	20.18	377.30
1996	73.27	375.99	1.68	51.64	0.61	21.03	373.70
1997	80.51	379.80	1.66	54.24	0.54	26.27	377.60
1998	76.50	389.56	1.25	55.10	0.31	21.40	388.00
1999	63.75	611.81	0.88	44.51	0.43	19.24	610.50

IK£ = Kshs.20; 1US\$ = Kshs.78.

Table 2.1(a)

Year	GDP growth (constant prices)		Construction contribution to GDP		Funding private	Gross capital formation
	Formal %	Informal %	Formal %	Informal %	KEM	KEM at current prices
1980	-	-	4.70	1.80	36.23	-
1981	-11.80	2.00	4.80	1.80	33.91	32.90
1982	-8.80	3.30	4.10	1.70	42.90	28.86
1983	-6.80	-2.30	3.70	1.70	42.41	59.35
1984	3.40	9.30	3.40	1.70	51.81	46.75
1985	3.70	-7.50	3.30	2.10	58.70	31.47
1986	4.10	3.60	3.20	1.90	57.34	50.31
1987	4.30	0.90	3.20	1.80	65.90	70.19
1988	5.40	4.80	3.20	1.80	78.90	70.46
1989	4.20	0.30	3.20	1.80	78.96	65.20
1990	-3.70	2.00	3.20	1.70	105.97	173.29
1991	-5.50	1.40	3.00	1.70	121.71	254.07
1992	-8.70	1.20	2.80	1.70	142.77	209.28
1993	1.10	3.00	2.60	1.80	212.42	142.94
1994	3.50	1.30	2.50	1.80	177.89	193.10
1995	1.90	1.20	2.50	1.70	304.58	307.99
1996	1.30	0.10	2.50	1.60	423.45	301.50
1997	0.90	0.10	2.50	1.60	575.39	402.44
1998	-	-	2.50	1.60	748.10	406.48
1999	-	-	2.40	1.60	918.15	390.80

Source: Economic Survey, Government of Kenya, 1990-2000.

2.2. Overview of the informal economy

The informal sector provides low-cost goods and services that are affordable to both the low and middle-income citizens who cannot afford to pay high prices. Intense competition keeps prices at low levels. It is an important and growing part of the overall economy in most developing countries. For example in Peru, the sector accounts for 38 per cent of GDP and 60 per cent of all man hours worked and its development is viewed as nothing short of revolutionary (Enrique Ghersi, 1997).

The informal sector in Kenya has been growing faster than the formal sector, and consequently providing more opportunities for employment. In 1999, the sector comprised 1,289,012 micro and small enterprises (MSEs) contributing 18.4 per cent to GDP and involving up to 3.7 million persons (ROK, et al 1999). The number of persons involved in the informal sector rose to 4.2 million in the year 2000 representing an annual growth rate of 11 per cent. In aggregate terms, the urban areas absorb the greatest number of MSE workers, representing nearly two-thirds of total MSE sector employment (ROK, Economic Survey, 2001). Nairobi alone accounted for nearly a quarter (24.06 per cent) of total employment in the sector.

The informal sector of the economy is traditionally held to have a number of distinct characteristics, such as ease of entry, the predominance of self employment, labour intensive production methods, low levels of organization, low productivity and income (ILO 1972; ROK et al, 1999; Wells, 2000). Individuals working within the sector work in an environment of uncertainty. However, unlike the formal economy, the sector is highly flexible, and entrepreneurs can quickly change their activities to respond to particular market needs (Mullei and Bokea, 1999).

The conventional belief that entry into the informal economy is easy is now being challenged. Research shows that the educational background of those operating within the sector has improved. In some subsectors education is applied in vetting new entrants, and the assumption that anybody can join the sector at any time is no longer valid. In many subsectors, those wishing to join have to have the right networks relevant for linking the individual to the resources required and site of operation (Graham et al 1998; McCormick et al 2001).

The assumption that there are no restrictions, rules, requirements or regulations to entry into the sector may, to some extent, be due to ignorance of the dynamics of the sector. Since the beginning of the 1990s, studies focusing on both social capital and institutions have shown that the informal economy has its own regulations and dynamics, including norms and rules of behaviour and operation. Firms operating within the informal sector have their own self-regulatory mechanisms, albeit informal (North 1990; K'Obonyo et al. 1999).

Non-compliance with official and administrative requirements, such as registration and payment of taxes, is a further characteristic of the informal economy. Most businesses operating within the informal economy are not registered with the Government, mainly because their owners find the process of registration not only cumbersome but also of no significant benefit. By not registering they aim to escape the manipulation of public officials. But this can backfire, as the lack of legality means that they are more liable to manipulation. A recent study has shown that unregistered firms pay more to public officers than those that are registered. However the payments are in the form of bribes that do not end up in the public coffers but in individual officers pockets (K'Obonyo et al., 1999). The notion that they do not pay taxes should be understood within this context.

A study by Graham et al. (1998) has shown that most firms operating within the informal economy are willing to pay taxes, but appropriate schedules of payment need to be designed. Firms find it difficult to accumulate the lump-sum payment required by authorities, but they are willing to pay the required fees in instalments. The capacity to pay is reflected in the amounts paid as bribes that are above the required licensing/registration fees.

In Kenya the informal sector continues to absorb a large number of the unemployed who cannot find employment opportunities within the formal sector. However, the sector does not guarantee long-term employment and security, partly due the uncertainty in access to markets and clients. The situation has become worse as the rate of unemployment continues to increase with deteriorating economic performance. The sector is dominated by small-scale economic activities largely of self-employed individuals. Most enterprises are owned and run by individuals but some employ a few people. Firm size is limited by lack of access to capital, poor management, intense competition and inadequate marketing strategies (Mullei and Bokea, 1999). Manufacturing enterprises in particular experience low productivity and income due to poor technologies and management. Thus small firms rarely graduate into medium or large enterprises.

Entrepreneurs operating within the informal economy have also been striving to organize in order to access different forms of resources. In the past, the sector was noted to

have low levels of organization with little access to organized markets, formal credit, and education/training. This has been changing with many civil society organizations providing different forms of support. However, much remains to be done by those operating within the informal economy themselves, and other development agencies that support them. In this respect there is a need to streamline the operations of the sector and lobby for its interests in both the private and public sector forums.

2.3. Informal construction sector

The informal construction sector has been defined as comprising “unregistered and unprotected individuals and small enterprises that supply labour and contribute in other ways to the output of the construction sector”.² These small enterprises and individuals are mainly engaged in housing and building construction activity. But it is now recognized that they also supply labour to contractors engaged in large projects in other sections of the industry (Mlinga and Wells, 2002).

Very relevant to studies of construction is the new and expanded concept of “informal employment” as conceptualized by WIEGO (2002) and ILO (2002). “Informal employment” is defined as employment without secure contracts, worker benefits, or social protection. It comprises two basic components: self-employment in informal enterprises; and paid employment in informal employment relations. The self-employed, in turn, are comprised of two basic groups: micro-entrepreneurs or employers who hire others and own account workers who do not hire others. This gives priority in defining informality to employment status rather than, as in earlier definitions, to enterprise characteristics. WIEGO further argues that as opposed to the earlier thought, the informal entrepreneurs are not avoiding formality, specifically registration and taxation; instead, it is the employer who tries to avoid legal obligations, including payroll taxes and other employer contributions. Many informal workers would prefer being formalized if doing so guaranteed secure contracts, worker benefits, social protection, and the right to organize and be represented (WIEGO, 2002). This scenario is particularly valid in the construction industry where employers around the world have disbanded their directly employed workforces in favour of “outsourcing” labour through subcontractors (ILO, 2001).

In most developing countries, especially in Africa, it has been noted that the informal construction sector has been growing rapidly. The pace has been fast, especially during depressed economic times when building owners often start with simple structures to provide basic shelter and then improve the structure as time and finance permits. The work is done by individuals and small firms that are able to adapt to the unpredictable needs of clients, including stopping work whenever funds are not available. A large proportion of this type of construction is residential, while others are residential cum commercial developments. Procurement of work is mainly based on informal, verbal relationships and agreements. This scenario, which Wells (2001) has called “the informal construction system” is prevalent in many developing countries, including Mexico (Herbert and Pickering, 1997).

Much activity in the informal construction system (but not all) takes place outside of the system of planning control. The houses are constructed without building permits or planning permission and often without legal title to the land. In Kenya a significant percentage of buildings/houses are constructed in “informal settlements”. In these settlements there are no clear titles to land, no land set aside for public utilities such as

² This definition was adopted at the First Meeting of the CIB Task Group 29: Construction in Developing Countries, Arusha, Tanzania, 21-23 Sep. 1998.

schools, parks or transportation corridors, and no urban infrastructure such as water, sewerage, electricity or paved roads.

2.4. Characteristics of informal construction in Kenya

The Kenyan construction industry comprises a large number of enterprises of various sizes, owned by different ethnic groups. Kenyans of foreign, mostly Asian, origin still dominate the industry. Kinyanjui and Mitullah (1999) have argued that although Asian-owned firms may be regarded as local, they have preferential access to finance outside the official bank system, and bank loans at fair interest rates and remission, which enables their businesses to thrive and operate in the formal system (Kinyanjui and Mitullah 1999). By comparison, most indigenous Kenyans own small firms, which largely operate within the informal system. These firms handle small jobs (Oludhe, 1990).

The dynamics within the informal construction system differ significantly from the formal conventional system. The formal construction sector has clients that have access to capital funds and are able to pay the builder on demand. The sector also has teams of professionals including architects, quantity surveyors and engineers who oversee the design and construction of a project and act as intermediaries between the clients and the builders. Contractors usually are responsible for the construction and completion of the projects within a specified time, cost and quality. There is also a formal contract agreement that spells out the responsibilities and legal obligations of each of the parties and that is enforceable by law.

The scenario within the informal construction system is quite different. According to Wachira (2000) and Wells (2001) client's access to capital funds for projects is highly unpredictable. This implies that construction time is unknown and projects often experience a lot of stops and restarts depending on the availability of funds. For example, a project for the construction of a three bedroom house may take up to five years. In most cases the buildings are designed as work proceeds and no professionals supervise projects. In some cases the design may be done by a professional or by a draughtsman, but when it comes to construction they are not consulted since most clients deem their charges to be exorbitant.

The majority of such buildings are constructed with no consideration of existing by-laws, insurance cover, and other legal requirements. Many owners of developments do not submit their building plans together with their proof of title to the land to local planning authorities. Since this is the yardstick used for documenting construction work, it creates a gap between the recorded statistics and actual construction. Wells (2001) has shown the extent of unplanned construction in the urban areas of Kenya in the 1990s by comparing trends in recorded building activity and cement consumption. The very significant gap is attributed to unrecorded construction activity.

An examination of government data shows that between 1995 and 1999, the informal private construction sector made a significant contribution to GDP and employment in Kenya, as shown in table 2.2. These figures are almost certainly underestimates (ROK, Economic Survey, 2000). Preliminary work for this study showed that individuals are developing many buildings in low and middle income, including peri-urban areas with basic capital in an incremental manner. The value of such buildings completed each year cannot be easily quantified.

Table 2.2. Contribution of the informal construction sector

Year	Informal construction contribution to GDP	Employment in informal construction
1995	1.7%	31,600
1996	1.6%	36,000
1997	1.6%	40,700
1998	1.6%	51,200
1999	1.6%	58,900

Source: Government of Kenya, Economic Surveys 1996 to 2000.

The owners of the buildings in most cases buy the materials for construction at the various stages and hire tradesmen to act as the foremen and oversee construction works. In some projects, the owners hire tradesmen and unskilled workers on daily basis depending on the current work on the project. For example at the walling stage, the owner hires masons and unskilled labour for as many days as is required to finish specified work or for as long as she/he is able to buy materials to keep the workforce engaged on a full day basis. Often, the owner has no say on the usage/wastage of the materials. However, the owners, members of family and friends do quality assurance, the gauge being comparison with other buildings in the surrounding area. It is usual for the owner to visit other developments to give the tradesmen an idea of the quality expected of them. Cost control is left to the owner who purchases the materials and negotiates daily wages with the workforce.

Small-unregistered construction firms develop the above type of buildings. The lack of registration with the Registrar of Societies or the Ministry of Public Works and Housing means that such firms lack credibility and necessary support, especially from the Government. The firms cannot bid for government contracts and other formal contracts or access credit. It seems that the firms ignore registration due to their limited capital and operation base. This denies them opportunities for support, coordination and networks that are relevant for improving their business. The situation has been made worse by the fact that a significant number of construction firms do not belong to associations. Such firms struggle on their own, with some owners of firms offering themselves as employees of other medium and larger firms when they cannot get jobs (Kinyanjui and Mitullah 1999).

The informal workforce lacks any significant degree of social protection mainly in terms of enforcements of minimum wages and other terms of employment such as leave, housing, health and safety regulations, as well as workmen's compensation. The majority of the workers are hired as casual labourers and work under difficult and dangerous conditions with no benefits (Kinyanjui and Mitullah, 1999). This is because the workforce is not covered under the Trade Disputes Act (ROK, 1991), Factories Act (ROK, 1988) or the Workmen's Compensation Act (ROK, 1972), which regulates labour and related issues. There are also no formal contract agreements and the owners handle legal queries with no recourse to the workmen. At the same time, the owner bears all the risks.

2.5. Policy issues relating to informal work

In Sessional Paper No. 1 of 1986 on Economic Management for Renewed Growth, Sessional Paper No. 2 of 1992 on Small Scale Enterprises and Sessional Paper No. 2 of 1996 on Industrial Transformation to the year 2020, the Government recognizes the role of micro and small enterprises (MSEs) in economic development and the need to support the sector. On the technological front, programmes to boost the technological capability of MSEs have been implemented by technical training institutes, national universities and

non-governmental organizations. There are about 41 technical training institutes that train artisans as technicians offering different levels of qualification. However, the transfer and diffusion of technology is still hampered by a mismatch between supply and demand for technology, inadequate funding for technology development and underdeveloped investment capacities and learning mechanisms (Mitullah and Odek, 2002).

Areas of concern in informal construction work include: skills and training, tools and equipment, terms of employment, working conditions, and health and safety. In the 1999 Micro and Small Businesses Survey (ROK, ICEG and K-REP, 1999), informal construction workers identified training as their most pressing need. They suggested that training should emphasize the development of entrepreneurial business management skills.

Recent research has shown that a large percentage of workers operating within the informal construction sector are trained through apprenticeship. A study conducted in 1999 found that workers within the construction industry were trained in both formal and (50 per cent) and informal (50 per cent) institutions, the latter being mainly through apprenticeship (Kinyanjui and Mitullah, 1999). In most informal construction sites, new entrants are taken on as apprentices and attached to experienced tradesmen in their areas of interest. The new entrants start off as unskilled people and over time and after working closely with the skilled workmen, their knowledge of specified work increases until they acquire the requisite skills. Once relevant skills are acquired, experience and reputation allow workers to proceed to take up specific work on their own.

However, most experienced tradesmen are known to have gained skills and experience through the formal construction sector. The formal sector is able to use new materials, skills and technology mainly because they have professionals who are in touch with the changing technology in the construction world. Such individuals supervise construction work and pass on new technologies to the formal contractors/workers. Mlinga and Wells (2002) have shown how the movement of workers between formal and informal employment in the construction industry in Tanzania has helped to transfer skills to the informal sector. An interesting question for research is whether or not similar movement is occurring in Kenya.

The Government of Kenya, in an effort to encourage the training of labour in various trades enacted the Industrial Training Act requiring all construction projects worth more than Kshs.50,000.00 (US\$641) to pay 0.25 per cent of the contract sum as a training levy (Industrial Training Act, 1983). Money generated from this source is supposed to be used in the training of various workers in the construction industry. However, informal construction enterprises or workers do not pay such monies mainly because their projects are not registered and they do not have formal contract agreements. Consequently, workers in the informal sector are not able to take advantage of this fund to develop their skills. Since the informal sector is believed to be the biggest employer in the construction industry, their lack of access to these funds has resulted in the funds hardly being utilized. By 1998, the account had credit in excess of US\$853,544 (Shah, 1998).

The need for training in the informal construction sector, the type of training required and the method of delivery are key issues requiring research.

Due to lack of employment contracts the workers are not covered by the Employment Act Cap 226 (ROK, 1984). Hence there are no legal provisions to regulate employment within the informal construction sector. Informal construction workers do not have any protection from exploitation as stipulated in legal provisions relating to minimum wage, terms and conditions of work or compensation due to accidents on sites.

Neither are informal workers members of the existing trade unions. The Trade Union Act requires that members have employment contracts (ROK, 1984), and this could partly

explain why most informal construction workers are not members of any union. Consequently, they are not covered by the Employers and Trade Union Agreement which spells out issues of concern to workers, such as wages, working hours, allowances, terms of termination/redundancy, retirement, allowances and protective clothing.

Most employers of informal workers ignore health and safety issues. This is reflected in the absence of basic requirements such helmets on working sites. Yet the sector is characterized by high exposure to occupational health hazards including physical hazards (noise, heat, dust, poor working platforms), chemical hazards (solvents, acids, resins), mechanical hazards (cutting, grinding, vehicles) and poor access to clean workplaces, toilets and water (Loewenson, 1995). Wachira (2000) observes that construction workers are subjected to hazards, which sometimes result in serious accidents such as loss of limbs, eyesight, and hearing impairment, and at times death. The fact that they do not have any form of insurance or workmen compensation means that most of the victims just leave the industry and the whole medical burden is borne by their families.

It may be concluded that the pressing economic situation in Kenya, as in many other developing countries, has pushed many citizens into the informal sector. This has made the sector the largest employer of labour. However, the employees have no secure contracts, regular hours of work and mandated benefits and they work in unsafe conditions. This calls for new policies for informal labour with a clear outline of working relations, conditions and benefits.

3. Study area and methodology

3.1. Introduction

The study used both primary and secondary data. The researchers reviewed relevant literature using both academic and non-academic sources. A search was undertaken within libraries of academic institutions and documentation centres of organizations focusing on the construction sector, such as UN-HABITAT, Ministry of Roads, Public Works and Housing, Kenya Building Research Centre and the University of Nairobi's Housing and Research Institute (HABRI). The information gathered provided a good base for raising research questions, and finalising the research instrument.

The primary data was collected in the capital city, Nairobi, between August 2001 and February 2003. The primary data was collected in three phases: a scoping exercise aimed at gathering basic information on issues of investigation, the main survey of 100 workers which researched issues relating to employment within the construction sector, and a follow-up survey to probe the specific issue of the movement of construction workers between formal and informal construction sites.

3.2. Study area

Nairobi is the capital city of Kenya, and was designated a town in 1899 by the British colonial administrators. The colonial Government conceived Nairobi as a European city where Africans were tolerated only for their labour. To ensure this, a pass law system was established to restrict African migration. The extension of the city boundary at independence brought in peri-urban areas, which were predominantly rural. Such areas were exempted from paying taxes and from building and planning regulations. However, as the population increased, the areas became the homes for the poor workers who could not afford to stay within the planned racially segregated areas of the city.

When founded, Nairobi had a population of only 10,000 on 18 sq. km. of land. By independence in 1963 the population had increased to 266,800 and it has continued to increase to reach 2,143,254 in the latest population census in 1999. Both the Kenya Government and the Nairobi City Council (NCC) have failed to provide shelter for the majority of the Nairobi population. This has attracted investors who develop informal settlements, where they do not own land but own the structures in which most of the urban poor stay. There is also a thriving industry of private low-income housing developers, who generally exploit the housing shortfall by charging high rents, which are often not commensurate with the services offered.

Nairobi has a thriving construction industry composed of both formal and informal firms. But it has not been spared in the slump in registered building activity, despite being the capital city. The value of plans approved by NCC maintained a downward trend from its peak of Ksh.13,020 million in 1997, to Ksh.6,600 million in the year 2000. At the same time, the value of plans approved for other towns rose by 62.8 per cent. Eldoret and Mombasa, which are also major towns, realized the highest increase.

The preliminary scoping phase of this study covered construction sites in eight zones located within low, medium and high income areas in the city of Nairobi (Kayole, Kamiti/Zimmerman, Upper Hill/Hurlingham, Dagoretti, Dandora, Kahawa and Nyayo Estate). The projects under construction included both commercial and residential, covering many types of development (flats, bungalow, maisonettes and high rise commercial buildings).

The main study focused only on Kayole and the surrounding areas. Kayole is located on the eastern side of Nairobi, some 17 kilometres from the city centre. It is a planned residential area for the low-income groups with most infrastructure and basic services. Housing units in Kayole are being developed by private developers who are allocated plots by the NCC to develop low income housing units. The units are mostly multi-storey and built of local stone, as shown in the photographs in Appendix I. The area has a mixture of development, ranging from well built finished units to others, which are roughly built without good finish. Rents in the area are comparatively low, and have been noted to be lower than rents in other informal settlements that lack almost all infrastructure and basic services.

3.3. Methodology

The first phase of the field research, the scoping exercise, was conducted during the month of August 2001 by the two principal researchers with the support of two research assistants. During this phase, the two principal researchers developed a checklist of questions to be raised and discussed with lead persons in various construction sites within the city. The questions included the following: type of project, materials in use, tools in use, nature of procurement, cost of project, persons employed, terms of employment, health safety and productivity. The research team then held discussions with foremen, subcontractors, contractors and site engineers who were in charge of the various purposively sampled sites.

The aim of the scoping exercise was to gather relevant information for developing and raising questions on the terms and conditions of employment for construction workers in Kenya, using Nairobi as a case study. The output of the scoping exercise was analysed by the two principal researchers and shared with both Kenyan and ILO colleagues. The information gathered was used to develop a comprehensive research instrument for the main study. It was particularly useful in developing closed questions, and providing a pointer to the nature and employment trends within the sector. The exercise was also useful in identifying sites within the city, where construction work was ongoing, the general nature of the sector, and for deciding which specific sites the main survey would focus on.

At the end of the exercise one of the sites, Kayole and surrounding suburbs, was purposively sampled for a detailed survey using a standard questionnaire. The questionnaire was administered in interviews with the workers. It is presented in Appendix II.

3.3.1. Sampling

The study limited itself to purposive sampling. Although the scoping exercise covered a number of sites within the city of Nairobi, the main survey focused on Kayole and surrounding areas. This was for a number of reasons. Among the 13 areas covered during the scoping exercise, Kayole was found to have the most vibrant construction sector. At the same time, the scoping exercise revealed that there were a number of incomplete construction projects within Kayole, which attracted the interest of the researchers, especially due to public press reports on the deteriorating economic situation, which was alleged to be affecting all sectors of the economy.

At study site level, the research used a non-systematic approach in locating specific construction sites. This involved transect walk across the residential area looking for active construction sites. This was after the failure to develop a sampling frame due to many non-active sites. Since the concern of the survey was to gather information on the construction labour force, the non-systematic approach used in locating sites within Kayole was found to be adequate.

Within the sample of active construction sites in Kayole and surrounding areas, a total of 100 respondents were interviewed. These respondents were mainly working on projects developing flats and commercial cum residential buildings. There was only one project developing a church and one developing maisonettes but no bungalows. This is largely due to the nature of development in Kayole – high-rise low income residential development. The respondents interviewed were mainly identified by foremen/owners of development. This was because most of those in charge of the sites were suspicious of the intentions of the research. Information gathered through questionnaires was supplemented with the key informant interviews conducted during the scoping exercise.

3.3.2. Data analysis

Data was analysed using both content analysis and Statistical Package for Social Science (SPSS) analysis. In applying content analysis, a ten-column matrix (Appendix III) based on information gathered using a checklist of issues was developed. The columns included information on the following: sample number and zone of project, type of project, materials in use, tools and equipment, nature of procurement, estimated cost, persons employed, terms of employment, health and safety, and productivity. This grouping made information accessible for analysing issues of concern to this study.

The Statistical Package for Social Science (SPSS) was applied in processing information gathered using questionnaires. All of the information gathered during the survey was entered into the computer package. Once entry was complete, frequency distributions for all variables were generated to enable basic understanding and analysis. Further grouping and analysis of variables was also done using the same package.

3.3.3. Follow-up survey

Analysis of the data collected during the scoping exercise and the main survey revealed a gap in our understanding of the mobility of construction workers between jobs in formal and informally contracted construction sites. In order to throw light on this issue a follow-up survey was undertaken in February 2003. A total of 16 sites were visited, ten informal and six formal. The original plan was to cover ten sites in each category but four respondents from formal sites failed to cooperate. On each site visited one labour contractor (group/gang leader) was interviewed. The respondents were asked three questions, as outlined in the questionnaire in Appendix III.

3.4. Limitations of the study

The construction sector is large and dynamic and a small survey covering a single area within one urban centre obviously has limitations. Consequently, this study should be viewed as a pilot study of employment within the urban construction sector. It cannot be taken to be representative of the construction sector or the country as a whole. The case study is located within an urban context, which is quite different from the rural set up. At the same time, the survey covered developments at the lowest end of the market. It is possible that the scenario in upmarket areas with large-scale constructors may be quite different.

On the other hand, the sample of individuals selected for interview (generally by the site foreman) was clearly biased towards skilled workers. Three quarters of those interviewed regarded themselves as skilled. Only 5 per cent considered themselves unskilled. Hence unskilled workers were not represented in proportion to their presence in the industry as a whole, as revealed in the scoping exercise.

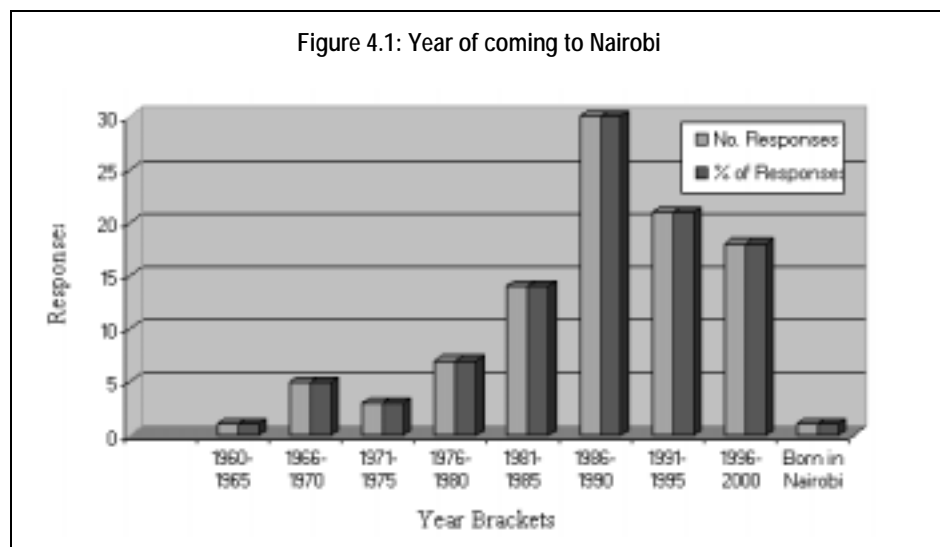
Other limitations included sampling procedure, and difficulty in locating active sites with individuals to interview. In some cases sites which were dormant, became active after the researchers had already covered the area and the research assistants had to get back to the sites. At the same time, during some intensive stages of construction work, for example concreting, it was quite difficult to get an interview. Our research revealed that the machines were hired and work had to be completed within a specific time. In some cases, the 21-day period of curing made it impossible to conduct interviews as expected since sites were dormant during this time. In other cases work was interrupted by change of workforce due to disagreement over wages, indifference among site managers, foremen and owners; while in others there was interruption of construction by NCC due to the use of un-metered water. We also experienced the movement of construction workers from one site to another within the same area before the completion of fieldwork. In such cases, site managers provided an explanation to the researchers and alternative respondents were identified.

4. Empirical findings of construction workers survey

4.1. Socio-economic background of respondents

4.1.1. Gender, location and history

The survey found that the construction sector in Kenya is dominated by the male gender. There was no single female found working within the construction sites covered in this survey. Consequently, the sample was composed entirely of men. Women's role on construction sites is limited to selling affordable food to workers. This is quite different from other countries such as India where a large percentage of women are employed within the construction sector.

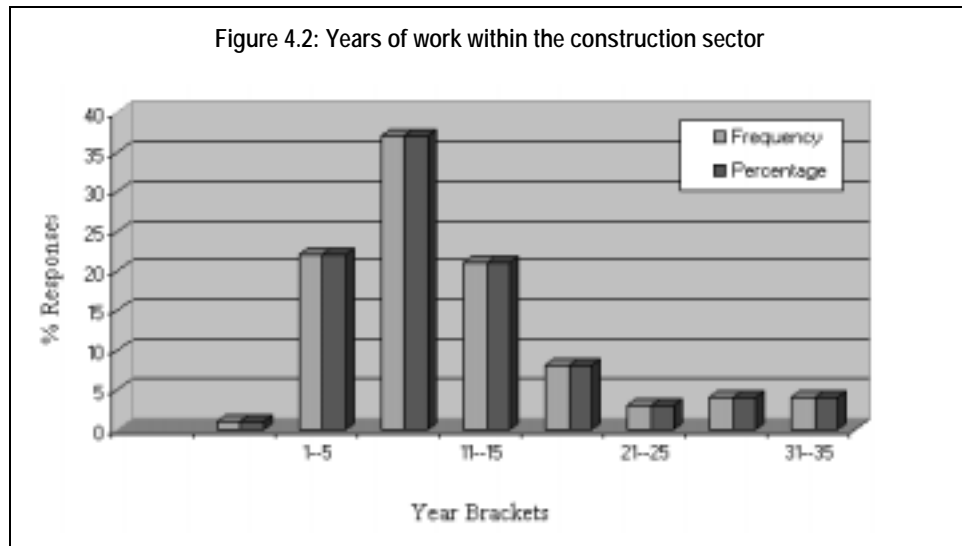


As reflected in figure 4.1, most of the construction workers are migrants to the city with only one worker having been born in the city. Most of the construction workers arrived in Nairobi between the year 1981 and the year 2000.

A question asking respondents to specify where they live within the city showed that most of them lived within low-income areas of the city, with a significant proportion living within informal settlements. A large percentage (55 per cent) lived in Kayole, 12 per cent in Soweto (an informal settlement located next to Kayole) and 9 per cent in Dandora (another low income area located about 3 kilometres from Kayole). A total of 3 per cent lived within the construction sites covered in the survey. Overall, the majority of construction workers lived within a distance of between 0.1 to 3 kilometres from their sites of work.

The short distance covered by the construction workers in their journey to work is supported by the mode of transport. When asked to specify how they get to work, a total of 79 per cent said they walked, 5 per cent used bicycles, while only 16 per cent used public modes of transport especially *matatus* (a mode of mini buses operated by individual entrepreneurs). Like most other informal sector activities, the earnings of construction workers are limited and many of them cannot afford the cost of public transport.

A comparison of the data presented in figures 4.1 and 4.2 suggests that most of the migrants had been construction workers for most of the period they lived in Nairobi.

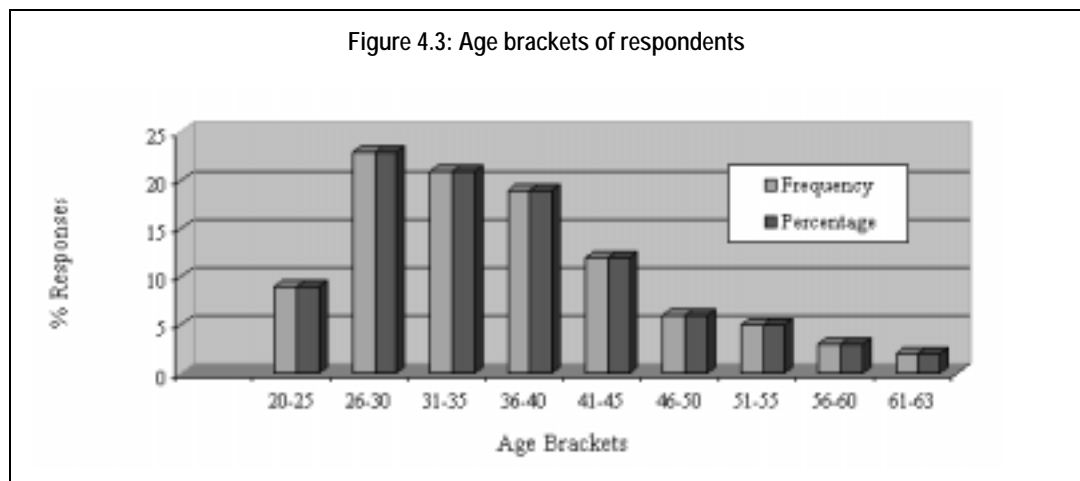


The interviewers also probed how the respondents joined the construction sector. A large number seem to have used social networks, which included relatives (17 per cent) and friends (37 per cent). Another 17 per cent made their entry through apprenticeship. An equivalent percentage made their entry through personal search, while 8 per cent found themselves in the sector as a last option. Only 3 per cent entered the sector as part of family business, while only one respondent indicated that he had a personal interest in construction, which he began as a hobby.

4.1.2. Bio-data of respondents

The construction sector in Kenya accommodates men of diverse age, education and training.

The survey found that while the youngest construction worker was only 21 years old, the eldest was 63. But in general the sector accommodates a comparatively young workforce with a majority being below 45 years of age, as shown in figure 4.3.



Education

Forty-three per cent of the construction workers interviewed had only primary education. The other 57 per cent had some secondary education, with no respondent reporting not having gone to school. Although a high percentage had secondary education,

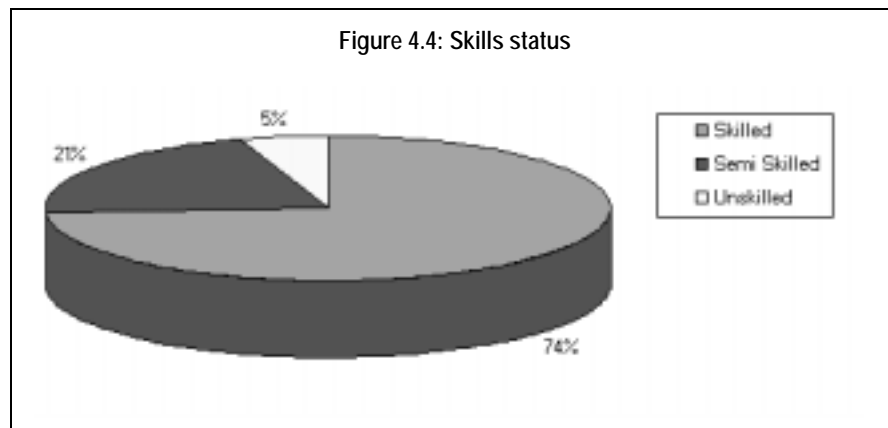
the research did not probe the quality of the secondary level education. It is possible that a number of them dropped out of secondary, or even of primary schooling.

In the past, workers within the informal economy have largely been individuals with comparatively low levels of education (ILO, 1972; Ng'ethe and Ndua, 1984). However, the trend in both informal employment and low-paying manual jobs has been changing since the beginning of the 1990s. A study conducted on associations of small-scale enterprises in 2001 shows that education levels have increased (McCormick et al, 2001). The majority of entrepreneurs in this study had completed primary education, while 29.5 per cent had completed secondary, with some having post secondary education. Another study on the small-scale garment sector, also found that the educational level of workers had risen between 1989 and 2000. In 1989 about half of the entrepreneurs working within the small-scale garment sector had only primary education, while some were illiterate. By 2002, more than half had secondary education and none was illiterate (McCormick et al, 2001).

It may be concluded that the poor economic performance, including retrenchment from public service and a moratorium on public service employment, has resulted in individuals taking employment which they would otherwise not take. Many school leavers join the construction sector because of lack of employment opportunities in other sectors.

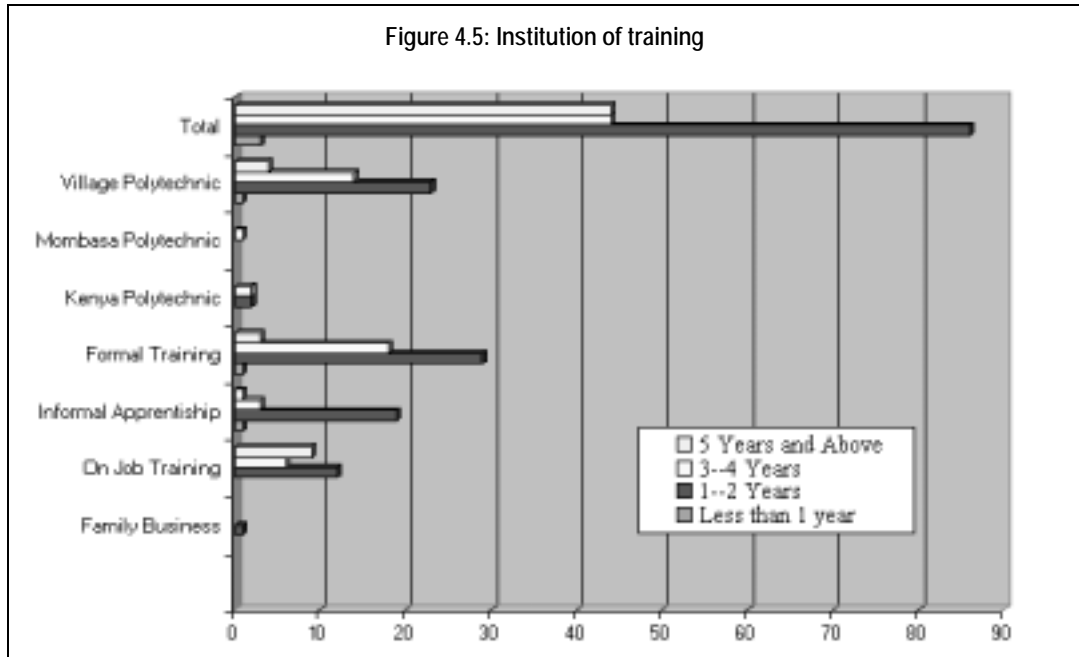
Skills and training

The majority (74 per cent) of construction workers in the sample were skilled, 21 per cent semi-skilled, while 5 per cent said they had no skills. This means that the sample was biased towards skilled workers. The majority of the skilled tradesmen were masons, painters, plumbers or carpenters of grade two. Most gained their skills through apprenticeship, largely trained by people belonging to their own ethnic group. Such individuals are relatives, friends, or people known through different informal networks.



The survey also found that a significant percentage (38 per cent) had further training, with years of training ranging between one to three with 1-2 years most common. The institutions where training took place are shown in figure 4.5. It can be seen that much of the training received was formal or semi-formal (village polytechnics). A trend towards formal training was also found in the survey by McCormick et al. (2001), which showed that the proportion of entrepreneurs with technical or professional qualifications was higher in 2002 (56.8 per cent) than in 1989 (42.9 per cent). Ninety per cent of those interviewed indicated that they wished to receive training to improve their skills. The majority of them would prefer on-the-job training, while others (18 per cent) preferred attachments and training in formal institutions. A few did not wish to have any form of training.

Figure 4.5: Institution of training



The skills most construction workers aspire to are masonry, plumbing and electrical work, in that order. A few respondents expressed a desire for skills in carpentry, civil engineering, architectural design, furniture design and building economics. Our findings show that masons, who are also able to perform other tasks, dominate building construction sites. While most masons have other skills, such as carpentry, plumbing, and painting, it seems that those with other skills cannot handle the task of masons. This gives the masons a niche in the construction industry.

The study also found that a large number of respondents were training apprentices with most of them training between one to three people. The respondents largely identified the apprentices, and only in isolated cases were they identified by the contractors or subcontractors.

Tools and equipment

The technology used in informal construction is labour intensive with very little use of plant and equipment. Labour-intensive technology is used because construction plant and equipment is expensive and out of reach for informal constructors who do not generate adequate incomes. The workforce uses simple basic tools that are purchased over time as funds become available.

The survey found that informal construction workers are exposed to machine methods only occasionally, when contractors and/or owners of development hire items such as concrete mixers and poker vibrators. This was further supported by a response asking respondents to list equipment available in their sites of work. A total of 74 per cent of respondents listed concrete mixers and vibrators. This equipment was mostly (80 per cent) hired, with only 4 per cent being owned by the firms.

Use of these labour-intensive methods and rudimentary tools mean that the energy input in any task is relatively high. The use of only basic tools has also served to restrict workers' knowledge of new technologies. Training has the potential of introducing new technology. However, after training many graduates lack start-up capital for beginning their own enterprises. As new skills and techniques are introduced, there is need to avail funds to assist the graduates to purchase more efficient tools of trade (ILO, 1998) otherwise training may not produce any significant results.

4.2. Nature and dynamics of employment

4.2.1. Definitions

Before we discuss the nature and dynamics of employment, it is necessary to define some terms as applicable to this study. *Foremen* are employed by the clients to take charge and supervise all the labour on-site (both skilled and non-skilled), which the client has hired. Sometimes the foreman may be given limited powers to hire some of the operatives. *Subcontractors* as used here will mainly refer to labour only subcontractors who enter into verbal contracts with clients to provide all the skilled and non-skilled labour required to carry out the work. Our findings show that materials for construction works are invariably supplied by the owner of building (80 per cent of responses) or by the foreman appointed by the owner (17 per cent). *Gang leaders* on the other hand, are usually artisans of many years of experience, good reputation and good contacts with potential clients who lead a group of skilled and non-skilled men who usually work together. The gang leader would normally have the responsibility of getting jobs to keep the gang employed and thus he usually earns more than the rest of the gang members.

4.2.2. Employment status

Most of the respondents (63 per cent) said they were working as employees; 16 per cent said they were subcontractors; and 11 per cent were self employed.

The data shows that employees are largely (60 per cent) hired by the owners of the development or by subcontractors (28 per cent). Among the sample, contractors and foremen hired only eight and four workers respectively. This pattern of employment was also found in the 20 sites covered during the scoping exercise. In 14 out of the 20 sites, the owners of development were the employers of the workers on-site. This trend is not common in large-scale construction, where work is largely subcontracted and labour hired by subcontractors.

The informal nature of doing business is revealed by the fact that the work agreement is not based on written contracts but on verbal agreements (88 per cent). Only 11 per cent indicated that they were working on some form of written agreement, albeit not standard. Only 1 per cent had a standard written contract, as is the case in most formal employment.

The labour subcontractors, gang leaders and foremen are also hired by the building owners/clients. They negotiate with clients for the award of jobs and for supervision of the same. They too enter into verbal contracts with clients, which are not enforceable by law and are nothing more than “gentlemen’s agreements”.

The gang leaders have control over their gangs and earn more than the gang members. They act as mentors to gang members who also aspire to have their own gangs. Most gang leaders indicated that they could handle more than one job at one time but this is rare. Whenever they do not have a job, they network with relatives, friends and potential clients in search of jobs. This network acts as contact to new or former clients. In some cases, they engage in other very different income-generating activities such as selling timber or farming.

The study revealed that most (77 per cent) informal construction workers aspire to be gang leaders in their own right. Some workers (18 per cent) merely aspired to be self-employed, while only 5 per cent wished to be employed by others. The gang leaders are considered to be making more money, have control over others, and appear to have reached the pinnacle of their careers. However, not many of them enjoy the assumed

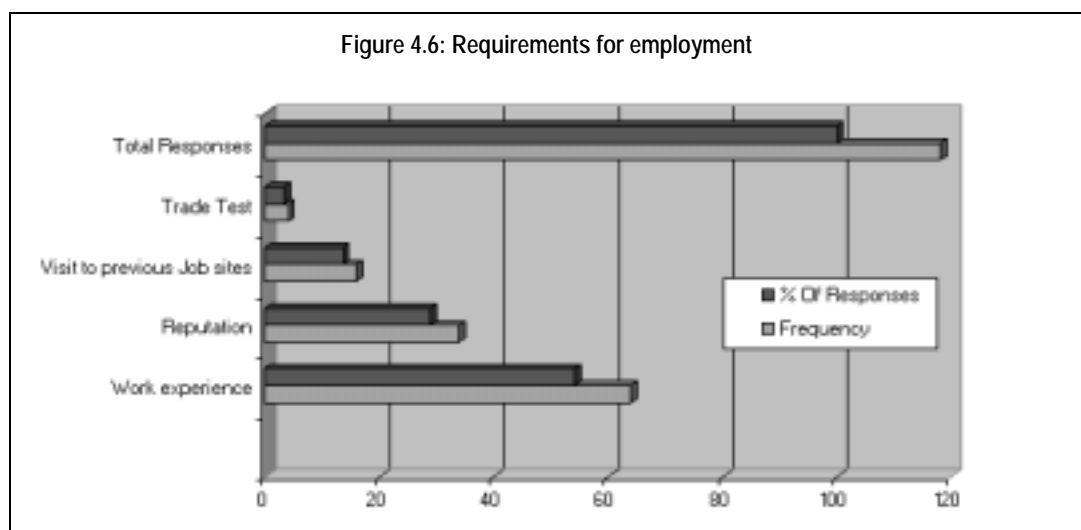
benefits. This is mainly because of the difficulty involved in searching for jobs, especially during hard economic times.

The distinction between labour subcontractors and gang leaders is not always clear. But the findings from the study seem to suggest that it could be based on the payment arrangements and allocation of risk. A subcontractor would normally provide a lump-sum quotation for completing a particular task or item of work (either the whole or part of a building). He would then recruit, supervise and pay all of the operatives required to complete the work, any difference between the lump-sum payment and the labour costs being the subcontractors' profit. A gang leader on the other hand would normally be responsible for finding a group of workers, possibly also for supervising them, for which he would receive a specific payment from the client. But he and the other labourers in his gang would be paid directly by the building owner or his foreman, either on a time or a piece-work basis.

4.2.3. Recruitment

Most of the respondents were recruited through friends (66 per cent), personal search (23 per cent), or through relatives (8 per cent). One respondent said that he got his job through a family business, another had previously been engaged in the sector, while a third was hired through apprenticeship. This clearly demonstrates the importance of social networks within the sector. Social networks play an important role in sustaining workers employed within the informal urban economy. The networks are a form of social capital and act as insurance for the comparatively poor urban workers who do not have any form of formal insurance.

The research also probed the views of respondents on the requirements or criteria for employment. The findings show that experience is the key requirement, followed by reputation, which is closely linked to experience. Having a trade test certificate was not considered important by respondents, as shown in figure 4.6. This illustrates the importance of informal methods of identifying workers. There is a tendency for potential employers to identify workers by merely inquiring about individuals who had worked on a particular project whose workmanship they admire. In some cases, potential developers undertake an informal search using social networks to identify potential employees with work experience. This shows that employment within the sector is largely based on the relationship between the worker and the owner of the development or the foreman. At the same time, the relationship is governed by the reputation of a particular worker in the neighbourhood and other knowledge about artisans acquired through informal networks.



Informal construction workers move around active construction sites and are hired by the owners or the foremen in charge of the construction on a casual basis. Employment in a particular site may last from one day to one month or more depending on the amount and/or pace of the work, availability of materials and funding. In some cases, work stalls and the workers have to hover around different construction sites in anticipation of getting a job, as they wait for activity to start again on the previous site. While the informal nature of business and relations eases the entry process, it can be disadvantageous to construction workers, especially when there is disagreement.

4.2.4. Income and method of payment

The study found that the method of payment within the informal construction sector is also informal. Most employees said they were paid on a daily basis (76 per cent), while another 17 per cent were paid weekly. Only two respondents indicated that they were paid monthly. This is quite different from operations within the formal sector, where most employees are paid on a monthly basis. The vast majority of respondents said they were paid on the basis of time worked. Only five respondents indicated that payment was based on piece-work.

The data shows that the mode of payment for construction workers was 100 per cent cash. In spite of the respondents having been asked to specify the format of payments with options, none listed any other option except cash. The majority (92 per cent) knew how the wage was determined and indicated negotiation with the owner/foreman (75 per cent) as a key determinant of wages. Others indicated negotiation with the contractor/subcontractor (18 per cent).

Average daily earnings were Ksh.400 with 75.6 per cent of respondents earning below Ksh.450. Most of the respondents noted that wages are determined largely by prevailing market conditions (82 per cent) or previous engagements. However, 12 per cent of the respondents indicated that wages are decided on an ad hoc basis.

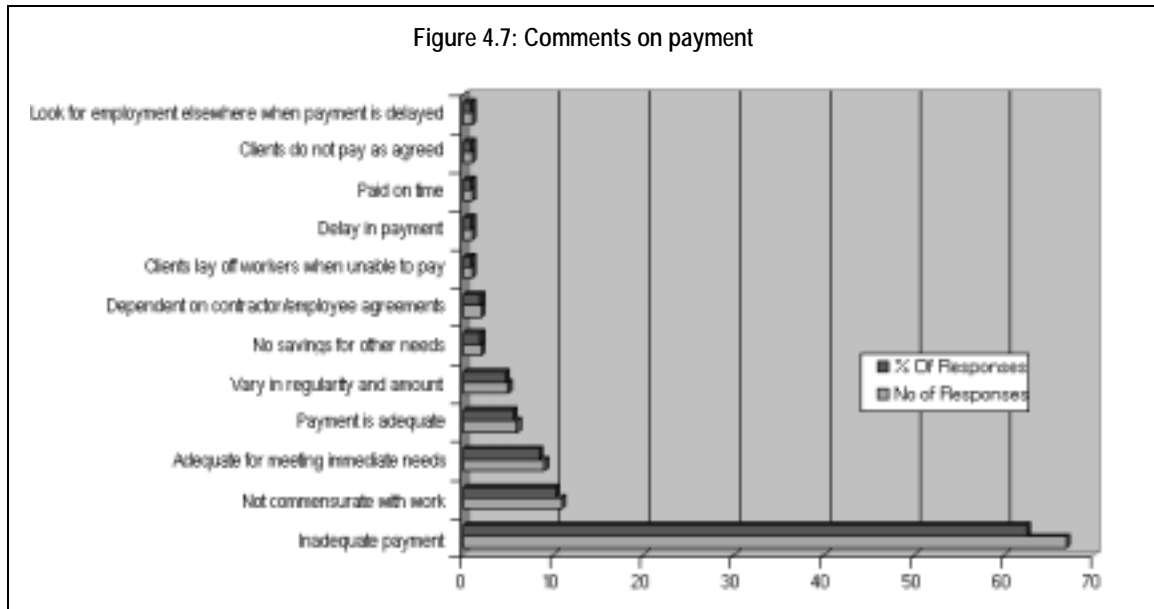
The average level of wages within the informal construction sector is higher than average earnings in other MSEs and much higher than basic minimum wages.³ However, our study shows that informal construction workers are not able to find work throughout the year: 93 per cent of our sample of workers said they were out of work for 30 days or more in an average year; 50 per cent are out of work for more than 90 days. During this period most are looking for employment, while a few others shift to other income-generating activities such as selling timber or farming.

Most of the informal construction workers operate without protection from the labour law, which governs the relations between employers and employees. The Employment Act provides regulation of remuneration and conditions of employment. It empowers the Minister of Labour to issue wage regulations, including fixing the basic minimum wage which is revised each year. The orders may also include a basic house allowance for employees not accommodated by their employers. However, even in the formal sector the high rate of unemployment gives employers power over employees, with most of them exploiting the situation. Most employees cannot question their terms of work, since the employment is offered on a willing worker and willing employer basis. Further, the informal construction market is competitive and often workers are willing to accept less

³ The average income from MSEs, according to the 1999 Baseline Survey, was Ksh. 6,000 monthly, which is around Ksh 200 per day based on 30 working days per month. This level of income is nearly twice the gazetted monthly basic minimum wages for urban areas of Ks. 3,707 (Mitullah and Odek, 2002).

income than the legal minimum wage. In some cases, this is targeted at establishing a relationship with a client who is likely to be a source of work in the future.

The respondents were asked to comment on the payment they received. Most felt that their payment was neither enough nor commensurate with the work they did, as reflected in figure 4.7. Other comments from respondents on pay were: clients do not pay well; delay with payment; payment does not allow savings to cater for other basic needs; and looking for job elsewhere when payment is delayed.



A few others had positive comments on the payment. A total of eight respondents indicated that their payment was adequate to meet their immediate needs, and another five respondents merely said the pay was good. A total of four respondents noted that their payment varied in regularity and amount, while two others noted that the payment was dependent on agreement between contractors and employees.

4.2.5. Employment benefits

Informal construction workers do not have benefits such as sick leave and annual paid leave. For every two consecutive months of service, an employee who is formally employed is entitled to sick leave of not less than seven days. Formally employed construction workers are also entitled to an annual paid leave of not less than 21 working days, and one rest day in every one week. These entitlements and benefits are denied to informal workers.

The informal construction workers are also not entitled to any health insurance. All the respondents interviewed in this study indicated that they do not pay any statutory deductions such as the National Social Security Fund (NSSF) or the National Hospital Insurance Fund (NHIF) and therefore do not benefit from them. This leaves such employees with no form of health insurance or social security. Consequently, they are exposed to very difficult circumstances when they fall sick, jobless or when they retire. At the same time, all the employees noted that they did not get any allowances, even in cases where they worked for more than eight hours a day. To some extent, employers exploit the large pool of the unemployed who hang around construction sites with the hope of being employed. In such a situation, the employers do not seem to care about employment terms.

Legislation in Kenya has instituted various schemes, for example the Pensions Act (Cap 189), and the Provident Fund Act (Cap 191) to assist employees to make savings.

Such savings are supposed to support employees when they retire or are out of employment. These schemes are not available to those working within the informal sector. As formal employment continues to reduce, there is need to ensure that the relevant Acts have provisions for informal workers.

4.3. Formal-informal linkages

In order to probe the movement of construction workers between formal and informal construction sites, a total of 16 sites were visited. Ten of these sites were informal while six were formal. The labour contractors or gang leaders working on these sites were asked three questions: whether they supplied labour to formal/informal sites; how often this occurred during the past three years; and what are the relative advantages and disadvantages of working for contractors or directly for private sector clients (see Appendix III).

The responses show clearly that there is movement of construction workers between formal and informal construction sites. All the ten labour contractors/gang leaders working on informal construction sites indicated that they supply labour to, or work for, contractors on formal sites. Furthermore, the data in table 4.1 indicates that this is a fairly regular occurrence. In each of the previous three years, five of the ten respondents had supplied labour to formal construction on more than three occasions.

Table 4.1. Supply of labour to formally contracted sites by workers on informal sites

Year	Frequency of responses					Total resp.
	Once	Twice	Thrice	Over three	None	
2002	2	1	2	5	0	10
2001	2	1	1	5	1	10
2000	0	3	0	5	2	10

Table 4.2 shows a similar finding for the six labour contractors found working on formal construction sites. All six respondents indicated that they also supply labour to informally contracted sites.

Table 4.2. Supply of labour to informally contracted sites by workers on formal sites

Year	Frequency of responses					Total resp.
	Once	Twice	Thrice	Over three	None	
2002	3	1	–	2	–	6
2001	2	–	–	2	2	6
2000	1	2	1	1	2	6

Comments from respondents support these findings. Typical comments include:

- A thriving construction industry provides opportunities for labour contractors in both formal and informal contracted sites.
- Gang leaders move with workers from one site to the other (formal and informal) depending on the availability of work.

The advantages of working on formal sites are perceived as follows: the work is less strenuous; contracts are honoured and payment is assured; contracts are longer; gang

leaders are protected from the wrath of the building owner/developer; there is a better quality of work due to monitoring and the availability of professionals; and workers are able to learn and improve their CV.

However, such contracts are hard to obtain. One respondents remarked that the contractors are increasingly becoming self-reliant, buying all equipment and continuing to work with the same labour contractors. Developing good relations with a contractor is therefore important. Also the bidding process is bureaucratic and requires adequate finance and good connections. Several respondents complained that the contractors manipulate and exploit labour contractors and gang leaders.

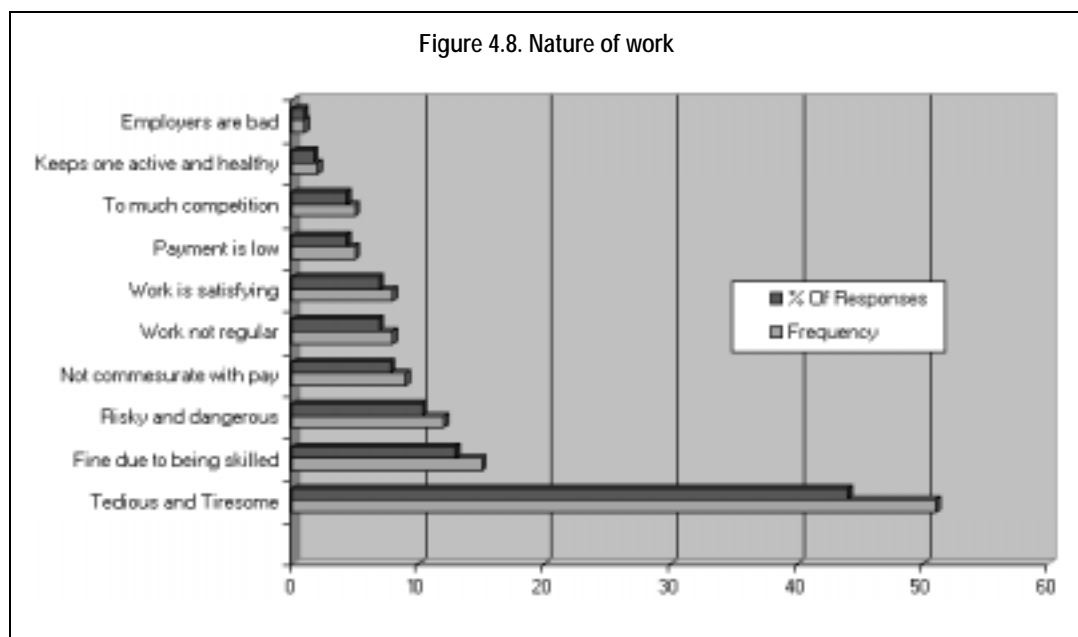
In this context, some see advantages in working directly with building owners/developers in the informal system. These include the ability to negotiate the contract (for example, to bargain for more days and additional pay) as well as to develop a rapport with the client that can lead to further work. Also payment is faster and can be higher. The disadvantages mainly concern the behaviour of the client, who may be seen as demanding, unreasonable, nagging, interfering and exploitative. Sometimes the client refuses to pay, or payment is late. These issues are particularly serious in the absence of any dispute resolution mechanism.

4.4. Working conditions and environment

The study revealed that the working conditions within the informal construction system are generally poor. This is mainly due to the large pool of unemployed construction workers who are more concerned about getting a job than the working conditions and inherent benefits.

4.4.1. Workers' views of work in construction

In assessing the nature of work, the most recurring response was that it is tedious and tiresome (44 per cent) or risky and dangerous (10 per cent), as shown in figure 4.8. Others (13 per cent) said it was fine since the respondents had the required skills.



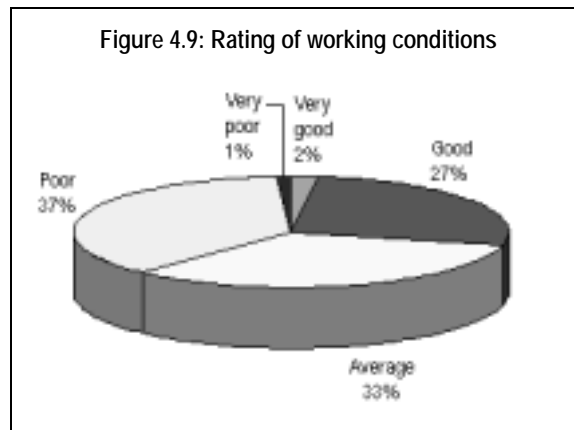
Although work within the construction sector is considered tedious and tiresome, the majority of informal construction workers had been working within the sector for more

than one year. Table 4.3 shows that a significant percentage had worked within the sector for over five years and 10 per cent for over 20 years. This shows that construction workers are not a transient population. In spite of the difficulties they continue to work within the industry.

Table 4.3. Duration of work in construction

Number of years	Frequency	Cumulative percentage
Less than one year	13	13.0
1-5	39	52
6-10	22	74
11-15	11	85
16-20	3	88
21-25	10	98
Above 25	2	100
Total	100	100

A total of 70 per cent of the respondents rate working conditions as ranging from average (33 per cent) to very poor (37 per cent), as reflected in figure 4.9. The reasons for this assessment included: that the job is risky in terms of health and safety requirements and poor pay, which is not commensurate with effort. Some respondents also observed that there was intense competition, lack of job security with workers having no rights. It is interesting to note that most of the 27 per cent who rated working conditions as good, did so because they claimed that after having been in the industry for long they had adopted to its harsh working conditions, generally accepting the poor working conditions as unavoidable.



Almost half of respondents said that they would not encourage their children/friends to join the industry due to the unfavourable working conditions, while the other half said they would encourage them due to lack of other economic opportunities. The latter position should be understood within the context of reducing employment opportunities in the country and the large pool of labour waiting to be deployed within any sector of the economy.

4.4.2. Hours of work

Most employees of the construction sector (82 per cent) said they work for eight or more hours. Only two respondents indicated they work for less. Fifteen per cent of respondents said they work for more than eight hours: most of these work for nine hours

but one works for ten and another for 12 hours. Those working for more than eight hours begin work at 7 a.m. instead of 8 a.m.

Sometimes the workers increase the hours worked per day, particularly when they were carrying out certain tasks that have to be finished on the same day, for example concreting. Where payment is for a particular task, the worker leaves immediately the task is completed irrespective of the time. This usually applies to trades such as plastering and painting.

4.4.3. Health and safety

The empirical survey found that the safety of employees was not catered for in most informal construction sites. A total of 96 per cent of the sites did not have safety measures of any kind in place and only 9 per cent had protective clothing.

Table 4.4. Health and safety regulations

Regulations	No. of responses	% of responses
Workers must be cautious and alert	28	41.2
Workers to provide own protective clothing	13	19.1
Individuals under influence of drugs and alcohol not allowed on site	10	14.7
Removal of any loose/sharp objects on-site	6	8.8
Workers to seek support when doing heavy work	4	5.9
Workers to place warning signs when working on dangerous areas	3	4.4
Workers to seek foreman's permission before using equipment	2	2.9
Keep time to avoid rushing over work	1	1.5
Report promptly any injury or accident	1	1.5
Total	68	100.0

Responses from 68 construction workers to questions on health and safety regulations are presented in table 4.4. The responses indicate that safety measures on-site are not adequate. They are limited to cautioning workers to be alert and not to come to work while drunk or under the influence of drugs. The cautionary measures the workers are required to take include: handling tools with care; avoiding steep and open spaces; using ladders carefully; and ensuring utmost concentration and alertness. Although these cautions are the major safety measures on-site, they are verbal and are hardly enforced.

The study further reveals that two-thirds of workers believe that they are responsible for their own safety on-site. This view is supported by the fact that workers have to provide their own protective clothing. Also, when workers are injured or hurt on-site nobody follows it up to ensure that they receive proper care and treatment. The burden of care is borne by the workers and their families alone. This is problematic since construction workers do not have insurance cover or workmen's compensation.

The respondents also specified some of the health hazards they have experienced within construction sites. The hazards included: pricking/poking by nails or other sharp objects, falling objects, dust and litter as the most significant health hazards on the sites of work as reflected in table 4.5. These hazards were immediate and physically visible. The construction workers do not seem to be sensitive to other hazards such as noise, exposure to chemicals, poor lighting and lack of sanitary facilities. They seem to consider the lack of

facilities as a character of their working environment, which they can neither change nor protect themselves against.

Table 4.5. Health hazards on construction sites

Hazard	No. of responses and valid %
Pricking/poking by sharp objects	23 (33.8%)
Dust from cement, lead oxide and white lime wash	15 (22.0%)
Falling objects	12 (17.6%)
Littered workplace	4 (5.9%)
Open live electrical cables	4 (5.9%)
Falling from high open spaces	2 (2.9%)
Weak wall, especially before reinforcement	2 (2.9%)
Lack of canopy to protect workers when they are working	2 (2.9%)
Flammable materials such as thinner and turpentine	1 (1.5%)
Weak climbing equipment and materials	1 (1.5%)
Slipping from a ladder	1 (1.5%)
Poor Ventilation	1 (1.5%)
Total	68 (100.0%)

Most informal sector workers do not have access to medical facilities and there is nobody to vet their fitness for work. If they are sick they pull off work and stay at home and recuperate for about seven days and get back to work as their health improves. While sick, they do not earn any income since they are entitled to neither sick leave nor medical cover. They therefore tend to return to work as soon as they can get out of bed. Discussions with the respondents revealed that victims only go to hospitals when the accidents are quite serious.

The health and safety problems informal construction workers face could be attributed to lack of information, education and health monitoring system on conditions of work within construction sites. This calls for sensitization of workers on various hazards and means of prevention. However, our findings shows that some workers are well informed on the measures that should be taken to improve safety and health standards on sites. This includes the use of protective clothing, setting and enforcing regulations, sensitization on the hazards, and random inspections by authorities. The workers however feel helpless in lobbying relevant authorities to implement health and safety requirements. This is partly due to lack of organization among construction workers, and the fear of dismissal if they engage in advocacy. This is largely because most of the informal construction workers do not have any unions or associations, which play the role of advocacy and policy influence as discussed in the following subsection.

4.5. Associational life

Belonging to unions and associations has been noted to benefit small-scale enterprises, including their employees (Mitullah, 1997; McCormick et al, 2001; Lund and Skinner, 1999). The findings of this study show that over half of respondents (55 per cent) were members of some association, while 45 per cent were not. The majority of those who belonged to some form of association were either in welfare associations (23 per cent) or in Revolving, Savings and Credit Associations (ROSCAs) (14 per cent). Others belonged to ethnic/clan associations (8 per cent); self help groups (3 per cent), development groups (3

per cent), Jua Kali associations (2 per cent), labour associations (2 per cent), and church associations (1 per cent).

The major benefits of being in associations were listed as: taking care of welfare matters (31 per cent), financial support (12 per cent), undertaking development projects (6 per cent), getting construction job through association (2 per cent). Other benefits included: training members on relevant skills (1 per cent), clan familiarization and socialization (1 per cent), spiritual nourishment (1 per cent) and buying tools, households and other goods (1 per cent).

A further probe, asking respondents to specify whether they were members of any organization that plays the role of advocacy and policy influence as well as protection of workers rights had only two positive responses. The two respondents indicated that they belonged to a Jua Kali Association and a trade union respectively. However, umbrella associations, which are well placed for advocacy and policy influence on behalf of small-scale enterprises such as the National Federation of Jua Kali Associations of Kenya, have performed poorly. The federation has been riddled with leadership wrangles, which has resulted in most local level associations withdrawing their membership.

Addressing issues relating to working conditions of informal construction workers requires the concerted action of the workers. This is best achieved through membership in some form of association or trade union. Among the respondents, 31.3 per cent viewed membership in trade unions as very important for lobbying. However, they were unaware of the existence of a construction workers union.

5. Conclusions and recommendations

5.1. Conclusions

This study has found that informal construction workers are mostly young men below 45 years of age. They operate under difficult working environment. They have no formal employment contracts, social security, health insurance, and are exposed to several health hazards. There are no relevant policies and regulations aimed at addressing the problems facing the subsector. This calls for joint efforts of Government, informal construction workers, international organizations, civil society and other agencies aimed at protecting informal construction workers.

The pressing economic situation has pushed many workers with comparatively better levels of education to this sector. The study found that most respondents have primary and secondary level of education, with none having no formal education. In the past, the informal sector was dominated by people with either low-level or no education. This has been changing with the reduction of economic opportunities and the retrenchment of the labour force from public service, and moratorium on public service employment. The reduced opportunities have contributed to individuals taking employment that they would not have otherwise taken.

The informal construction workers interviewed earn an average of Ksh.400 per day. This is determined by prevailing market conditions, previous engagement, negotiation and agreement with an employer. Although this average daily wage is well above the legal minimum, most workers are unable to find work throughout the year. Also, the sample was skewed towards skilled workers.

The survey showed that most workers are not satisfied with their work and most of those employed within the sector would not want their family members to join the sector. Construction work is considered to be tedious and tiresome with work done not being commensurate with payments.

Most of the construction workers interviewed have skills and some further training (formal or informal) in their areas of specialization which are predominantly masonry, plumbing and electrical work. However, experience and reputation (rather than formal qualifications) are the main requirements of employment within the informal construction system. Access to technology is limited, and workers are only exposed to technology when their employers hire basic tools and equipment such as concrete mixers and poker vibrators.

The findings show the close relationship between the formal and informal construction sectors. The construction workers straddle between formal and informal construction firms depending on the availability of employment. In between jobs in the informal sector the workers are hired by contractors in the formal construction sector on a labour only basis for varying periods. This process facilitates the transfer of technology and skills. Working in the formal sector exposes the workers to technology, skills and working relations, which do not exist within the informal sector. Thus, formal sector employment acts as a fertile training ground for the informal sector workforce. This exchange should be encouraged as a means of continuous transfer of technology to the informal construction sector.

The informal nature of work and relations within the sector has both advantages and disadvantages. The informality remains appropriate only as long as things go well. In cases of disagreement over terms of engagement, payment or injury at work, the informal

workers cannot sue the employers. At the same time, employees cannot question their terms of work, since it is based on a verbal contract between a willing worker and a willing employer.

The study shows the importance of tradesmen who act as foremen on behalf of the clients, as well as of those who work as leaders of a gang. The gang leaders supply labour to clients as required. They negotiate with clients for jobs, enter into verbal contracts and rally gangs of workers. They may also supervise the gang. However, both the workers and the gang leader are generally paid directly by the client or his foreman, with the gang leader receiving additional payment for supervisory tasks. Most workers aspire to have their own gangs in order to be gang leaders, a position viewed as the pinnacle of the informal worker's career.

Some gang leaders have made the transition to labour subcontractors. The distinction between the two is in practice not always clear. But it may be hypothesized that it rests on the nature of the contract with the client. In this interpretation, labour subcontractors would be those who undertake to complete a task (the whole or part of a building) for a lump sum. They then recruit and pay the workers needed to complete the task, taking any profit (or loss) arising from the transaction. Hence the labour subcontractors take on more risk than the gang leaders. They also assume more of the duties of employers.

A number of issues concerning employment and working conditions within the informal construction sector emerge from this study. They include legal and policy issues, capacity building, organization of informal construction workers, and information and linkages. The section below outlines how some of these areas of concern can be addressed.

5.2. Recommendations

5.2.1. Organizing

There are many hindrances to efficient performance in the informal construction sector which need addressing by all stakeholders, including the construction sector itself. Before the era of structural adjustment policies, governments were viewed as the sole providers and lawmakers. However, this is changing and governments are beginning to adopt new ways of governing, laying emphasis on participation by stakeholder groups. This change is partly due to the shift to multi-party politics and calls for good governance and effective participation of stakeholder groups in development.

In line with these changes, there is a need for the informal construction sector to get organized in order to exploit the expanded political space. As discussed in this study, most of those working within the informal construction sector either do not belong to any association, or belong to associations which do not engage in advocacy and policy influence. This denies them a voice to advocate and pressure their employers and other relevant bodies for their rights. Consequently, there is a need to expose construction workers to the benefits of belonging to associations which have the potential to engage in advocacy and to influence policy. Associations of workers would be able to lobby and represent the workers interests: for example, in areas relating to insurance, training, wages, terms and conditions of work. Associations can further facilitate workers inclusion in annual labour negotiations.

5.2.2. Legal and policy issues

Most individuals who operate within the informal economy strive to operate outside of the legal framework. This is mainly because of the high cost, in terms of time and

information, of complying with regulations. Studies have shown that the costs of compliance are often higher than the potential benefits. Thus, there is a need to streamline regulatory and administrative regimes in order to minimize not only the cost of compliance but also the time required to process papers. This would encourage many of those operating within the informal construction sector to comply with requisite legal requirements. This will not only generate resources for relevant authorities in terms of service fees but will also improve the operations of the sector.

As this study shows, most workers are engaged without any contracts of employment. Consequently, they operate on insecure employment terms, with their fate largely lying with gang leaders, contractors and subcontractors. In order to improve employment conditions within the sector, there is need to re-examine the Employment Act, especially the definition of employment. The nature of work and work arrangements needs to be reassessed in the light of contemporary realities. The realities of informal work challenge the standard employment status categories of employer, employee, own-account worker, and contributing family worker used in labour force statistics. The formal employer-employee relationship is breaking down under new, flexible and decentralized production systems.

The Employment Act in Kenya does not accommodate this flexibility. The absence of employment contracts within the informal construction sector does not negate the need for protection through the legal framework, such as workmen's compensation and other entitlements such as sick and annual leave. The informal construction sector should lobby for legal protection without necessarily transforming its status to that of formal workers.

5.2.3. Training and capacity building

An appreciation of the link between the formal and informal part of the construction sector through its labour force, as demonstrated in this research, requires a review of the provisions of the Industrial Training Act. The Act only recognizes and accredits graduates and trades persons of formal training institutions. The study has shown that informal construction workers have generally not had any formal training and have therefore not benefited from the training provisions under the Act.

The study shows that the majority of informal construction workers are trained on-the-job, through apprenticeship. The Government has made no effort to grade and register those in the informal sector who are trained via the apprenticeship system, even where they have demonstrated competence. The performance of workers trained through informal apprenticeship has shown that this is an effective way of learning, with some workers excelling in their respective fields. This should be encouraged and the necessary support provided, including examining performance and providing certification to those qualified. The training levy that is rarely utilized in the construction sector, mainly because the informal construction workforce cannot benefit, should be redirected to serve the needs of the informal construction sector. It does not make economic sense to reserve resources for a dormant formal sector at the expense of a dynamic informal sector.

Some of the training levy funds could be used for designing appropriate training programmes for the informal construction workers, from which the whole industry would benefit. As they are obliged to work in order to get paid, and do so even when their health condition is not good, any form of learning must be integrated into their work schedule so that they can learn while earning. Devising an appropriate training programme will require a change in outlook, as well as the identification of innovative methods. Training levy funds might also be used for to develop appropriate technologies, tools and equipment. Universities, UN-Habitat, ILO and relevant non-profit organizations can play a significant role in this task, as well as in devising appropriate health and safety training.

In some cases the language of training is also not appropriate and there is a need to identify the right communication channel. While conventional thought may push one to believe that increasing levels of education within the sector implies competence in English, and probably Kiswahili, this is not necessarily the case. It should also not be taken for granted that most apprentices work under those who speak their local languages. However, language is one reason why individuals prefer to work under people who belong to their own ethnic group. (The social capital which such individuals gain by working with others from their own community is another.) The fear of not being able to communicate effectively keeps people from those who do not speak their languages. This factor is often overlooked and should be planned for in any training programme.

5.2.4. Health and safety

Another key area that needs to be addressed is health and safety. There is need to devise a means of enforcing the occupational health regulations in informal construction operations in order to reduce the exposure of workers to workplace hazards. This calls for some education for workers, foremen and clients on ways of minimizing the risk of accidents on-site. They should be encouraged to use work processes that reduce occupational hazards while improving working environments and output. Further research may be needed in this area.

5.2.5. Information and linkages

Information is an important resource which informal workers lack. Generally, the workers do not have adequate information on market needs. This limits their opportunities in the job market as well as their ability to bargain for better terms. Lack of information has partly contributed to workers accepting low wages and poor working conditions. Establishing focal points where prospective clients can advertise for workers from the various trades, and also access market information, has a potential of improving employment within the sector. In Nairobi, this is happening spontaneously among some trades, such as painters, who congregate at a particular location within the Central Business District (CBD) where clients go to hire them.

There is also a need for organizations of informal sector workers to collaborate and create linkages with relevant institutions such as micro-finance institutions, trade unions, training institutes, universities, non-governmental organizations (NGOs) and other civil society organizations. In order to devise appropriate training programmes collaboration will be required with the Federation of Kenya Employers and Central Organization of Trade Unions (COTU) who are the administrators of the training fund. Professional bodies in Kenya such as the Architectural Association of Kenya, Institute of Quantity Surveyors of Kenya and Institute of Engineers of Kenya should also be encouraged to support the informal construction sector.

Appendix I

Typical structures in Kayole



Appendix II

Questionnaire for the construction workers

BRIEF: The construction sector within sub-Saharan Africa is a major source of employment and income. The industry in most countries is characterized by extensive subcontracting, temporary and insecure employment. This research aims at gaining better understanding of the terms and conditions of employment for construction workers in African cities, in order to identify where and how conditions might be improved and/or workers offered some degree of protection. The Institute for Development Studies (IDS) of the University of Nairobi will appreciate your response to issues raised in this questionnaire. Any information provided will remain confidential.

1.0 HISTORY

- 1.1 When did you start living in Nairobi? -----
- 1.2 Where do you live? -----
- 1.3 Approximate distance from site -----
- 1.4 How do you get to site?
 1. Walk
 2. Bicycle
 3. Bus/Matatu
 4. Train
 5. Other (please specify) -----
- 1.5 How did you join construction?
 1. Through family business
 2. Through relatives
 3. Through friends
 4. Apprentice
 5. Personal search
 6. No other option
 7. Other (please specify) -----
- 1.6 How many years have you been working in construction?
- 1.7 Specify the type of project you are currently working on

1. Flats	Area -----	No. of floors -----
2. Bungalow	Area -----	
3. Maisonette	Area -----	
4. Residential cum commercial	Area -----	No. of floors -----
5. Commercial	Area -----	No. of floors -----
6. Other (please specify)	-----	

2.0 SKILLS AND TRAINING

- 2.1 Specify your skill status
 1. Skilled
 2. Semi skilled
 3. Unskilled
 4. Other (please specify) -----

2.2 If skilled type of skill

1. Mason Grade -----
2. Plumber Grade -----
3. Painter Grade -----
4. Carpenter Grade -----
5. Other (please specify) ----- Grade -----

2.3 Skill aspired to

2.4 Skill acquisition through

1. Family business No. of years -----
2. On-the-job training No. of years -----
3. Informal apprenticeship No. of years -----
4. Formal training No. of years -----

2.5 If formal training, specify training institute

1. Kenya polytechnic No. of years -----
2. Eldoret polytechnic No. of years -----
3. Mombasa polytechnic No. of years -----
4. Village polytechnic No. of years -----
5. Other (please specify) ----- No. of years -----

2.6 Are you currently training any apprentices?

1. Yes
2. No

2.7 If yes how many? -----

2.8 Who identifies the apprentices?

1. Owner
2. Subcontractor
3. Training institution
4. Respondent
5. Other (please specify) -----

2.9 How are the apprentices paid?

1. Piecework
2. Daily
3. Weekly
4. Monthly
5. Other (please specify) -----

3.0 MATERIALS, EQUIPMENT AND TOOLS

3.1 Specify the materials in use

1. Concrete
2. Timber
3. Natural stone
4. Iron sheet roofing
5. Tile roof

-
6. Steel windows
 7. Timber doors
 8. Other (please specify) -----
- 3.2 Who supplies the materials to site?
1. Owner
 2. Foreman
 3. Supplier
 4. Other (please specify) -----
- 3.3 Specify the equipment available on site
1. Concrete mixer
 2. Vibrator
 3. Other (please specify) -----
- 3.4 Source of equipment:
1. Owned
 2. Hired
 3. Other (please specify) -----
- 3.5 Tools in use
1. -----
 2. -----
 3. -----
 4. -----
 5. -----
 6. -----
- 3.6 Estimated cost Kshs. -----
- 3.7 Completion date -----
- 3.8 Estimated output per day -----
- 4.0 EMPLOYMENT DETAILS
- 4.1 How long have you been on this job? -----
- 4.2 Specify your employment status
1. Contractor
 2. Subcontractor
 3. Self-employed
 4. Employee of another
 5. Other (please specify) -----
- 4.3 How did you get the job?
1. Through family business
 2. Through relatives
 3. Through friends
 4. Apprentice
 5. Personal search
 6. No other option

-
7. Other (please specify) -----
- 4.4 Who hired you?
 1. Owner
 2. Contractor
 3. Subcontractor
 4. Other (please specify) -----
 - 4.5 Requirements for employment
 1. Trade test cert.
 2. Reputation
 3. Work experience
 4. Visit to previous job sites
 5. Other (please specify) -----
 - 4.6 Work agreement
 1. Standard written
 2. Written
 3. Verbal
 4. Other (please specify) -----
 - 4.7 Specify the nature of payment
 1. Piecework
 2. Daily
 3. Weekly
 4. Monthly
 5. Other (please specify) -----
 - 4.8 Average earnings (Kshs): per day ----- per week----- per month -----
 - 4.9 What is the format of payment?
 1. Cash
 2. Cheque
 3. Food
 4. Accommodation
 5. Other (please specify) -----
 - 4.10 Do you know how the wage is determined?
 1. Yes
 2. No
 - 4.11 If yes, specify?
 1. Negotiation with owner/foreman
 2. Negotiation with labour only employer
 3. Negotiation with contractor/subcontractor
 4. Agreement with training institution
 5. Other (please specify) -----
 - 4.12 Basis of wage
 1. Ministry of labour minimum wage

-
2. Prevailing market conditions
 3. Previous engagements
 4. Ad hoc
 5. Other (please specify) -----

4.13 Do you pay any statutory deduction (e.g. NSSF)

1. Yes
2. No

4.14 If yes, please specify -----

4.15 Do you get any allowances (e.g. medical)

1. Yes
2. No

4.16 If yes, please specify -----

4.17 Comment on payment -----

4.18 Comment on nature of work -----

5.0 WORKING CONDITIONS

5.1 How many hours do you work per day -----

5.2 How would you rate the working conditions?

1. Very good
2. Good
3. Average
4. Poor
5. Very poor
6. Explain your answer -----

6.0 HEALTH AND SAFETY

6.1 Who is responsible for safe working condition on site?

1. Employer
2. Contractor
3. Foreman
4. Self
5. Other (please specify) -----

6.2 Are there any safety/health regulations on site?

1. Yes
2. No

6.3 If yes outline some of these regulations -----

6.4 What safety/health measures are taken on site?

1. Education/information of workers
2. Protective clothing
3. Warning signs
4. Other (please specify) -----

6.5 Are you aware of any health/safety hazards on site?

1. Yes

-
- 2. No
 - 6.6 If yes, please specify -----
 - 6.7 Have you ever been out of work because of an accident on site?
 - 1. Yes
 - 2. No
 - 6.8 If yes for how long (days) ----- (months) ----- (years) -----
 - 6.9 Briefly describe the accident -----
 - 6.10 Briefly describe the cause -----
 - 6.11 Briefly describe the management of the accident -----
 - 6.12 How can safety conditions on site be improved? -----
 - 6.13 How can the terms of employment be improved? -----
 - 7.0 ASSOCIATIONAL LIFE
 - 7.1 Are you a member of any association?
 - 1. Yes
 - 2. No
 - 7.2 If yes, please specify association -----
 - 7.3 What are the benefits of being in an association? -----
 - 7.4 Are you a member of any union or organization, which protects your rights?
 - 3. Yes
 - 2. No
 - 7.5 If yes, please specify -----
 - 7.6 What benefits do you get from membership of the above organization?
 - 1. Soft loans
 - 2. Tools
 - 3. Training
 - 4. Information on wage guidelines
 - 5. Information on safety/health issues
 - 6. Support/advice on dispute resolution
 - 7. Medical expenses cover
 - 8. Other (please specify) -----
 - 8.0 WORK EXPERIENCE

Specify during the past one year:

 - 8.1 How many projects you have worked on (please specify type)
 - 1. Flats Area -----
 - 2. Bungalow Area -----
 - 3. Maisonette Area -----
 - 4. Residential/commercial Area ----- No. of floors -----
 - 5. Commercial Area ----- No. of floors -----
 - 6. Other (please specify) -----
 - 8.2 Jobs undertaken in the projects
 - 1. Mason Grade -----

-
2. Plumber Grade-----
 3. Painter Grade -----
 4. Carpenter Grade -----
 5. Other (please specify) ----- Grade -----
- 8.3 Employment status
1. Contractor
 2. Subcontractor
 3. Self-employed
 4. Employee of another
 5. Other (please specify) -----
- 8.4 Type of contracts
1. Standard written
 2. Written
 3. Verbal
 4. Other (please specify) -----
- 8.5 Employer
1. Private individual
 2. Company
 3. Cooperative
 4. Parastatal
 5. Government
 6. Other (please specify) -----
- 8.6 Approximate number of days worked in the year -----
- 8.7 Approximate number of days out of work -----
- 8.8 What did you do when there was no work? -----
- 9.0 ASPIRATIONS
- 9.1 Please specify the preferred employment status
1. Self-employed
 2. Employee of another
 3. Contractor
 4. Subcontractor
 5. Other (please specify) -----
- 9.2 Explain reason for preference -----
- 9.3 Preferred type of project
1. Flats
 2. Bungalow
 3. Maisonette
 4. Residential cum commercial
 5. Commercial
 6. Other (please specify) -----
- 9.4 Explain reason for preference -----

-
- 9.5 Preferred clients
1. Private individual
 2. Company
 3. Cooperative
 4. Parastatal
 5. Government
 6. Other (please specify) -----
- 9.6 Explain reason for preference -----
- 9.7 Would you like to receive training to upgrade you skills?
1. Yes
 2. No (If No go to 9.10)
- 9.8 If yes what is your preferred method of training?
1. On the job
 2. In a formal institution
 3. By attachment
 4. Other (please specify) -----
- 9.9 Preferred language of training -----
- 9.10 If no, please explain -----
- 9.11 What is your view of working conditions in construction -----
- 9.12 Would you encourage your children or friends to join construction?
1. Yes
 2. No
- 9.13 Please explain your answer) -----
- 10.0 BIO DATA
- 10.1 Age of respondent -----
- 10.2 Gender of respondent
1. Male
 2. Female
- 10.3 Education
1. Primary
 2. Secondary
 3. High school (form 5 & 6)
 4. University
- 10.4 Do you have any further training?
1. Yes
 2. No
- 10.5 If yes, please specify
- | | | |
|---------------------------------|--------------|-------|
| 1. Polytechnic | No. of years | ----- |
| 2. Technical secondary school | No. of years | ----- |
| 3. Institute of Technology | No. of years | ----- |
| 4. Other (please specify) ----- | | |

Appendix III

Probing formal/informal linkages

Questions for labour contractors (group/gang leaders) in informally contracted sites

1. Do you supply labour to (or work for) contractors? (1) Yes (2) No
2. If yes, how often during the last three years.

Year	Once	Twice	Thrice	Over three	Comment
2002					
2001					
2000					

3. What are the advantages and disadvantages of working directly for building owners/developers and contractors?

Supply of labour	Advantages	Disadvantages
Contractors		
Building owners/developers		

Questions for labour contractors (group/gang leaders) in formally contracted sites

1. Do you supply labour to (or work for) informally contracted sites (directly to clients)?
(1) Yes (2) No
2. If yes, how often during the last three years.

Year	Once	Twice	Thrice	Over three	Comment
2002					
2001					
2000					

3. What are the advantages and disadvantages of working directly for building owners/developers and contractors?

Supply of labour	Advantages	Disadvantages
Contractors		
Building owners/developers		

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